

Załącznik

do Raportu z wykonania badań przemysłowych pt. *Badania rozkładów rozmiaru cząstek w próbkach zawiesin pochodzących z procesów wytwarzania farb* z czerwca 2018 roku.

Raporty z badań analizatorem LS 13 320

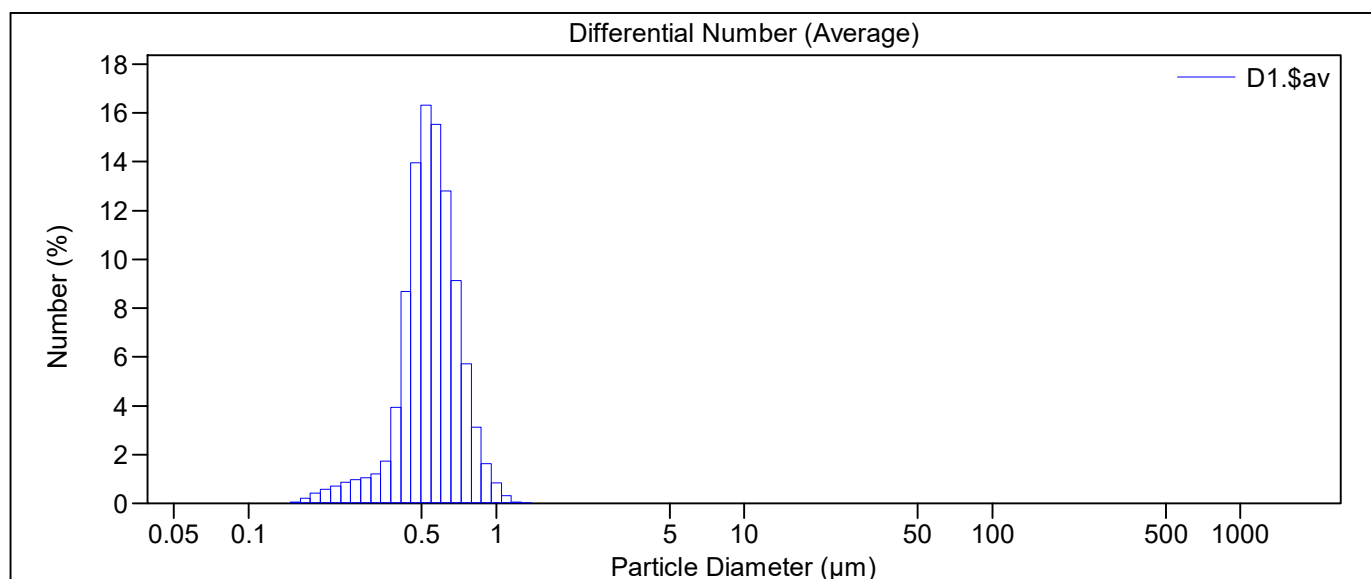
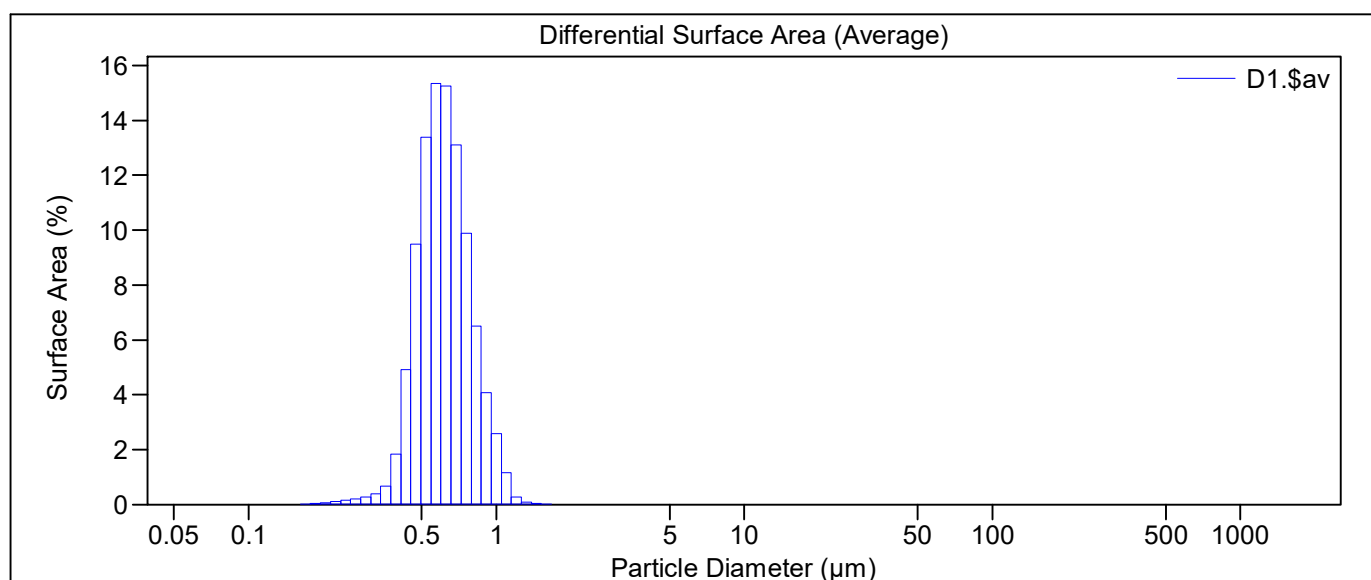
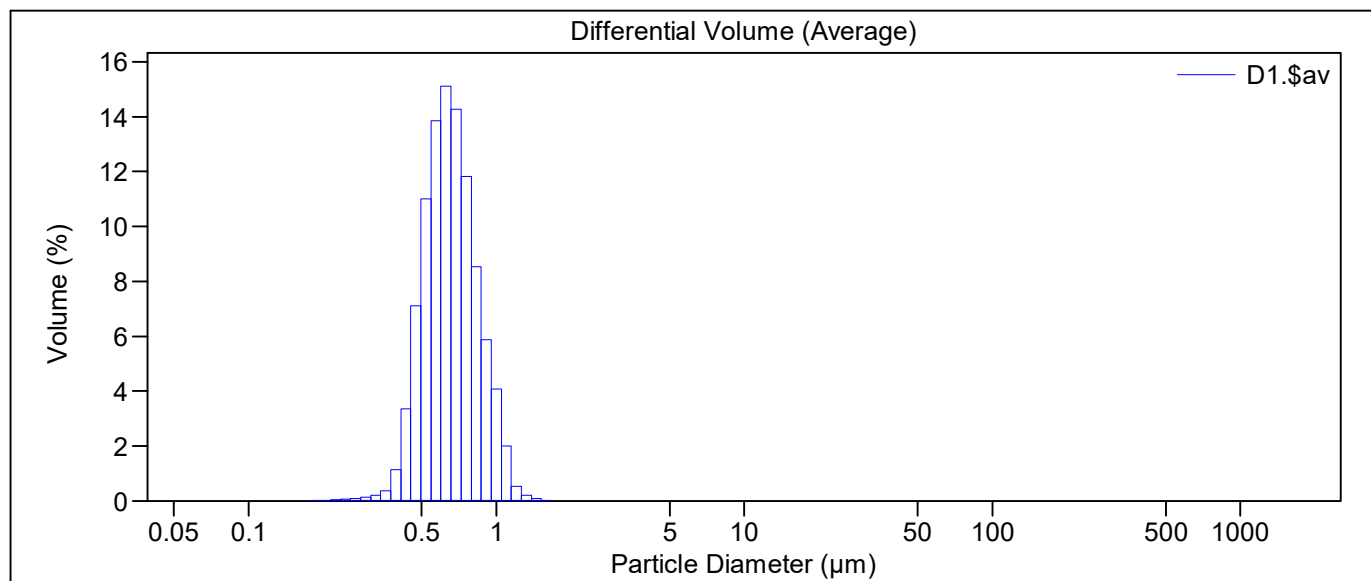
Spis treści

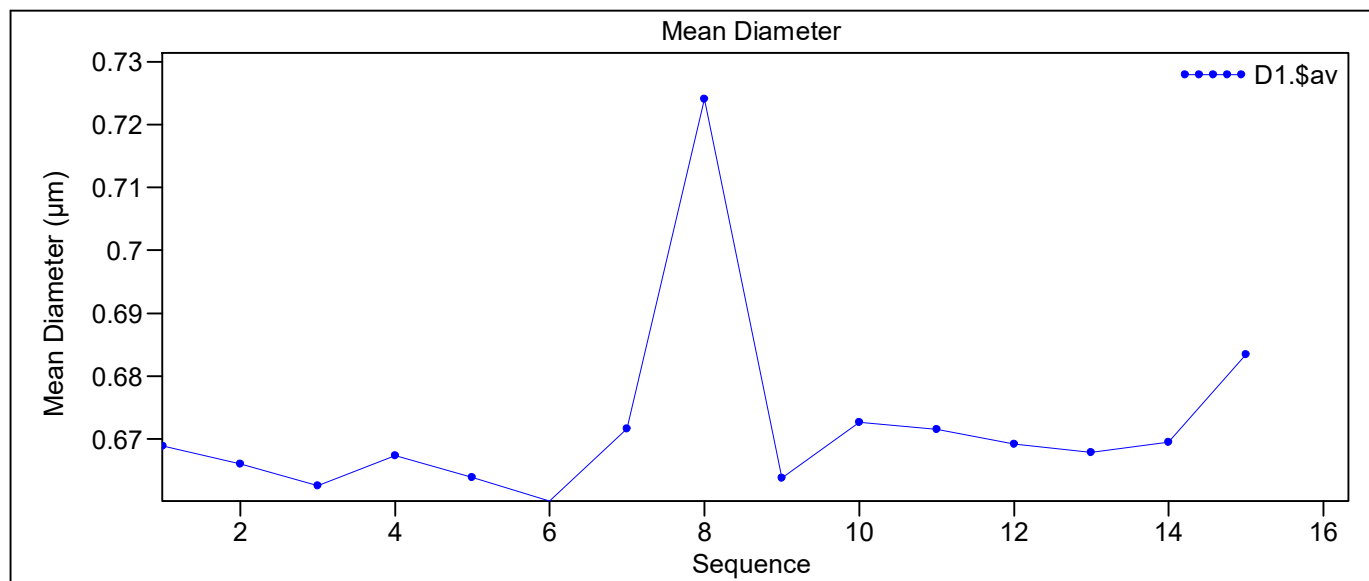
Próbka D1	2
Próbka D2	82
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Próbka M1	241
Próbka M2	321
Próbka M3	401
Próbka M4	480
Próbka M5	558
Próbka M6	637
Próbka M7	717
Próbka M8	797
Próbka M9	874

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1.\$av D1.\$av		
File ID:	D1		
Operator:	KW		
Optical model:	TiO2_KW.rf780d PIDS included		
LS 13 320	Universal Liquid Module		
Pump speed:	50%		
Fluid:	water		
Average of 15 files			
D:\KW\PROFARB\POMIARY\	TiO2\D1\D1_01_145336.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_02_145523.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_03_145711.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_04_150913.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_05_151101.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_06_151248.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_07_152257.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_08_152444.\$ls	D:\KW	
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\PROFARB\POMIARY\	TiO2\D1\D1_12_154750.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_13_160150.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_14_160337.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D1\D1_15_160526.\$ls		

Volume Statistics (Arithmetic)			D1.\$av	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.672 μm	S.D.:	0.169 μm	
Median:	0.647 μm	Variance:	0.029 μm ²	
Mean/Median ratio:	1.039	C.V.:	25.2%	
Mode:	0.627 μm	Skewness:	0.825 Right skewed	
		Kurtosis:	1.086 Leptokurtic	
<10%	<25%	<50%	<75%	<90%
0.480 μm	0.550 μm	0.647 μm	0.769 μm	0.909 μm





D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0.000001	0.000003	0.000060
14	0.134	0.141	0.000079	0.00035	0.0059
15	0.148	0.155	0.0010	0.0042	0.058
16	0.162	0.170	0.0050	0.019	0.22
17	0.178	0.186	0.013	0.045	0.43
18	0.195	0.205	0.024	0.075	0.59
19	0.214	0.225	0.039	0.11	0.72
20	0.235	0.247	0.062	0.16	0.86
21	0.258	0.271	0.093	0.22	0.98
22	0.284	0.297	0.13	0.28	1.05
23	0.311	0.326	0.20	0.39	1.21
24	0.342	0.358	0.38	0.67	1.73
25	0.375	0.393	1.15	1.85	3.94
26	0.412	0.431	3.35	4.91	8.70
27	0.452	0.474	7.12	9.50	14.0
28	0.496	0.520	11.0	13.4	16.3
29	0.545	0.571	13.9	15.4	15.5
30	0.598	0.627	15.1	15.2	12.8
31	0.656	0.688	14.3	13.1	9.14
32	0.721	0.755	11.8	9.90	5.73
33	0.791	0.829	8.53	6.51	3.12
34	0.868	0.910	5.87	4.08	1.62
35	0.953	0.999	4.08	2.58	0.85
36	1.047	1.097	2.01	1.16	0.32
37	1.149	1.204	0.54	0.28	0.065
38	1.261	1.321	0.20	0.097	0.018
39	1.385	1.451	0.095	0.042	0.0065
40	1.520	1.592	0.032	0.013	0.0017
41	1.668	1.748	0.0060	0.0022	0.00024

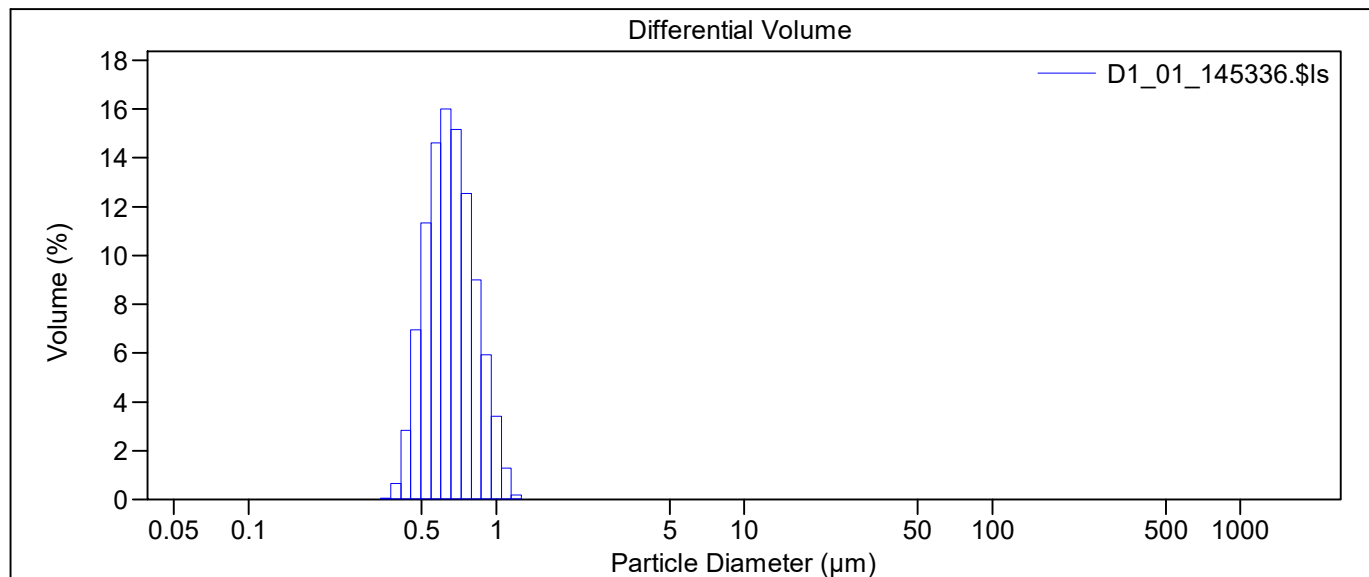
D1.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.00054	0.00018	0.000016
43	2.011	2.107	0.000005	0.000001	1.01E-7
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

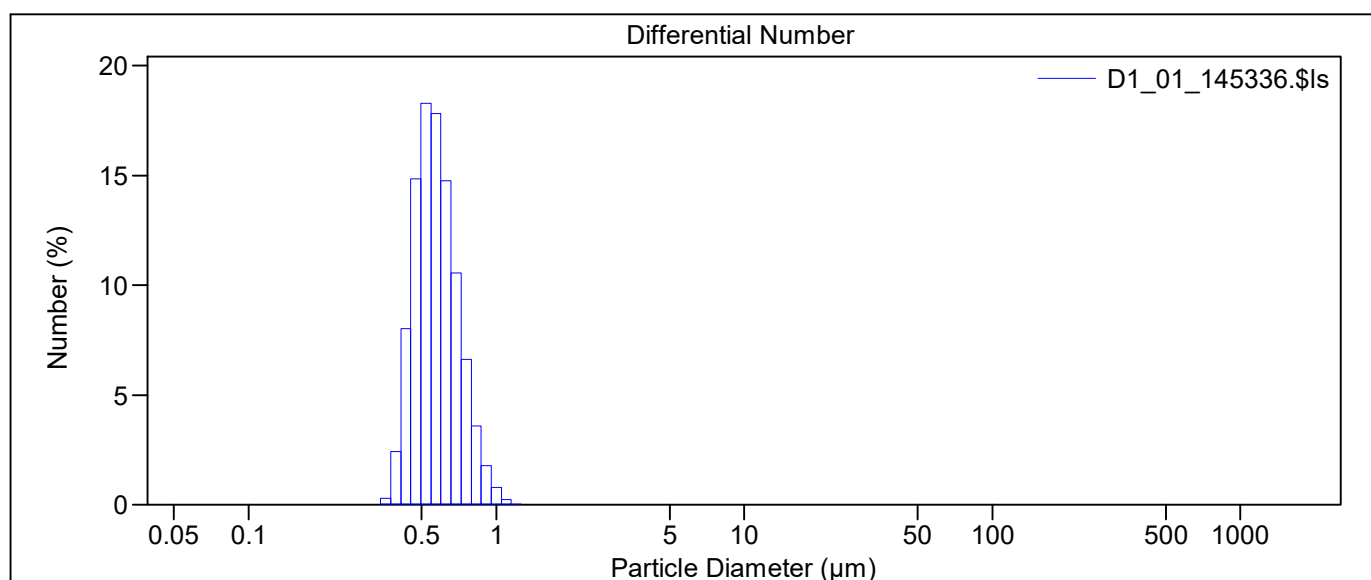
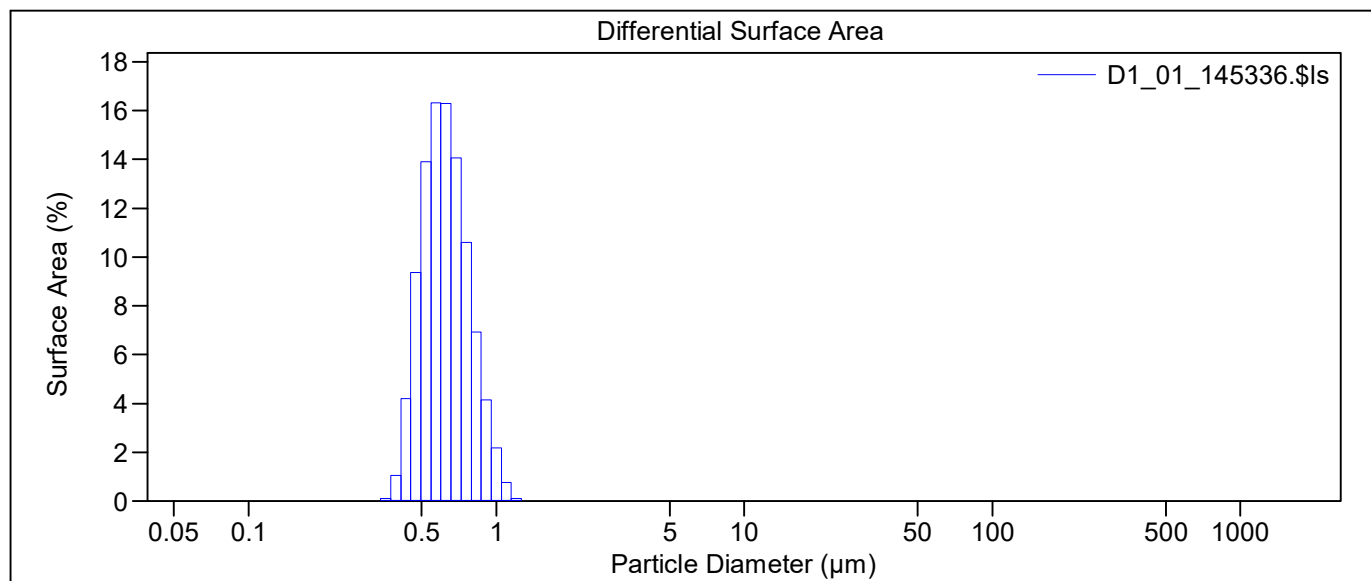
D1.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_01_145336.\$ls		
	D1_01_145336.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.91%		
LS 13 320	Universal Liquid Module		
Start time:	14:51 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_01_145336.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.150 μm
Mean:	0.669 μm		Variance:	0.022 μm ²
Median:	0.648 μm		C.V.:	22.4%
Mean/Median ratio:	1.033		Skewness:	0.671 Right skewed
Mode:	0.627 μm		Kurtosis:	0.136 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.493 μm	0.556 μm	0.648 μm	0.762 μm	0.880 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.0015	0.0029	0.0096
24	0.342	0.358	0.059	0.11	0.29
25	0.375	0.393	0.65	1.05	2.41
26	0.412	0.431	2.84	4.20	8.02
27	0.452	0.474	6.95	9.36	14.8
28	0.496	0.520	11.3	13.9	18.3
29	0.545	0.571	14.6	16.3	17.8
30	0.598	0.627	16.0	16.3	14.8
31	0.656	0.688	15.2	14.1	10.6
32	0.721	0.755	12.5	10.6	6.61
33	0.791	0.829	9.01	6.93	3.59
34	0.868	0.910	5.93	4.15	1.78
35	0.953	0.999	3.41	2.18	0.78
36	1.047	1.097	1.29	0.75	0.22
37	1.149	1.204	0.18	0.097	0.024
38	1.261	1.321	0.0068	0.0033	0.00067
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

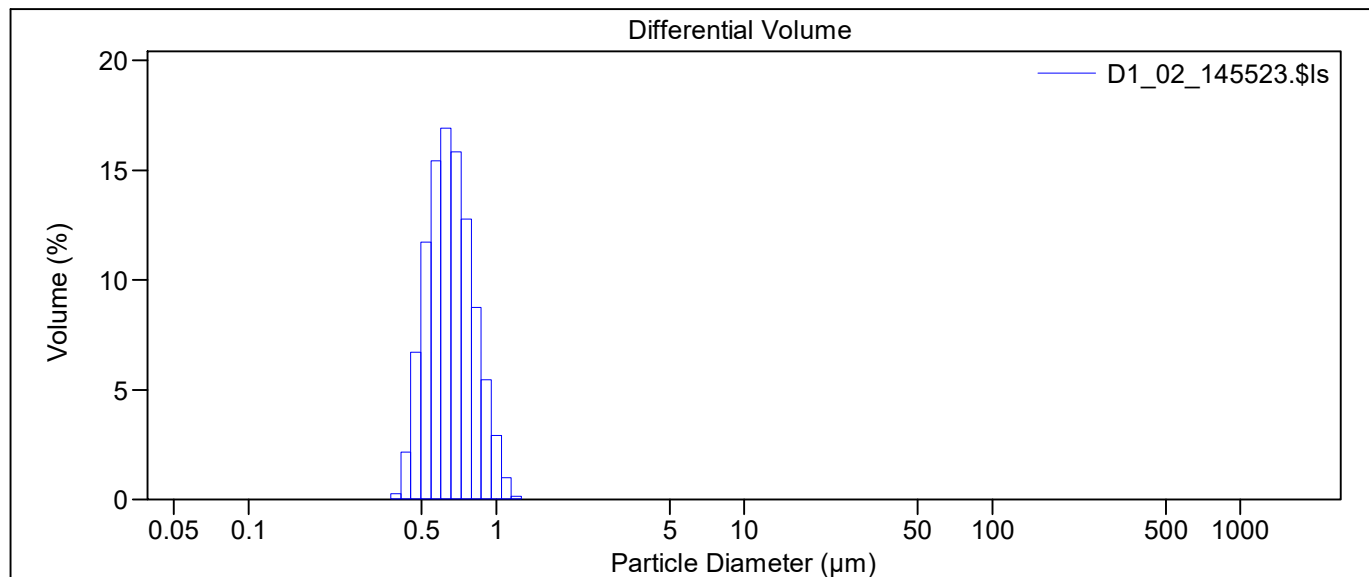
D1.\$av

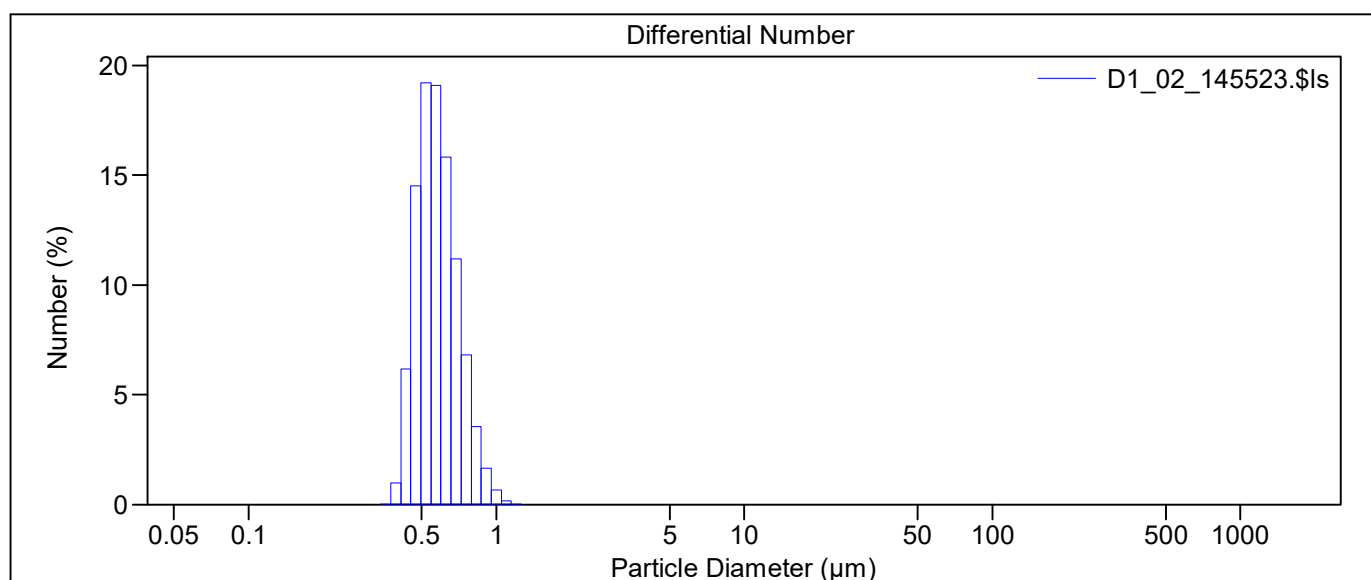
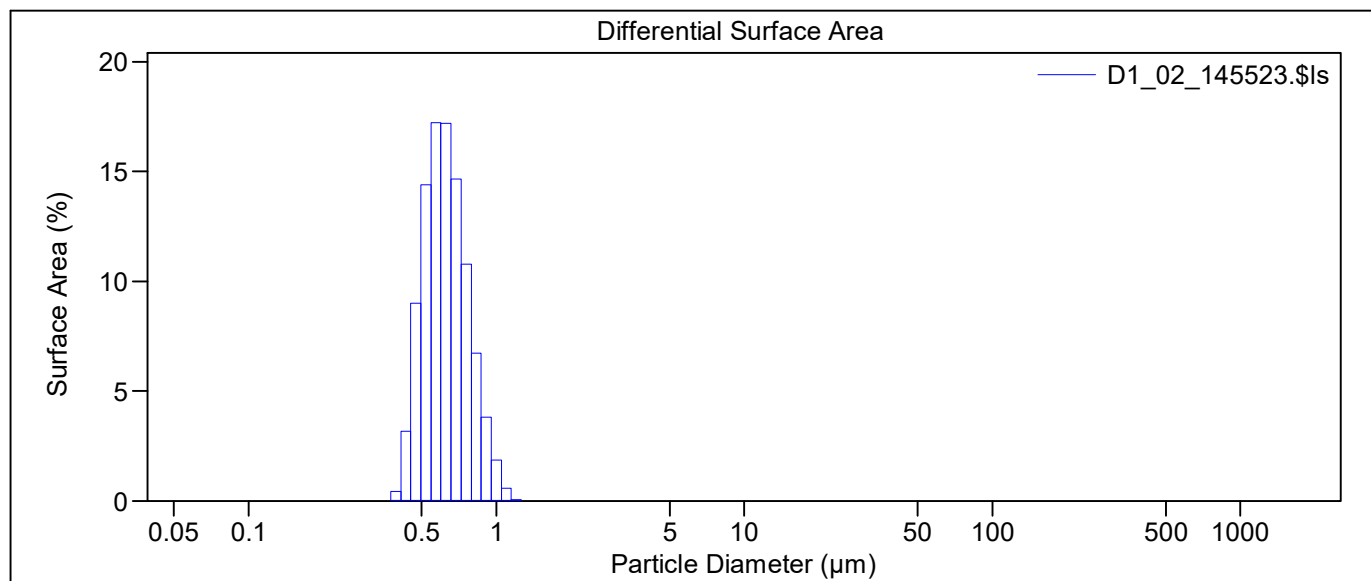
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_02_145523.\$ls		
	D1_02_145523.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.00%		
LS 13 320	Universal Liquid Module		
Start time:	14:53 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_02_145523.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.142 μm
Mean:	0.666 μm		Variance:	0.020 μm ²
Median:	0.646 μm		C.V.:	21.3%
Mean/Median ratio:	1.032		Skewness:	0.710 Right skewed
Mode:	0.627 μm		Kurtosis:	0.248 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.500 μm	0.559 μm	0.646 μm	0.754 μm	0.864 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0079	0.014	0.040
25	0.375	0.393	0.26	0.42	0.99
26	0.412	0.431	2.15	3.19	6.18
27	0.452	0.474	6.69	9.01	14.5
28	0.496	0.520	11.7	14.4	19.2
29	0.545	0.571	15.4	17.2	19.1
30	0.598	0.627	16.9	17.2	15.8
31	0.656	0.688	15.8	14.7	11.2
32	0.721	0.755	12.8	10.8	6.84
33	0.791	0.829	8.76	6.74	3.54
34	0.868	0.910	5.46	3.83	1.67
35	0.953	0.999	2.91	1.86	0.67
36	1.047	1.097	1.00	0.58	0.17
37	1.149	1.204	0.13	0.070	0.017
38	1.261	1.321	0.0045	0.0022	0.00045
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

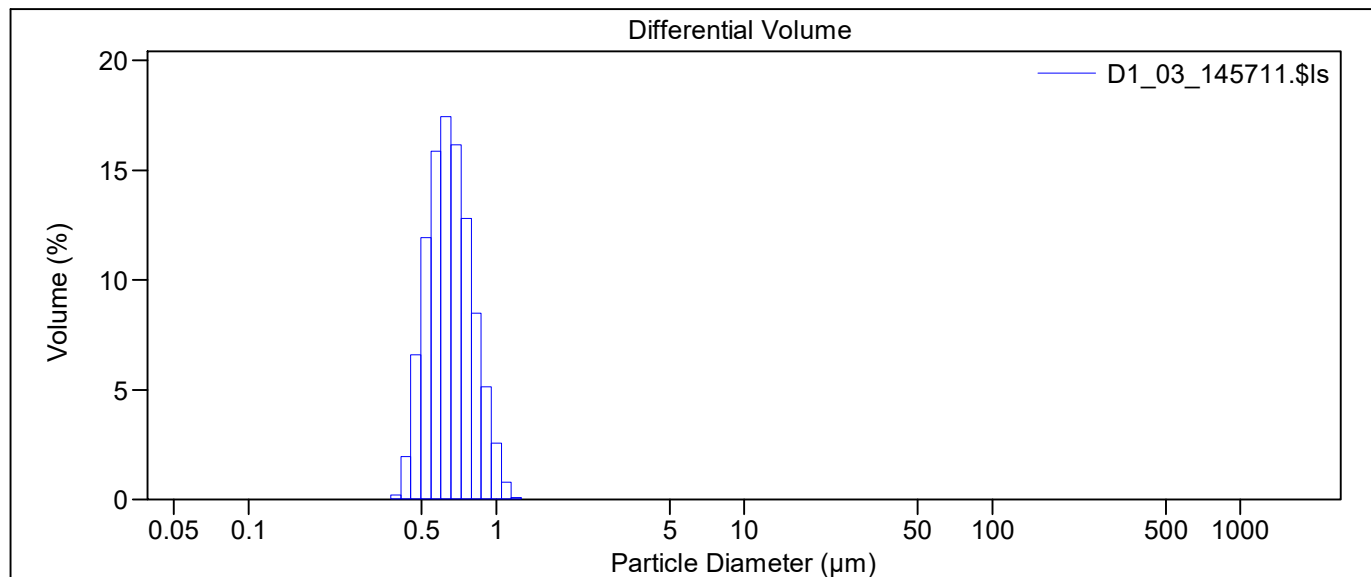
D1.\$av

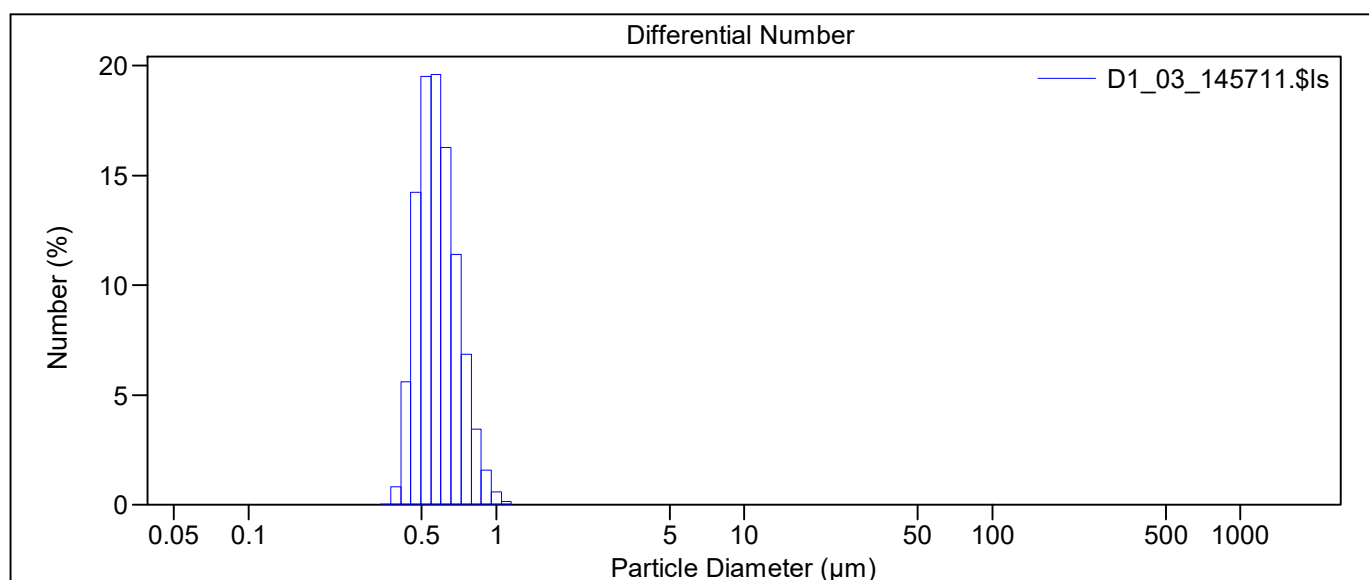
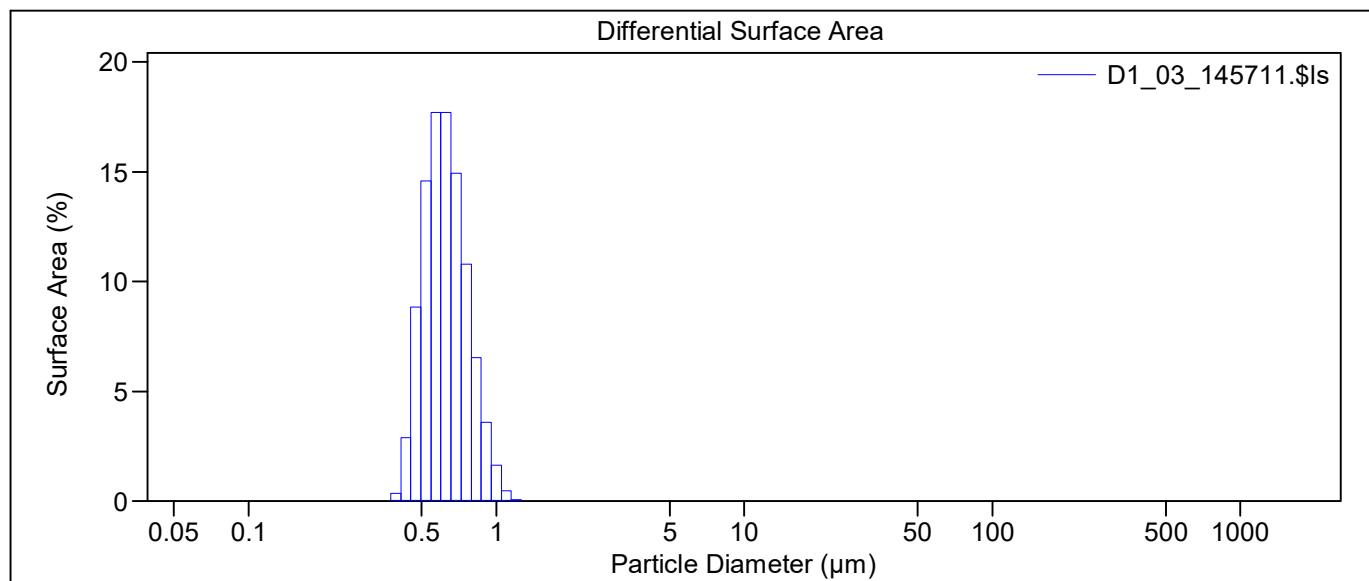
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_03_145711.\$ls		
	D1_03_145711.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.06%		
LS 13 320	Universal Liquid Module		
Start time:	14:55 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_03_145711.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.137 μm
Mean:	0.663 μm		Variance:	0.019 μm ²
Median:	0.643 μm		C.V.:	20.8%
Mean/Median ratio:	1.030		Skewness:	0.710 Right skewed
Mode:	0.627 μm		Kurtosis:	0.280 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.501 μm	0.559 μm	0.643 μm	0.748 μm	0.856 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0058	0.010	0.029
25	0.375	0.393	0.22	0.35	0.83
26	0.412	0.431	1.95	2.88	5.59
27	0.452	0.474	6.58	8.83	14.2
28	0.496	0.520	11.9	14.6	19.5
29	0.545	0.571	15.9	17.7	19.6
30	0.598	0.627	17.4	17.7	16.3
31	0.656	0.688	16.1	14.9	11.4
32	0.721	0.755	12.8	10.8	6.84
33	0.791	0.829	8.50	6.52	3.43
34	0.868	0.910	5.12	3.58	1.56
35	0.953	0.999	2.58	1.64	0.59
36	1.047	1.097	0.79	0.46	0.14
37	1.149	1.204	0.092	0.049	0.012
38	1.261	1.321	0.0027	0.0013	0.00027
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

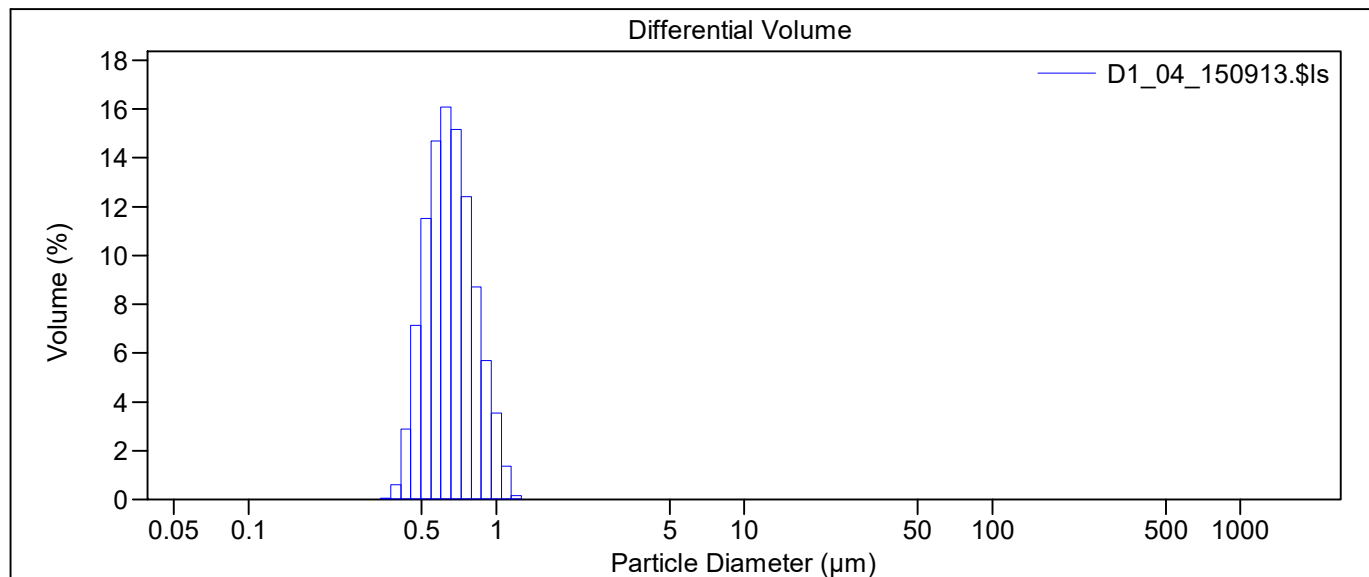
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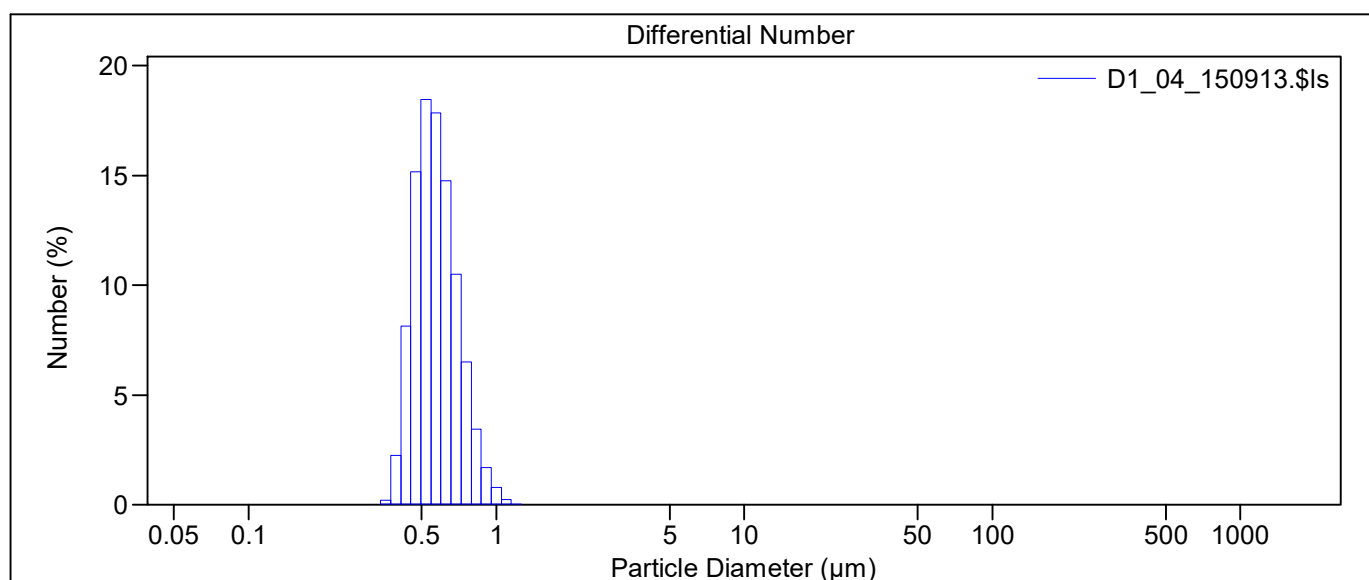
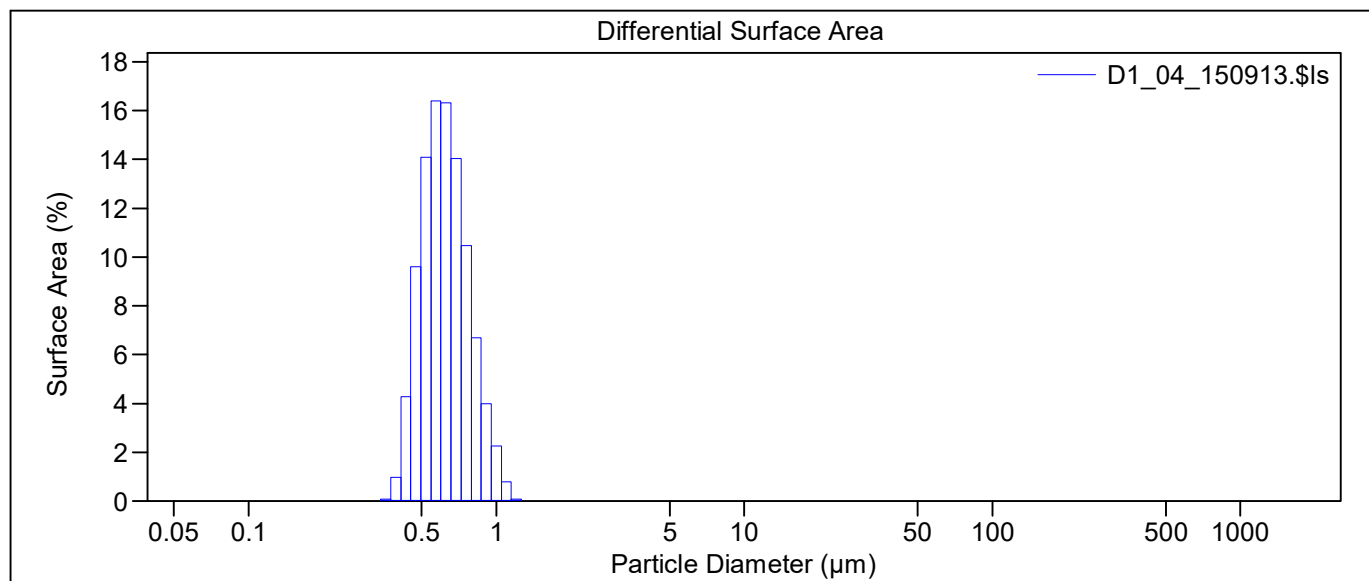
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_04_150913.\$ls		
	D1_04_150913.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.83%		
LS 13 320	Universal Liquid Module		
Start time:	15:07 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_04_150913.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.150 μm
Mean:	0.667 μm		Variance:	0.022 μm ²
Median:	0.646 μm		C.V.:	22.4%
Mean/Median ratio:	1.034		Skewness:	0.688 Right skewed
Mode:	0.627 μm		Kurtosis:	0.136 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.492 μm	0.555 μm	0.646 μm	0.760 μm	0.879 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00032	0.00062	0.0021
24	0.342	0.358	0.042	0.074	0.21
25	0.375	0.393	0.61	0.98	2.25
26	0.412	0.431	2.89	4.27	8.12
27	0.452	0.474	7.15	9.60	15.2
28	0.496	0.520	11.5	14.1	18.5
29	0.545	0.571	14.7	16.4	17.8
30	0.598	0.627	16.1	16.3	14.7
31	0.656	0.688	15.2	14.0	10.5
32	0.721	0.755	12.4	10.5	6.51
33	0.791	0.829	8.71	6.69	3.45
34	0.868	0.910	5.69	3.98	1.70
35	0.953	0.999	3.53	2.25	0.80
36	1.047	1.097	1.36	0.79	0.23
37	1.149	1.204	0.15	0.077	0.019
38	1.261	1.321	0.0013	0.00064	0.00013
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

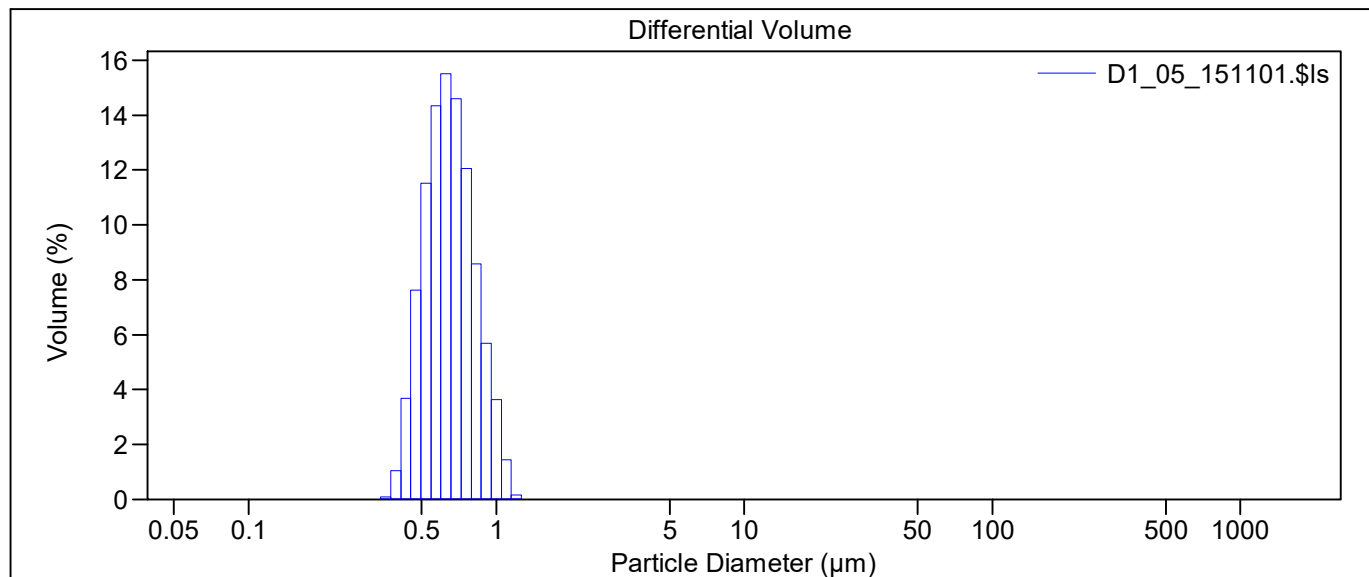
D1.\$av

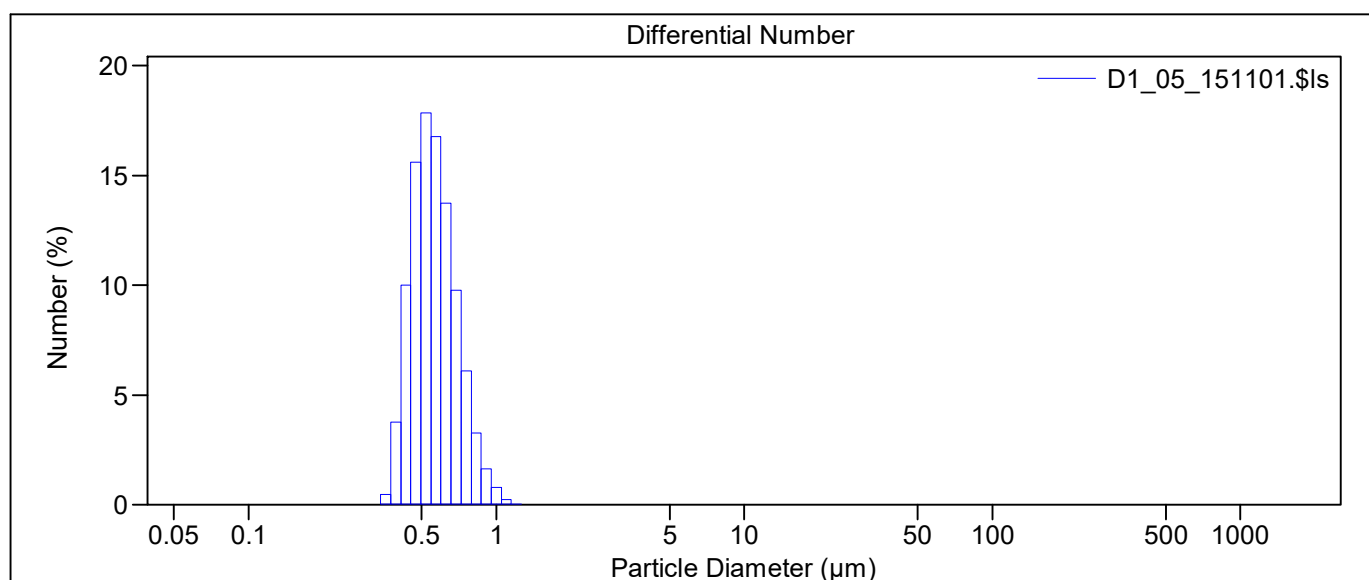
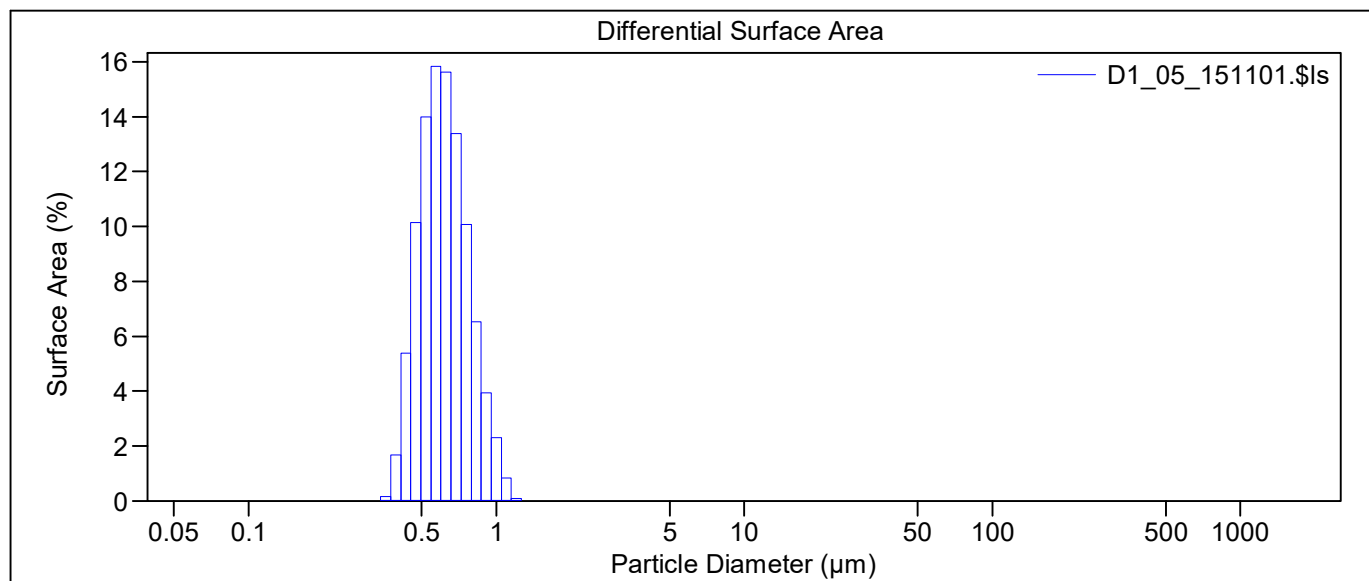
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_05_151101.\$ls		
	D1_05_151101.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.76%		
LS 13 320	Universal Liquid Module		
Start time:	15:09 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_05_151101.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.154 μm
Mean:	0.664 μm		Variance:	0.024 μm ²
Median:	0.642 μm		C.V.:	23.1%
Mean/Median ratio:	1.034		Skewness:	0.669 Right skewed
Mode:	0.627 μm		Kurtosis:	0.083 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.482 μm	0.549 μm	0.642 μm	0.759 μm	0.882 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00083	0.0016	0.0052
24	0.342	0.358	0.096	0.17	0.46
25	0.375	0.393	1.05	1.69	3.77
26	0.412	0.431	3.69	5.39	9.99
27	0.452	0.474	7.62	10.2	15.6
28	0.496	0.520	11.5	14.0	17.8
29	0.545	0.571	14.3	15.8	16.8
30	0.598	0.627	15.5	15.6	13.7
31	0.656	0.688	14.6	13.4	9.77
32	0.721	0.755	12.1	10.1	6.09
33	0.791	0.829	8.58	6.53	3.28
34	0.868	0.910	5.69	3.95	1.64
35	0.953	0.999	3.64	2.30	0.79
36	1.047	1.097	1.44	0.83	0.24
37	1.149	1.204	0.16	0.082	0.020
38	1.261	1.321	0.0014	0.00069	0.00014
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

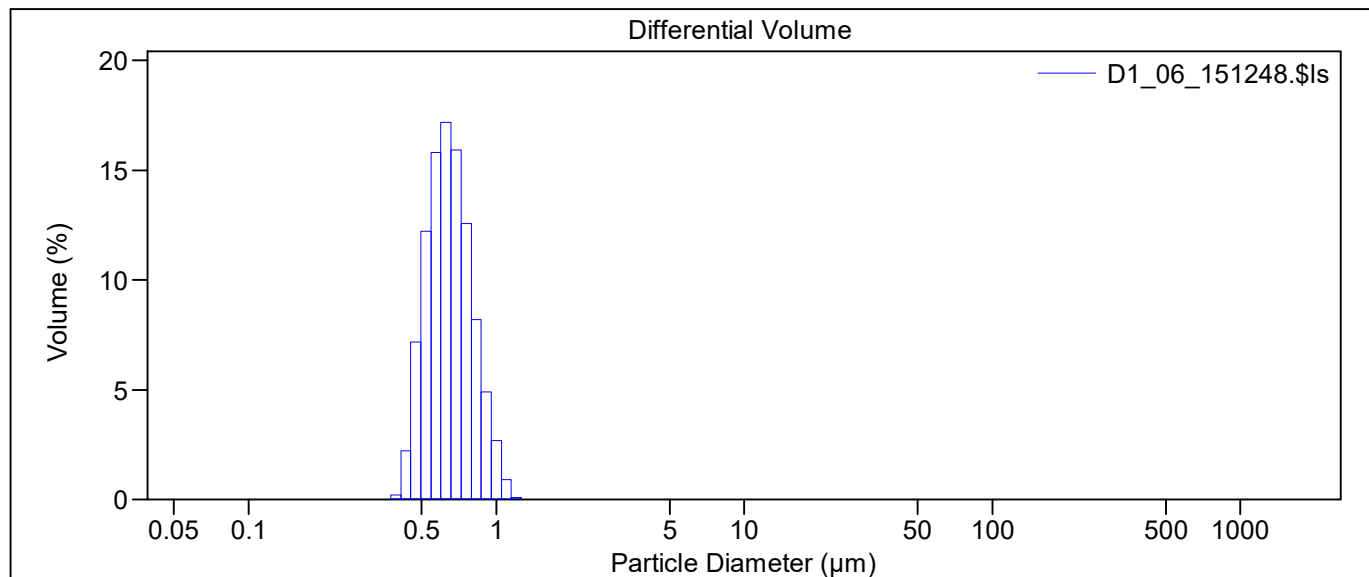
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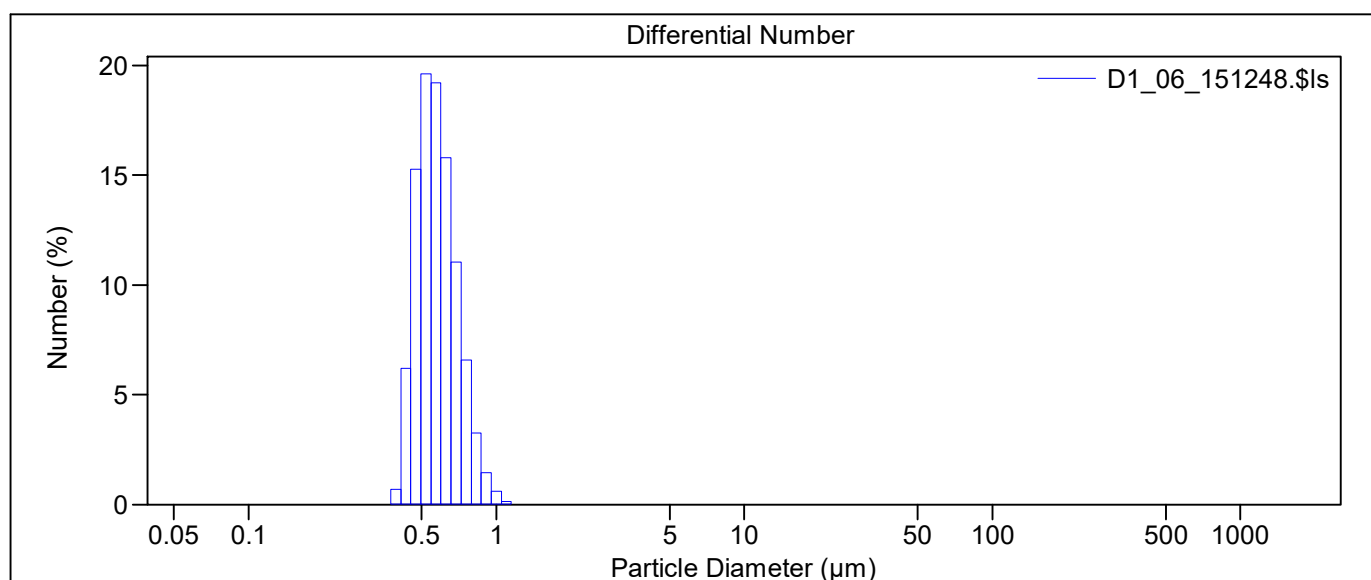
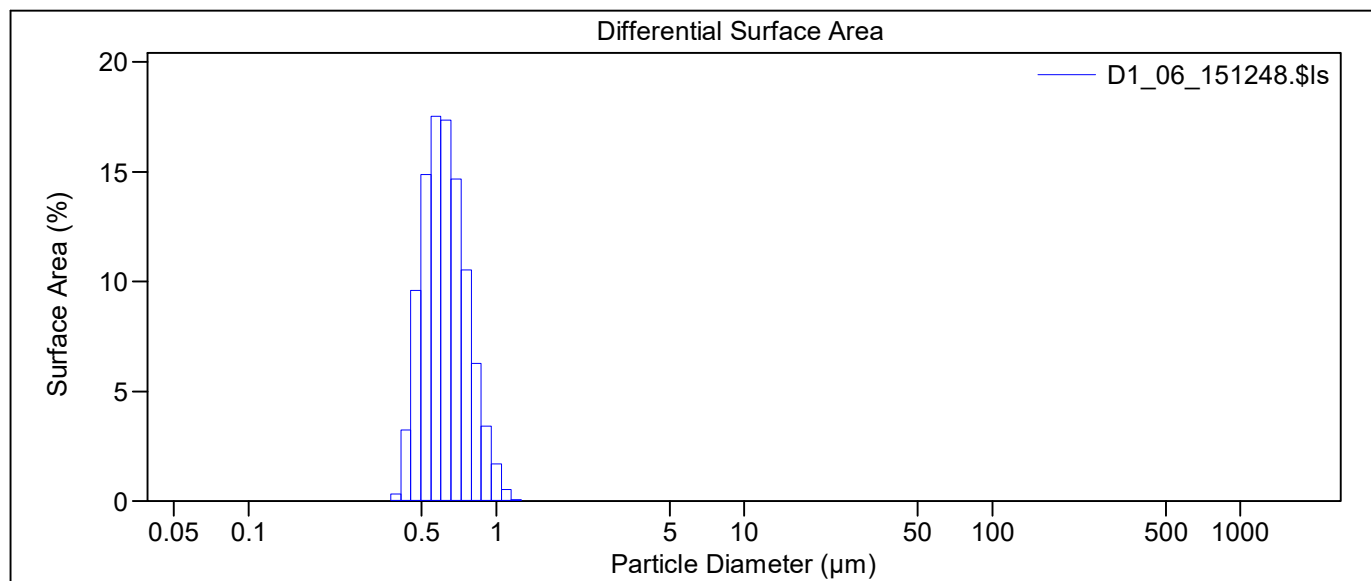
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_06_151248.\$ls		
	D1_06_151248.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.93%		
LS 13 320	Universal Liquid Module		
Start time:	15:11 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_06_151248.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.139 μm
Mean:	0.660 μm		Variance:	0.019 μm ²
Median:	0.640 μm		C.V.:	21.1%
Mean/Median ratio:	1.031		Skewness:	0.738 Right skewed
Mode:	0.627 μm		Kurtosis:	0.318 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.498 μm	0.556 μm	0.640 μm	0.745 μm	0.855 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0016	0.0028	0.0077
25	0.375	0.393	0.19	0.31	0.71
26	0.412	0.431	2.20	3.24	6.21
27	0.452	0.474	7.19	9.60	15.3
28	0.496	0.520	12.2	14.9	19.6
29	0.545	0.571	15.8	17.5	19.2
30	0.598	0.627	17.2	17.4	15.8
31	0.656	0.688	15.9	14.7	11.1
32	0.721	0.755	12.6	10.5	6.60
33	0.791	0.829	8.20	6.26	3.25
34	0.868	0.910	4.89	3.40	1.47
35	0.953	0.999	2.68	1.70	0.61
36	1.047	1.097	0.90	0.52	0.15
37	1.149	1.204	0.089	0.047	0.012
38	1.261	1.321	0.00078	0.00038	0.000077
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

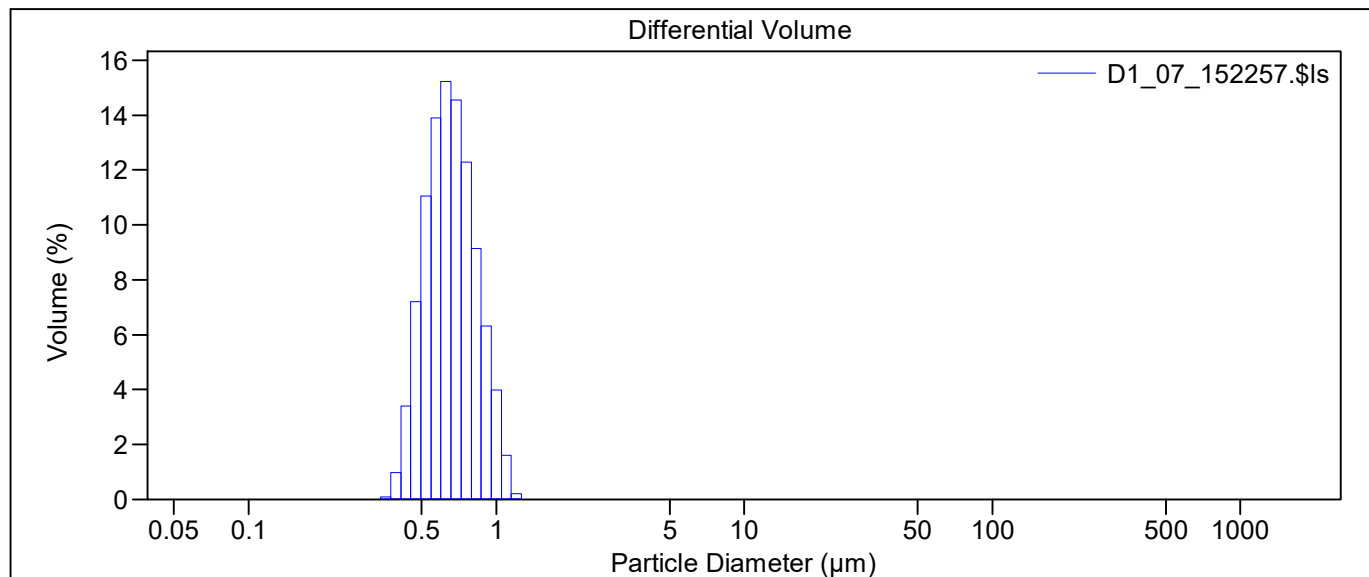
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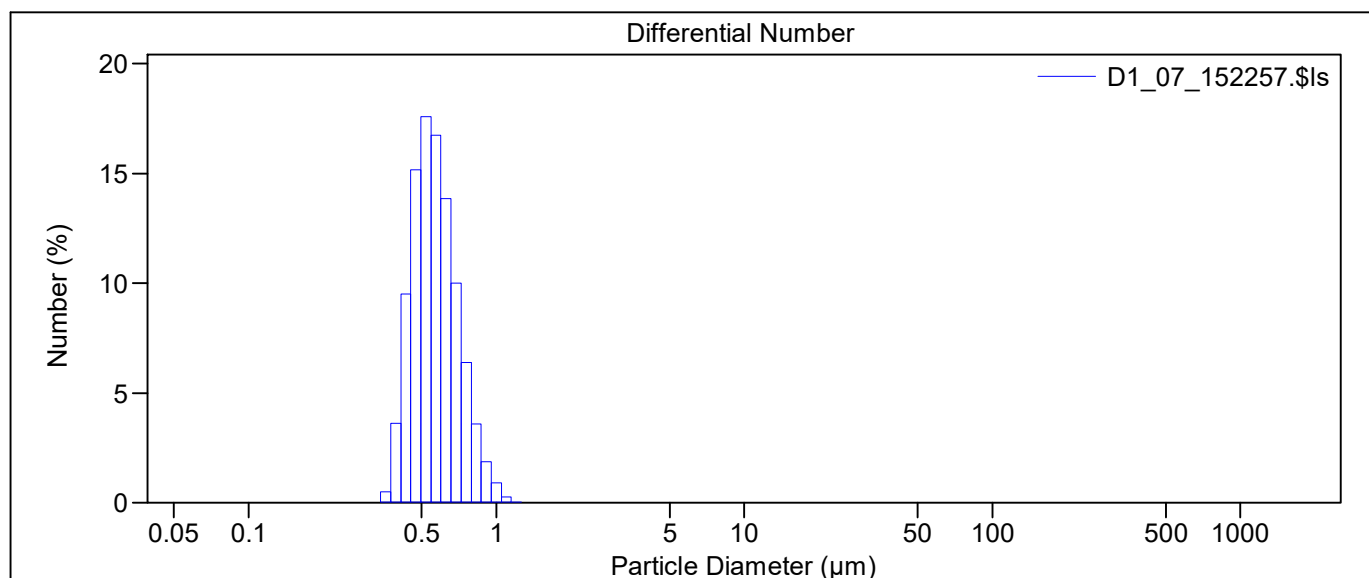
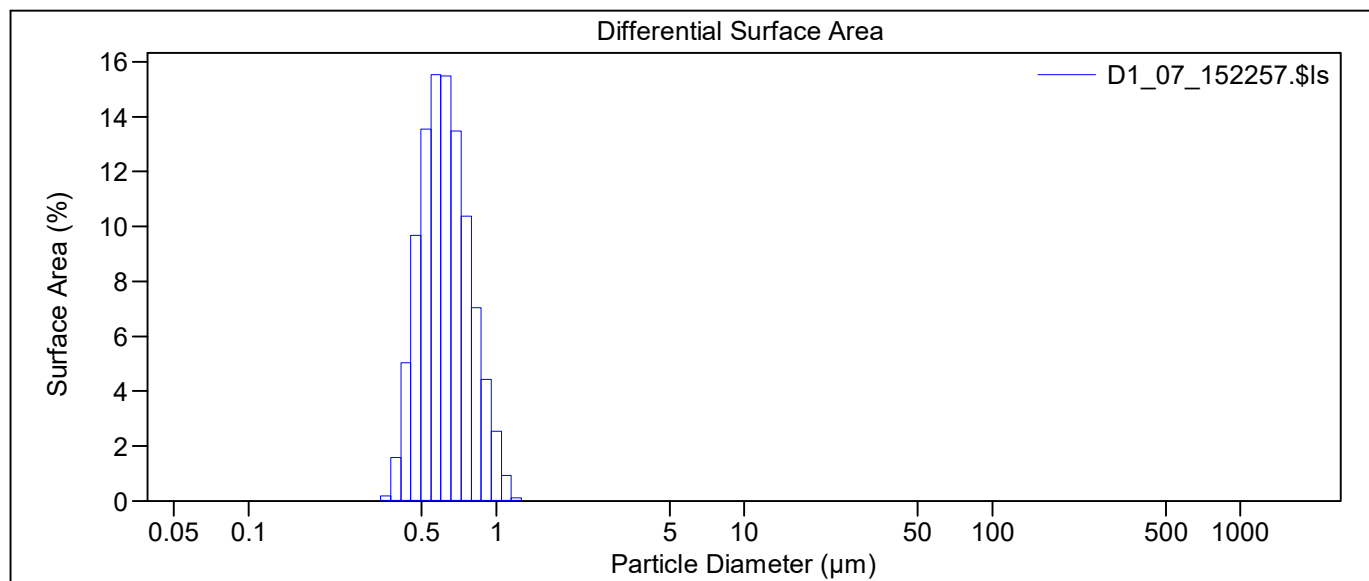
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_07_152257.\$ls		
	D1_07_152257.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.81%		
LS 13 320	Universal Liquid Module		
Start time:	15:21 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_07_152257.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.672 μm	S.D.:	0.156 μm	
Median:	0.649 μm	Variance:	0.024 μm ²	
Mean/Median ratio:	1.034	C.V.:	23.3%	
Mode:	0.627 μm	Skewness:	0.635 Right skewed	
		Kurtosis:	-0.0046 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.486 μm	0.553 μm	0.649 μm	0.770 μm	0.897 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.0022	0.0043	0.014
24	0.342	0.358	0.10	0.18	0.50
25	0.375	0.393	0.98	1.59	3.60
26	0.412	0.431	3.41	5.04	9.50
27	0.452	0.474	7.20	9.69	15.2
28	0.496	0.520	11.0	13.5	17.6
29	0.545	0.571	13.9	15.5	16.7
30	0.598	0.627	15.2	15.5	13.8
31	0.656	0.688	14.5	13.5	10.0
32	0.721	0.755	12.3	10.4	6.39
33	0.791	0.829	9.15	7.04	3.59
34	0.868	0.910	6.32	4.43	1.88
35	0.953	0.999	4.00	2.55	0.90
36	1.047	1.097	1.61	0.94	0.27
37	1.149	1.204	0.21	0.11	0.027
38	1.261	1.321	0.0051	0.0024	0.00049
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

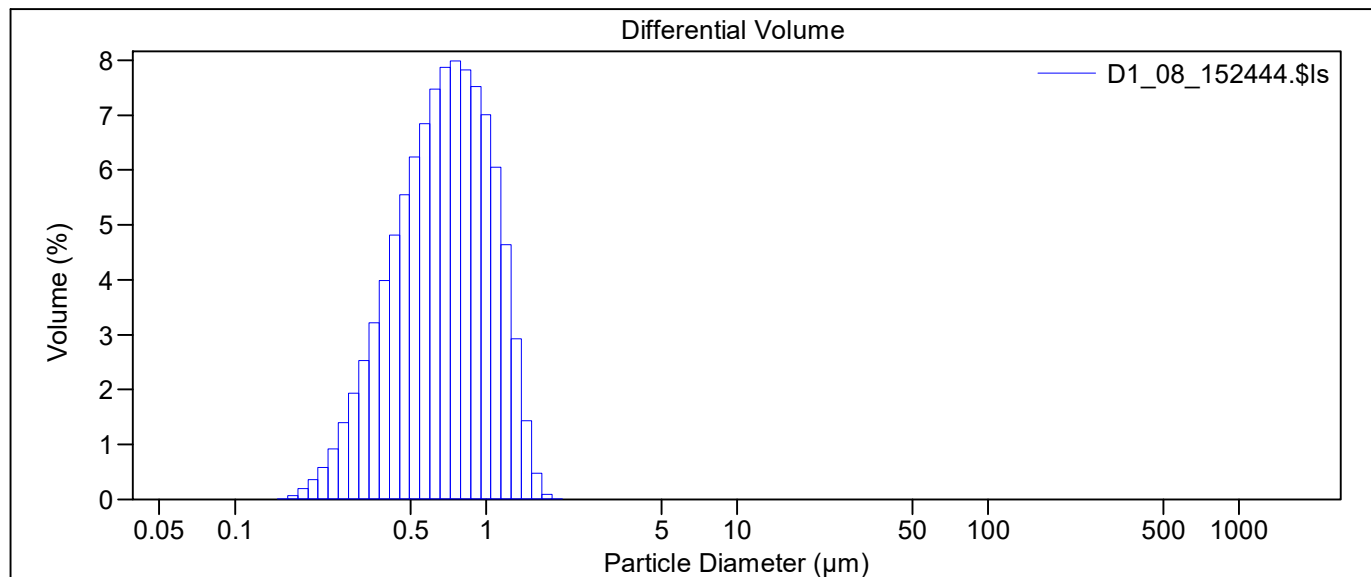
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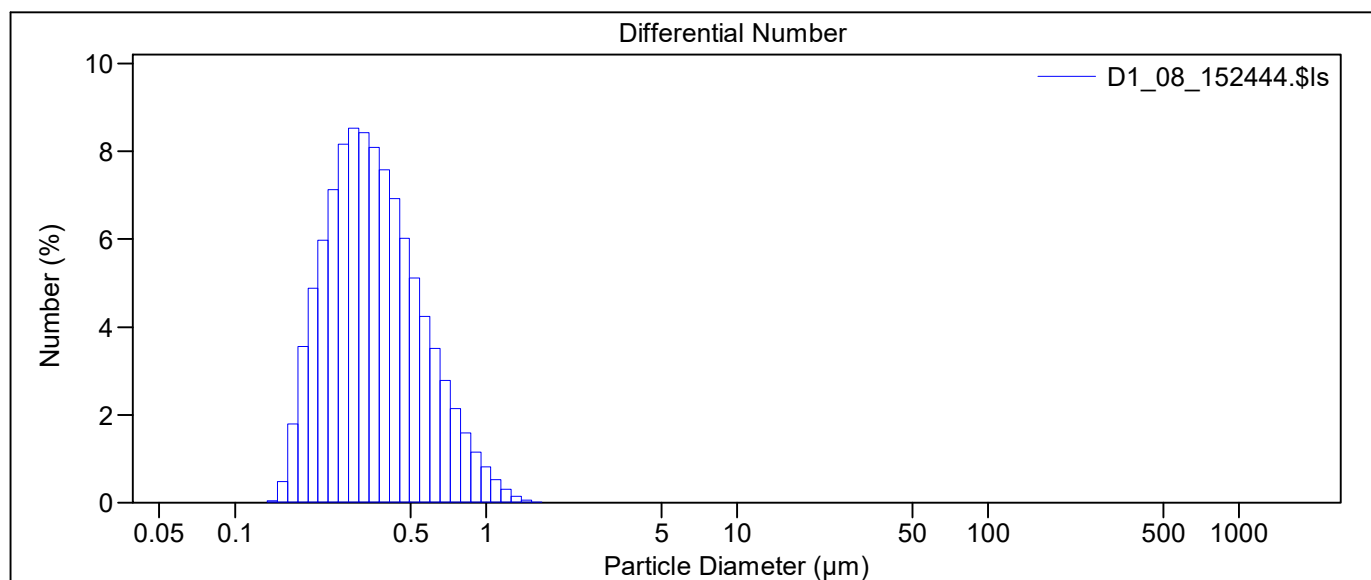
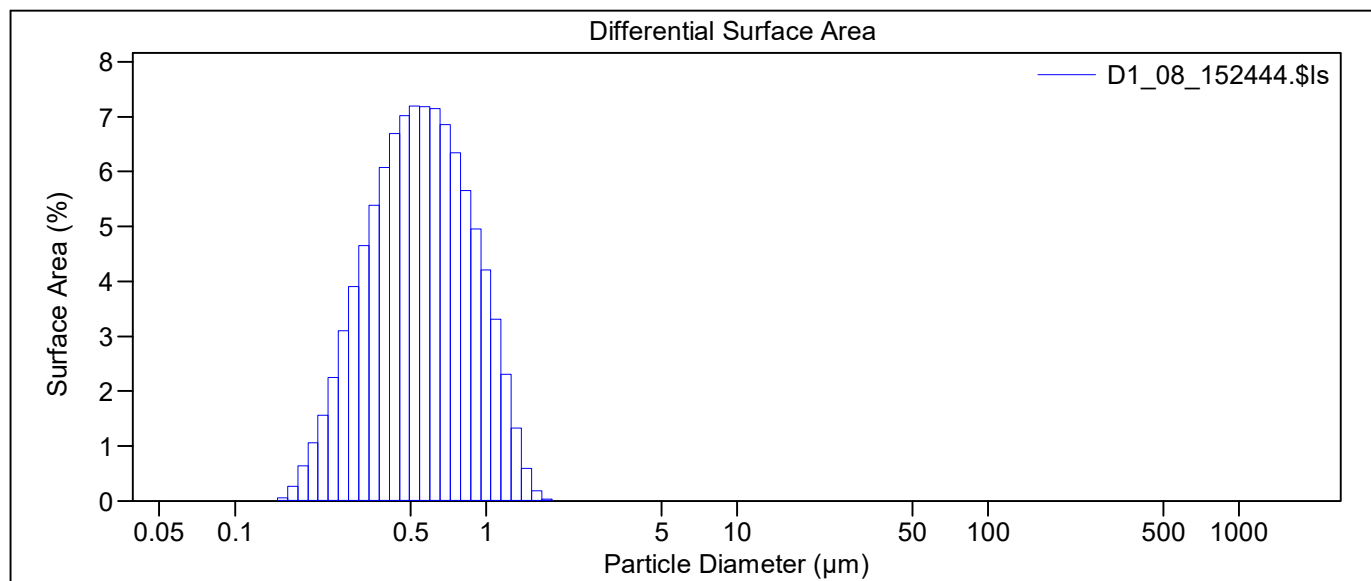
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_08_152444.\$ls		
	D1_08_152444.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.00%		
LS 13 320	Universal Liquid Module		
Start time:	15:23 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_08_152444.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.296 μm
Mean:	0.724 μm		Variance:	0.088 μm ²
Median:	0.688 μm		C.V.:	40.9%
Mean/Median ratio:	1.053		Skewness:	0.508 Right skewed
Mode:	0.755 μm		Kurtosis:	-0.304 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.362 μm	0.491 μm	0.688 μm	0.927 μm	1.142 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0.000009	0.000042	0.00050
14	0.134	0.141	0.0012	0.0050	0.049
15	0.148	0.155	0.015	0.060	0.48
16	0.162	0.170	0.076	0.27	1.79
17	0.178	0.186	0.20	0.64	3.56

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.36	1.06	4.88
19	0.214	0.225	0.59	1.57	5.98
20	0.235	0.247	0.93	2.25	7.13
21	0.258	0.271	1.40	3.10	8.16
22	0.284	0.297	1.94	3.91	8.53
23	0.311	0.326	2.53	4.65	8.42
24	0.342	0.358	3.21	5.38	8.08
25	0.375	0.393	3.99	6.08	7.58
26	0.412	0.431	4.82	6.69	6.92
27	0.452	0.474	5.55	7.02	6.03
28	0.496	0.520	6.24	7.19	5.12
29	0.545	0.571	6.84	7.19	4.25
30	0.598	0.627	7.48	7.15	3.51
31	0.656	0.688	7.87	6.86	2.79
32	0.721	0.755	7.99	6.34	2.14
33	0.791	0.829	7.82	5.66	1.58
34	0.868	0.910	7.52	4.95	1.15
35	0.953	0.999	7.01	4.21	0.81
36	1.047	1.097	6.06	3.31	0.53
37	1.149	1.204	4.64	2.31	0.31
38	1.261	1.321	2.93	1.33	0.15
39	1.385	1.451	1.43	0.59	0.054
40	1.520	1.592	0.48	0.18	0.014
41	1.668	1.748	0.090	0.031	0.0020
42	1.832	1.919	0.0081	0.0025	0.00013
43	2.011	2.107	0.000068	0.000019	0.000001
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

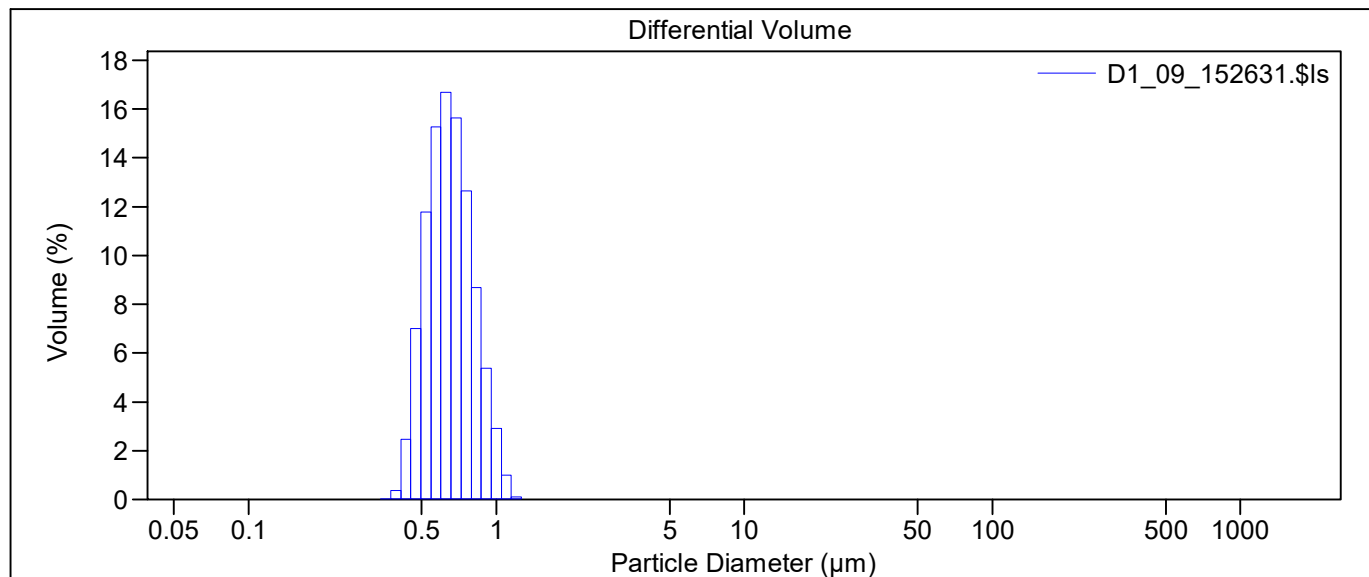
D1.\$av

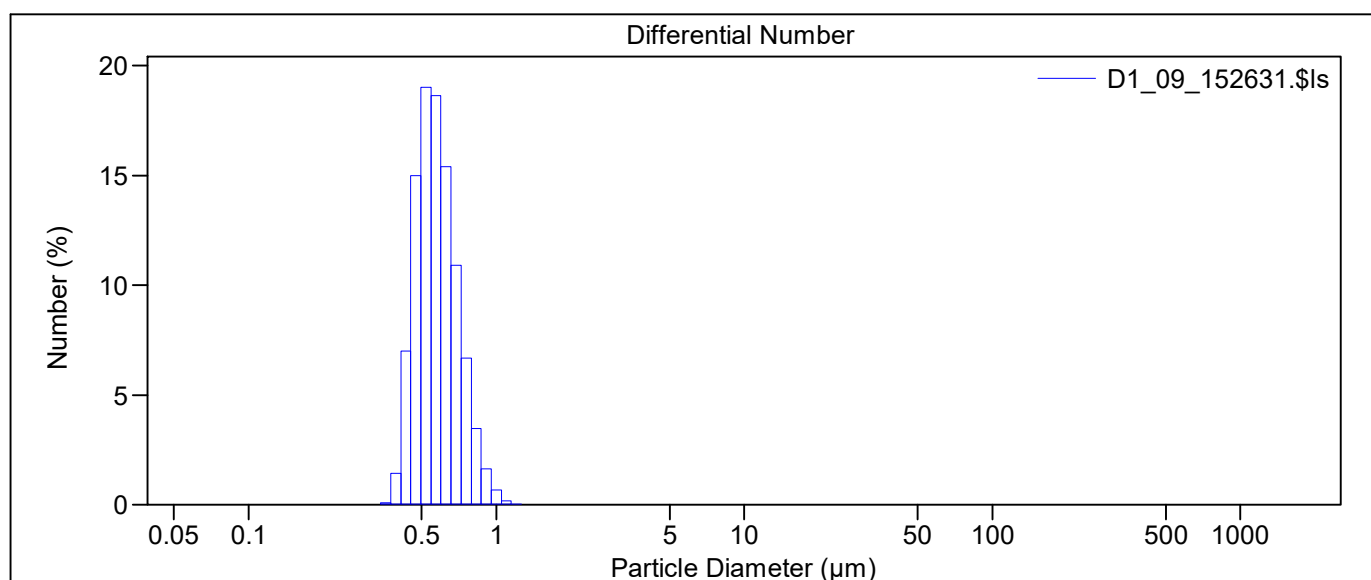
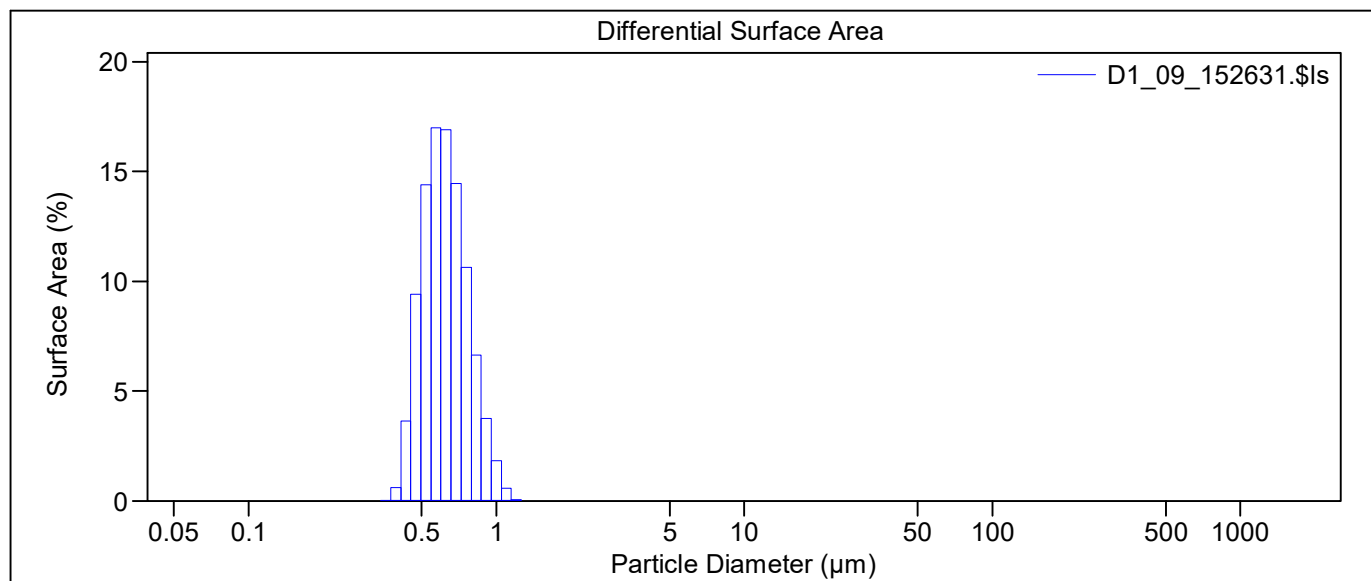
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_09_152631.\$ls		
	D1_09_152631.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.02%		
LS 13 320	Universal Liquid Module		
Start time:	15:24 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_09_152631.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.143 μm
Mean:	0.664 μm		Variance:	0.020 μm ²
Median:	0.644 μm		C.V.:	21.5%
Mean/Median ratio:	1.031		Skewness:	0.693 Right skewed
Mode:	0.627 μm		Kurtosis:	0.210 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.497 μm	0.556 μm	0.644 μm	0.753 μm	0.863 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00017	0.00033	0.0011
24	0.342	0.358	0.019	0.033	0.092
25	0.375	0.393	0.38	0.61	1.41
26	0.412	0.431	2.48	3.65	6.99
27	0.452	0.474	7.01	9.41	15.0
28	0.496	0.520	11.8	14.4	19.0
29	0.545	0.571	15.3	17.0	18.6
30	0.598	0.627	16.7	16.9	15.4
31	0.656	0.688	15.6	14.4	10.9
32	0.721	0.755	12.7	10.6	6.67
33	0.791	0.829	8.68	6.65	3.46
34	0.868	0.910	5.39	3.76	1.62
35	0.953	0.999	2.90	1.85	0.66
36	1.047	1.097	0.99	0.57	0.17
37	1.149	1.204	0.12	0.061	0.015
38	1.261	1.321	0.0026	0.0012	0.00025
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

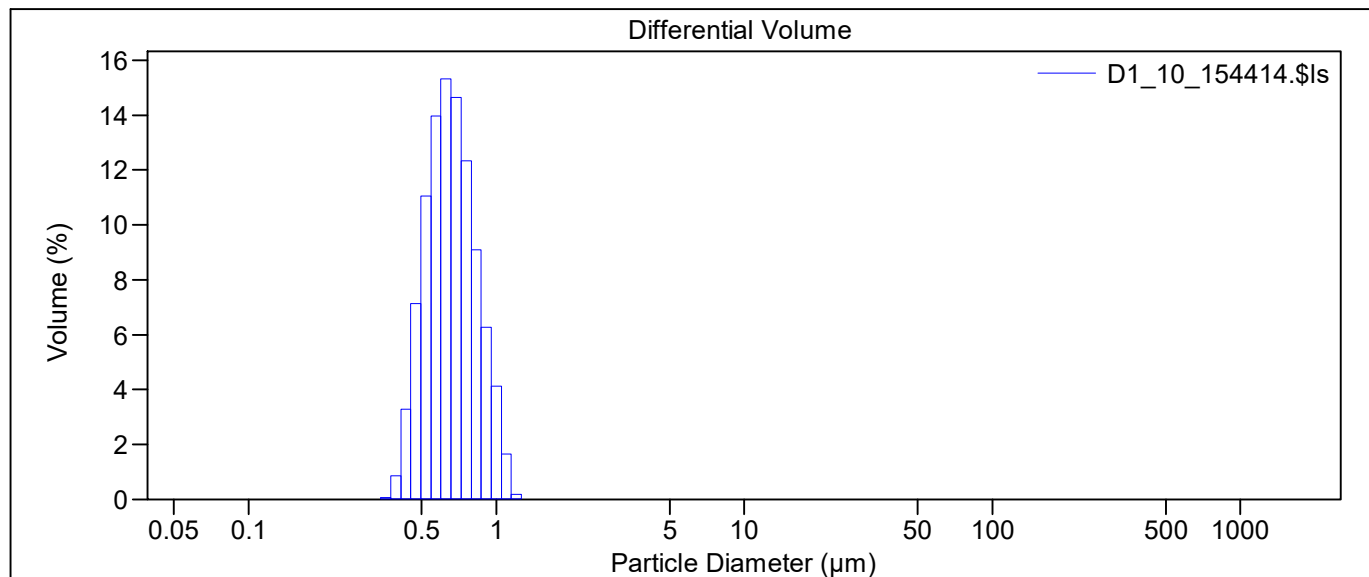
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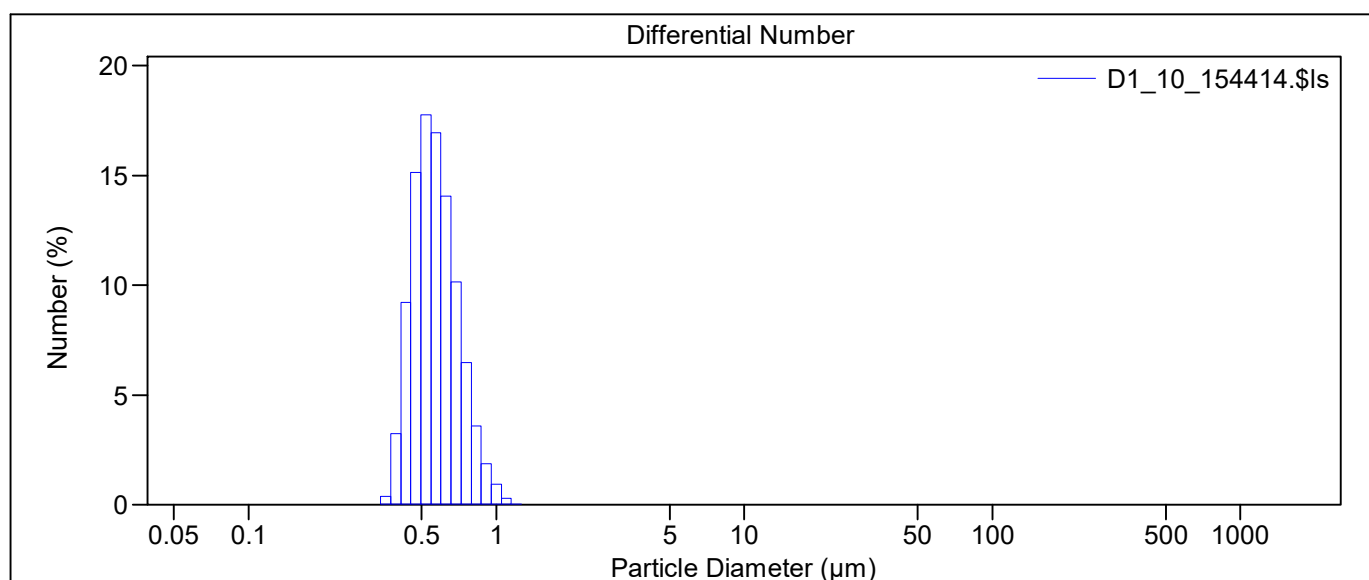
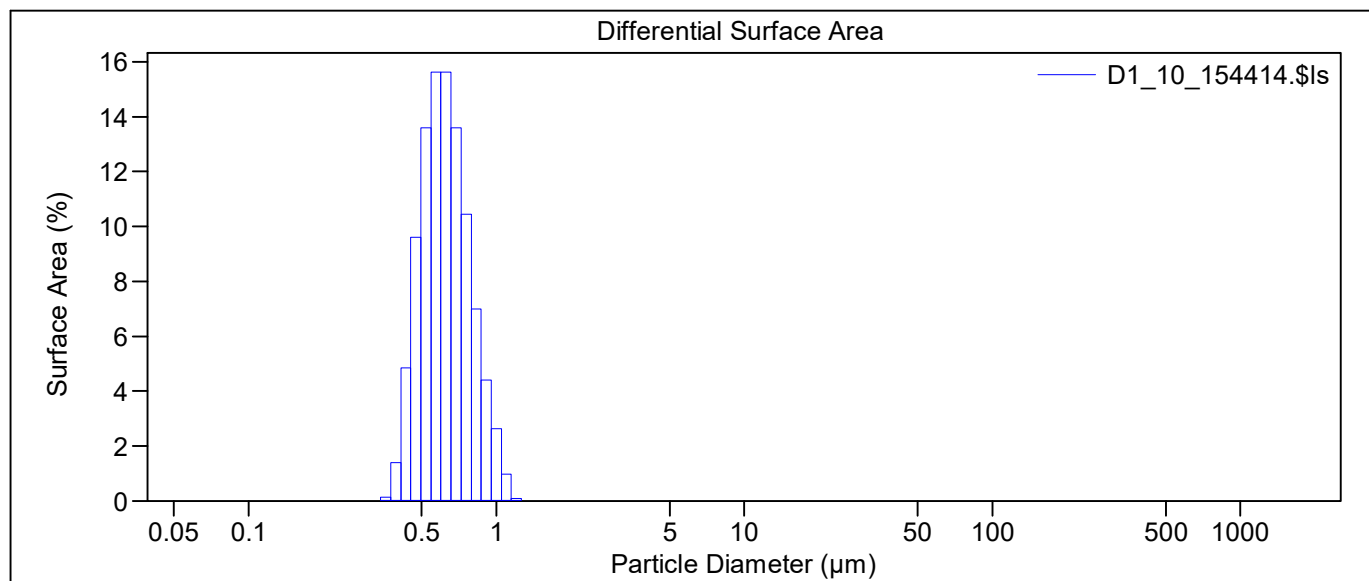
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_10_154414.\$ls		
	D1_10_154414.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.81%		
LS 13 320	Universal Liquid Module		
Start time:	15:42 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_10_154414.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.156 μm
Mean:	0.673 μm		Variance:	0.024 μm ²
Median:	0.650 μm		C.V.:	23.2%
Mean/Median ratio:	1.035		Skewness:	0.641 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.016 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.488 μm	0.555 μm	0.650 μm	0.770 μm	0.899 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00062	0.0012	0.0040
24	0.342	0.358	0.074	0.13	0.37
25	0.375	0.393	0.87	1.41	3.22
26	0.412	0.431	3.28	4.86	9.21
27	0.452	0.474	7.13	9.62	15.1
28	0.496	0.520	11.1	13.6	17.7
29	0.545	0.571	14.0	15.6	16.9
30	0.598	0.627	15.3	15.6	14.0
31	0.656	0.688	14.6	13.6	10.1
32	0.721	0.755	12.3	10.4	6.46
33	0.791	0.829	9.09	7.01	3.60
34	0.868	0.910	6.27	4.40	1.88
35	0.953	0.999	4.12	2.64	0.93
36	1.047	1.097	1.66	0.97	0.28
37	1.149	1.204	0.18	0.097	0.024
38	1.261	1.321	0.0017	0.00082	0.00016
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

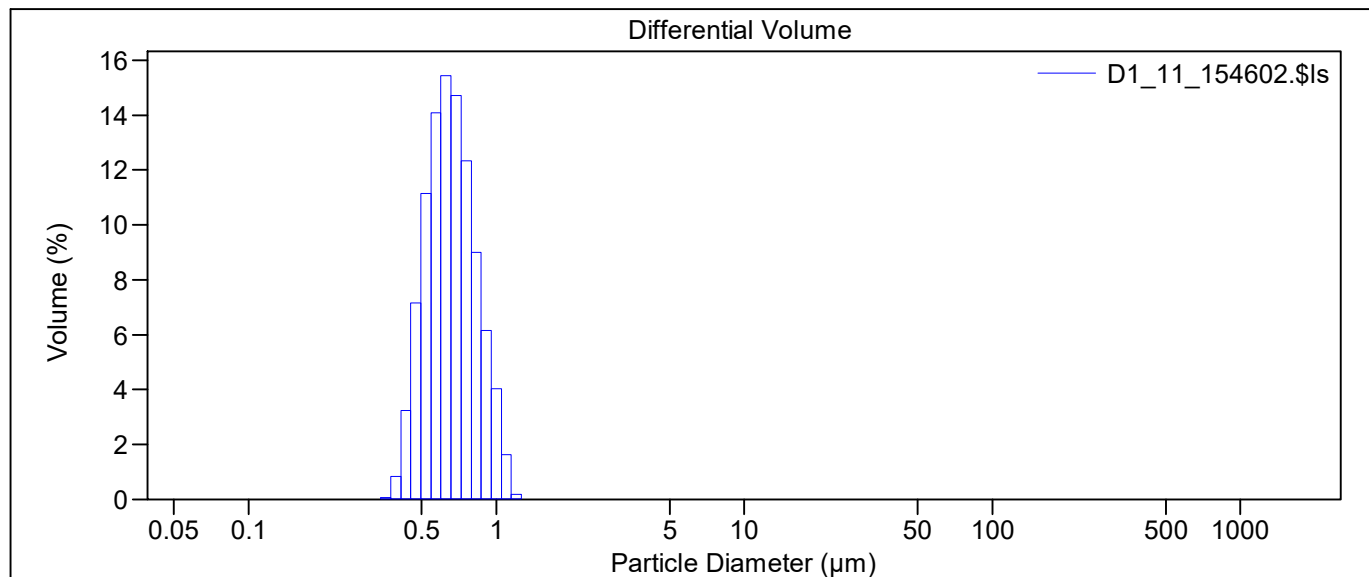
D1.\$av

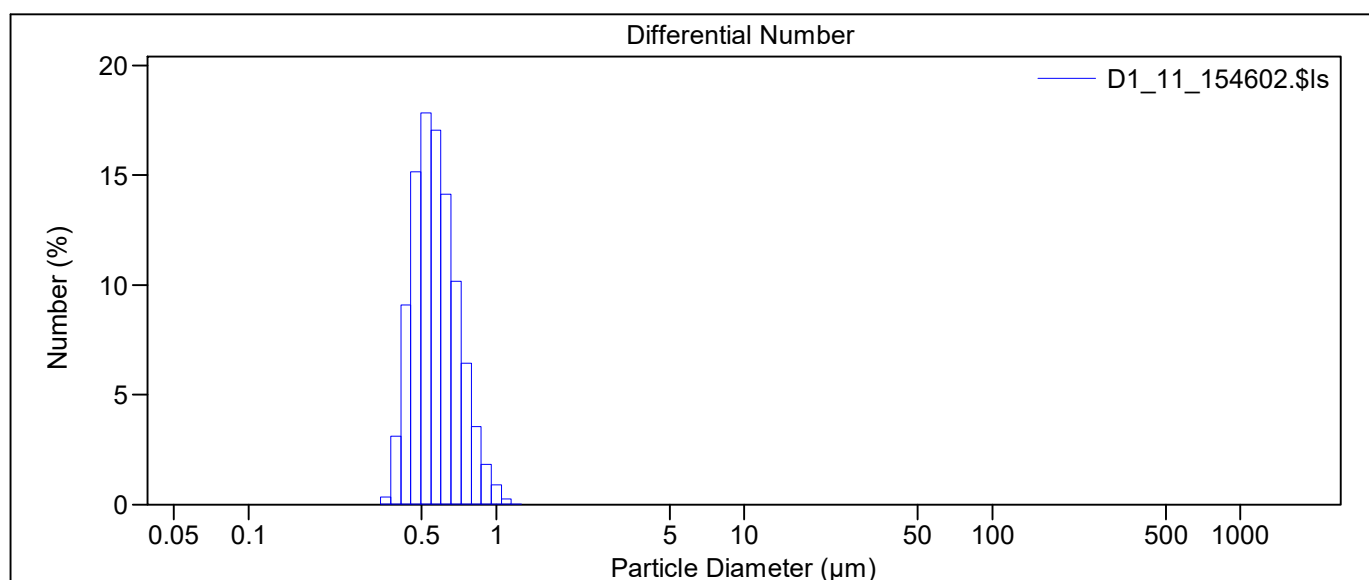
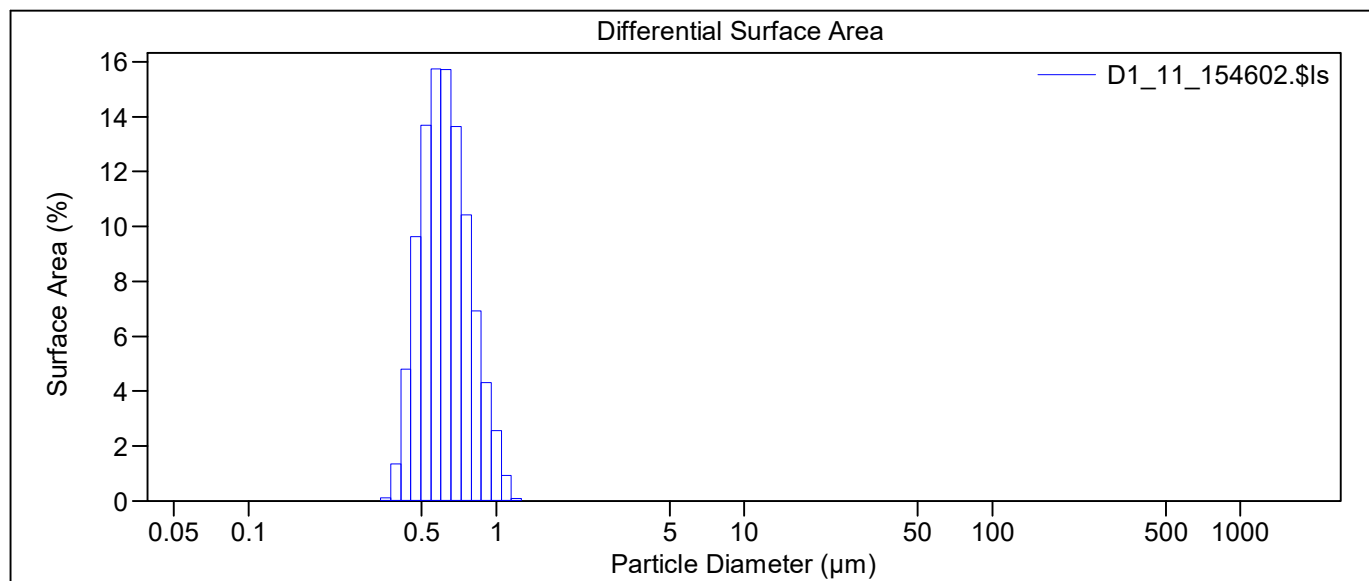
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_11_154602.\$ls		
	D1_11_154602.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.82%		
LS 13 320	Universal Liquid Module		
Start time:	15:44 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_11_154602.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.155 μm
Mean:	0.672 μm		Variance:	0.024 μm ²
Median:	0.649 μm		C.V.:	23.1%
Mean/Median ratio:	1.035		Skewness:	0.652 Right skewed
Mode:	0.627 μm		Kurtosis:	0.013 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.488 μm	0.554 μm	0.649 μm	0.768 μm	0.896 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00059	0.0011	0.0038
24	0.342	0.358	0.070	0.13	0.35
25	0.375	0.393	0.84	1.36	3.11
26	0.412	0.431	3.24	4.80	9.09
27	0.452	0.474	7.16	9.64	15.2
28	0.496	0.520	11.1	13.7	17.9
29	0.545	0.571	14.1	15.8	17.1
30	0.598	0.627	15.4	15.7	14.1
31	0.656	0.688	14.7	13.6	10.2
32	0.721	0.755	12.3	10.4	6.45
33	0.791	0.829	9.00	6.93	3.56
34	0.868	0.910	6.15	4.31	1.84
35	0.953	0.999	4.02	2.57	0.91
36	1.047	1.097	1.62	0.94	0.28
37	1.149	1.204	0.18	0.095	0.023
38	1.261	1.321	0.0016	0.00079	0.00016
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

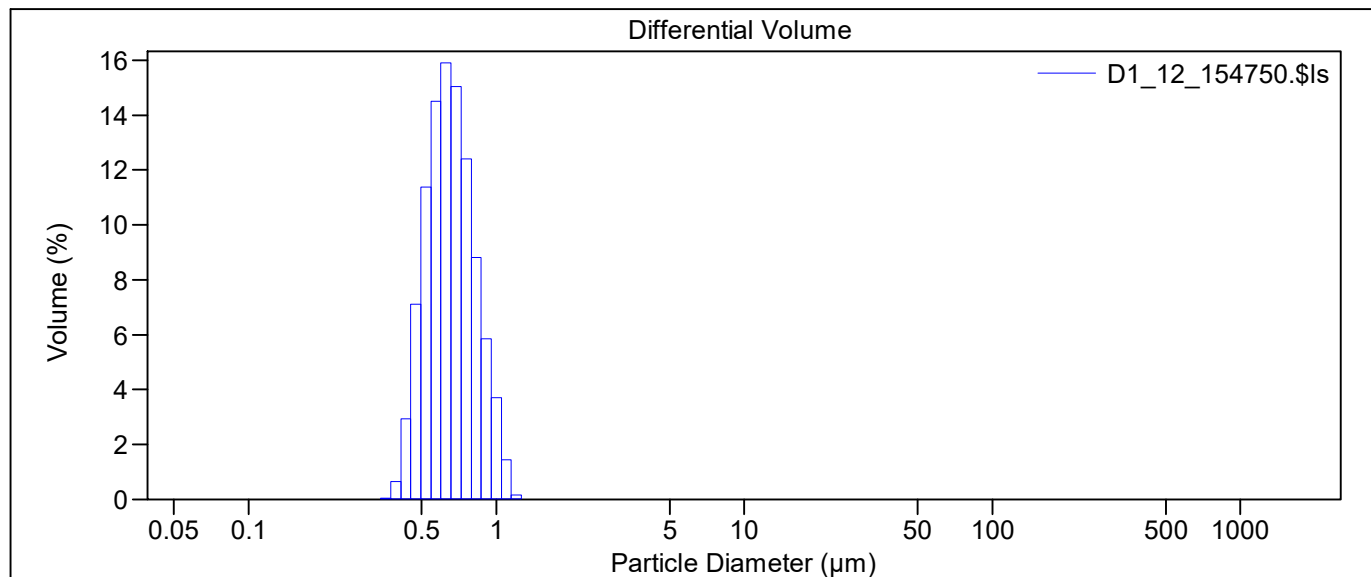
D1.\$av

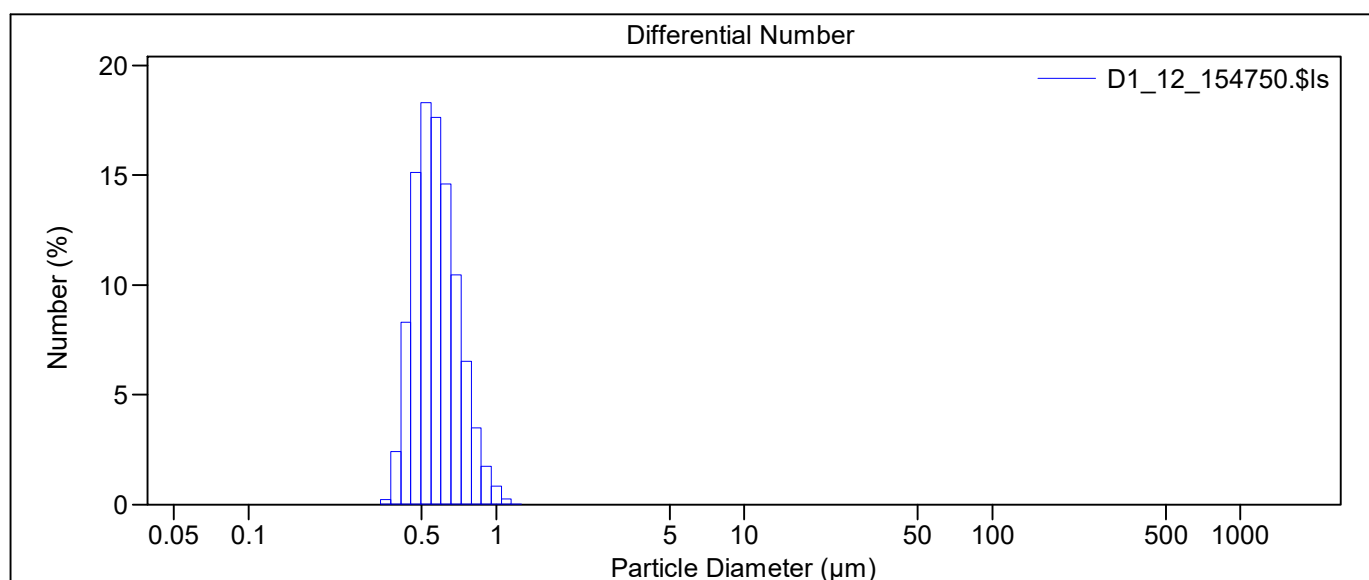
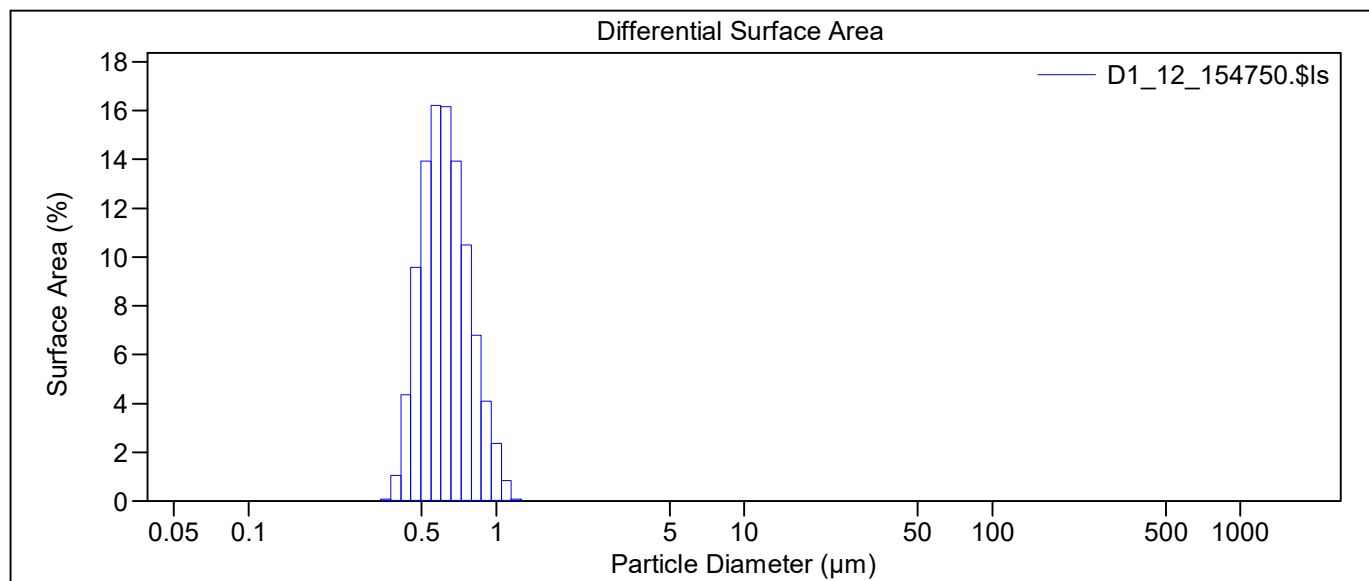
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_12_154750.\$ls		
	D1_12_154750.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.85%		
LS 13 320	Universal Liquid Module		
Start time:	15:46 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_12_154750.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.151 μm
Mean:	0.669 μm		Variance:	0.023 μm ²
Median:	0.647 μm		C.V.:	22.6%
Mean/Median ratio:	1.034		Skewness:	0.678 Right skewed
Mode:	0.627 μm		Kurtosis:	0.098 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.492 μm	0.555 μm	0.647 μm	0.763 μm	0.885 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00037	0.00072	0.0024
24	0.342	0.358	0.047	0.084	0.23
25	0.375	0.393	0.65	1.06	2.43
26	0.412	0.431	2.95	4.36	8.30
27	0.452	0.474	7.11	9.56	15.1
28	0.496	0.520	11.4	13.9	18.3
29	0.545	0.571	14.5	16.2	17.6
30	0.598	0.627	15.9	16.2	14.6
31	0.656	0.688	15.0	13.9	10.5
32	0.721	0.755	12.4	10.5	6.52
33	0.791	0.829	8.82	6.79	3.50
34	0.868	0.910	5.85	4.10	1.76
35	0.953	0.999	3.70	2.36	0.84
36	1.047	1.097	1.45	0.84	0.25
37	1.149	1.204	0.16	0.083	0.020
38	1.261	1.321	0.0014	0.00069	0.00014
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

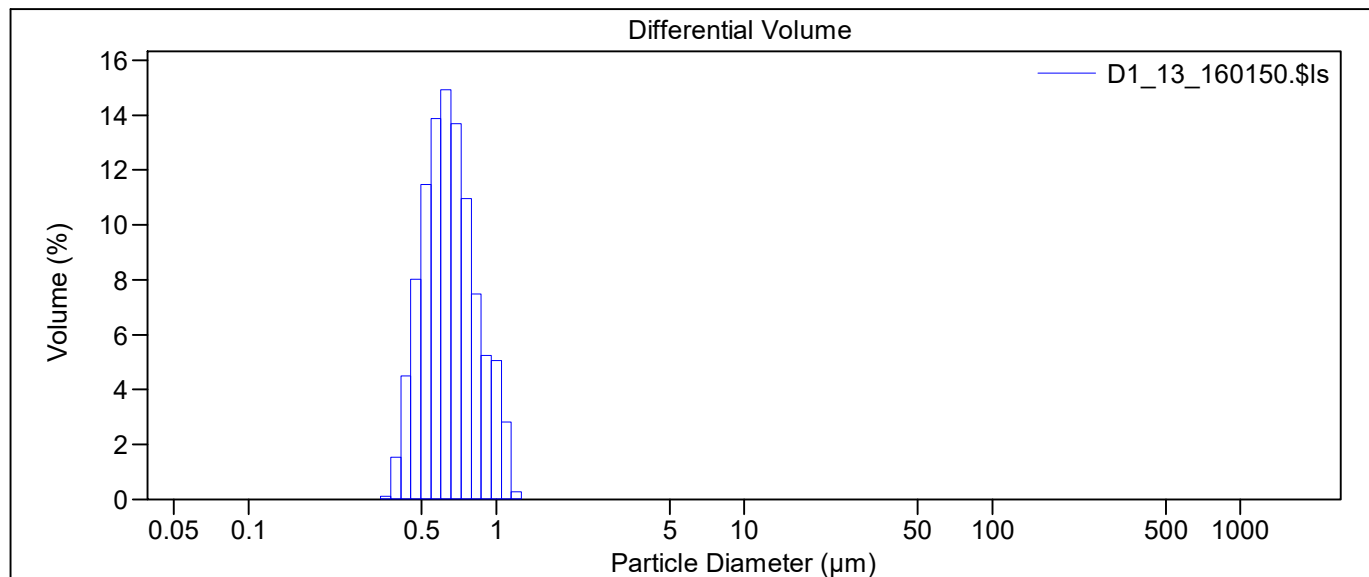
D1.\$av

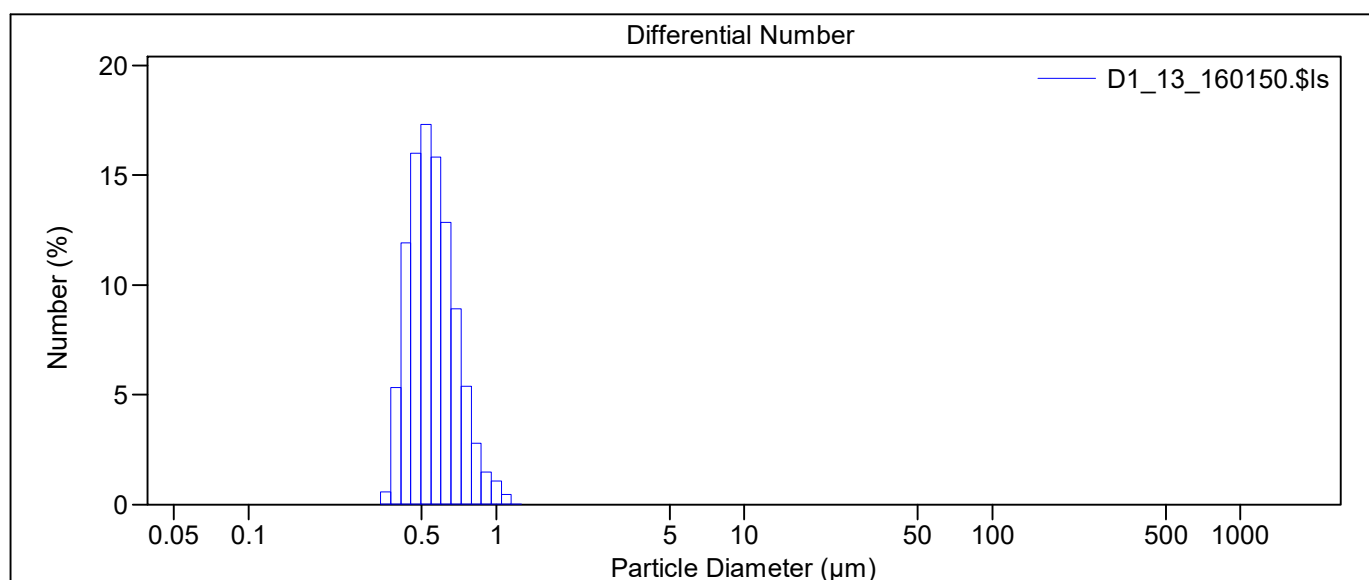
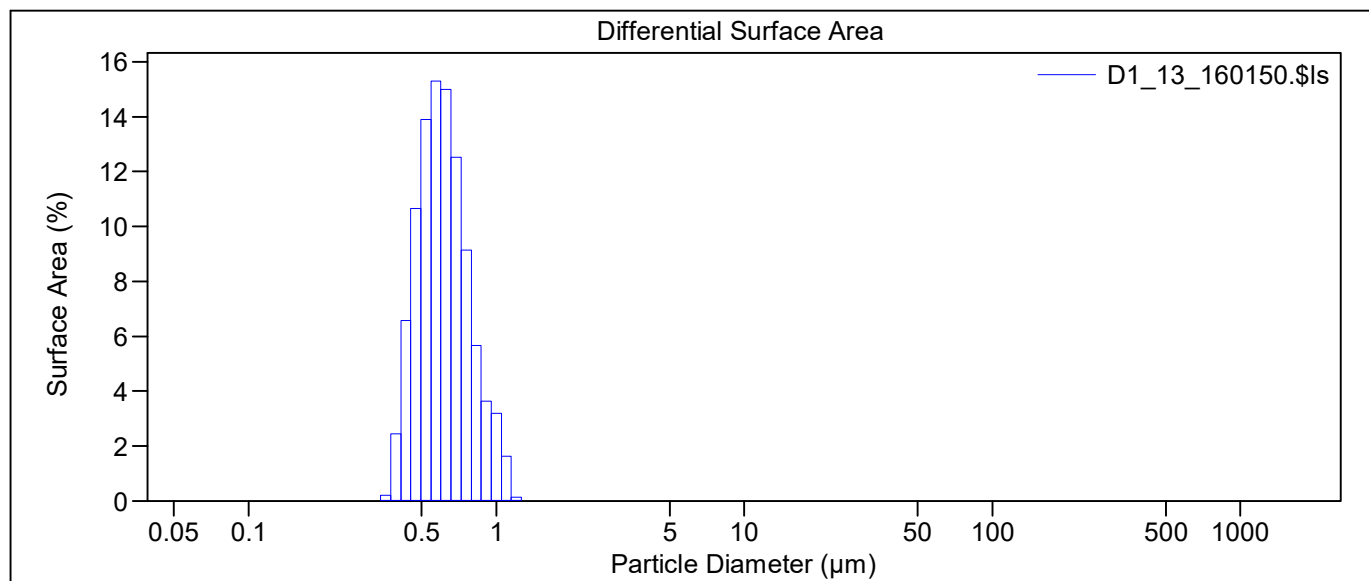
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_13_160150.\$ls		
	D1_13_160150.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.73%		
LS 13 320	Universal Liquid Module		
Start time:	16:00 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	55%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_13_160150.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.168 μm
Mean:	0.668 μm		Variance:	0.028 μm ²
Median:	0.639 μm		C.V.:	25.2%
Mean/Median ratio:	1.045		Skewness:	0.751 Right skewed
Mode:	0.627 μm		Kurtosis:	0.053 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.473 μm	0.542 μm	0.639 μm	0.765 μm	0.924 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.12	0.22	0.57
25	0.375	0.393	1.53	2.45	5.34
26	0.412	0.431	4.51	6.58	11.9
27	0.452	0.474	8.01	10.6	16.0
28	0.496	0.520	11.5	13.9	17.3
29	0.545	0.571	13.9	15.3	15.8
30	0.598	0.627	14.9	15.0	12.9
31	0.656	0.688	13.7	12.5	8.92
32	0.721	0.755	11.0	9.13	5.40
33	0.791	0.829	7.48	5.68	2.78
34	0.868	0.910	5.24	3.63	1.48
35	0.953	0.999	5.07	3.19	1.08
36	1.047	1.097	2.83	1.62	0.45
37	1.149	1.204	0.28	0.15	0.034
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

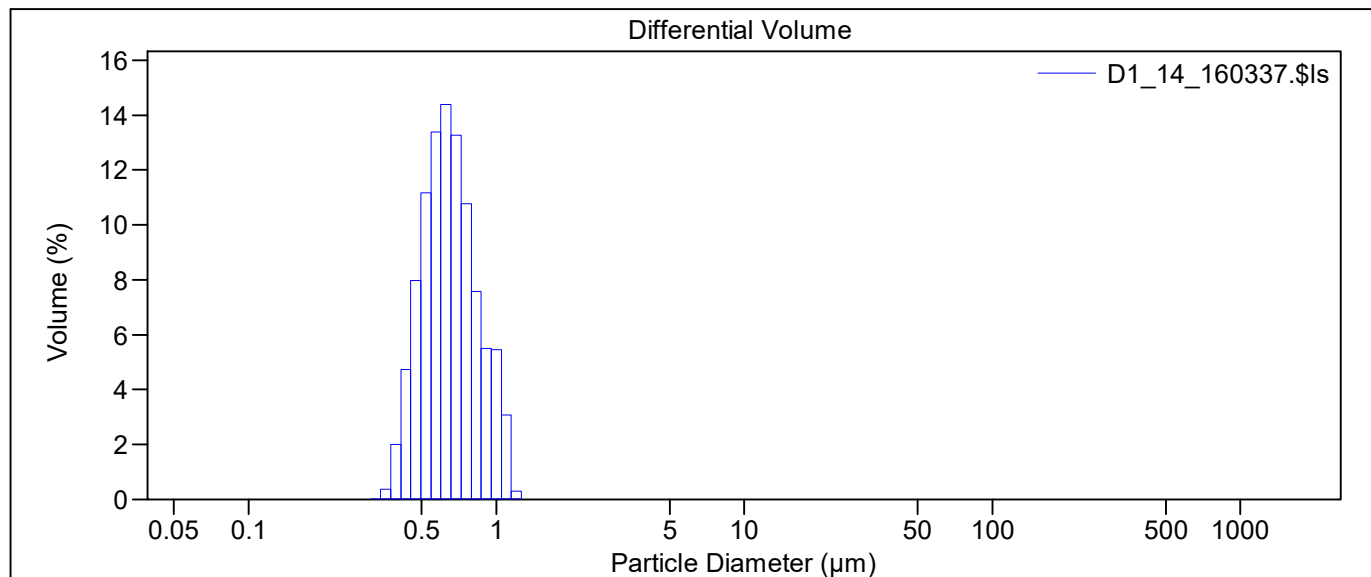
D1.\$av

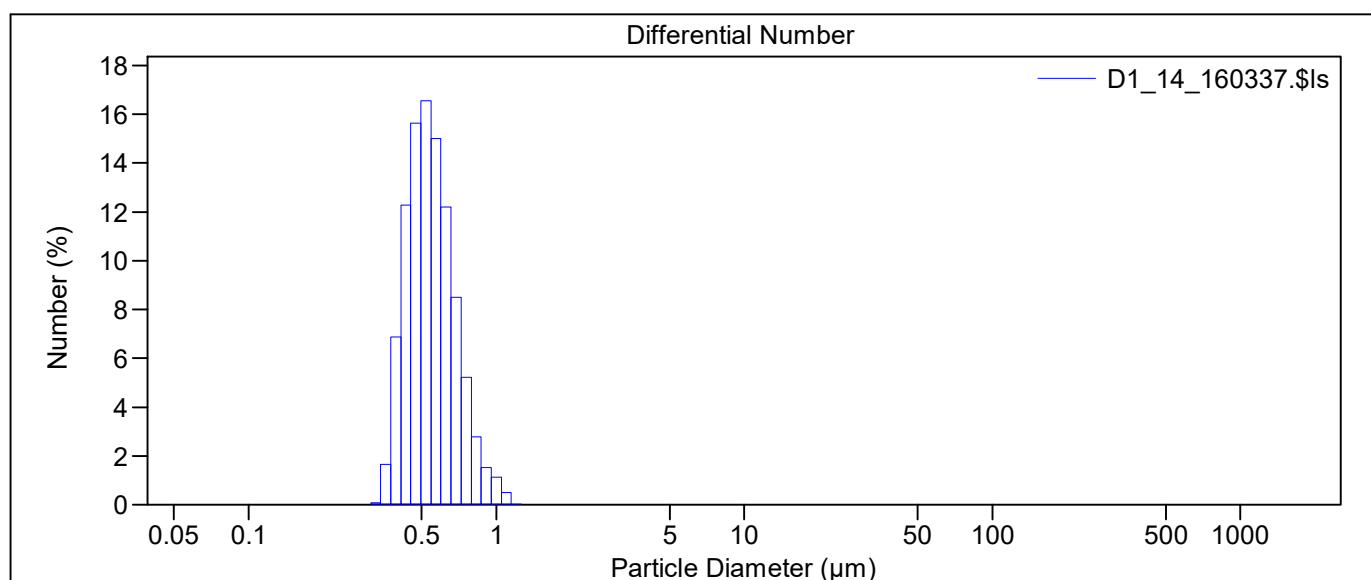
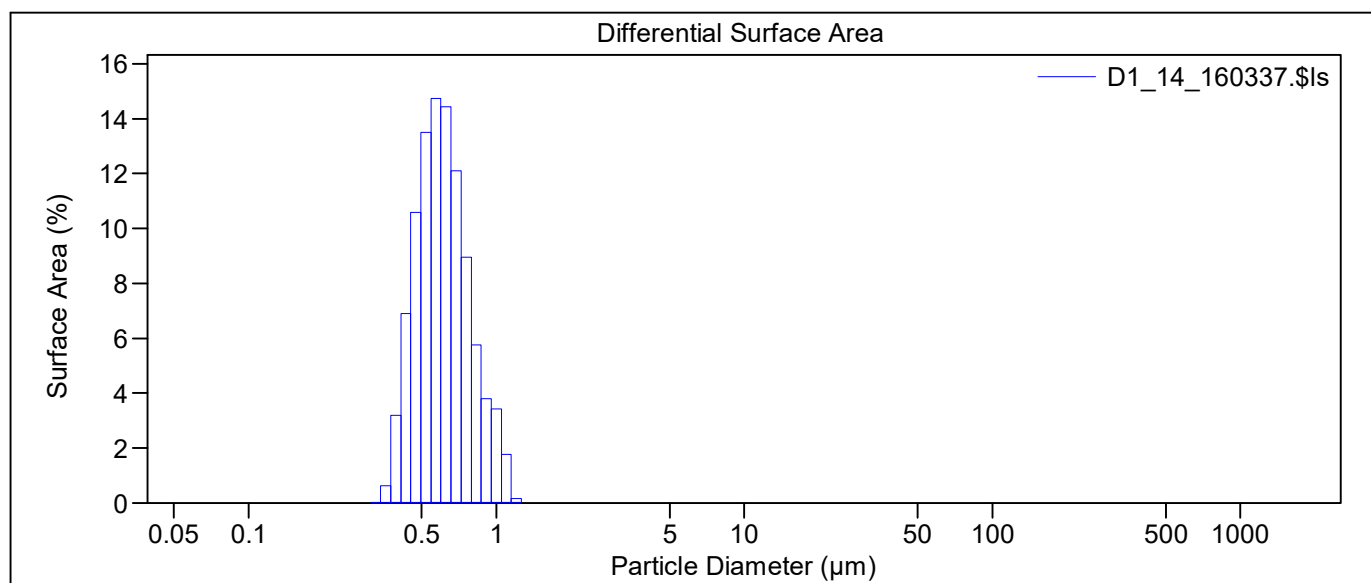
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_14_160337.\$ls		
	D1_14_160337.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.71%		
LS 13 320	Universal Liquid Module		
Start time:	16:01 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	56%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_14_160337.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.173 µm
Mean:	0.670 µm		Variance:	0.030 µm ²
Median:	0.640 µm		C.V.:	25.9%
Mean/Median ratio:	1.046		Skewness:	0.703 Right skewed
Mode:	0.627 µm		Kurtosis:	-0.071 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.468 µm	0.539 µm	0.640 µm	0.771 µm	0.935 µm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.013	0.025	0.078
24	0.342	0.358	0.36	0.64	1.65
25	0.375	0.393	2.00	3.20	6.88
26	0.412	0.431	4.73	6.90	12.3
27	0.452	0.474	7.97	10.6	15.6
28	0.496	0.520	11.2	13.5	16.6
29	0.545	0.571	13.4	14.7	15.0
30	0.598	0.627	14.4	14.4	12.2
31	0.656	0.688	13.3	12.1	8.50
32	0.721	0.755	10.8	8.97	5.22
33	0.791	0.829	7.59	5.75	2.78
34	0.868	0.910	5.50	3.80	1.52
35	0.953	0.999	5.45	3.43	1.14
36	1.047	1.097	3.08	1.76	0.49
37	1.149	1.204	0.31	0.16	0.037
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

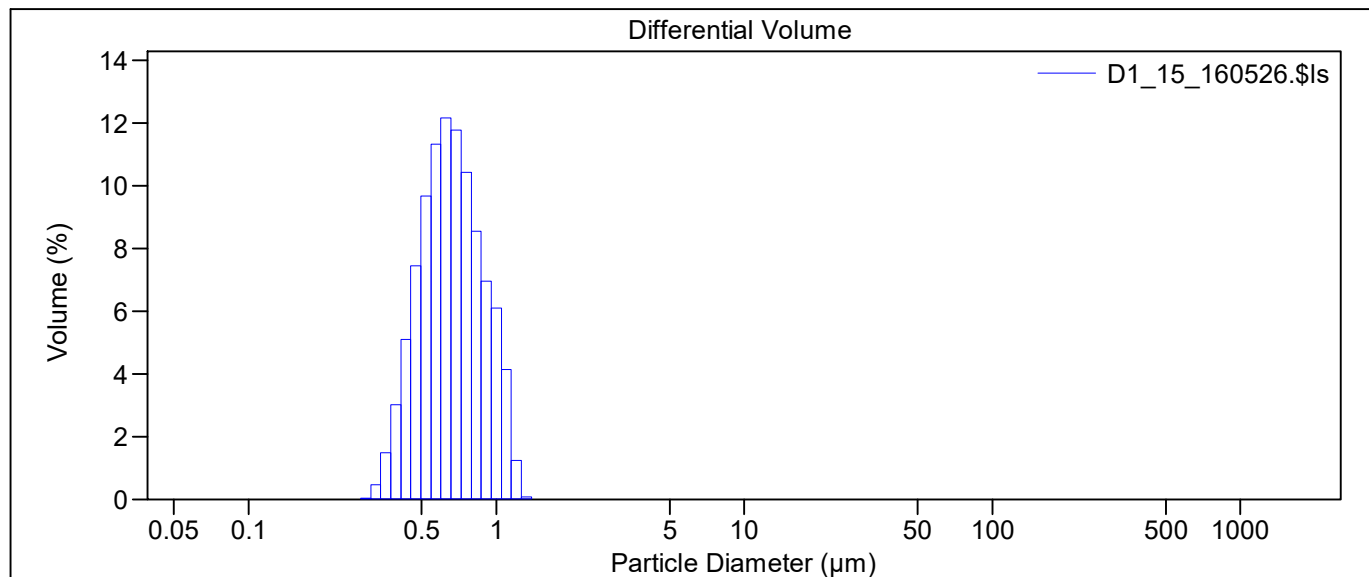
D1.\$av

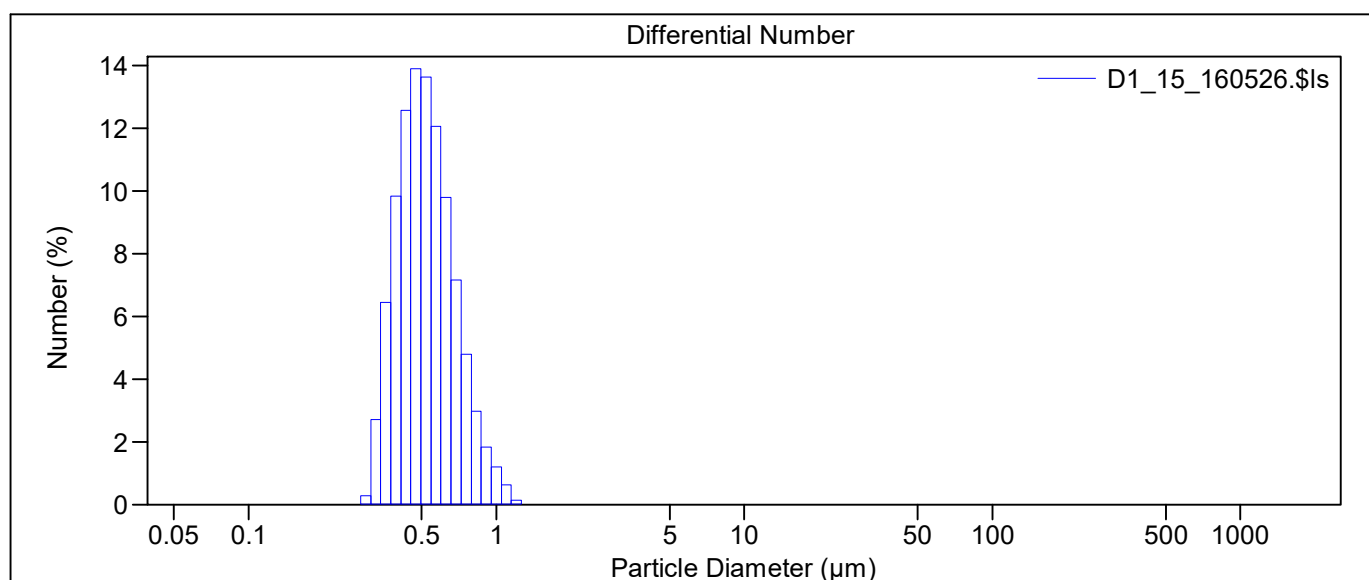
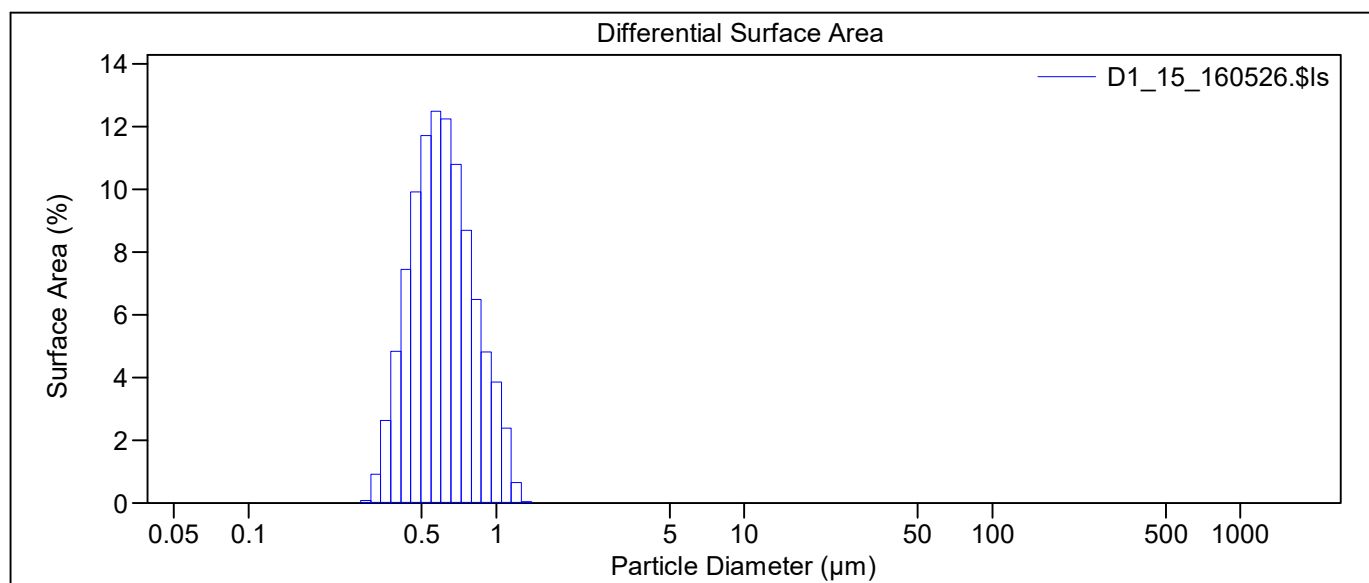
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D1\D1_15_160526.\$ls		
	D1_15_160526.\$ls		
File ID:	D1		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.63%		
LS 13 320	Universal Liquid Module		
Start time:	16:03 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	57%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D1_15_160526.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.196 μm
Mean:	0.683 μm		Variance:	0.038 μm ²
Median:	0.653 μm		C.V.:	28.7%
Mean/Median ratio:	1.047		Skewness:	0.568 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.311 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.451 μm	0.534 μm	0.653 μm	0.810 μm	0.977 μm





D1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.039	0.082	0.29
23	0.311	0.326	0.47	0.92	2.71
24	0.342	0.358	1.50	2.63	6.45
25	0.375	0.393	3.02	4.84	9.84
26	0.412	0.431	5.10	7.45	12.6
27	0.452	0.474	7.45	9.91	13.9
28	0.496	0.520	9.67	11.7	13.6
29	0.545	0.571	11.3	12.5	12.1
30	0.598	0.627	12.2	12.2	9.80
31	0.656	0.688	11.8	10.8	7.17
32	0.721	0.755	10.4	8.70	4.80
33	0.791	0.829	8.54	6.50	2.97
34	0.868	0.910	6.96	4.82	1.83
35	0.953	0.999	6.10	3.85	1.21
36	1.047	1.097	4.14	2.38	0.62
37	1.149	1.204	1.24	0.65	0.14
38	1.261	1.321	0.076	0.036	0.0066
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

D1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\D2\D2.\$av D2.\$av

File ID: D2

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_01_161504.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_02_161650.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_03_161839.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_04_163001.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_05_163148.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_06_163336.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_07_164436.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_08_164623.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_09_164811.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_10_170202.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_11_170349.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_12_170538.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_13_171734.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_14_171922.\$Is D:\KW

\PROFARB\POMIARY\ TiO2\D2\D2_15_172110.\$Is

Volume Statistics (Arithmetic) D2.\$av

Calculations from 0.040 µm to 2000 µm

Volume: 100%

Mean: 0.654 µm

S.D.: 0.139 µm

Median: 0.633 µm

Variance: 0.019 µm²

Mean/Median ratio: 1.032

C.V.: 21.3%

Mode: 0.627 µm

Skewness: 1.040 Right skewed

Kurtosis: 2.043 Leptokurtic

<10%

<25%

<50%

<75%

<90%

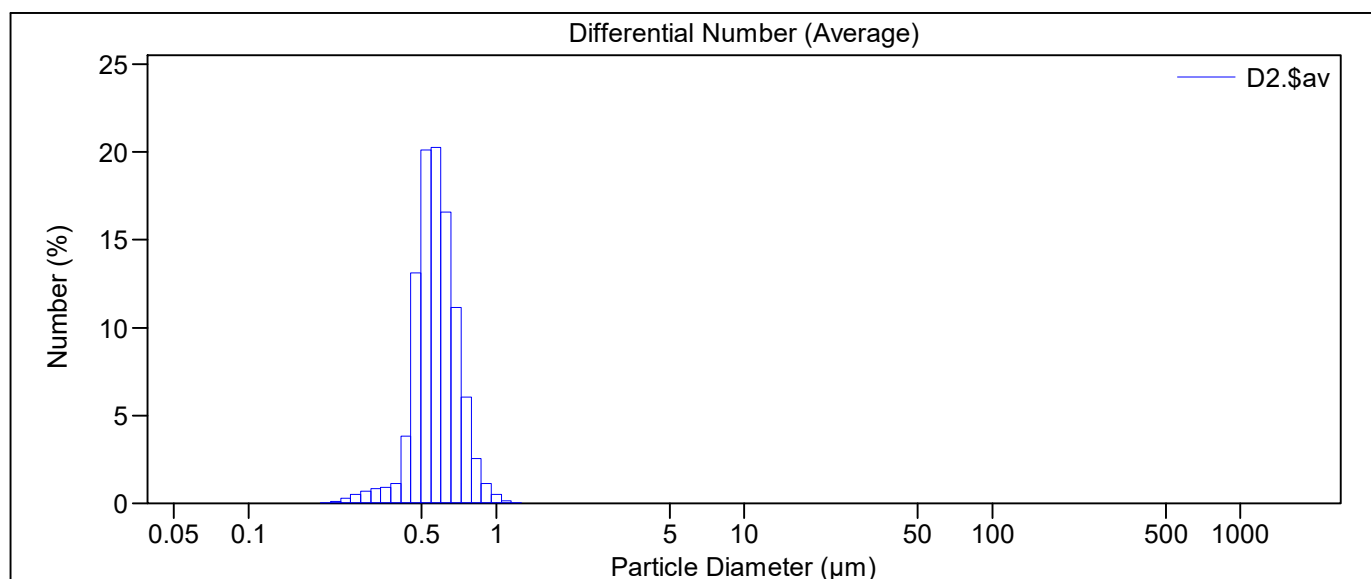
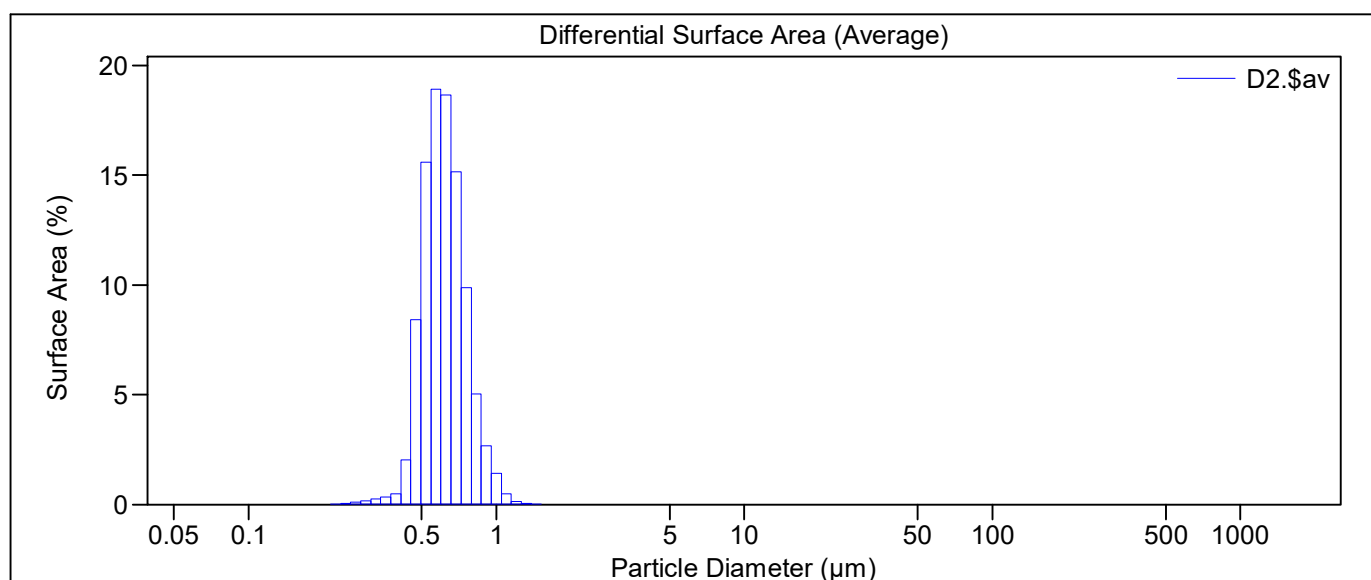
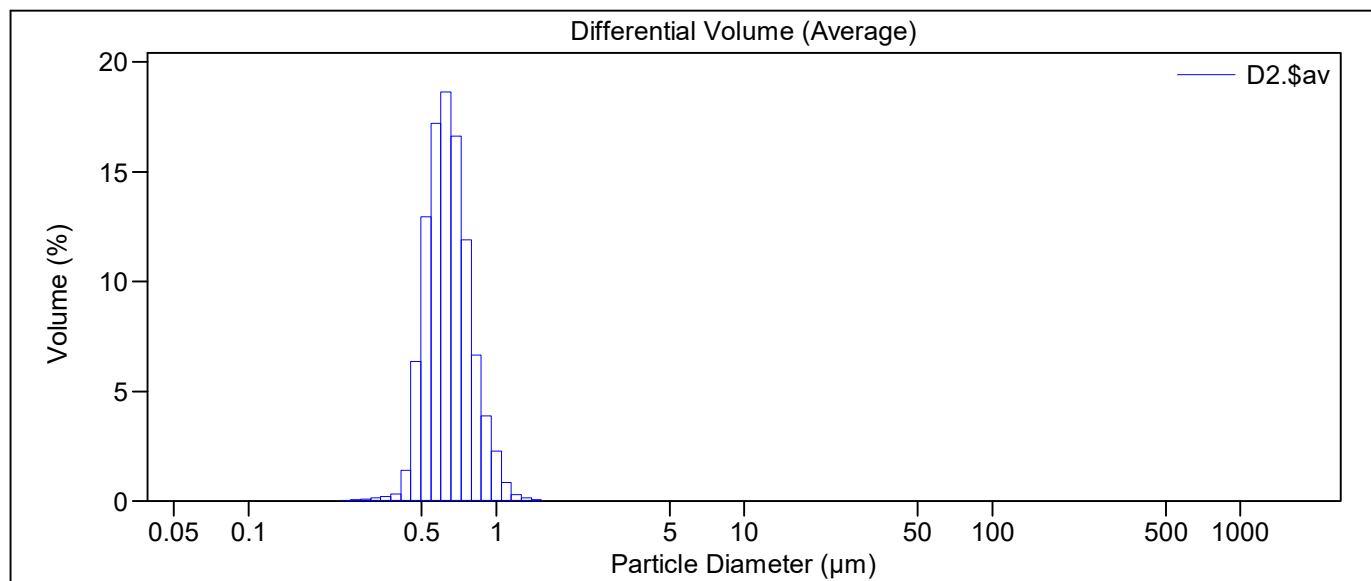
0.502 µm

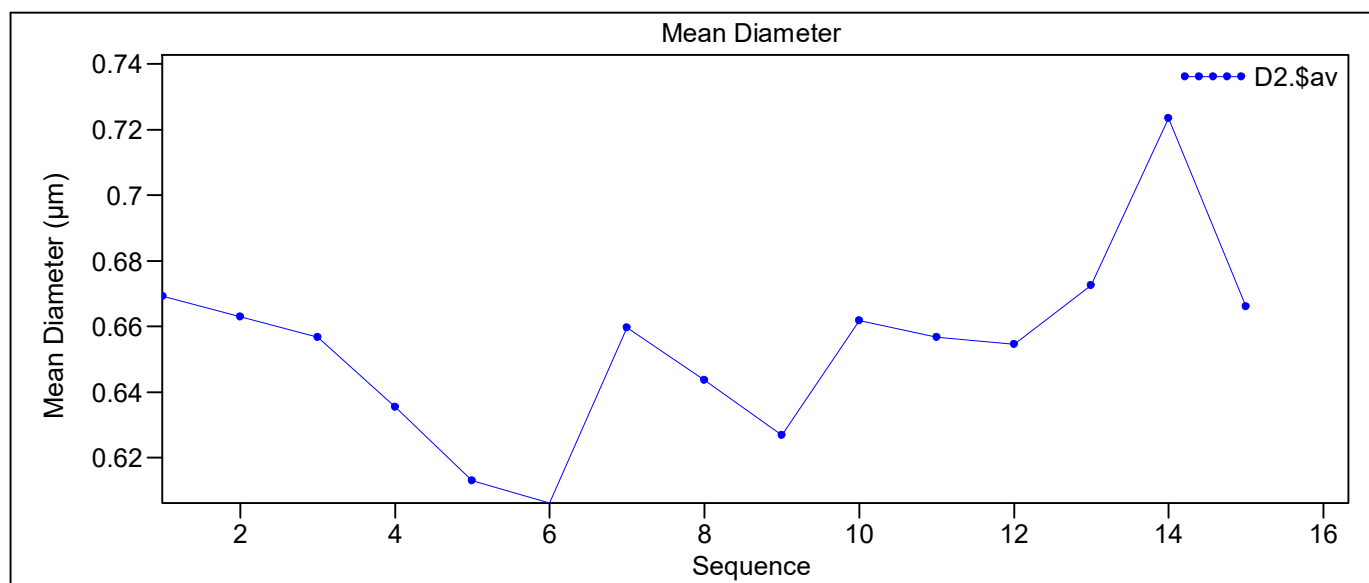
0.556 µm

0.633 µm

0.727 µm

0.839 µm





D2.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0.000065	0.00022	0.0022
18	0.195	0.205	0.00093	0.0029	0.024
19	0.214	0.225	0.0062	0.017	0.12
20	0.235	0.247	0.020	0.051	0.29
21	0.258	0.271	0.046	0.11	0.51
22	0.284	0.297	0.083	0.17	0.69
23	0.311	0.326	0.13	0.25	0.83
24	0.342	0.358	0.19	0.34	0.91
25	0.375	0.393	0.31	0.50	1.13
26	0.412	0.431	1.41	2.05	3.83
27	0.452	0.474	6.36	8.43	13.1
28	0.496	0.520	12.9	15.6	20.1
29	0.545	0.571	17.2	18.9	20.2
30	0.598	0.627	18.6	18.7	16.6
31	0.656	0.688	16.6	15.1	11.2
32	0.721	0.755	11.9	9.89	6.05
33	0.791	0.829	6.65	5.03	2.55
34	0.868	0.910	3.88	2.68	1.13
35	0.953	0.999	2.28	1.43	0.50
36	1.047	1.097	0.84	0.48	0.14
37	1.149	1.204	0.29	0.15	0.037
38	1.261	1.321	0.13	0.063	0.013
39	1.385	1.451	0.044	0.019	0.0031
40	1.520	1.592	0.0072	0.0028	0.00039
41	1.668	1.748	0.00046	0.00017	0.000019

D2.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

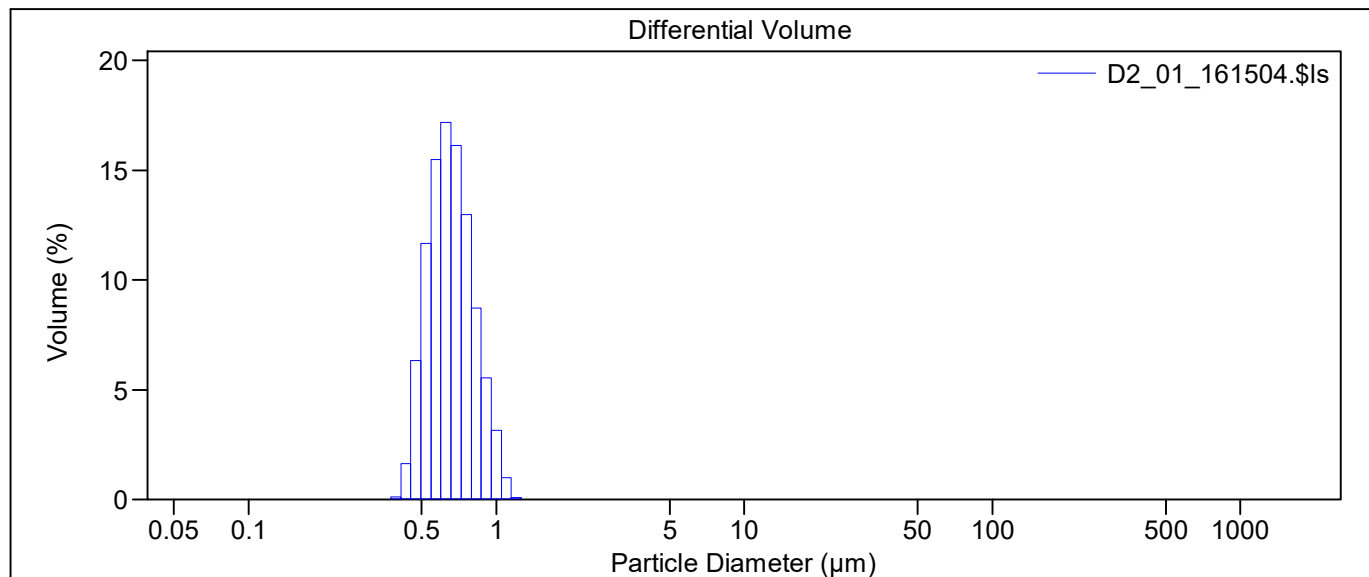
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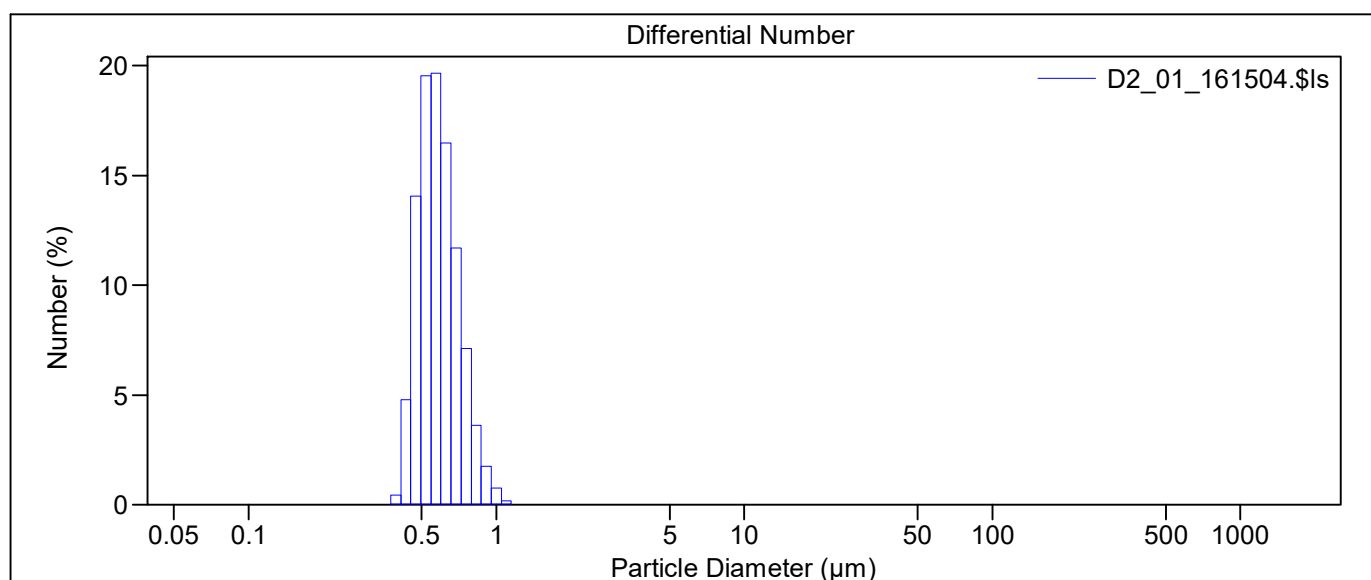
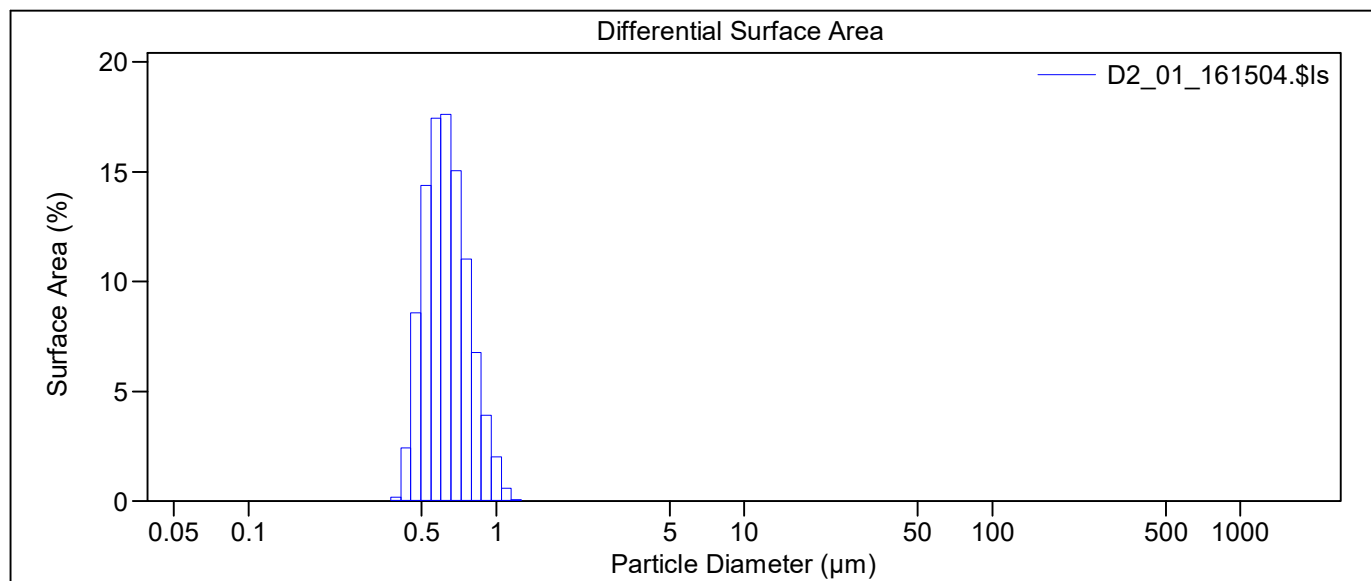
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_01_161504.\$ls		
	D2_01_161504.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.17%		
LS 13 320	Universal Liquid Module		
Start time:	16:13 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_01_161504.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.141 μm
Mean:	0.669 μm		Variance:	0.020 μm ²
Median:	0.648 μm		C.V.:	21.0%
Mean/Median ratio:	1.032		Skewness:	0.714 Right skewed
Mode:	0.627 μm		Kurtosis:	0.196 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.504 μm	0.563 μm	0.648 μm	0.756 μm	0.866 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.00084	0.0015	0.0043
25	0.375	0.393	0.11	0.19	0.44
26	0.412	0.431	1.63	2.42	4.77
27	0.452	0.474	6.33	8.58	14.0
28	0.496	0.520	11.7	14.4	19.5
29	0.545	0.571	15.5	17.4	19.6
30	0.598	0.627	17.2	17.6	16.5
31	0.656	0.688	16.1	15.1	11.7
32	0.721	0.755	13.0	11.0	7.11
33	0.791	0.829	8.72	6.76	3.61
34	0.868	0.910	5.54	3.91	1.73
35	0.953	0.999	3.15	2.02	0.74
36	1.047	1.097	0.99	0.58	0.18
37	1.149	1.204	0.088	0.047	0.012
38	1.261	1.321	0.00073	0.00036	0.000075
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

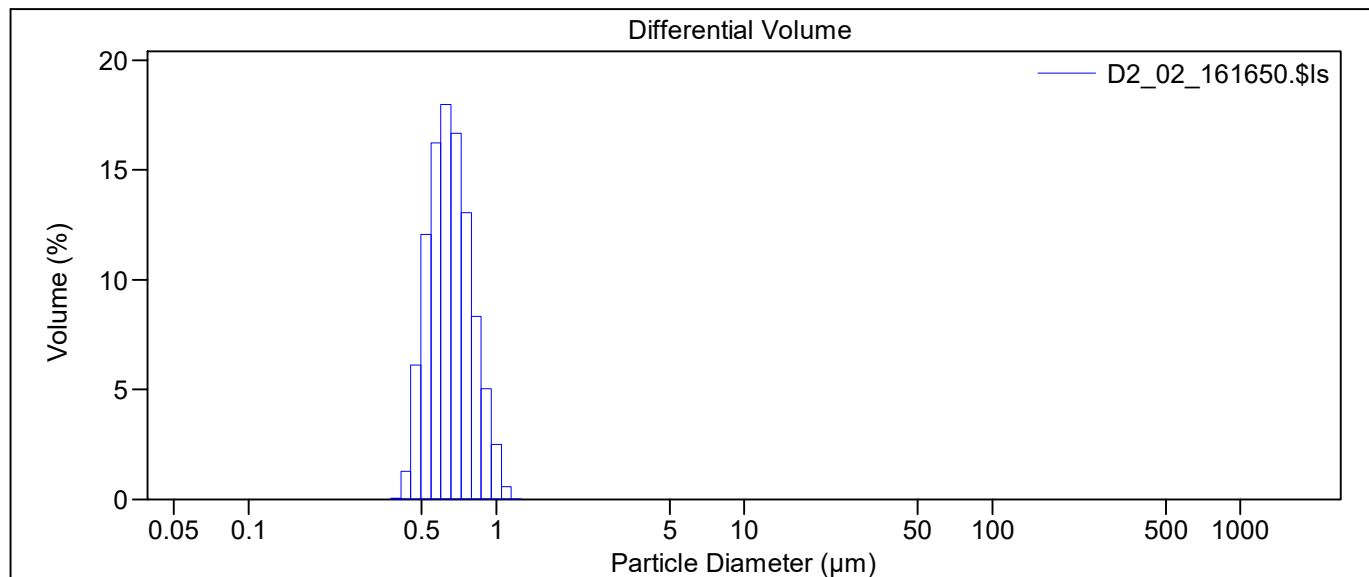
D2.\$av

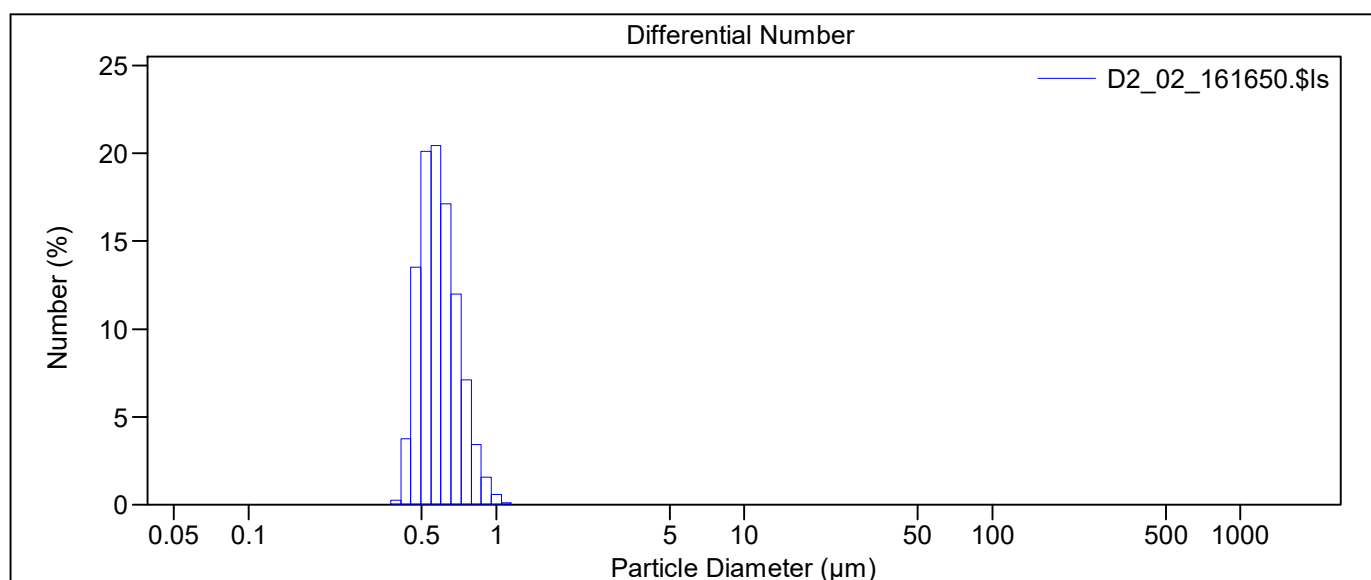
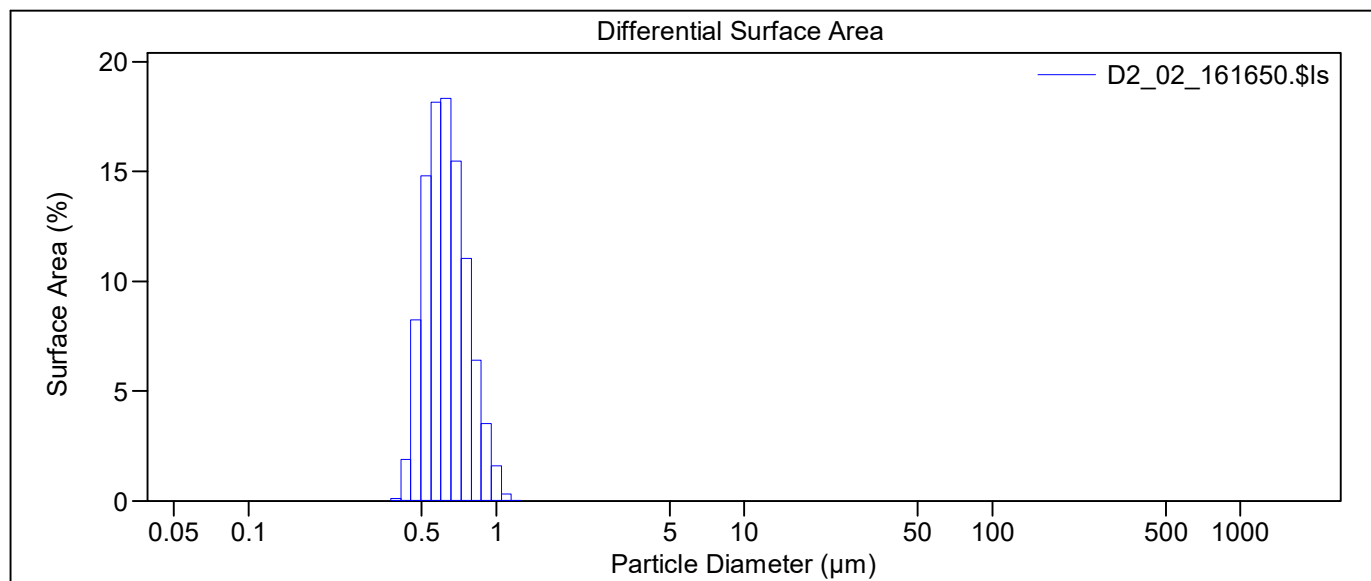
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_02_161650.\$ls		
	D2_02_161650.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.35%		
LS 13 320	Universal Liquid Module		
Start time:	16:15 1	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_02_161650.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.133 μm
Mean:	0.663 μm		Variance:	0.018 μm ²
Median:	0.644 μm		C.V.:	20.0%
Mean/Median ratio:	1.029		Skewness:	0.701 Right skewed
Mode:	0.627 μm		Kurtosis:	0.202 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.506 μm	0.563 μm	0.644 μm	0.745 μm	0.851 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.00039	0.00070	0.0020
25	0.375	0.393	0.065	0.11	0.25
26	0.412	0.431	1.28	1.90	3.74
27	0.452	0.474	6.13	8.26	13.5
28	0.496	0.520	12.1	14.8	20.1
29	0.545	0.571	16.2	18.2	20.5
30	0.598	0.627	18.0	18.3	17.1
31	0.656	0.688	16.7	15.5	12.0
32	0.721	0.755	13.1	11.1	7.11
33	0.791	0.829	8.33	6.42	3.43
34	0.868	0.910	5.03	3.53	1.56
35	0.953	0.999	2.51	1.61	0.59
36	1.047	1.097	0.57	0.33	0.10
37	1.149	1.204	0.033	0.018	0.0045
38	1.261	1.321	0.00022	0.00011	0.000022
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

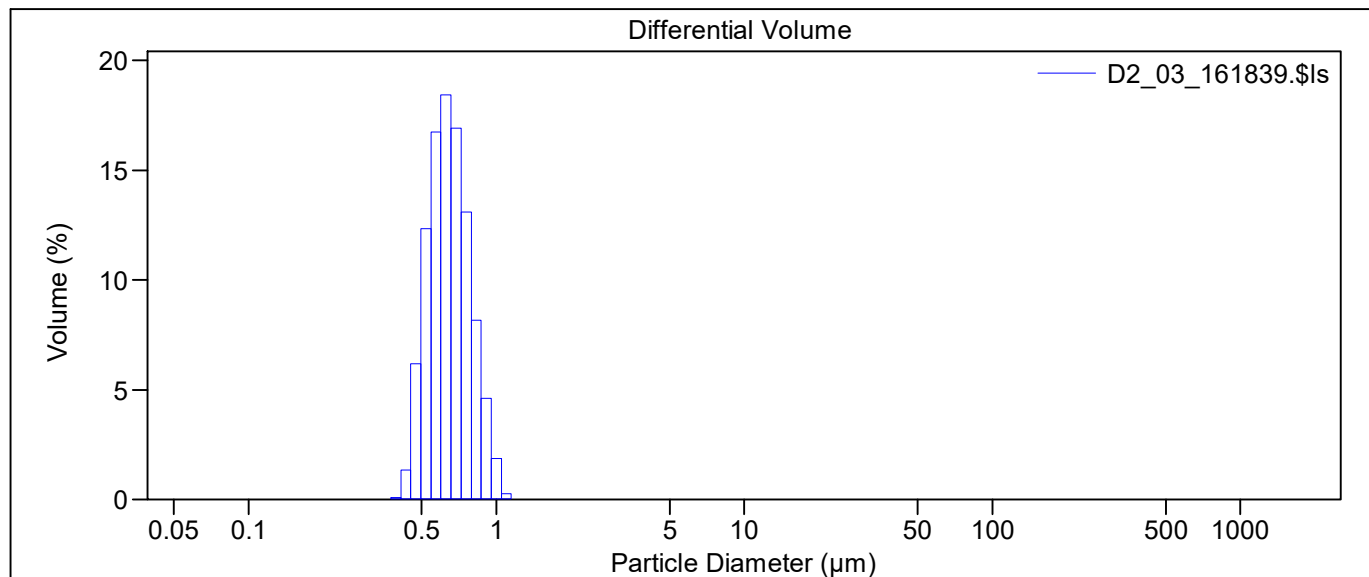
D2.\$av

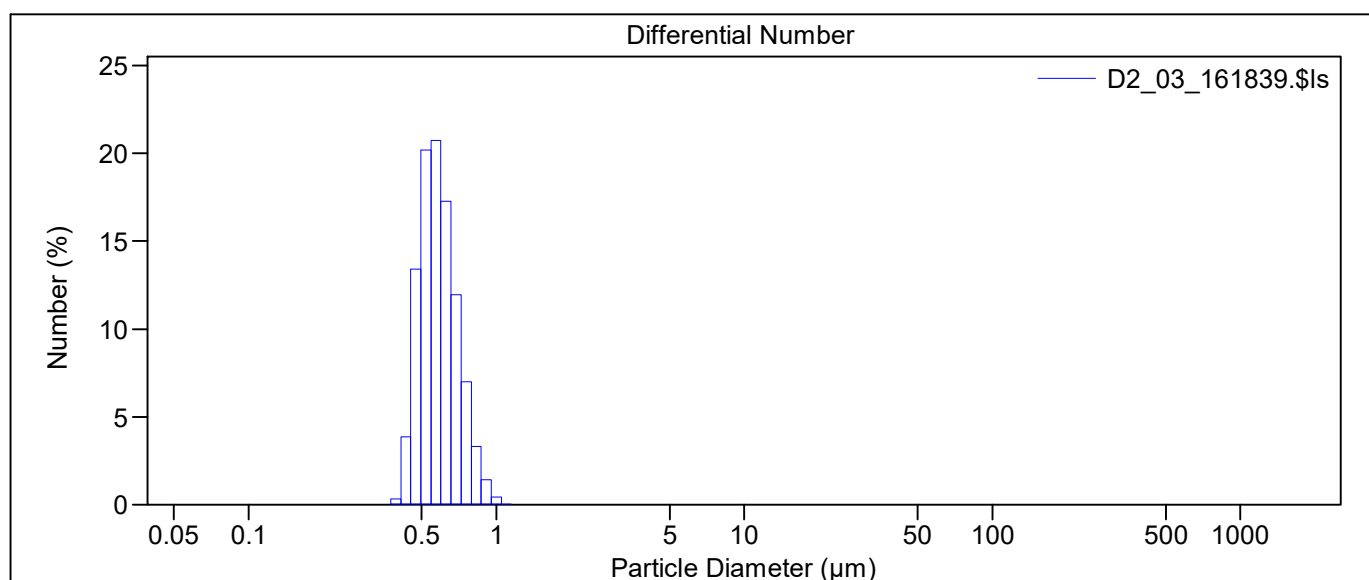
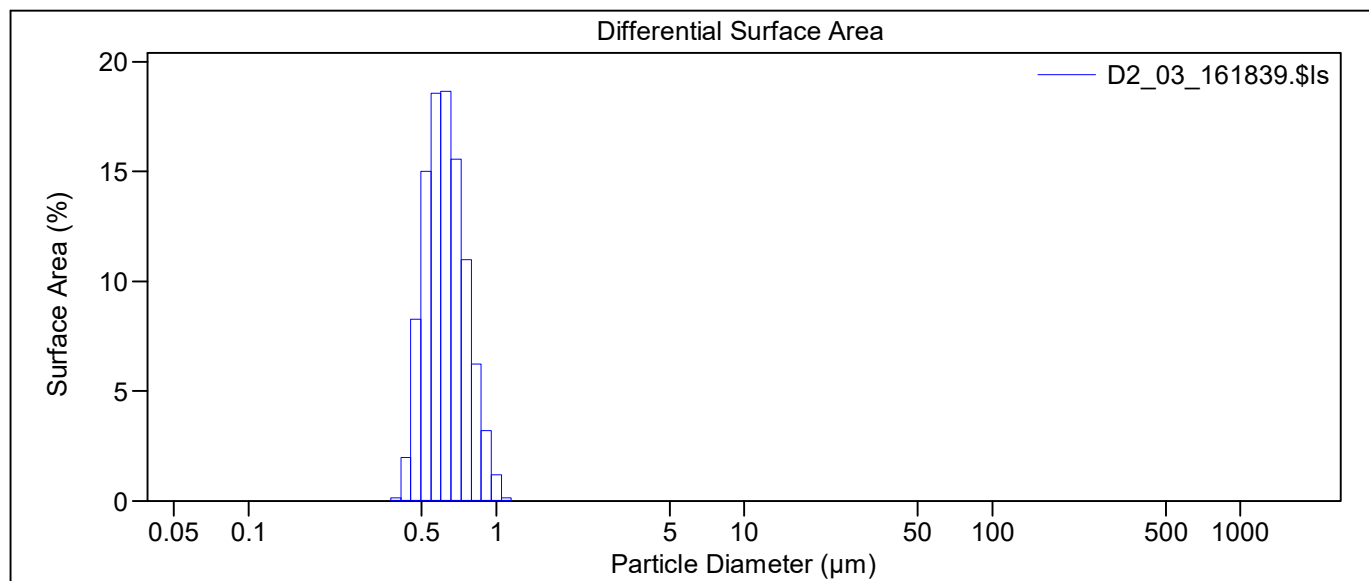
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_03_161839.\$ls		
	D2_03_161839.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.56%		
LS 13 320	Universal Liquid Module		
Start time:	16:16 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_03_161839.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.127 μm
Mean:	0.657 μm		Variance:	0.016 μm ²
Median:	0.640 μm		C.V.:	19.3%
Mean/Median ratio:	1.026		Skewness:	0.638 Right skewed
Mode:	0.627 μm		Kurtosis:	0.084 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.506 μm	0.561 μm	0.640 μm	0.737 μm	0.838 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0010	0.0018	0.0051
25	0.375	0.393	0.090	0.15	0.34
26	0.412	0.431	1.35	1.98	3.87
27	0.452	0.474	6.19	8.28	13.4
28	0.496	0.520	12.3	15.0	20.2
29	0.545	0.571	16.7	18.6	20.7
30	0.598	0.627	18.4	18.7	17.3
31	0.656	0.688	16.9	15.6	12.0
32	0.721	0.755	13.1	11.0	7.00
33	0.791	0.829	8.17	6.25	3.30
34	0.868	0.910	4.59	3.20	1.41
35	0.953	0.999	1.87	1.19	0.43
36	1.047	1.097	0.26	0.15	0.045
37	1.149	1.204	0.0066	0.0035	0.00087
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

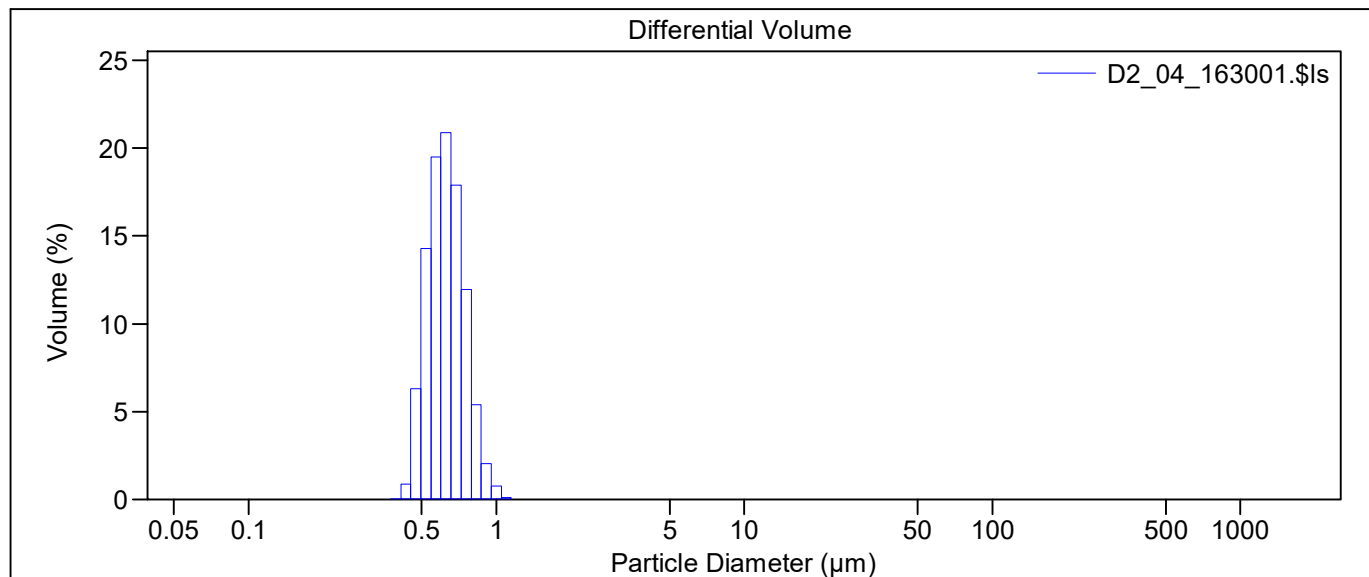
D2.\$av

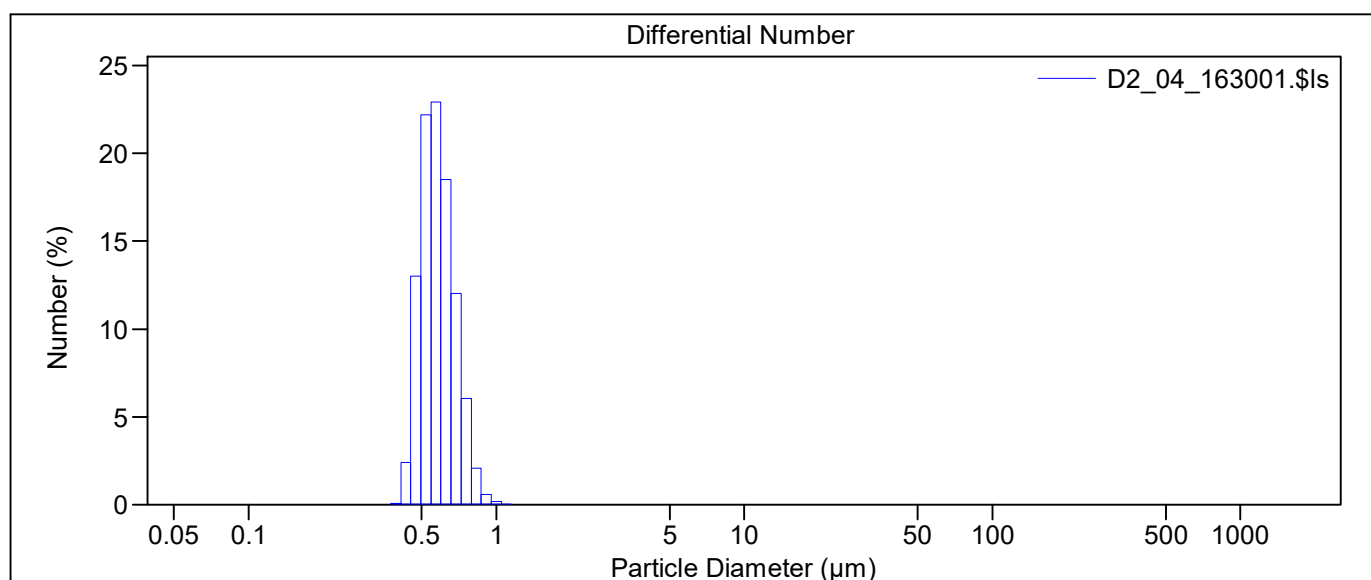
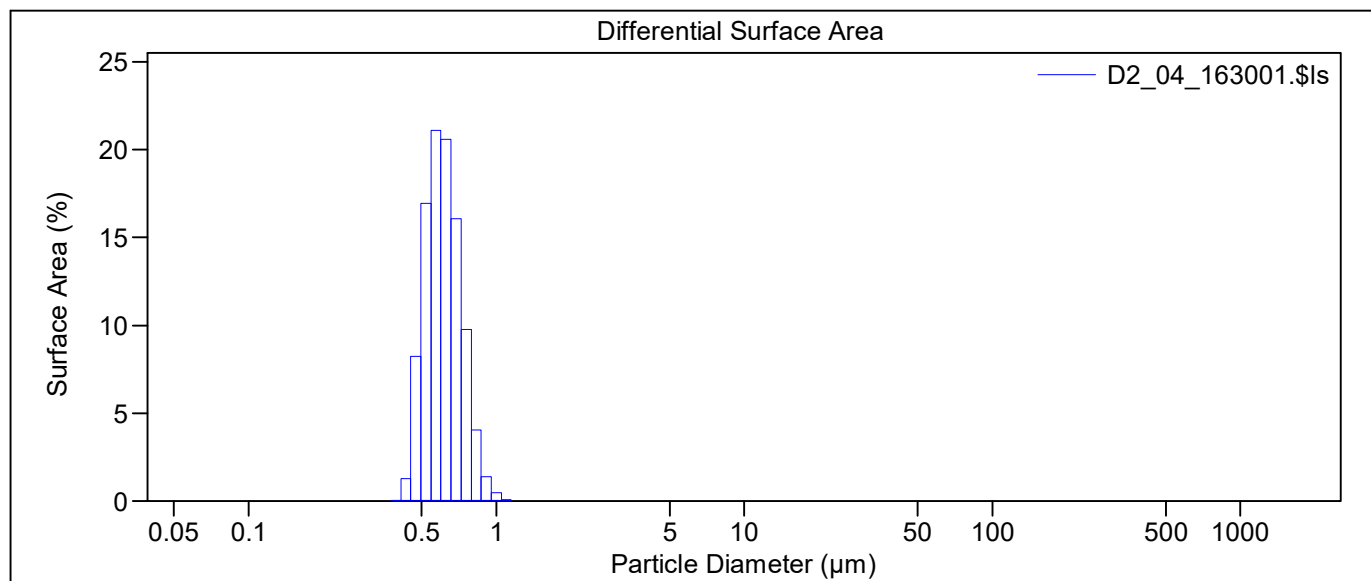
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_04_163001.\$ls		
	D2_04_163001.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	3.17%		
LS 13 320	Universal Liquid Module		
Start time:	16:28 1	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_04_163001.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.109 μm
Mean:	0.635 μm		Variance:	0.012 μm ²
Median:	0.623 μm		C.V.:	17.1%
Mean/Median ratio:	1.020		Skewness:	0.709 Right skewed
Mode:	0.627 μm		Kurtosis:	0.550 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.506 μm	0.554 μm	0.623 μm	0.704 μm	0.781 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.022	0.035	0.080
26	0.412	0.431	0.88	1.26	2.39
27	0.452	0.474	6.32	8.25	13.0
28	0.496	0.520	14.3	17.0	22.2
29	0.545	0.571	19.5	21.1	22.9
30	0.598	0.627	20.9	20.6	18.5
31	0.656	0.688	17.9	16.1	12.0
32	0.721	0.755	11.9	9.77	6.06
33	0.791	0.829	5.41	4.03	2.08
34	0.868	0.910	2.03	1.38	0.59
35	0.953	0.999	0.76	0.47	0.17
36	1.047	1.097	0.11	0.064	0.019
37	1.149	1.204	0.0033	0.0017	0.00041
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

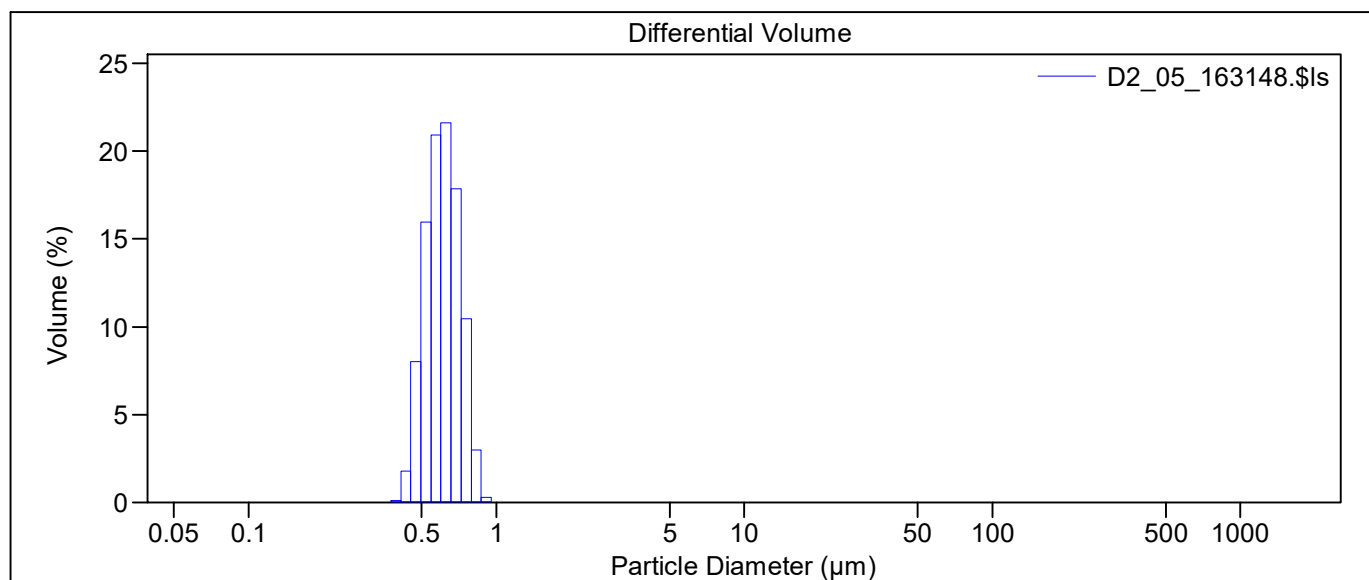
D2.\$av

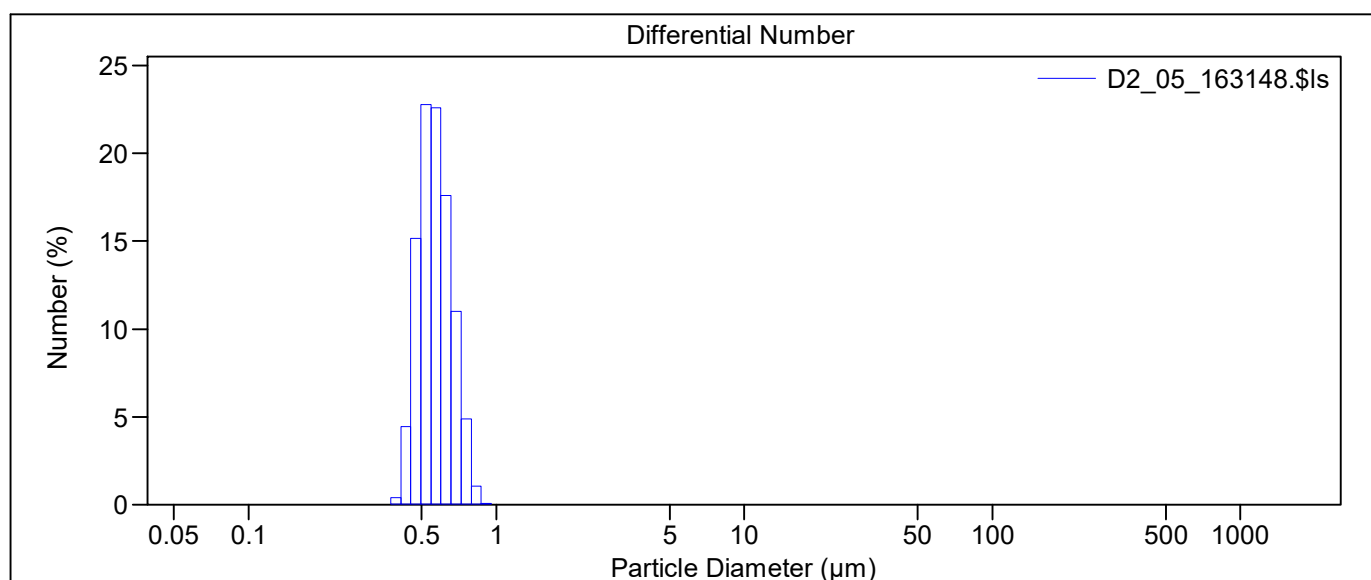
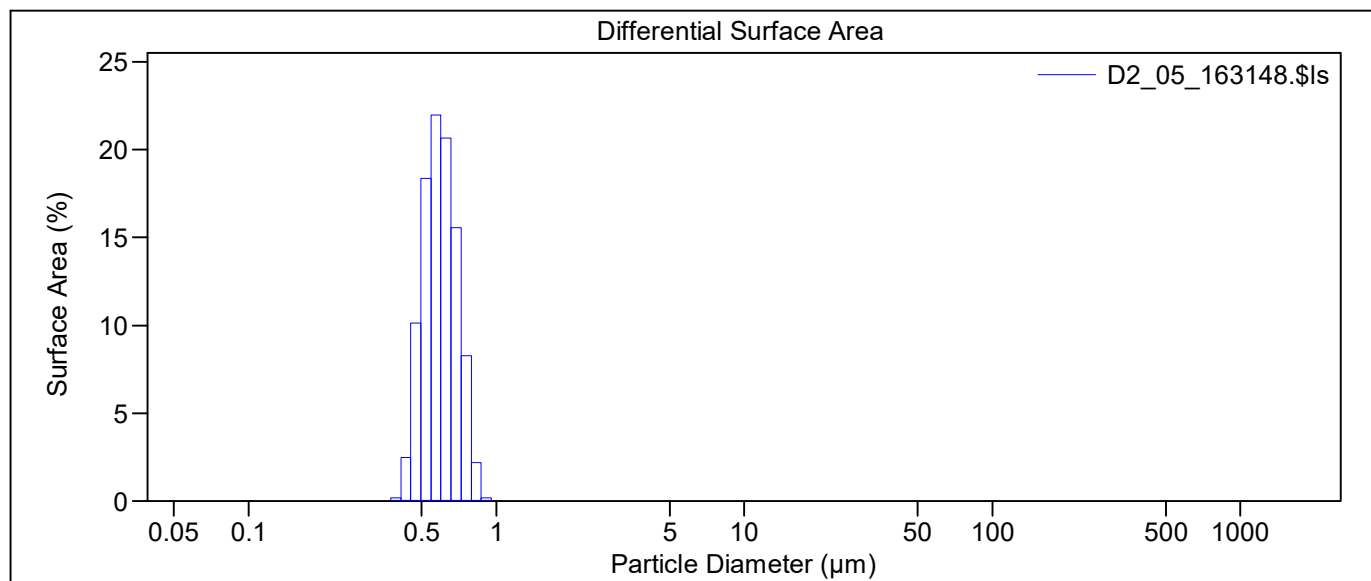
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_05_163148.\$ls		
	D2_05_163148.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	3.66%		
LS 13 320	Universal Liquid Module		
Start time:	16:30 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	4%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_05_163148.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.094 μm
Mean:	0.613 μm		Variance:	0.0088 μm ²
Median:	0.607 μm		C.V.:	15.3%
Mean/Median ratio:	1.011		Skewness:	0.328 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.377 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.496 μm	0.542 μm	0.607 μm	0.680 μm	0.746 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0016	0.0026	0.0068
25	0.375	0.393	0.12	0.19	0.41
26	0.412	0.431	1.78	2.48	4.46
27	0.452	0.474	8.02	10.1	15.1
28	0.496	0.520	16.0	18.4	22.8
29	0.545	0.571	20.9	22.0	22.6
30	0.598	0.627	21.6	20.6	17.6
31	0.656	0.688	17.9	15.5	11.0
32	0.721	0.755	10.4	8.28	4.87
33	0.791	0.829	3.00	2.17	1.06
34	0.868	0.910	0.28	0.18	0.075
35	0.953	0.999	0.0049	0.0030	0.00099
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

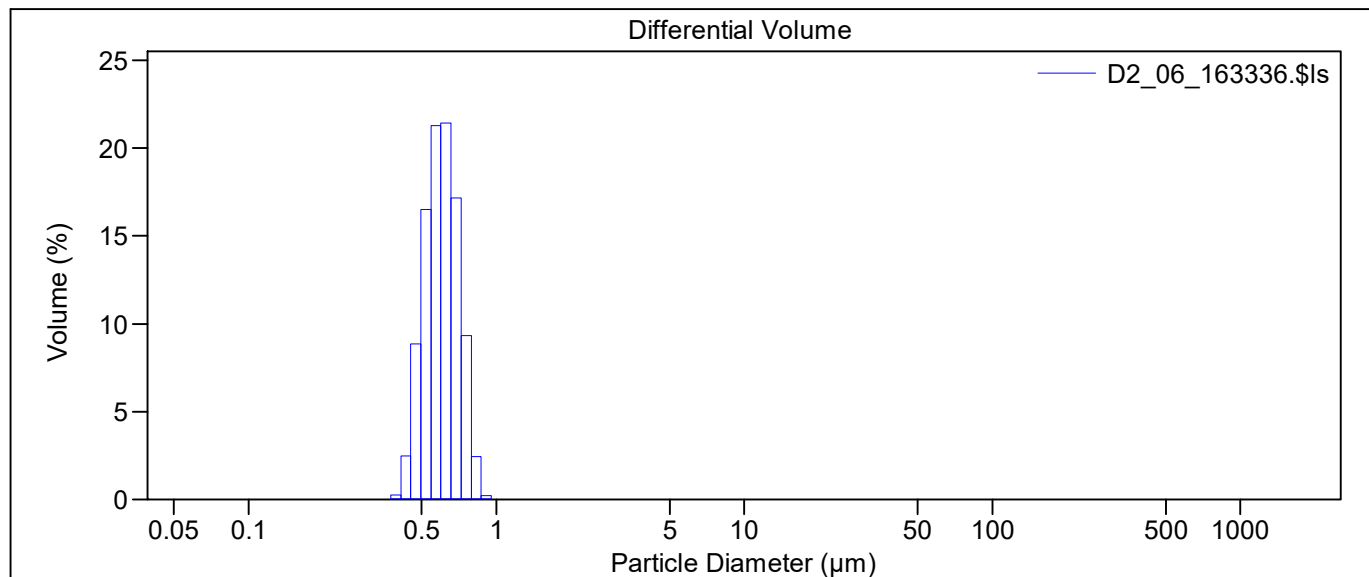
D2.\$av

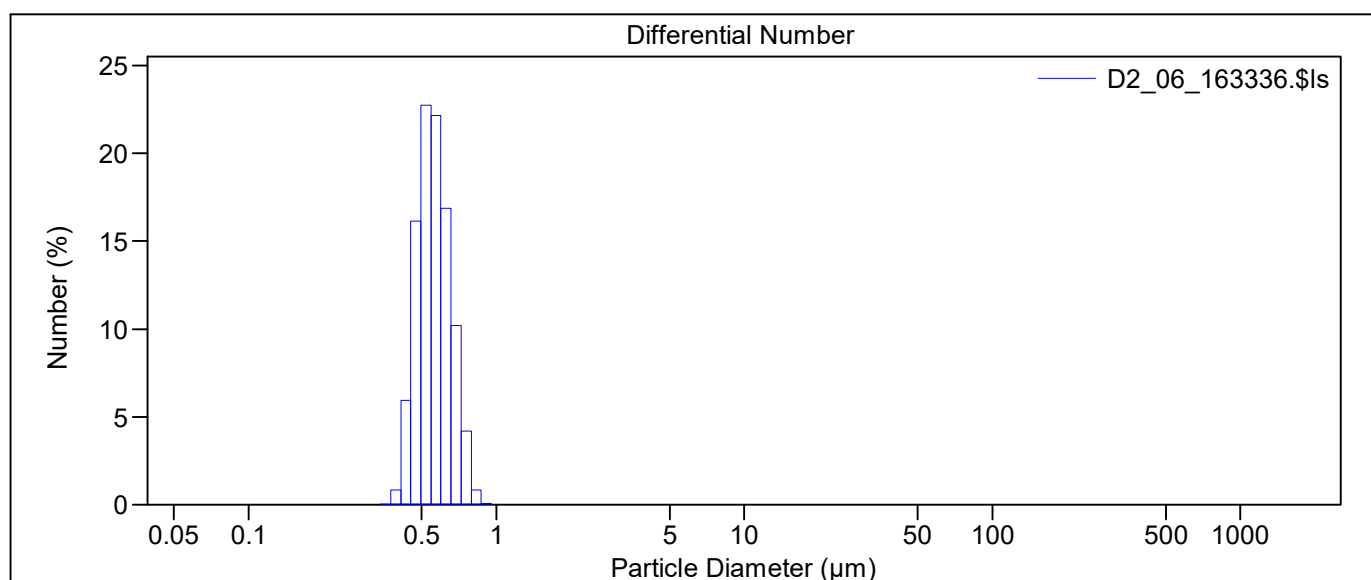
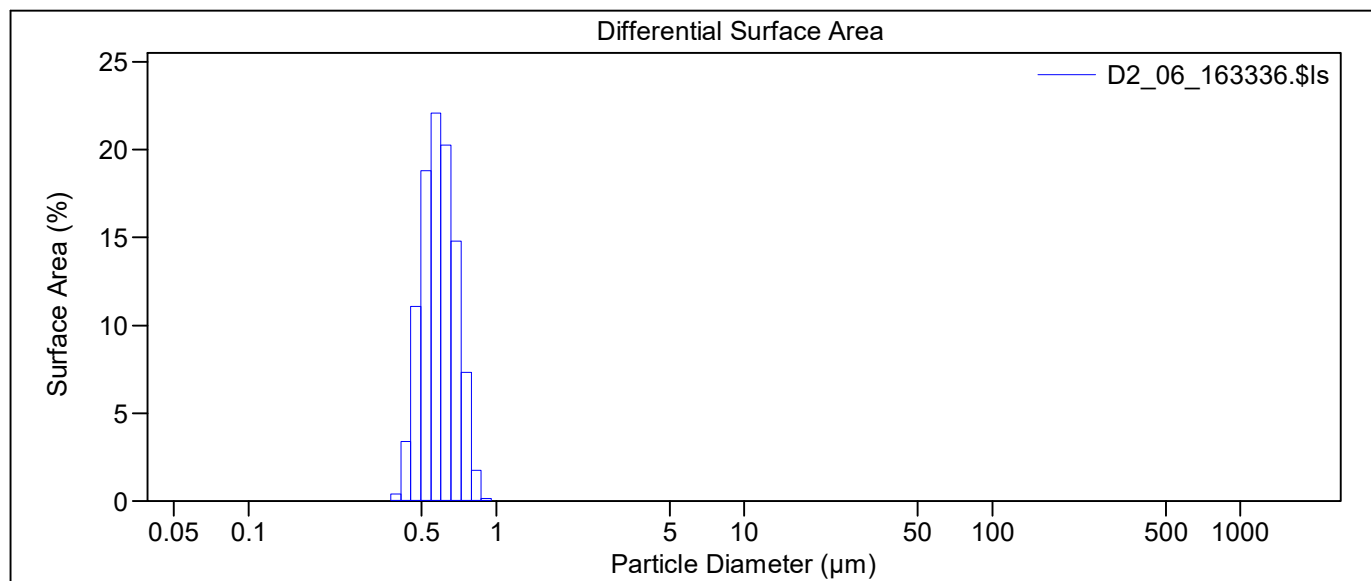
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_06_163336.\$ls		
	D2_06_163336.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	3.92%		
LS 13 320	Universal Liquid Module		
Start time:	16:31 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	4%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_06_163336.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.093 µm
Mean:	0.606 µm		Variance:	0.0087 µm ²
Median:	0.600 µm		C.V.:	15.3%
Mean/Median ratio:	1.011		Skewness:	0.322 Right skewed
Mode:	0.627 µm		Kurtosis:	-0.339 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.488 µm	0.536 µm	0.600 µm	0.672 µm	0.736 µm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0063	0.010	0.027
25	0.375	0.393	0.26	0.39	0.82
26	0.412	0.431	2.46	3.38	5.93
27	0.452	0.474	8.86	11.1	16.1
28	0.496	0.520	16.5	18.8	22.7
29	0.545	0.571	21.3	22.1	22.2
30	0.598	0.627	21.4	20.3	16.9
31	0.656	0.688	17.2	14.8	10.2
32	0.721	0.755	9.35	7.33	4.20
33	0.791	0.829	2.43	1.74	0.83
34	0.868	0.910	0.23	0.15	0.059
35	0.953	0.999	0.0046	0.0027	0.00088
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

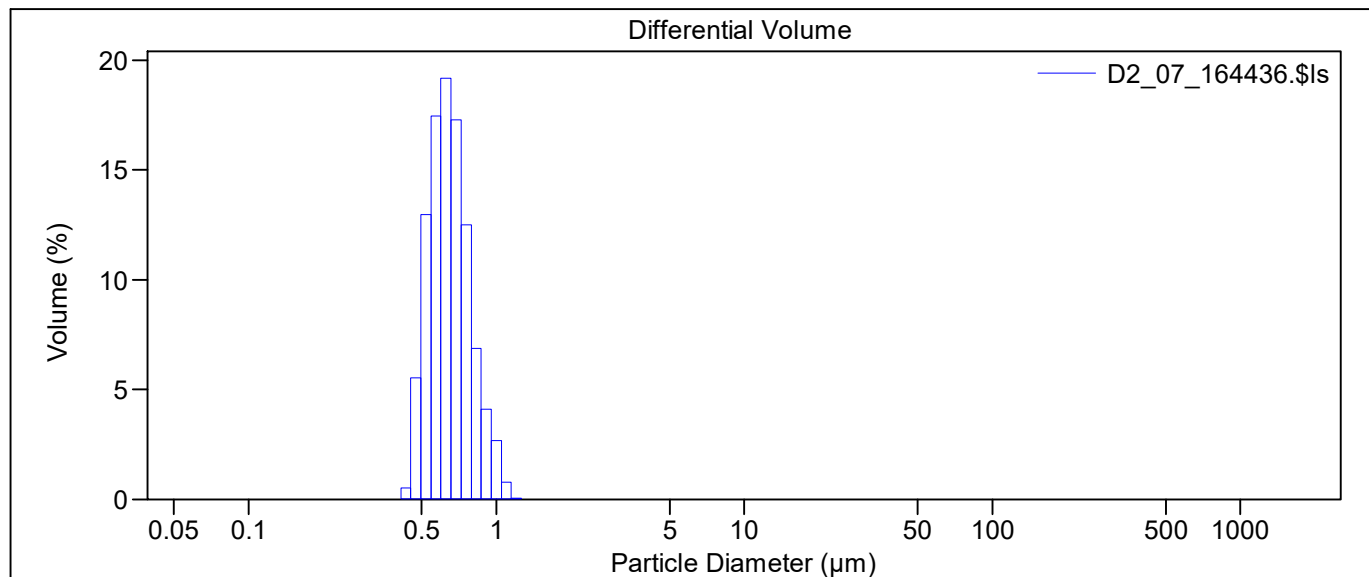
D2.\$av

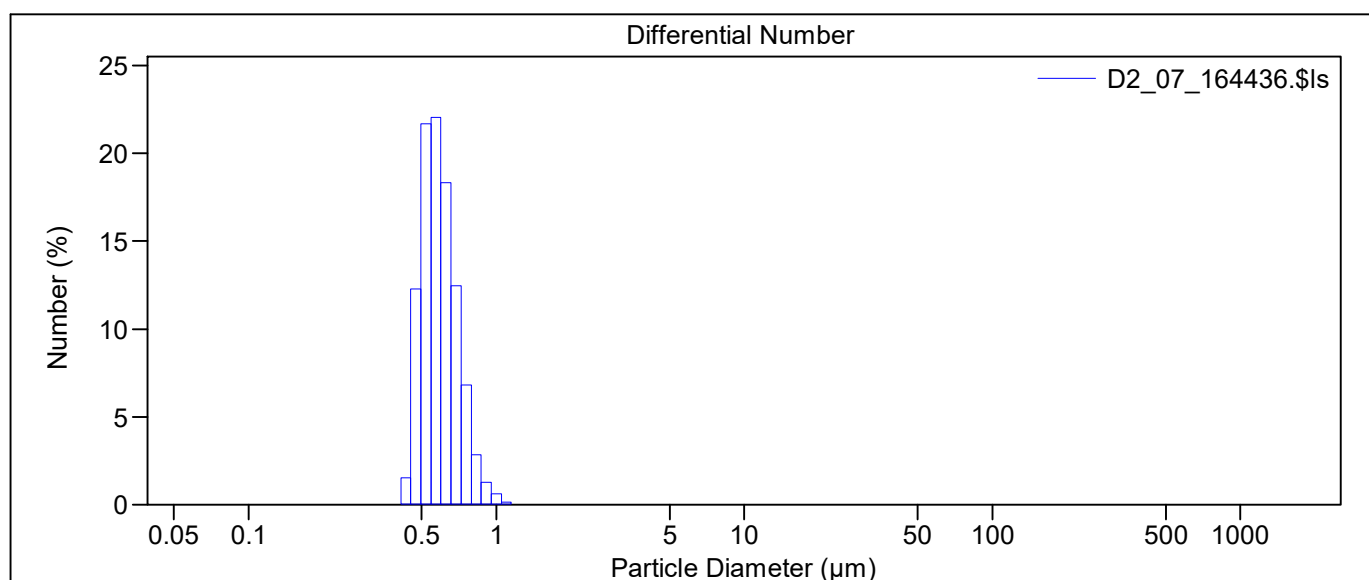
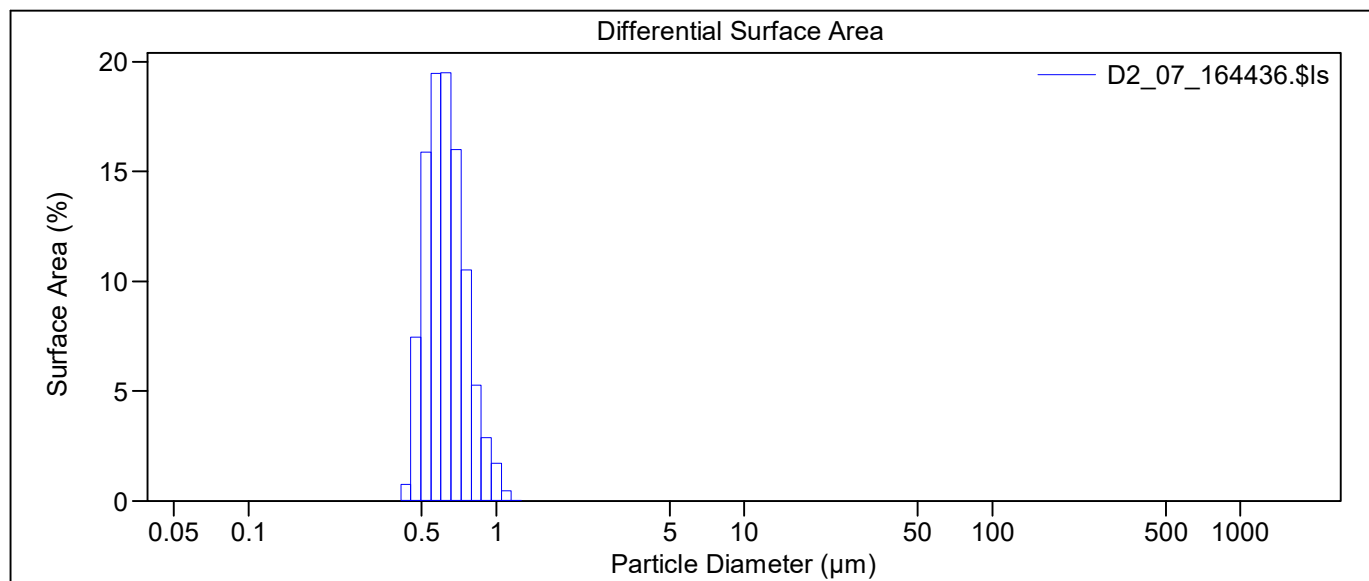
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_07_164436.\$ls		
	D2_07_164436.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.20%		
LS 13 320	Universal Liquid Module		
Start time:	16:42 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	57%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_07_164436.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.130 μm
Mean:	0.660 μm		Variance:	0.017 μm ²
Median:	0.639 μm		C.V.:	19.7%
Mean/Median ratio:	1.032		Skewness:	0.897 Right skewed
Mode:	0.627 μm		Kurtosis:	0.696 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.511 μm	0.563 μm	0.639 μm	0.732 μm	0.842 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0	0	0
26	0.412	0.431	0.52	0.77	1.52
27	0.452	0.474	5.55	7.46	12.3
28	0.496	0.520	13.0	15.9	21.7
29	0.545	0.571	17.5	19.5	22.0
30	0.598	0.627	19.2	19.5	18.3
31	0.656	0.688	17.3	16.0	12.5
32	0.721	0.755	12.5	10.5	6.81
33	0.791	0.829	6.88	5.29	2.84
34	0.868	0.910	4.12	2.88	1.28
35	0.953	0.999	2.68	1.71	0.63
36	1.047	1.097	0.79	0.46	0.14
37	1.149	1.204	0.044	0.023	0.0060
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

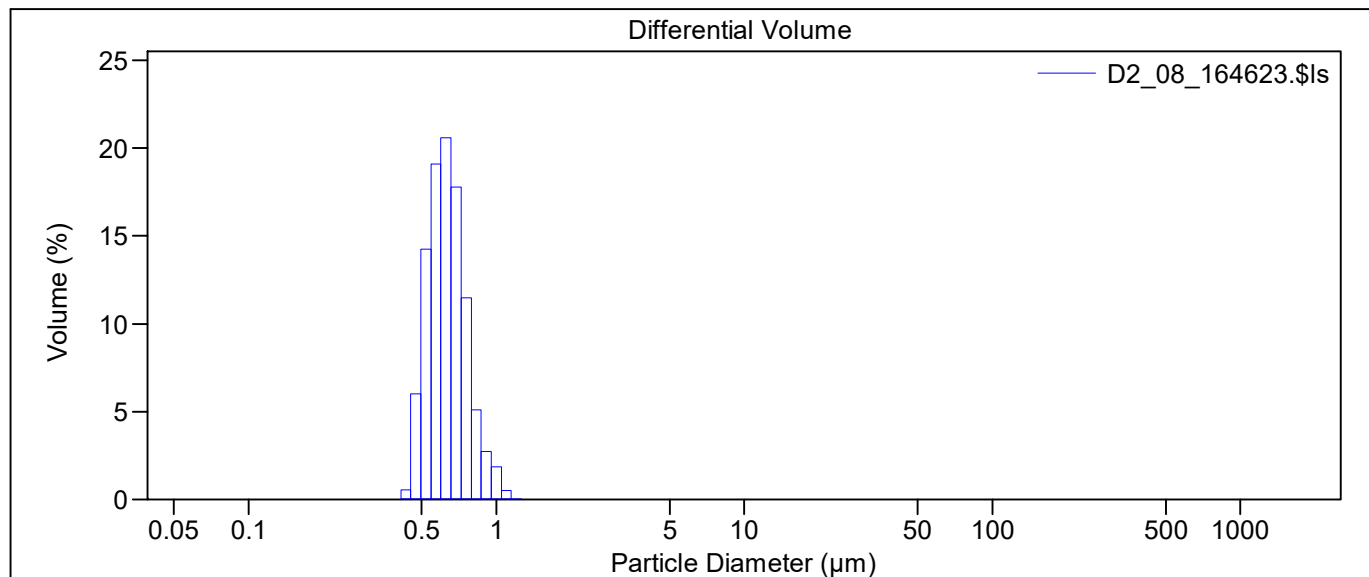
D2.\$av

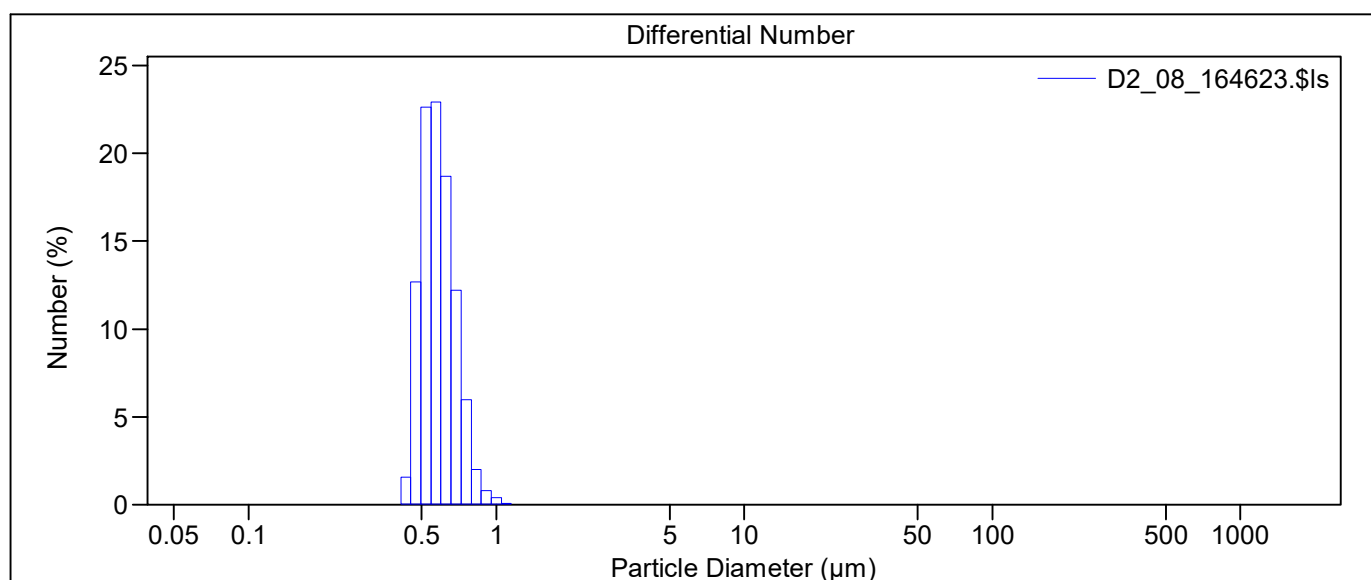
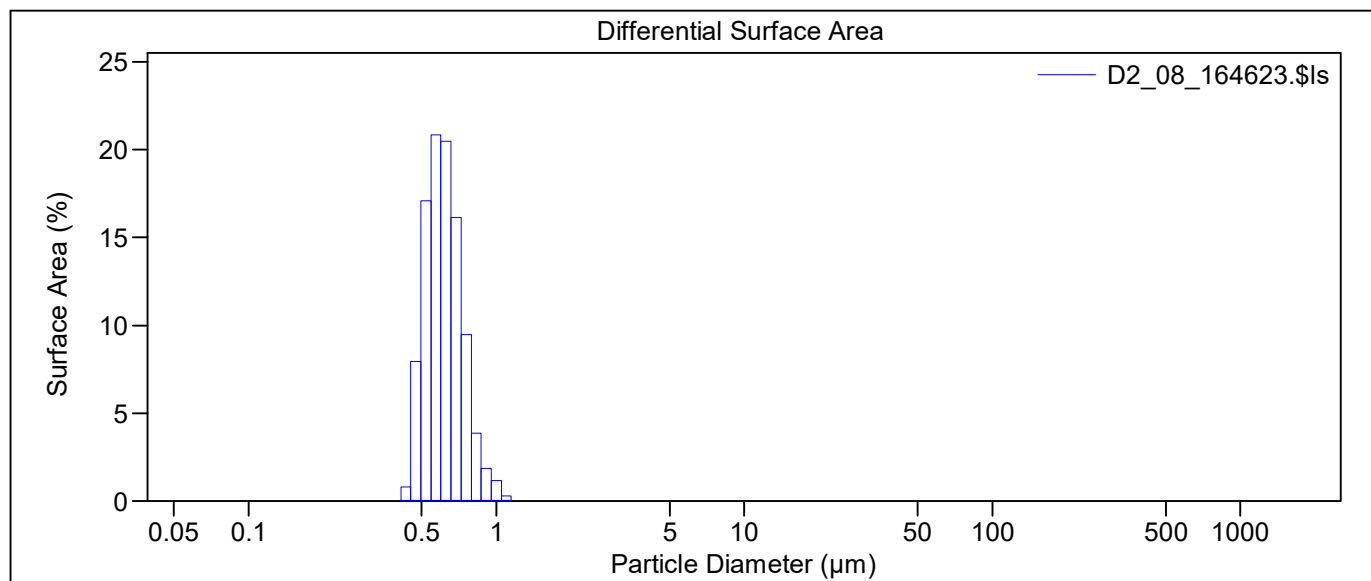
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_08_164623.\$ls		
	D2_08_164623.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.44%		
LS 13 320	Universal Liquid Module		
Start time:	16:44 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	57%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_08_164623.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.119 μm
Mean:	0.644 μm		Variance:	0.014 μm ²
Median:	0.627 μm		C.V.:	18.5%
Mean/Median ratio:	1.027		Skewness:	0.993 Right skewed
Mode:	0.627 μm		Kurtosis:	1.244 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.508 μm	0.556 μm	0.627 μm	0.709 μm	0.795 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0	0	0
26	0.412	0.431	0.56	0.81	1.56
27	0.452	0.474	6.03	7.94	12.7
28	0.496	0.520	14.2	17.1	22.6
29	0.545	0.571	19.1	20.9	22.9
30	0.598	0.627	20.6	20.5	18.7
31	0.656	0.688	17.8	16.1	12.2
32	0.721	0.755	11.5	9.49	5.96
33	0.791	0.829	5.11	3.85	2.01
34	0.868	0.910	2.73	1.87	0.81
35	0.953	0.999	1.86	1.16	0.42
36	1.047	1.097	0.52	0.30	0.089
37	1.149	1.204	0.024	0.013	0.0031
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

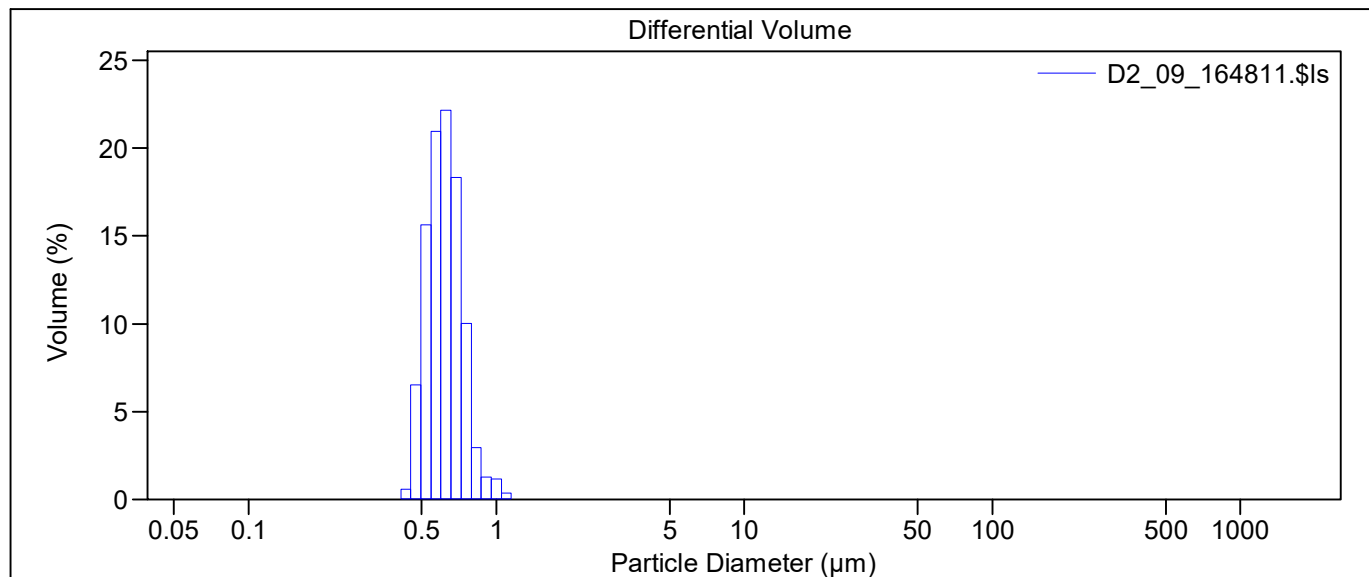
D2.\$av

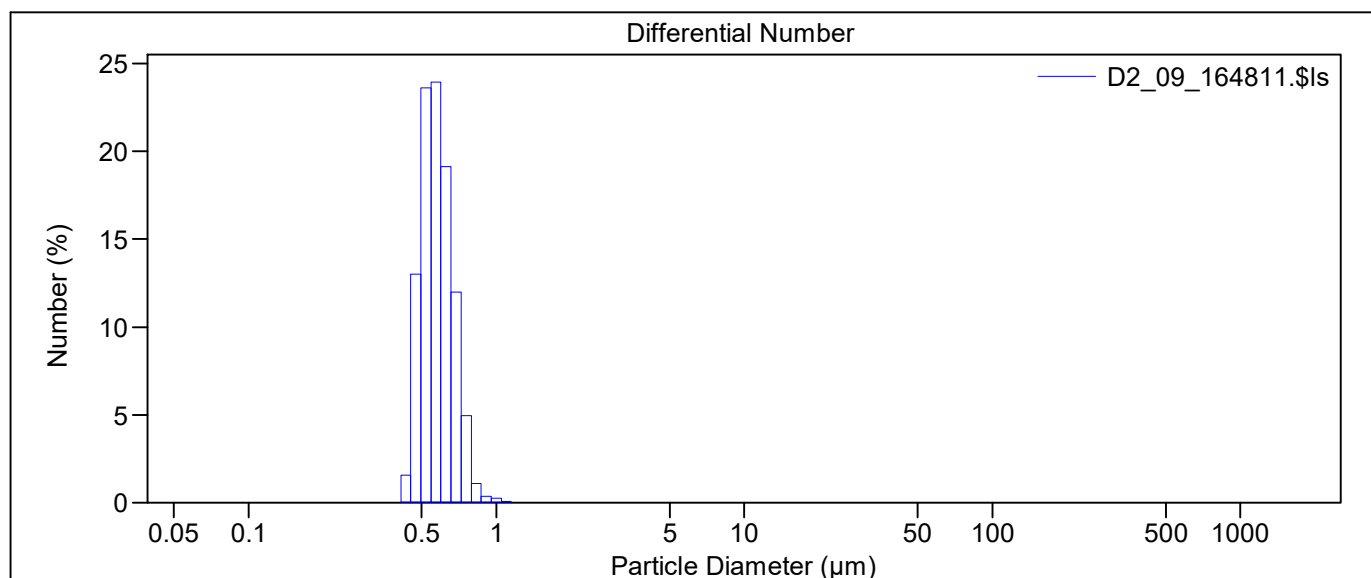
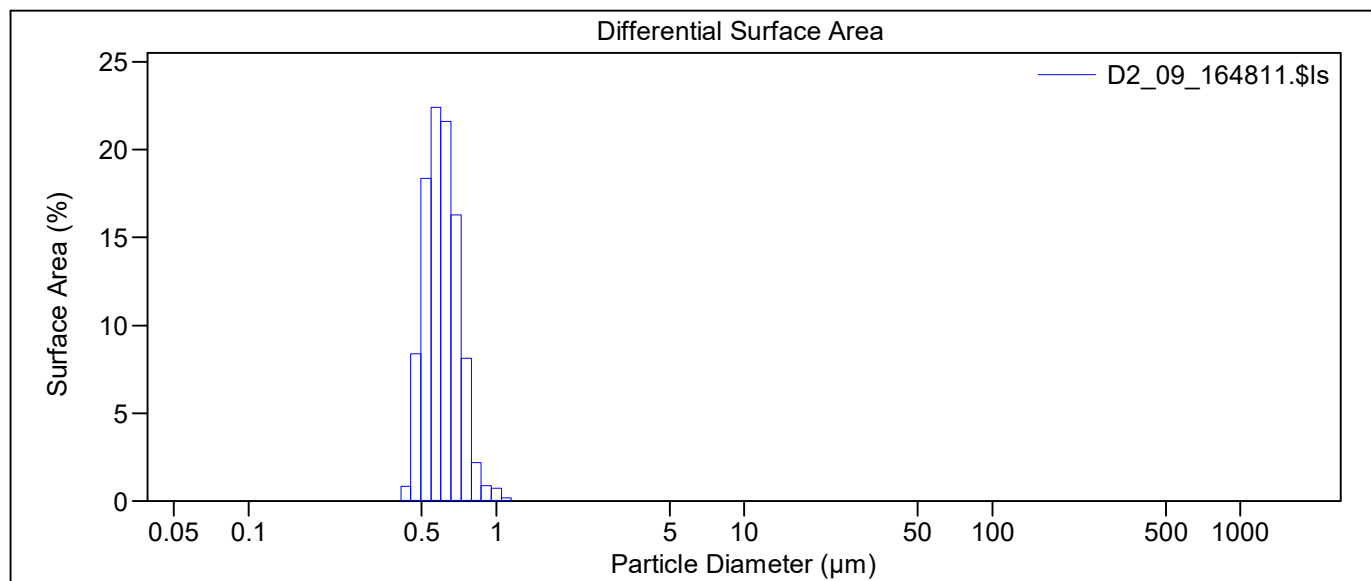
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_09_164811.\$ls		
	D2_09_164811.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.81%		
LS 13 320	Universal Liquid Module		
Start time:	16:46 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	57%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_09_164811.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.106 μm
Mean:	0.627 μm		Variance:	0.011 μm ²
Median:	0.615 μm		C.V.:	16.9%
Mean/Median ratio:	1.020		Skewness:	1.072 Right skewed
Mode:	0.627 μm		Kurtosis:	2.084 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.505 μm	0.551 μm	0.615 μm	0.688 μm	0.761 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0	0	0
26	0.412	0.431	0.60	0.85	1.58
27	0.452	0.474	6.51	8.40	13.0
28	0.496	0.520	15.6	18.4	23.6
29	0.545	0.571	20.9	22.4	23.9
30	0.598	0.627	22.2	21.6	19.1
31	0.656	0.688	18.3	16.3	12.0
32	0.721	0.755	10.0	8.11	4.95
33	0.791	0.829	2.96	2.18	1.10
34	0.868	0.910	1.29	0.86	0.36
35	0.953	0.999	1.17	0.71	0.25
36	1.047	1.097	0.35	0.20	0.057
37	1.149	1.204	0.014	0.0070	0.0017
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

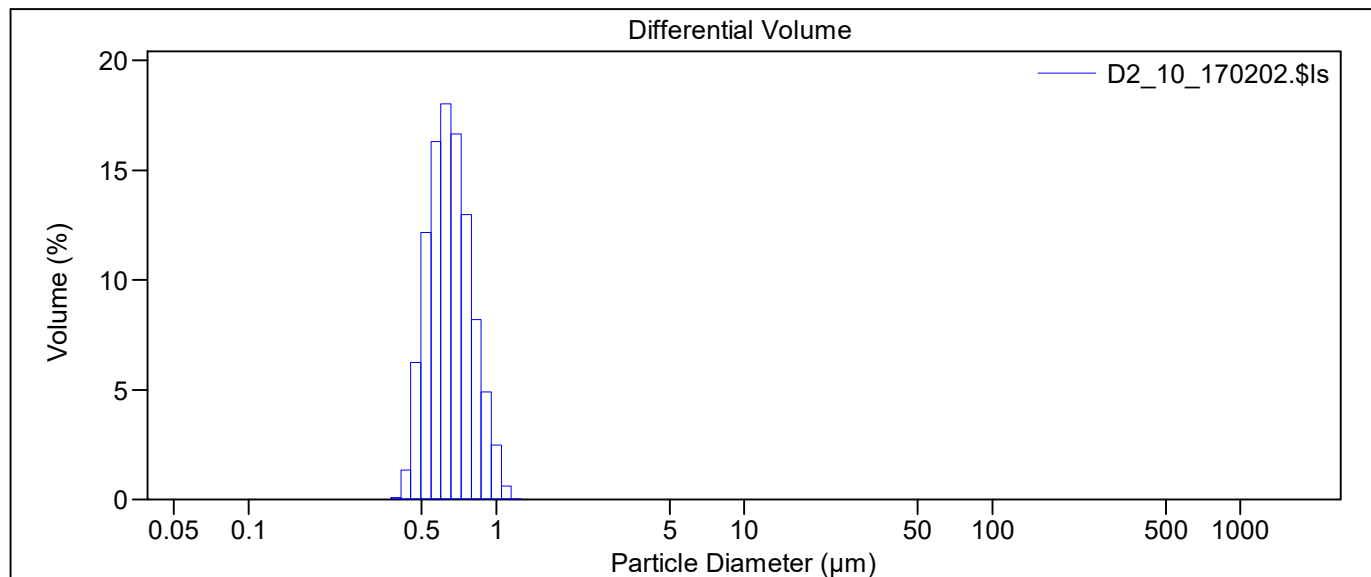
D2.\$av

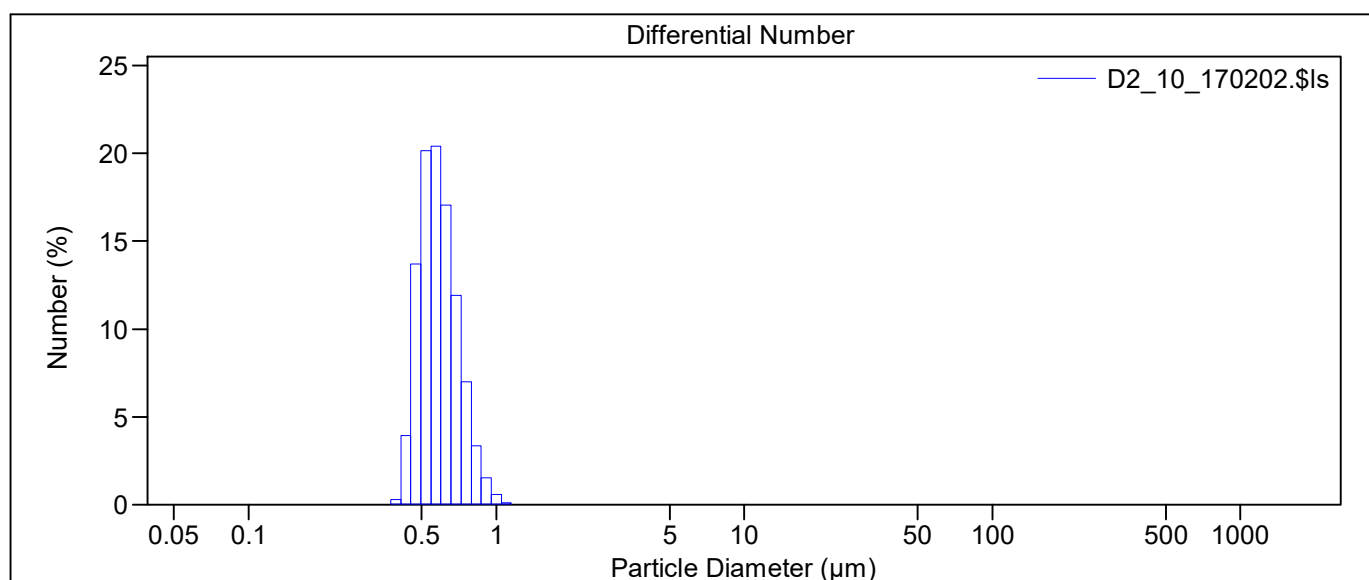
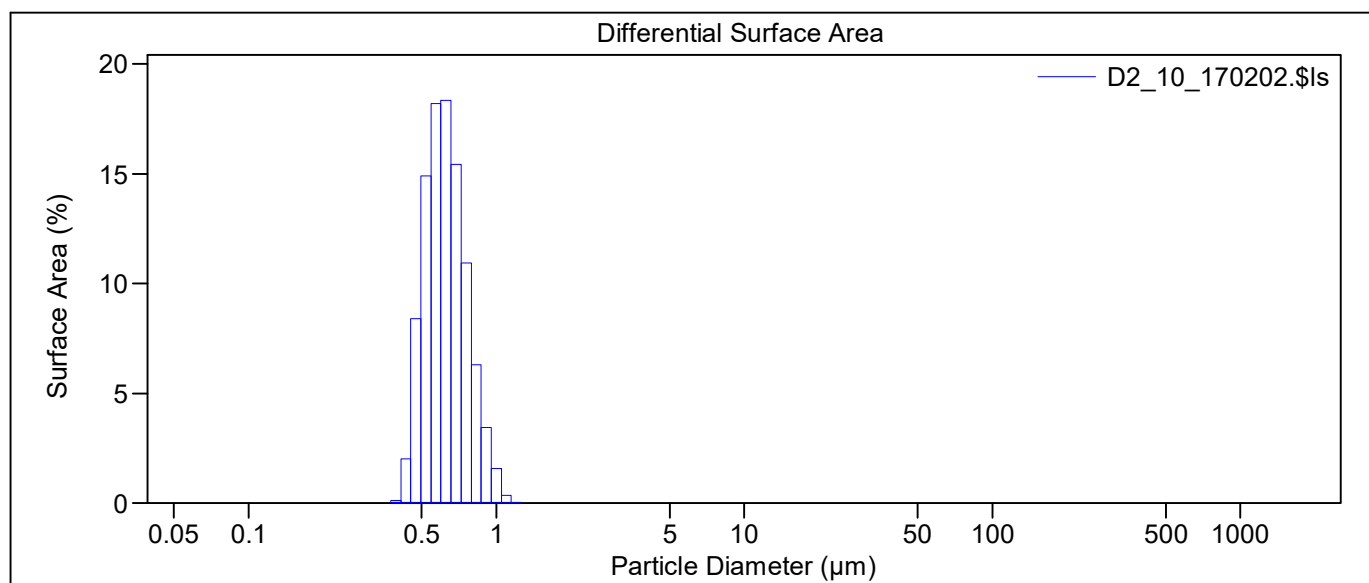
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_10_170202.\$ls		
	D2_10_170202.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.37%		
LS 13 320	Universal Liquid Module		
Start time:	17:00 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_10_170202.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.133 μm
Mean:	0.662 μm		Variance:	0.018 μm ²
Median:	0.643 μm		C.V.:	20.1%
Mean/Median ratio:	1.029		Skewness:	0.716 Right skewed
Mode:	0.627 μm		Kurtosis:	0.251 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.506 μm	0.562 μm	0.643 μm	0.743 μm	0.850 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

Beckman Coulter LS13320

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.00046	0.00082	0.0023
25	0.375	0.393	0.073	0.12	0.28
26	0.412	0.431	1.35	2.00	3.93
27	0.452	0.474	6.25	8.41	13.7
28	0.496	0.520	12.2	14.9	20.1
29	0.545	0.571	16.3	18.2	20.4
30	0.598	0.627	18.0	18.3	17.1
31	0.656	0.688	16.6	15.4	11.9
32	0.721	0.755	13.0	10.9	7.01
33	0.791	0.829	8.18	6.29	3.34
34	0.868	0.910	4.90	3.43	1.51
35	0.953	0.999	2.49	1.59	0.58
36	1.047	1.097	0.60	0.35	0.11
37	1.149	1.204	0.038	0.020	0.0051
38	1.261	1.321	0.00027	0.00013	0.000027
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

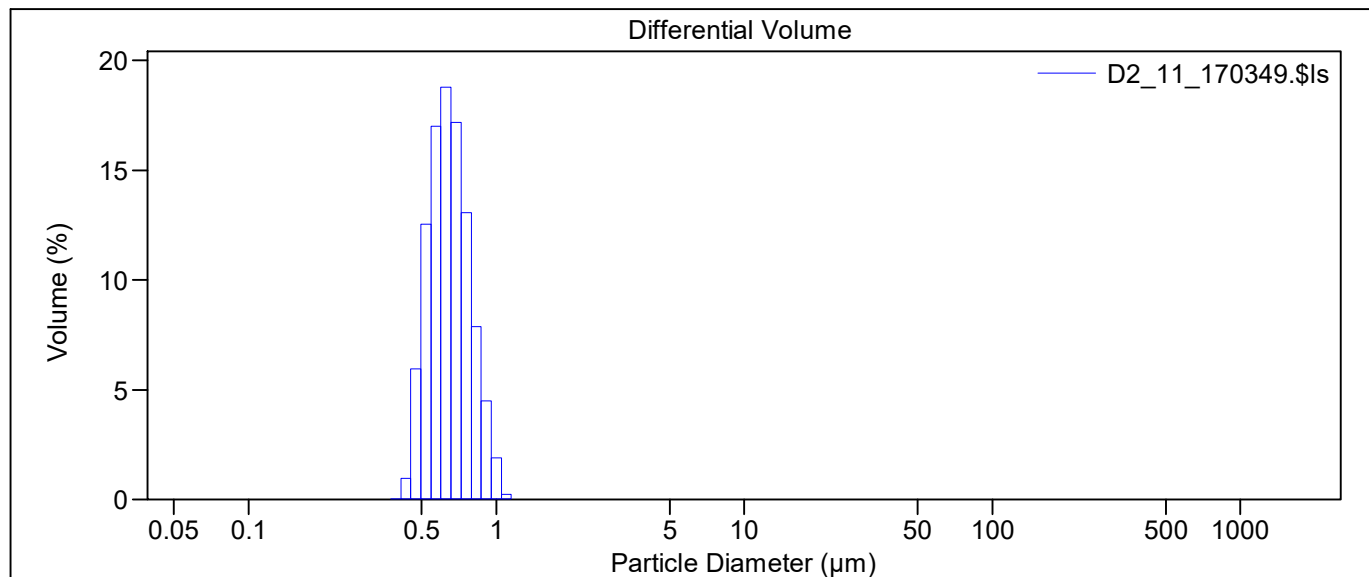
D2.\$av

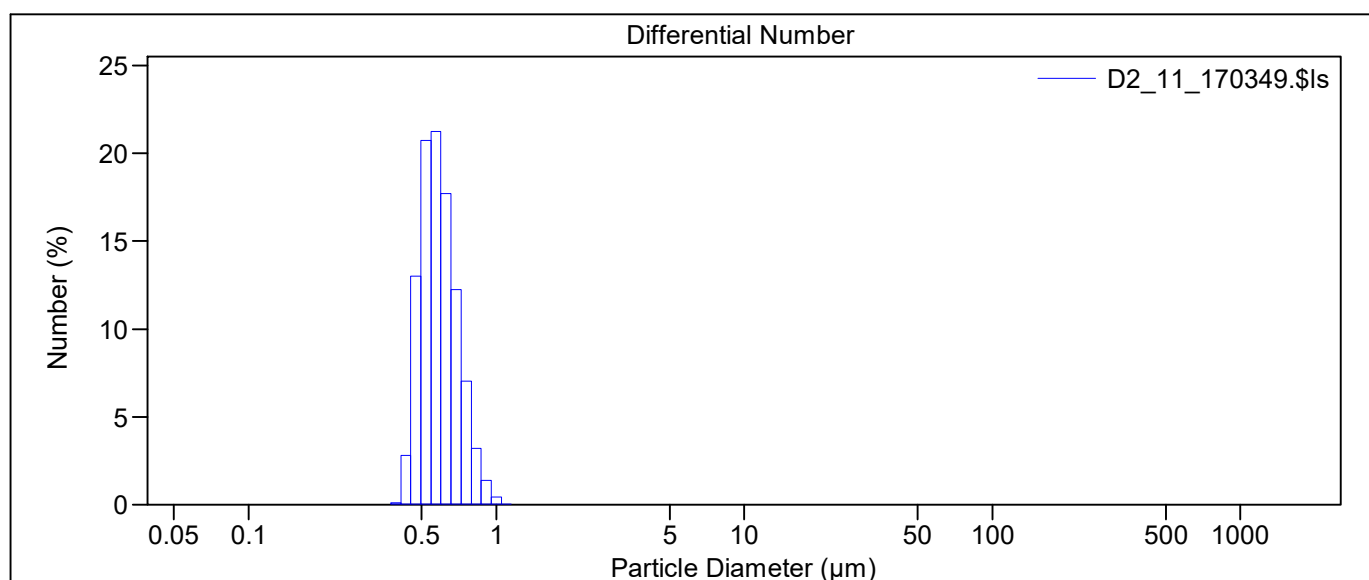
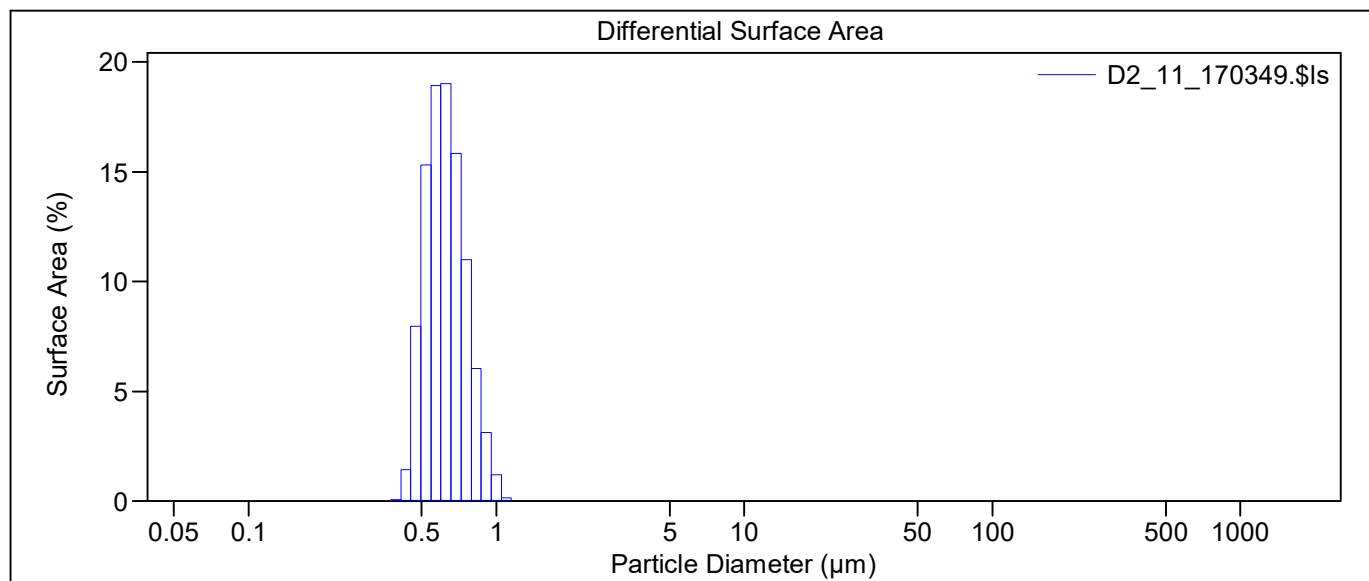
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_11_170349.\$ls		
	D2_11_170349.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.49%		
LS 13 320	Universal Liquid Module		
Start time:	17:02 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_11_170349.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.125 μm
Mean:	0.657 μm		Variance:	0.016 μm ²
Median:	0.640 μm		C.V.:	19.0%
Mean/Median ratio:	1.026		Skewness:	0.669 Right skewed
Mode:	0.627 μm		Kurtosis:	0.128 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.508 μm	0.562 μm	0.640 μm	0.734 μm	0.835 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.00011	0.00019	0.00054
25	0.375	0.393	0.030	0.048	0.11
26	0.412	0.431	0.97	1.43	2.82
27	0.452	0.474	5.94	7.96	13.0
28	0.496	0.520	12.5	15.3	20.7
29	0.545	0.571	17.0	18.9	21.2
30	0.598	0.627	18.8	19.0	17.7
31	0.656	0.688	17.2	15.8	12.3
32	0.721	0.755	13.1	11.0	7.05
33	0.791	0.829	7.86	6.02	3.21
34	0.868	0.910	4.49	3.13	1.38
35	0.953	0.999	1.90	1.21	0.44
36	1.047	1.097	0.23	0.13	0.040
37	1.149	1.204	0.0022	0.0012	0.00029
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

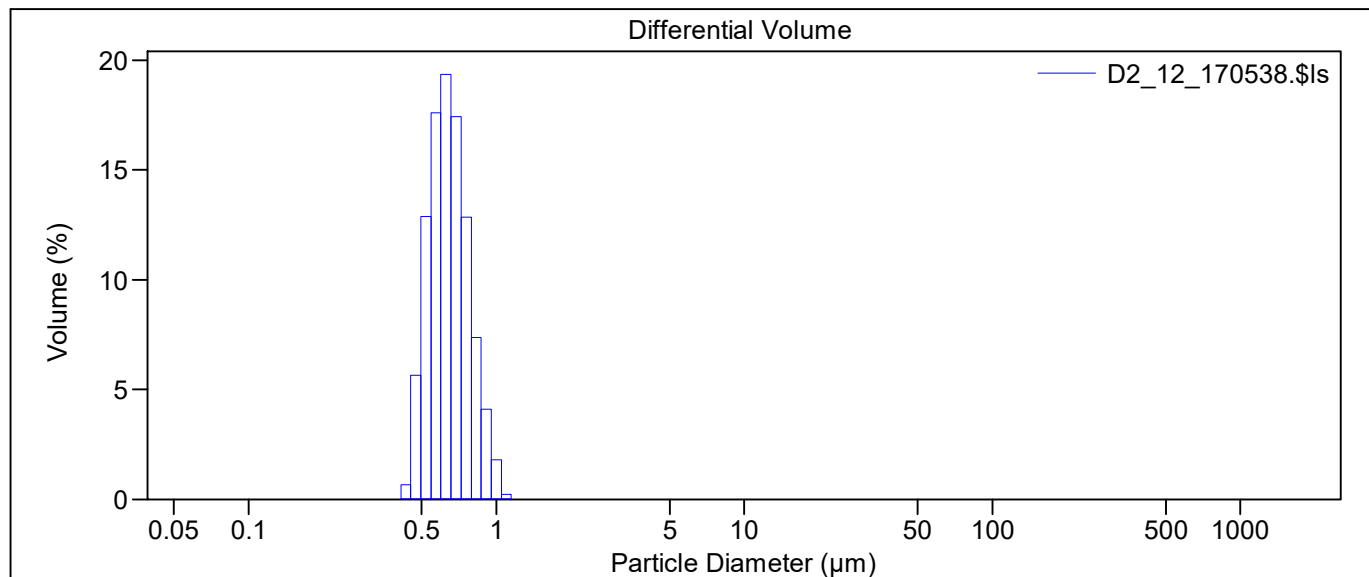
D2.\$av

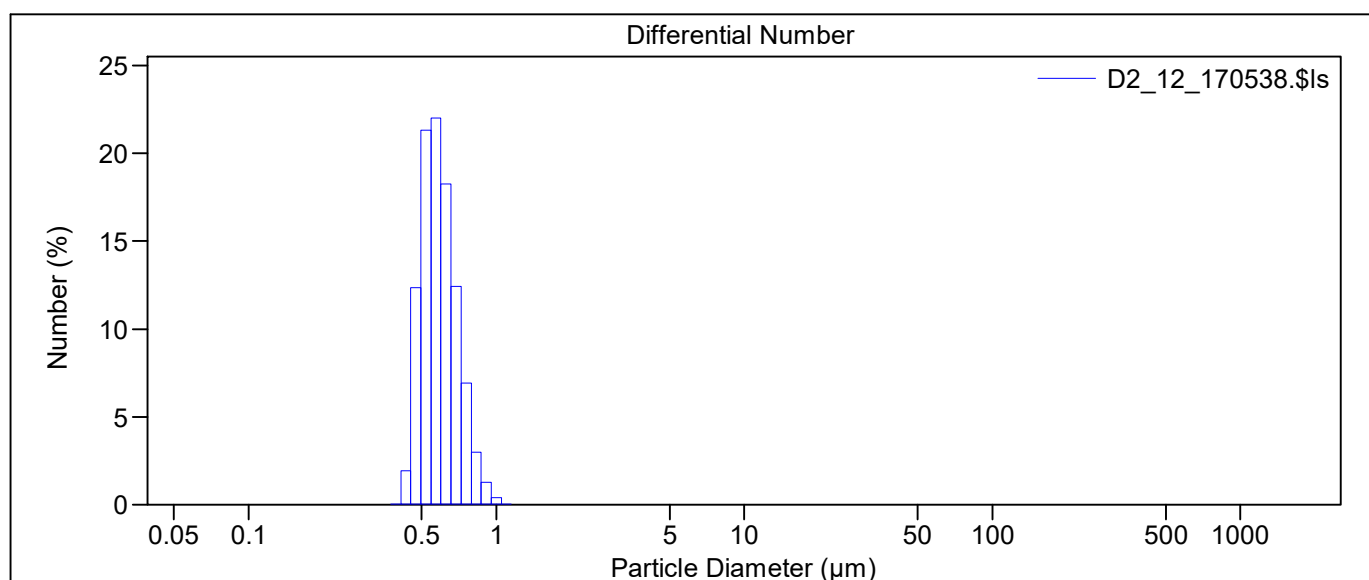
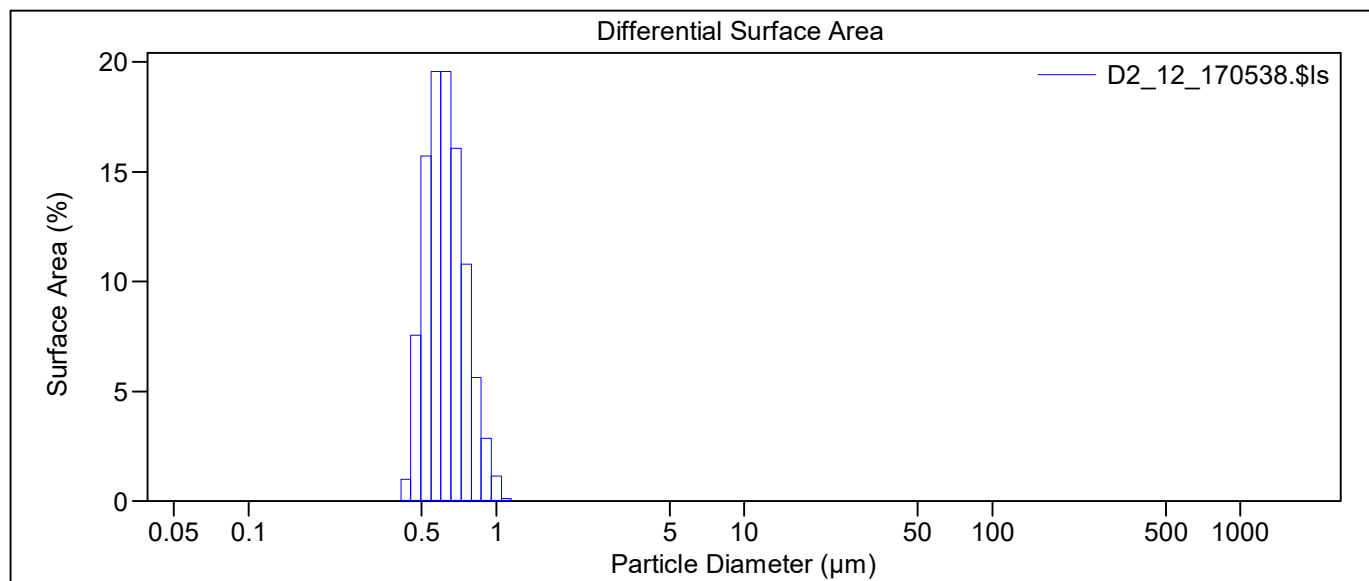
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_12_170538.\$ls		
	D2_12_170538.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.56%		
LS 13 320	Universal Liquid Module		
Start time:	17:03 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_12_170538.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.122 μm
Mean:	0.655 μm		Variance:	0.015 μm ²
Median:	0.638 μm		C.V.:	18.7%
Mean/Median ratio:	1.026		Skewness:	0.720 Right skewed
Mode:	0.627 μm		Kurtosis:	0.261 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.510 μm	0.562 μm	0.638 μm	0.728 μm	0.828 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.0064	0.010	0.024
26	0.412	0.431	0.67	0.99	1.94
27	0.452	0.474	5.65	7.55	12.3
28	0.496	0.520	12.9	15.7	21.3
29	0.545	0.571	17.6	19.6	22.0
30	0.598	0.627	19.4	19.6	18.3
31	0.656	0.688	17.4	16.1	12.4
32	0.721	0.755	12.9	10.8	6.94
33	0.791	0.829	7.37	5.63	3.01
34	0.868	0.910	4.12	2.87	1.27
35	0.953	0.999	1.79	1.14	0.42
36	1.047	1.097	0.22	0.13	0.039
37	1.149	1.204	0.0021	0.0011	0.00029
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

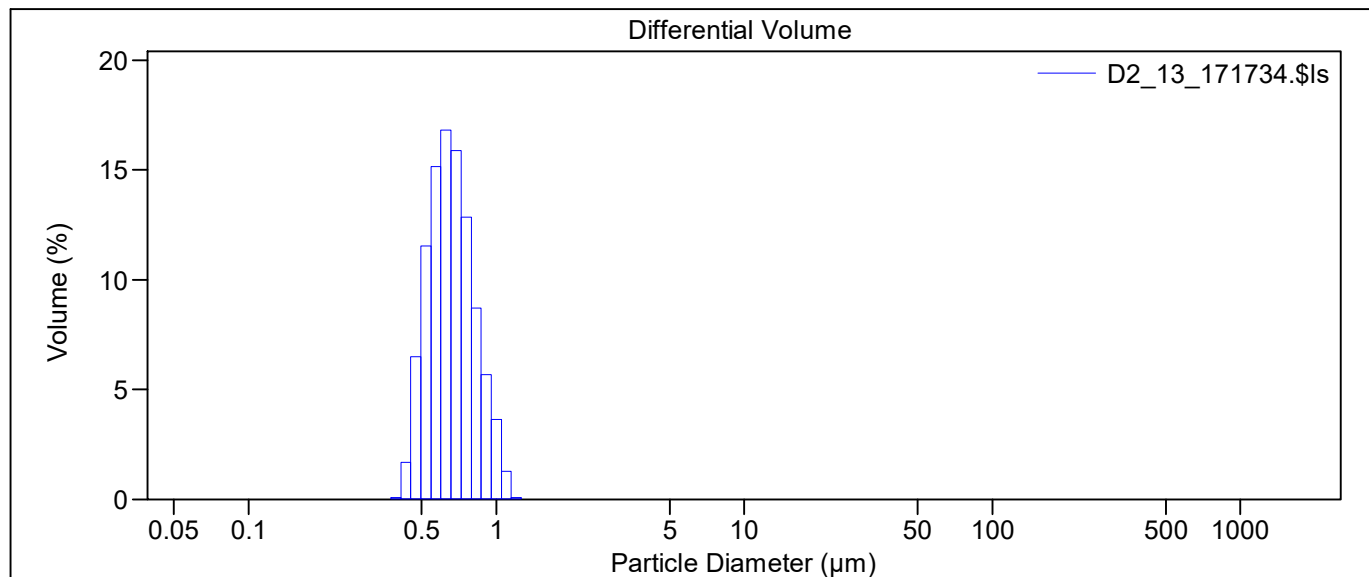
D2.\$av

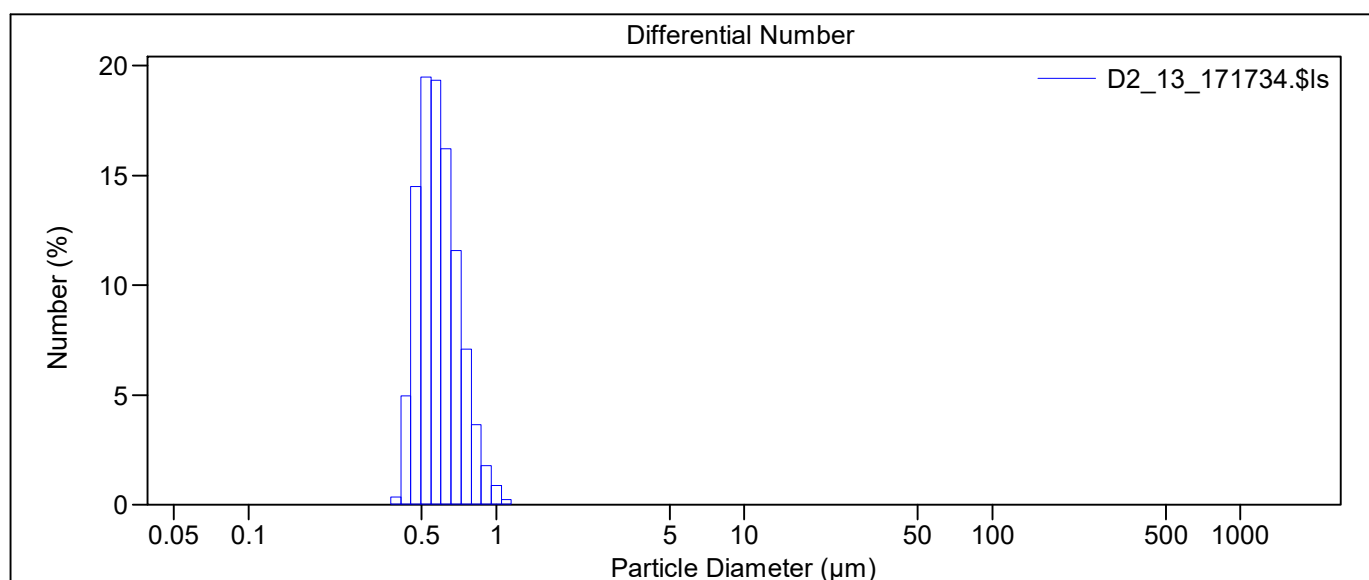
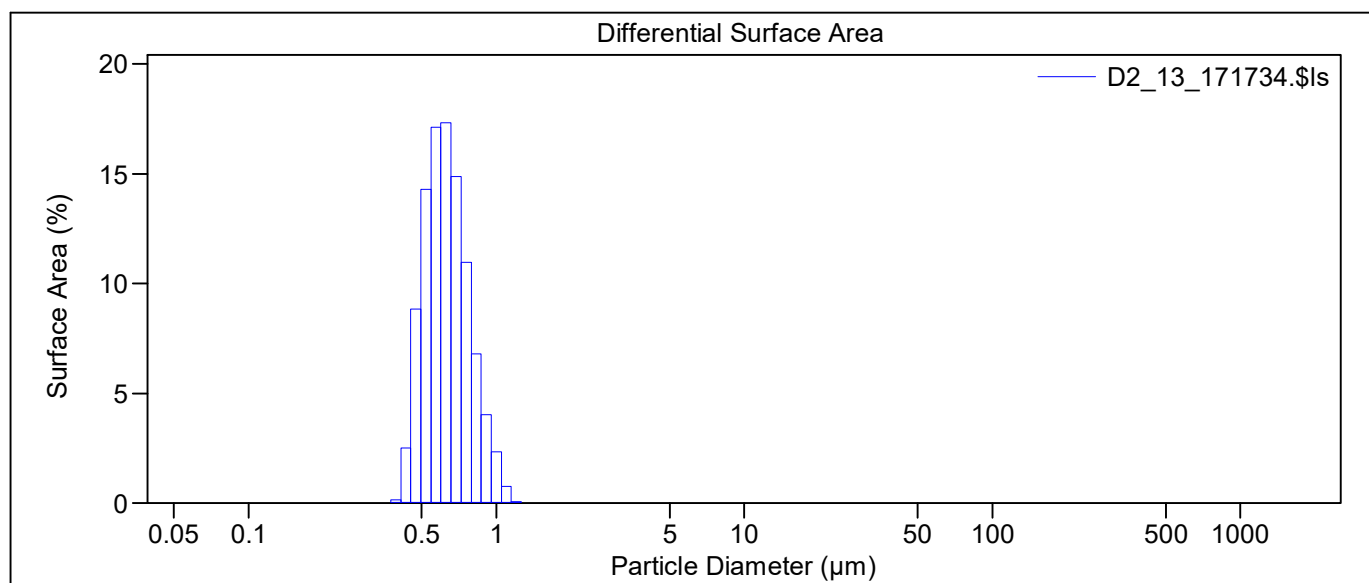
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_13_171734.\$ls		
	D2_13_171734.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.03%		
LS 13 320	Universal Liquid Module		
Start time:	17:15 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_13_171734.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.145 μm
Mean:	0.673 μm		Variance:	0.021 μm ²
Median:	0.650 μm		C.V.:	21.5%
Mean/Median ratio:	1.034		Skewness:	0.727 Right skewed
Mode:	0.627 μm		Kurtosis:	0.164 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.504 μm	0.563 μm	0.650 μm	0.761 μm	0.879 μm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.091	0.15	0.36
26	0.412	0.431	1.68	2.51	4.97
27	0.452	0.474	6.49	8.82	14.5
28	0.496	0.520	11.5	14.3	19.5
29	0.545	0.571	15.2	17.1	19.3
30	0.598	0.627	16.8	17.3	16.2
31	0.656	0.688	15.9	14.9	11.6
32	0.721	0.755	12.9	11.0	7.08
33	0.791	0.829	8.73	6.78	3.63
34	0.868	0.910	5.69	4.03	1.79
35	0.953	0.999	3.64	2.34	0.86
36	1.047	1.097	1.28	0.75	0.23
37	1.149	1.204	0.098	0.053	0.013
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

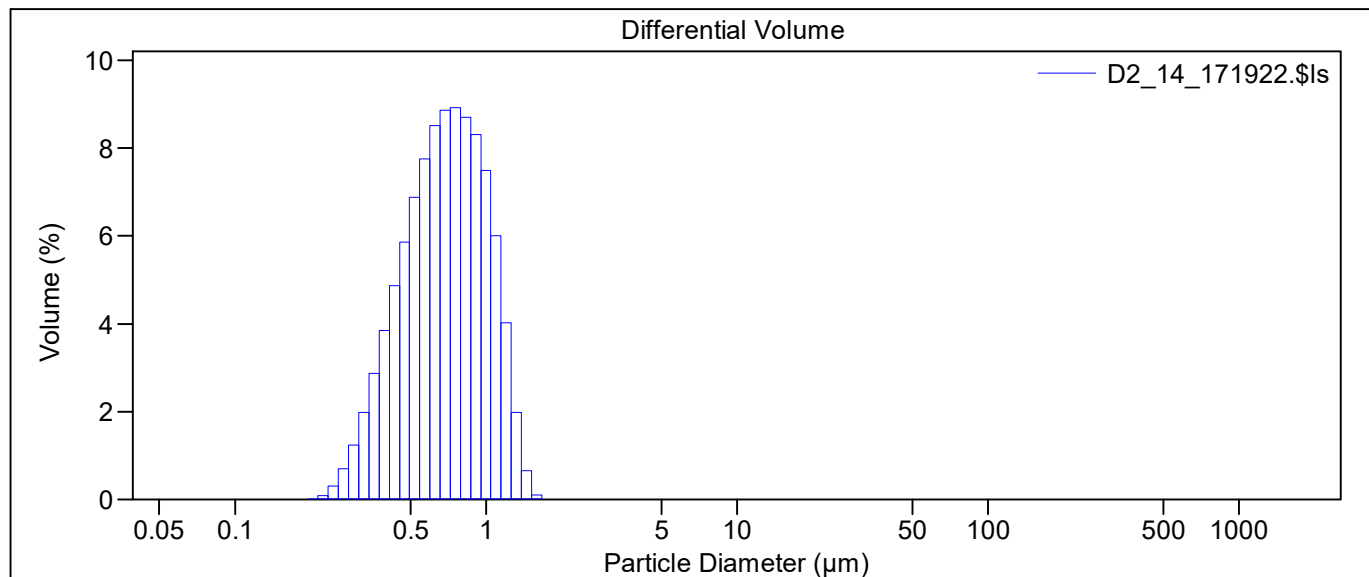
D2.\$av

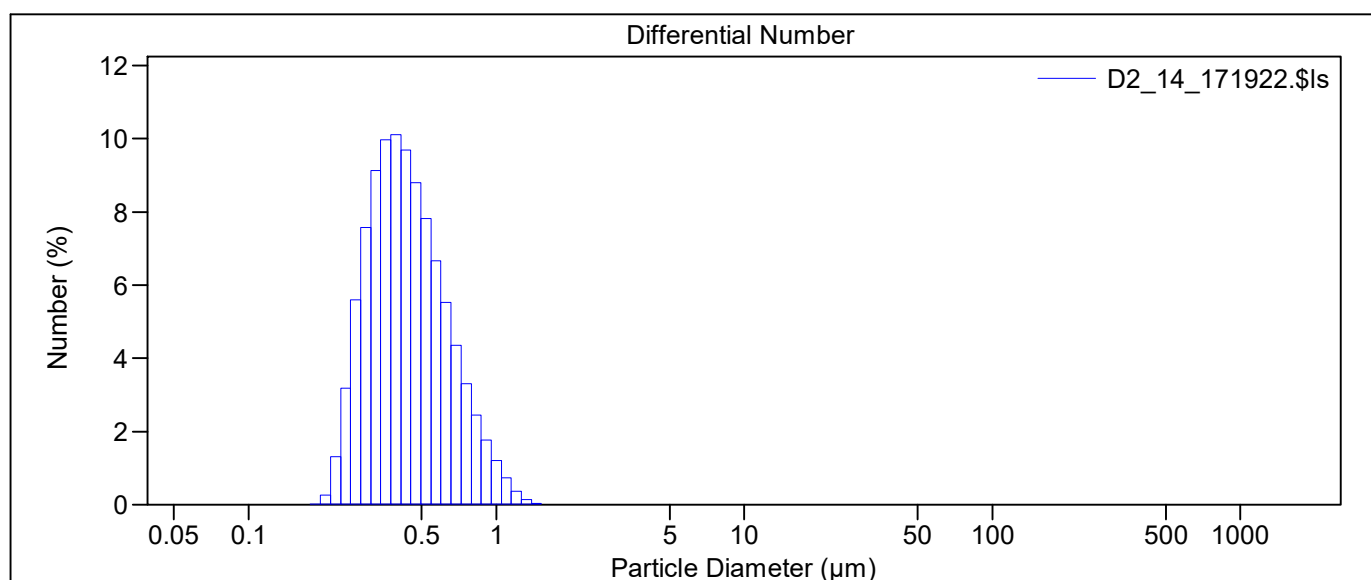
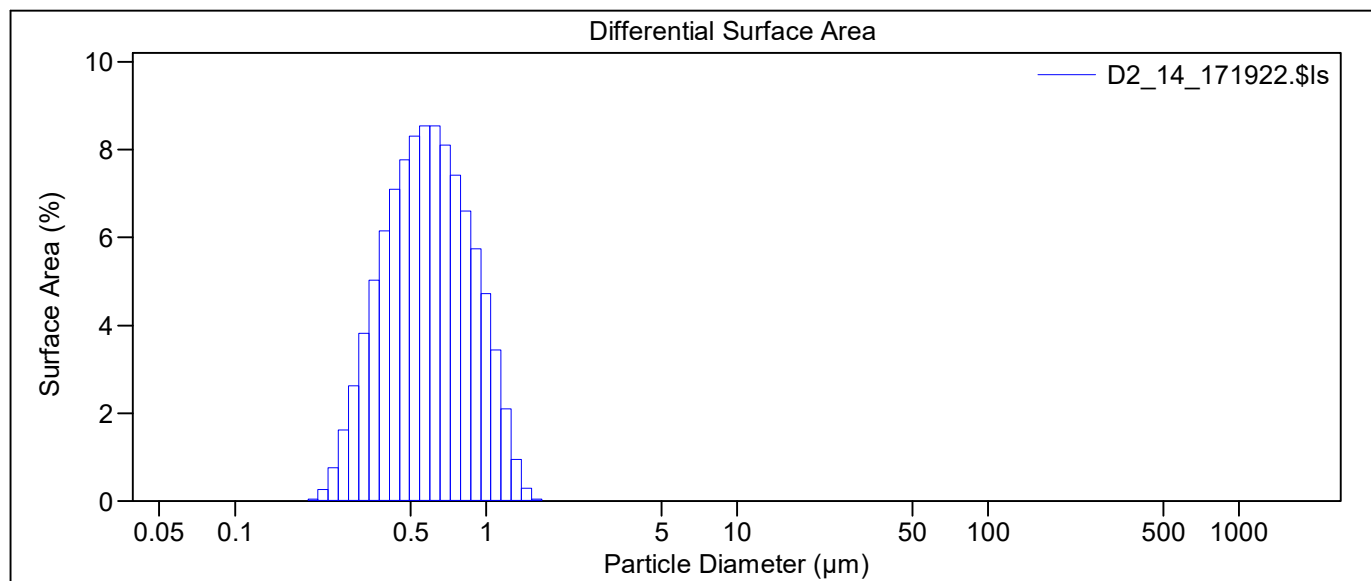
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_14_171922.\$ls		
	D2_14_171922.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.29%		
LS 13 320	Universal Liquid Module		
Start time:	17:17 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	50%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_14_171922.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.261 μm
Mean:	0.724 μm		Variance:	0.068 μm ²
Median:	0.693 μm		C.V.:	36.0%
Mean/Median ratio:	1.043		Skewness:	0.462 Right skewed
Mode:	0.755 μm		Kurtosis:	-0.387 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.402 μm	0.519 μm	0.693 μm	0.905 μm	1.094 μm





D2.\$av					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0.00097	0.0033	0.024

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.014	0.043	0.26
19	0.214	0.225	0.093	0.26	1.31
20	0.235	0.247	0.30	0.76	3.19
21	0.258	0.271	0.70	1.61	5.60
22	0.284	0.297	1.24	2.63	7.57
23	0.311	0.326	1.98	3.82	9.13
24	0.342	0.358	2.87	5.03	9.98
25	0.375	0.393	3.85	6.15	10.1
26	0.412	0.431	4.87	7.10	9.69
27	0.452	0.474	5.85	7.77	8.80
28	0.496	0.520	6.88	8.31	7.81
29	0.545	0.571	7.75	8.54	6.66
30	0.598	0.627	8.51	8.54	5.53
31	0.656	0.688	8.86	8.10	4.35
32	0.721	0.755	8.92	7.42	3.31
33	0.791	0.829	8.70	6.60	2.44
34	0.868	0.910	8.31	5.74	1.76
35	0.953	0.999	7.50	4.72	1.20
36	1.047	1.097	6.01	3.45	0.73
37	1.149	1.204	4.03	2.11	0.37
38	1.261	1.321	1.99	0.95	0.14
39	1.385	1.451	0.66	0.28	0.034
40	1.520	1.592	0.11	0.042	0.0042
41	1.668	1.748	0.0069	0.0025	0.00021
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

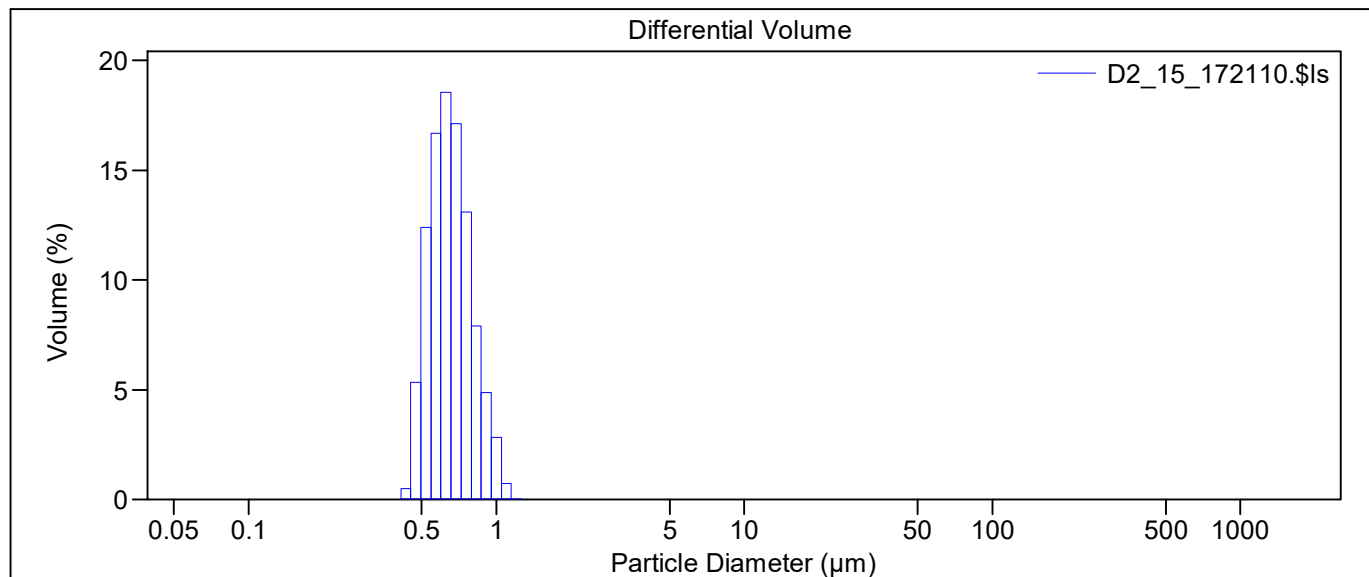
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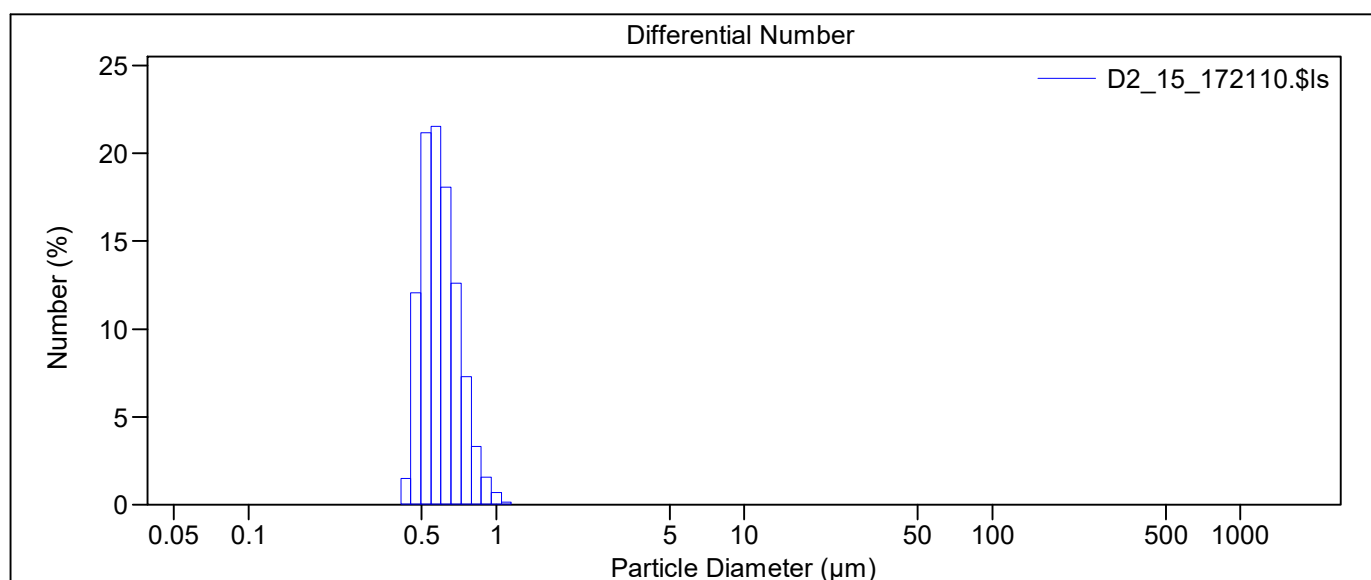
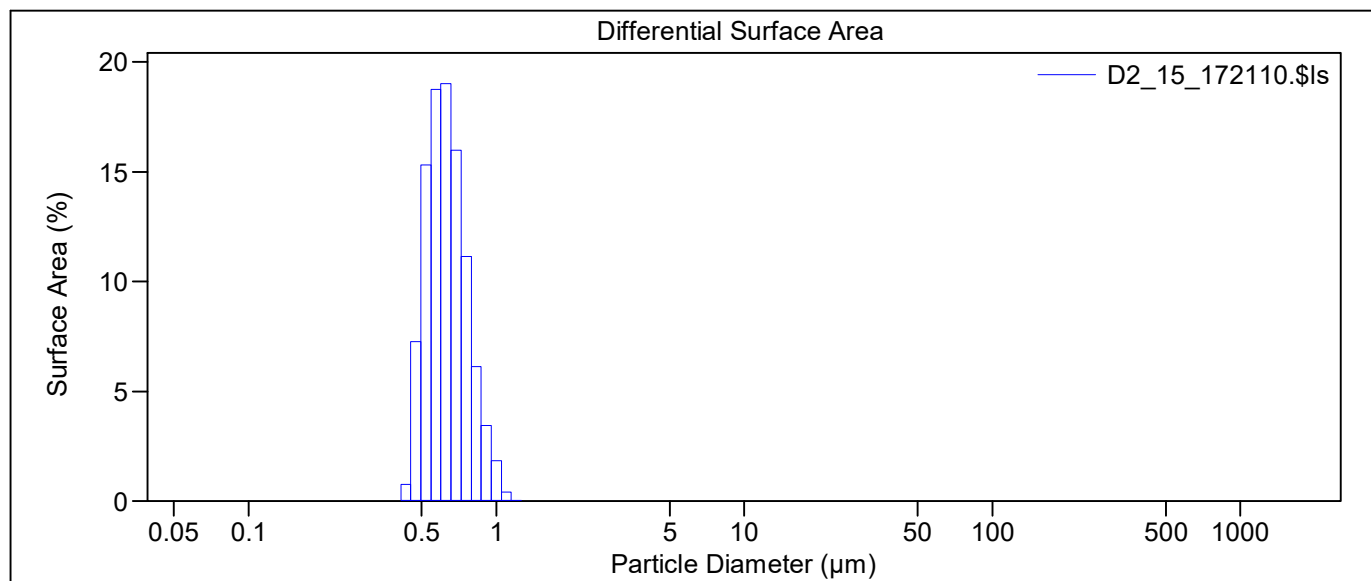
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D2\D2_15_172110.\$ls		
	D2_15_172110.\$ls		
File ID:	D2		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.26%		
LS 13 320	Universal Liquid Module		
Start time:	17:19 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	51%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D2_15_172110.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.132 µm
Mean:	0.666 µm		Variance:	0.017 µm ²
Median:	0.646 µm		C.V.:	19.8%
Mean/Median ratio:	1.032		Skewness:	0.794 Right skewed
Mode:	0.627 µm		Kurtosis:	0.366 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.512 µm	0.566 µm	0.646 µm	0.745 µm	0.853 µm





D2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0	0	0
26	0.412	0.431	0.50	0.75	1.51
27	0.452	0.474	5.34	7.25	12.1
28	0.496	0.520	12.4	15.3	21.2
29	0.545	0.571	16.7	18.8	21.5
30	0.598	0.627	18.5	19.0	18.1
31	0.656	0.688	17.1	16.0	12.6
32	0.721	0.755	13.1	11.1	7.30
33	0.791	0.829	7.91	6.13	3.33
34	0.868	0.910	4.87	3.44	1.55
35	0.953	0.999	2.84	1.82	0.68
36	1.047	1.097	0.72	0.42	0.13
37	1.149	1.204	0.033	0.018	0.0046
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

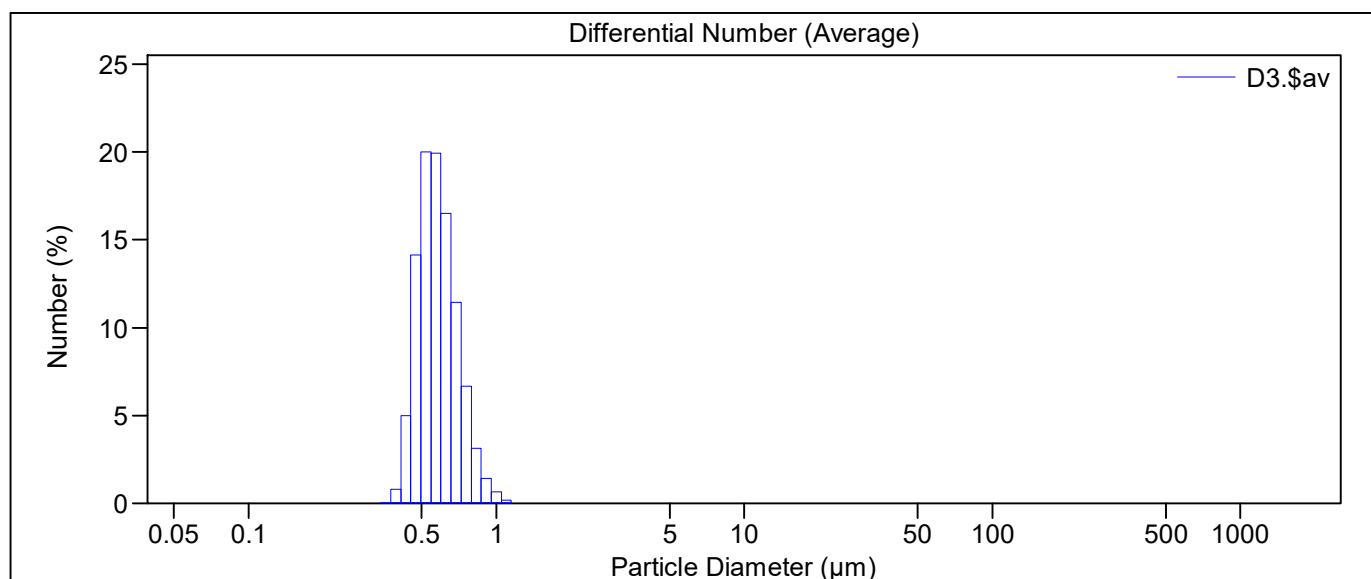
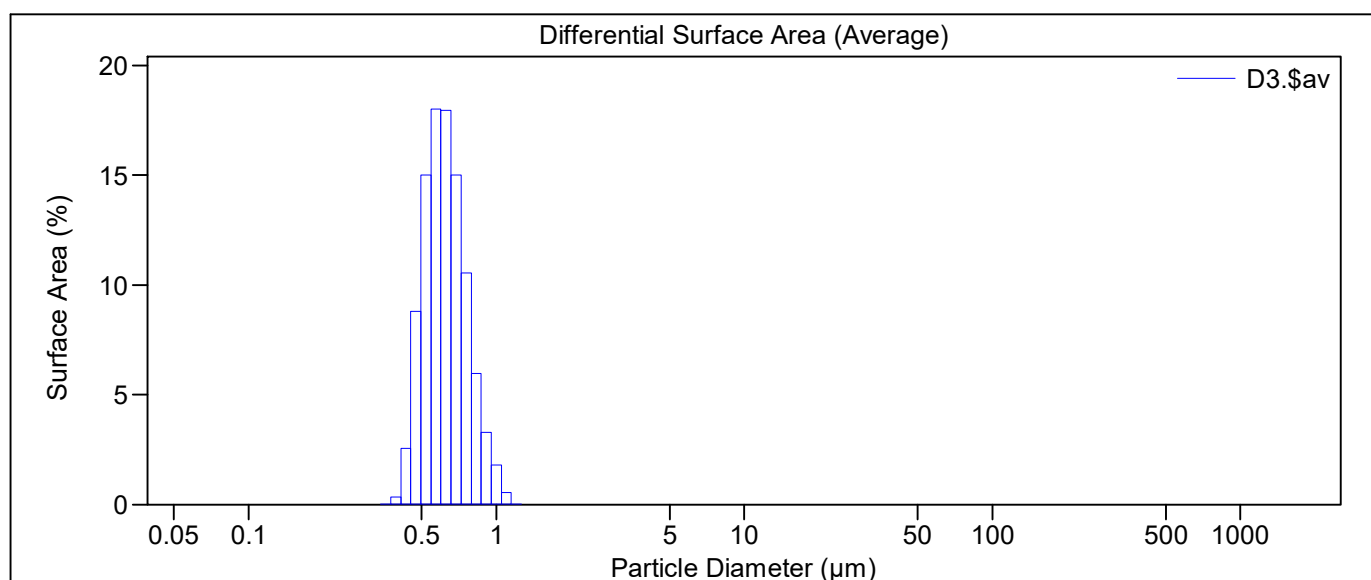
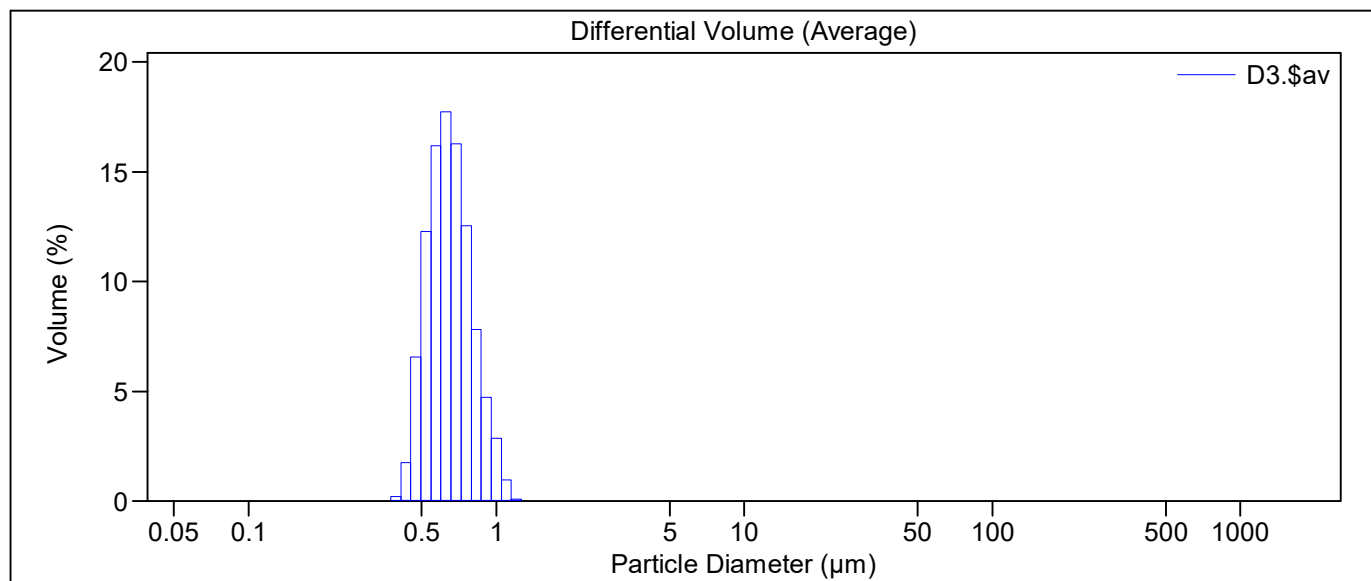
D2.\$av

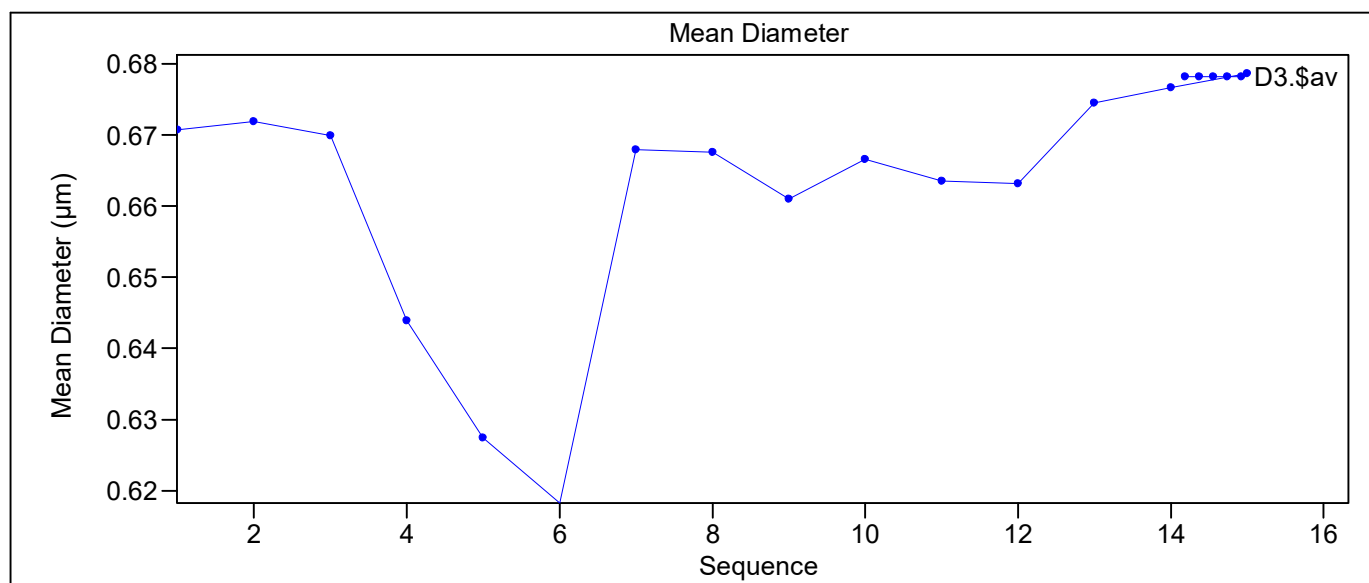
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3.\$av D3.\$av		
File ID:	D3		
Operator:	KW		
Optical model:	TiO2_KW.rf780d PIDS included		
LS 13 320	Universal Liquid Module		
Pump speed:	50%		
Fluid:	water		
Average of 15 files			
D:\KW\PROFARB\POMIARY\	TiO2\D3\D3_01_173737.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_02_173925.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_03_174111.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_04_175257.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_05_175444.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_06_175631.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_07_180544.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_08_180732.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\D3\D3_09_180920.\$ls	D:\KW	
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\PROFARB\POMIARY\	TiO2\D3\D3_15_183747.\$ls		

Volume Statistics (Arithmetic)			D3.\$av	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.661 μm	S.D.:	0.138 μm	
Median:	0.641 μm	Variance:	0.019 μm ²	
Mean/Median ratio:	1.032	C.V.:	20.9%	
Mode:	0.627 μm	Skewness:	0.782 Right skewed	
		Kurtosis:	0.420 Leptokurtic	
<10%	<25%	<50%	<75%	<90%
0.502 μm	0.559 μm	0.641 μm	0.743 μm	0.855 μm





D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0097	0.017	0.048
25	0.375	0.393	0.22	0.35	0.82
26	0.412	0.431	1.75	2.58	5.00
27	0.452	0.474	6.56	8.80	14.1
28	0.496	0.520	12.3	15.0	20.0
29	0.545	0.571	16.2	18.0	19.9
30	0.598	0.627	17.7	18.0	16.5
31	0.656	0.688	16.3	15.0	11.5
32	0.721	0.755	12.5	10.5	6.67
33	0.791	0.829	7.82	5.99	3.14
34	0.868	0.910	4.73	3.30	1.44
35	0.953	0.999	2.86	1.82	0.66
36	1.047	1.097	0.98	0.56	0.17
37	1.149	1.204	0.080	0.042	0.010
38	1.261	1.321	0.00034	0.00016	0.000033
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0

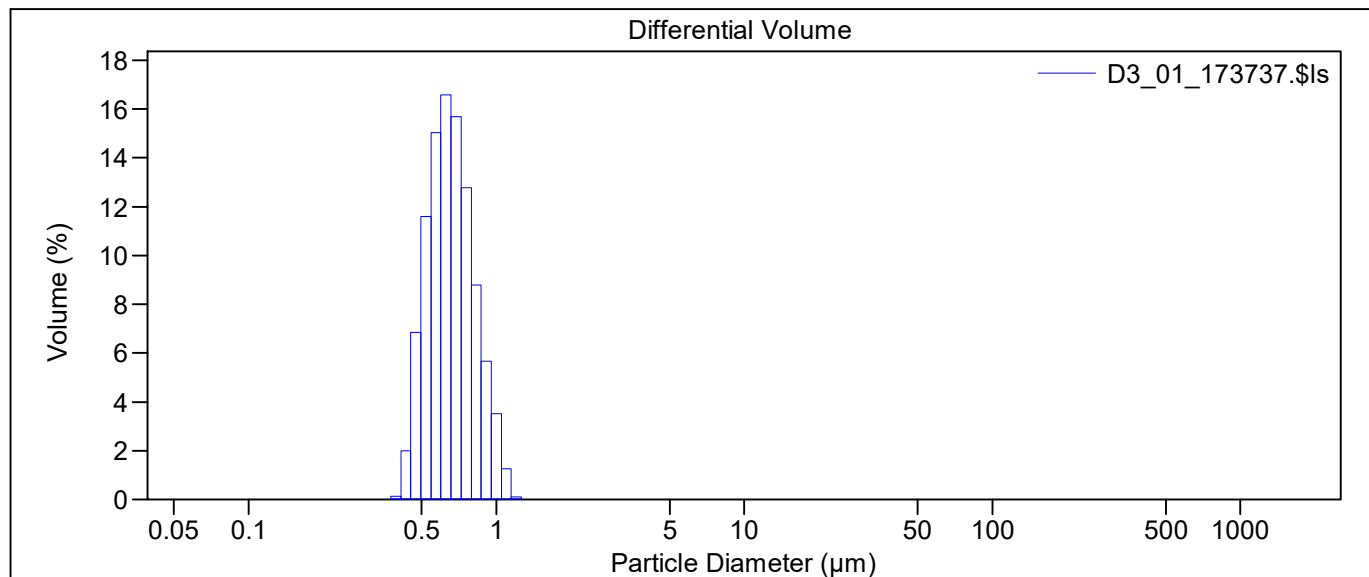
D3.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

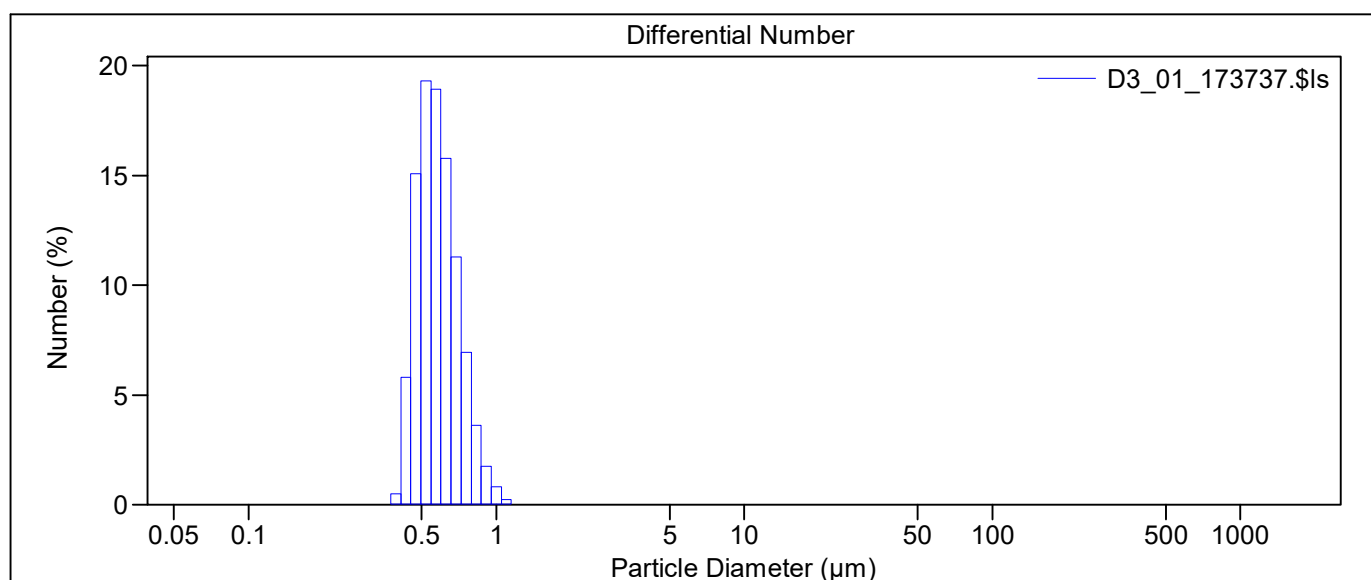
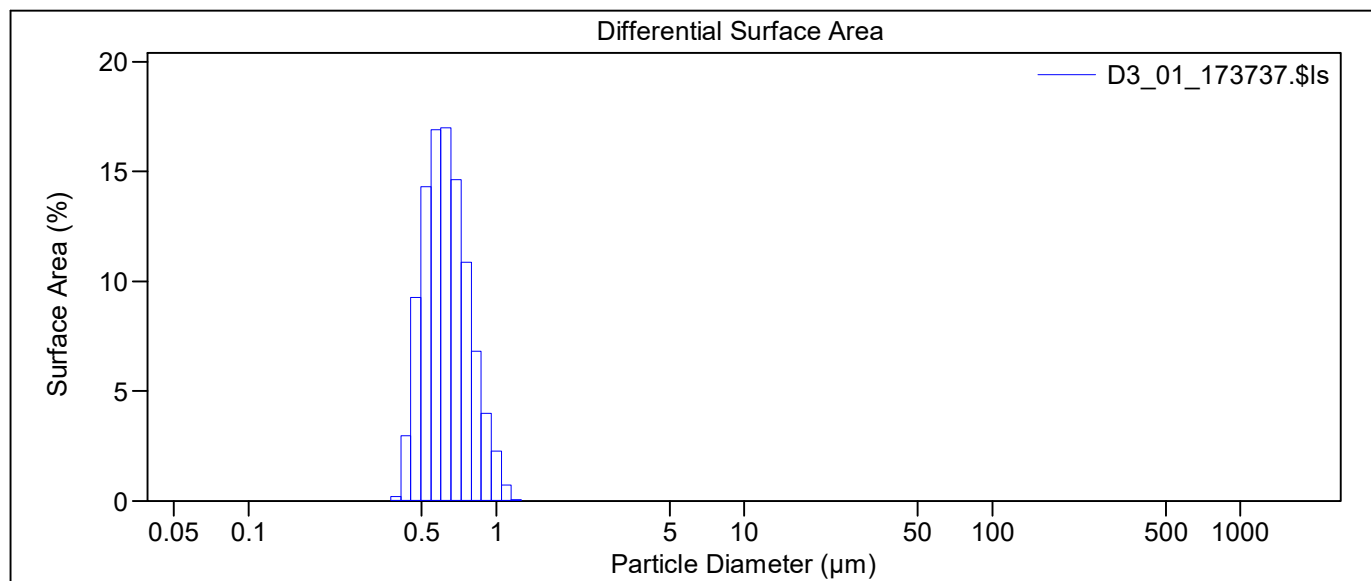
D3.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_01_173737.\$ls		
	D3_01_173737.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.04%		
LS 13 320	Universal Liquid Module		
Start time:	17:35 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_01_173737.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.145 μm
Mean:	0.671 μm		Variance:	0.021 μm ²
Median:	0.649 μm		C.V.:	21.7%
Mean/Median ratio:	1.034		Skewness:	0.713 Right skewed
Mode:	0.627 μm		Kurtosis:	0.145 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.501 μm	0.561 μm	0.649 μm	0.760 μm	0.877 μm





D3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.13	0.21	0.49
26	0.412	0.431	1.99	2.97	5.81
27	0.452	0.474	6.85	9.28	15.1
28	0.496	0.520	11.6	14.3	19.3
29	0.545	0.571	15.0	16.9	18.9
30	0.598	0.627	16.6	17.0	15.8
31	0.656	0.688	15.7	14.6	11.3
32	0.721	0.755	12.8	10.9	6.95
33	0.791	0.829	8.80	6.81	3.61
34	0.868	0.910	5.67	4.00	1.76
35	0.953	0.999	3.53	2.27	0.83
36	1.047	1.097	1.26	0.74	0.22
37	1.149	1.204	0.10	0.054	0.014
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0

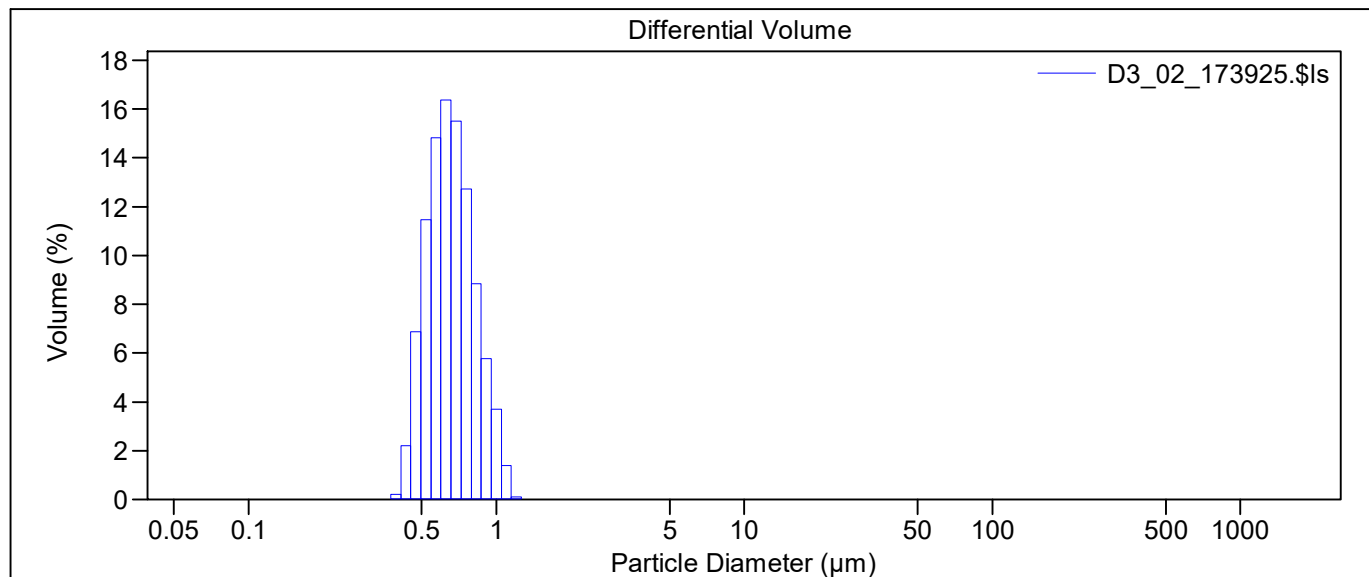
D3.\$av

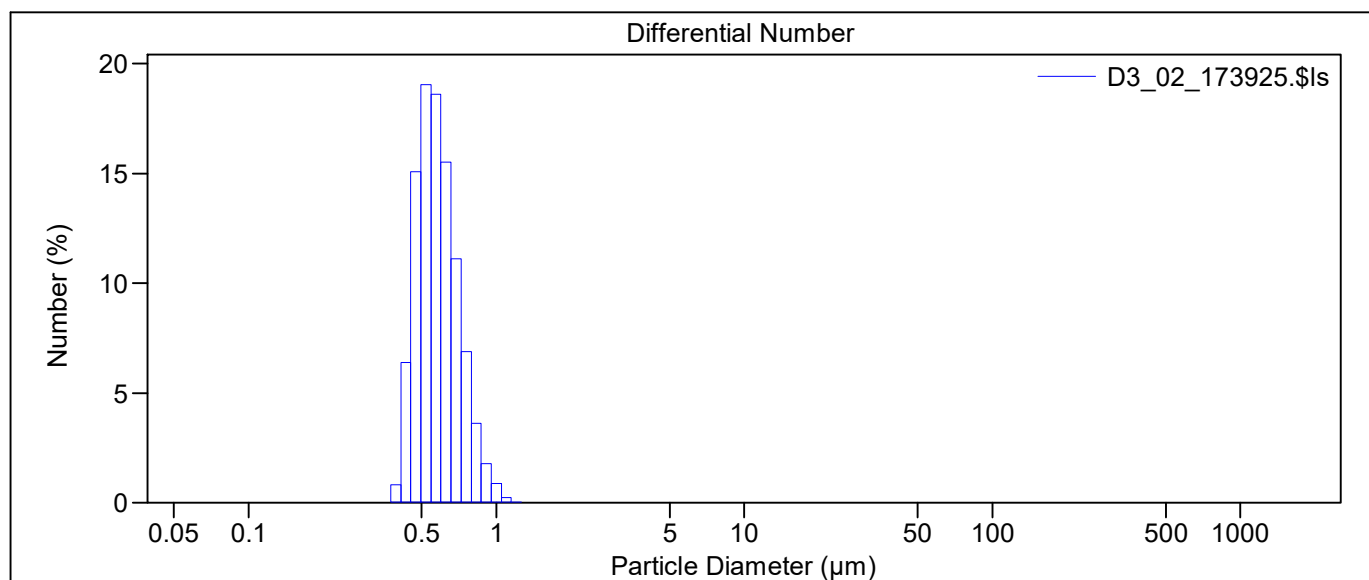
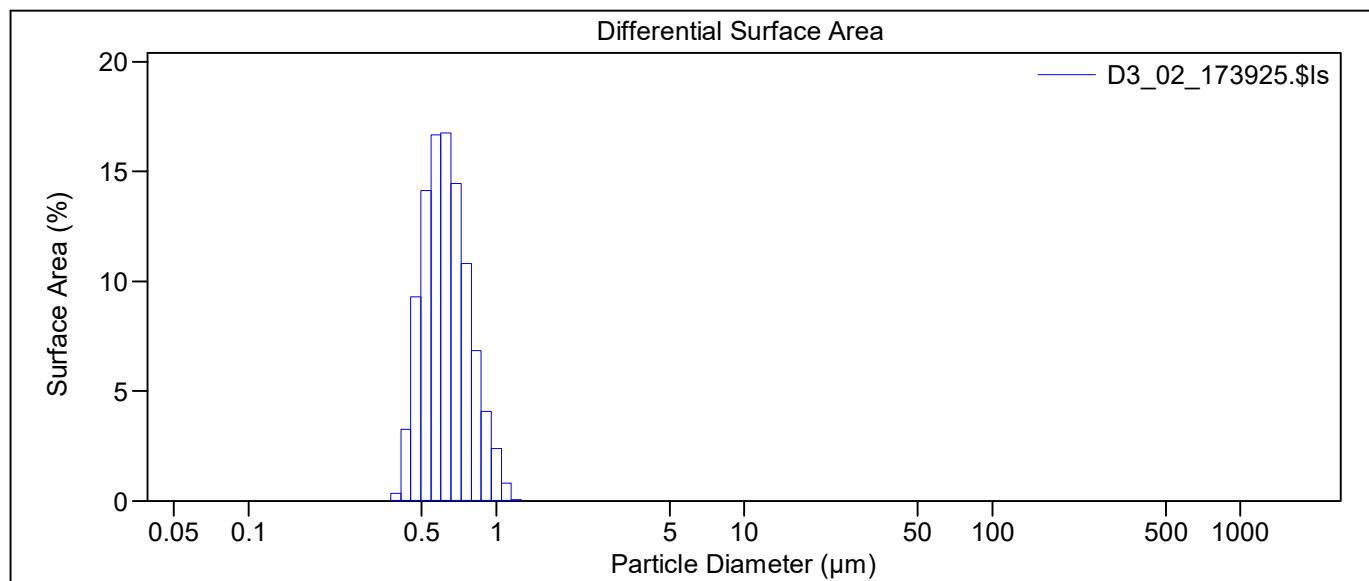
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_02_173925.\$ls		
	D3_02_173925.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.03%		
LS 13 320	Universal Liquid Module		
Start time:	17:37 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	49%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_02_173925.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.148 μm
Mean:	0.672 μm		Variance:	0.022 μm ²
Median:	0.650 μm		C.V.:	22.0%
Mean/Median ratio:	1.034		Skewness:	0.705 Right skewed
Mode:	0.627 μm		Kurtosis:	0.120 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.499 μm	0.560 μm	0.650 μm	0.763 μm	0.883 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0023	0.0040	0.011
25	0.375	0.393	0.22	0.35	0.83
26	0.412	0.431	2.20	3.28	6.40
27	0.452	0.474	6.86	9.30	15.1
28	0.496	0.520	11.5	14.2	19.0
29	0.545	0.571	14.8	16.7	18.6
30	0.598	0.627	16.4	16.8	15.5
31	0.656	0.688	15.5	14.5	11.1
32	0.721	0.755	12.7	10.8	6.89
33	0.791	0.829	8.85	6.86	3.63
34	0.868	0.910	5.78	4.08	1.79
35	0.953	0.999	3.70	2.38	0.87
36	1.047	1.097	1.39	0.82	0.25
37	1.149	1.204	0.12	0.062	0.015
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

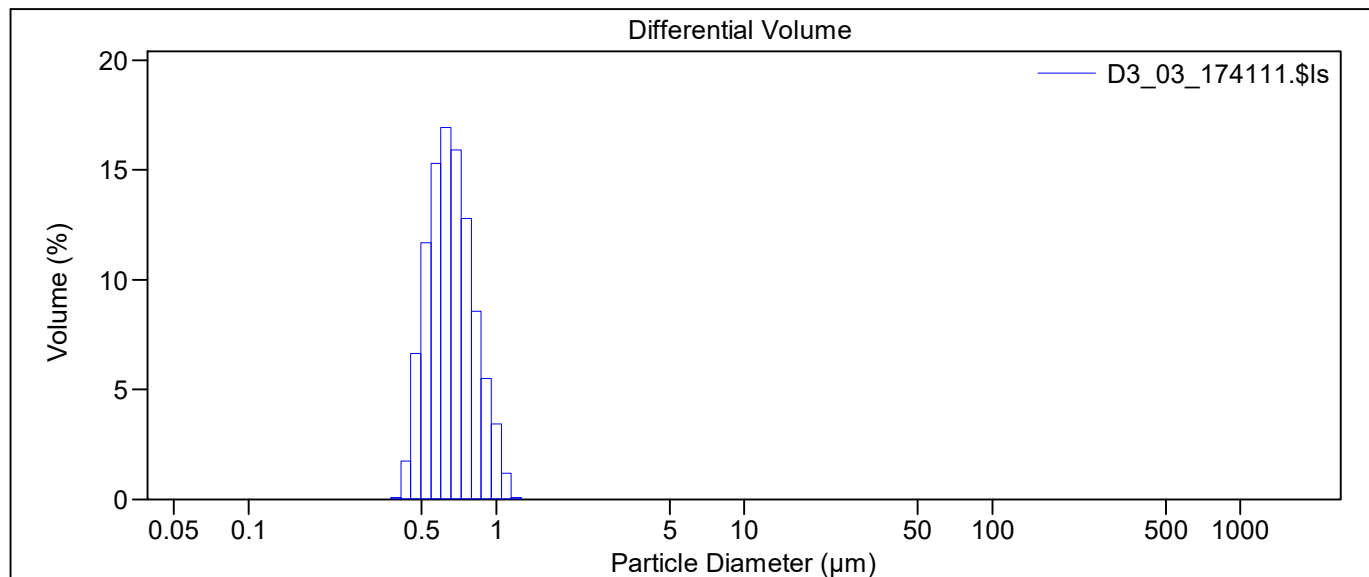
D3.\$av

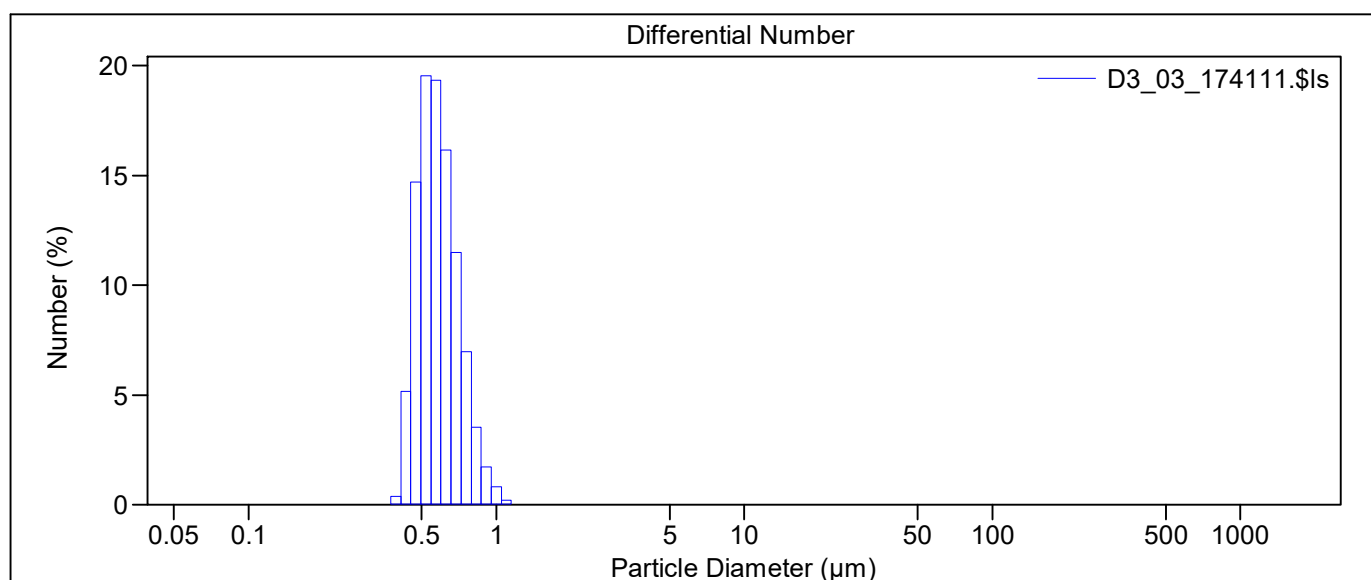
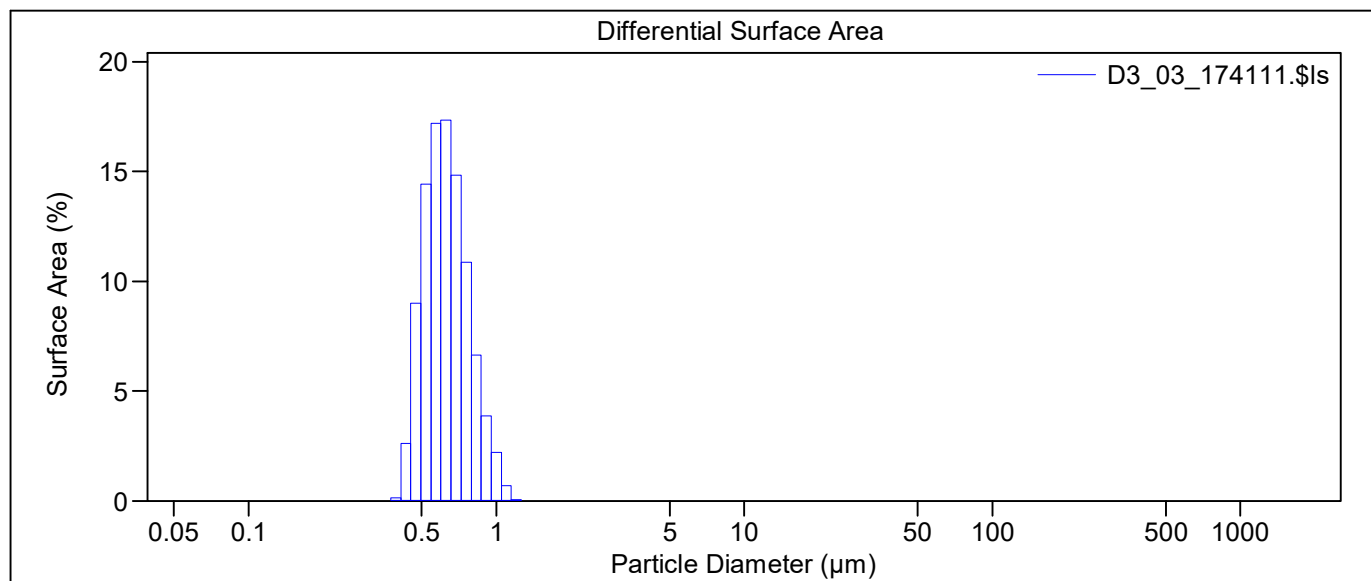
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_03_174111.\$ls		
	D3_03_174111.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.12%		
LS 13 320	Universal Liquid Module		
Start time:	17:39 1	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	51%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_03_174111.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.144 μm
Mean:	0.670 μm		Variance:	0.021 μm ²
Median:	0.648 μm		C.V.:	21.4%
Mean/Median ratio:	1.034		Skewness:	0.733 Right skewed
Mode:	0.627 μm		Kurtosis:	0.198 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.502 μm	0.561 μm	0.648 μm	0.757 μm	0.872 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.098	0.16	0.38
26	0.412	0.431	1.76	2.62	5.15
27	0.452	0.474	6.65	9.01	14.7
28	0.496	0.520	11.7	14.4	19.5
29	0.545	0.571	15.3	17.2	19.3
30	0.598	0.627	16.9	17.3	16.2
31	0.656	0.688	15.9	14.8	11.5
32	0.721	0.755	12.8	10.9	6.98
33	0.791	0.829	8.59	6.65	3.54
34	0.868	0.910	5.51	3.89	1.72
35	0.953	0.999	3.45	2.22	0.81
36	1.047	1.097	1.20	0.70	0.21
37	1.149	1.204	0.092	0.049	0.012
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

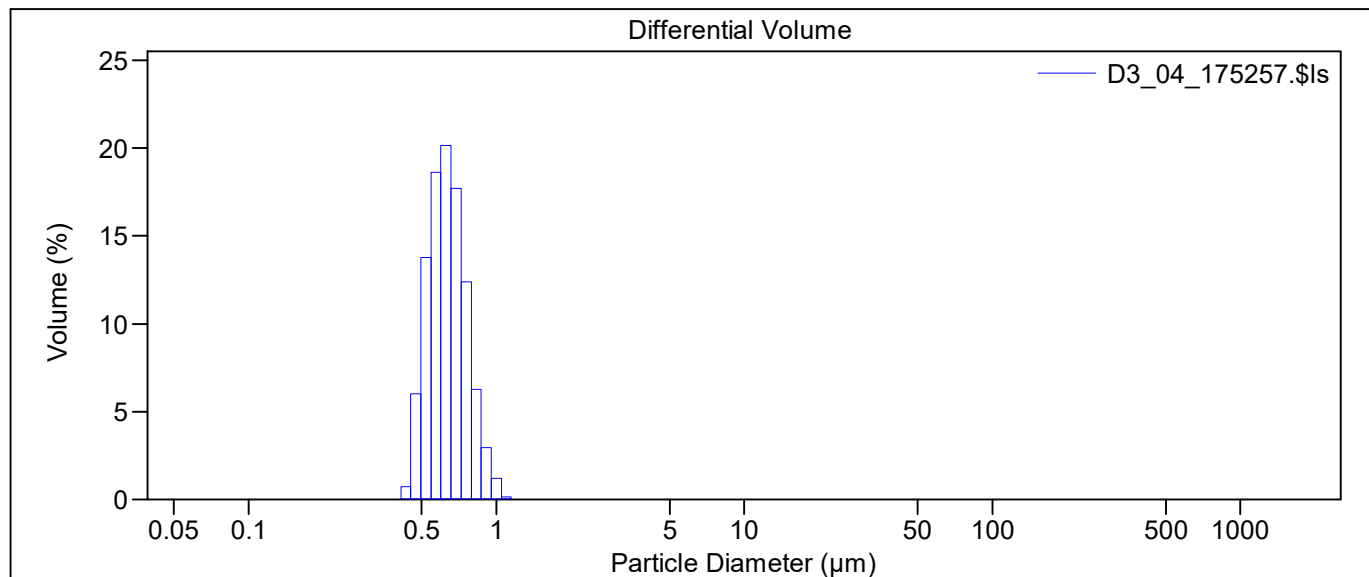
D3.\$av

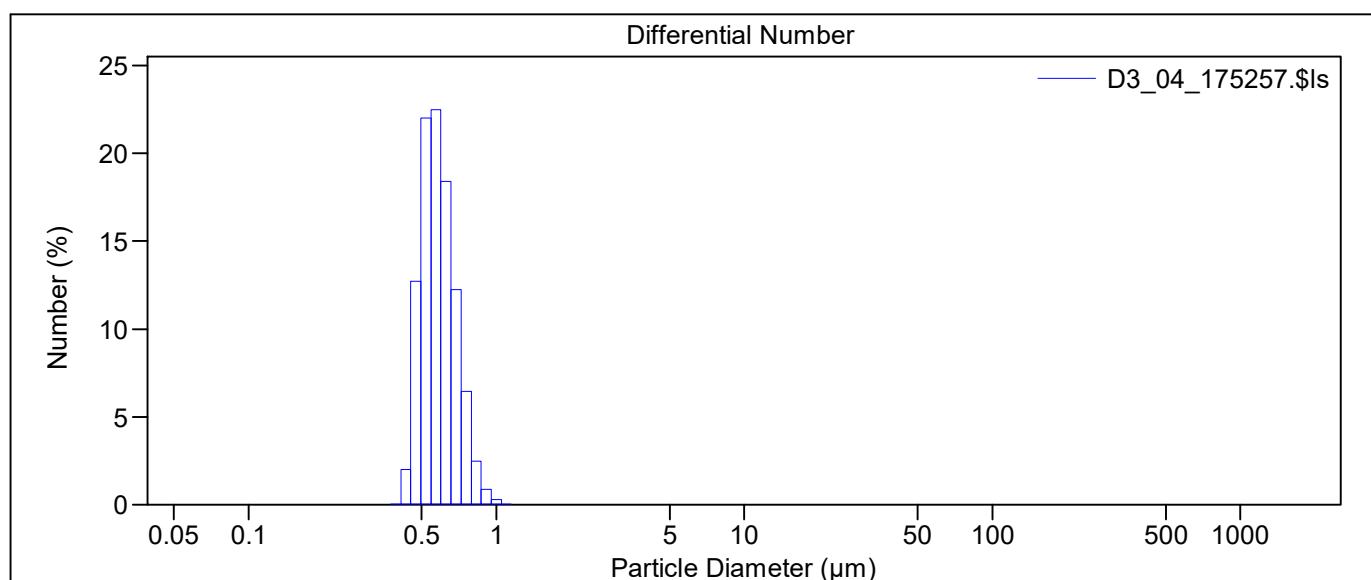
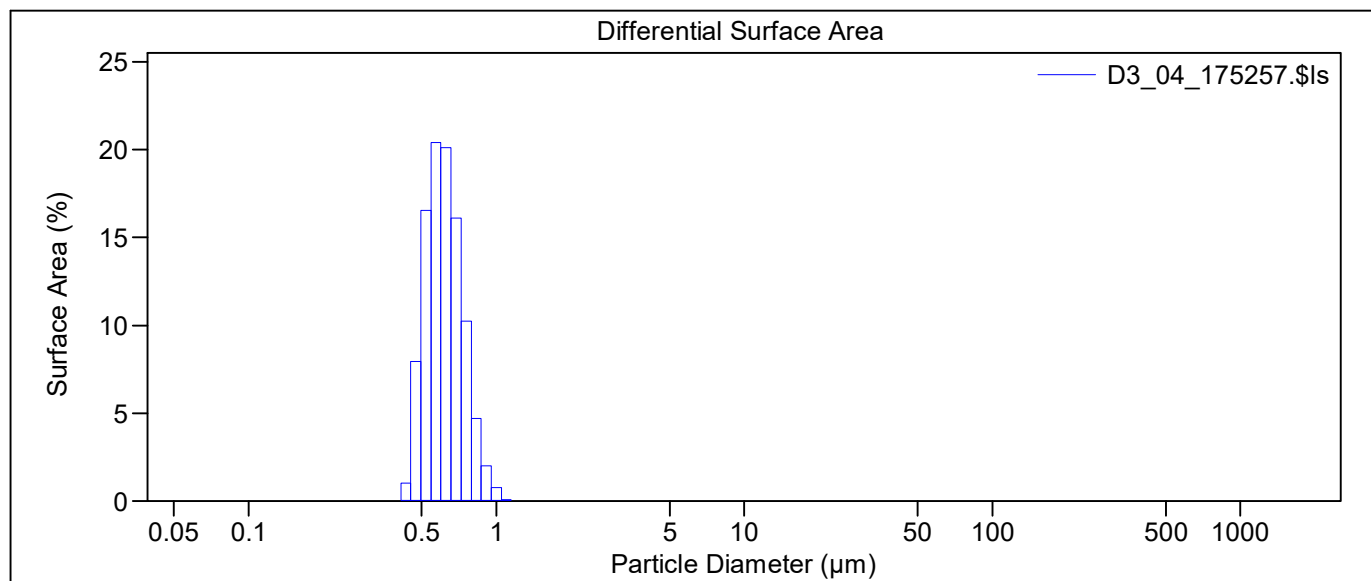
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_04_175257.\$ls		
	D3_04_175257.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.84%		
LS 13 320	Universal Liquid Module		
Start time:	17:51 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_04_175257.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.115 μm
Mean:	0.644 μm		Variance:	0.013 μm ²
Median:	0.629 μm		C.V.:	17.8%
Mean/Median ratio:	1.023		Skewness:	0.741 Right skewed
Mode:	0.627 μm		Kurtosis:	0.464 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.508 μm	0.558 μm	0.629 μm	0.713 μm	0.798 μm





D3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.0068	0.011	0.025
26	0.412	0.431	0.71	1.03	1.99
27	0.452	0.474	6.03	7.95	12.7
28	0.496	0.520	13.8	16.6	22.0
29	0.545	0.571	18.6	20.4	22.5
30	0.598	0.627	20.2	20.1	18.4
31	0.656	0.688	17.7	16.1	12.2
32	0.721	0.755	12.4	10.3	6.46
33	0.791	0.829	6.25	4.71	2.47
34	0.868	0.910	2.94	2.02	0.88
35	0.953	0.999	1.22	0.76	0.27
36	1.047	1.097	0.16	0.088	0.026
37	1.149	1.204	0.0015	0.00079	0.00020
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

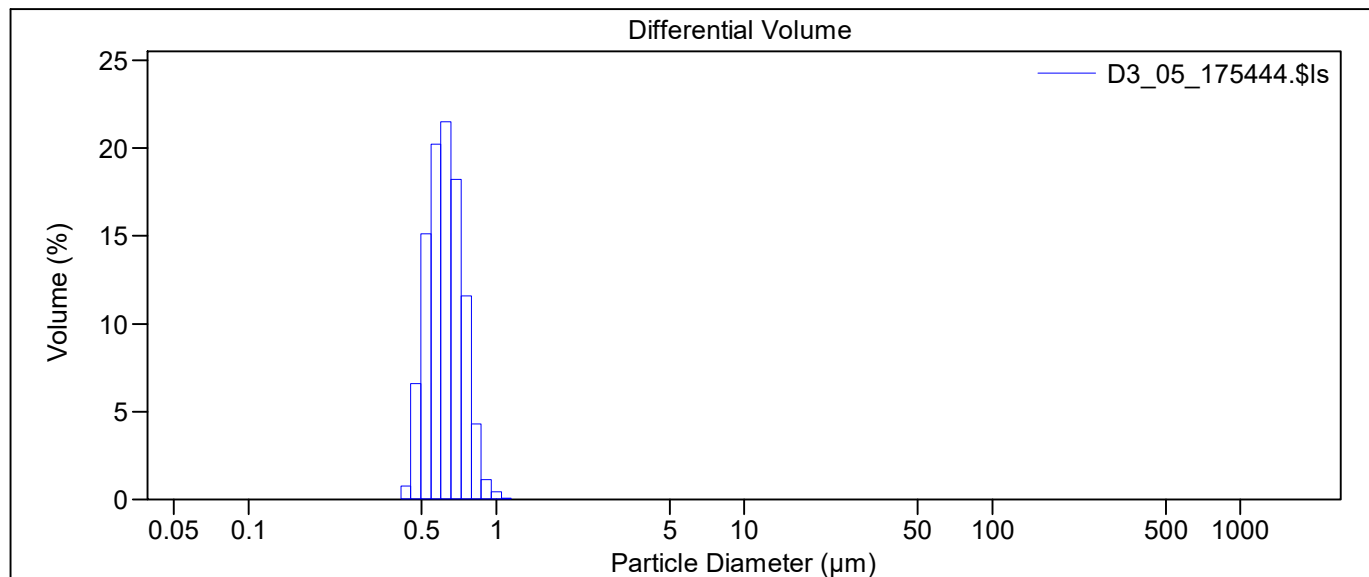
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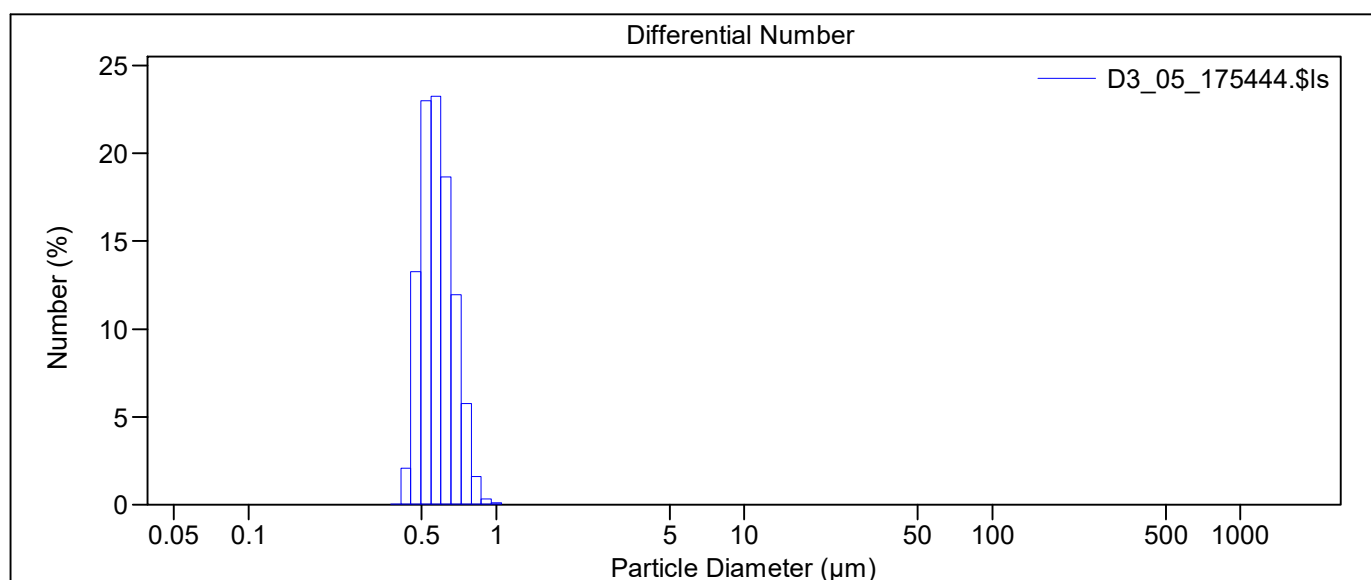
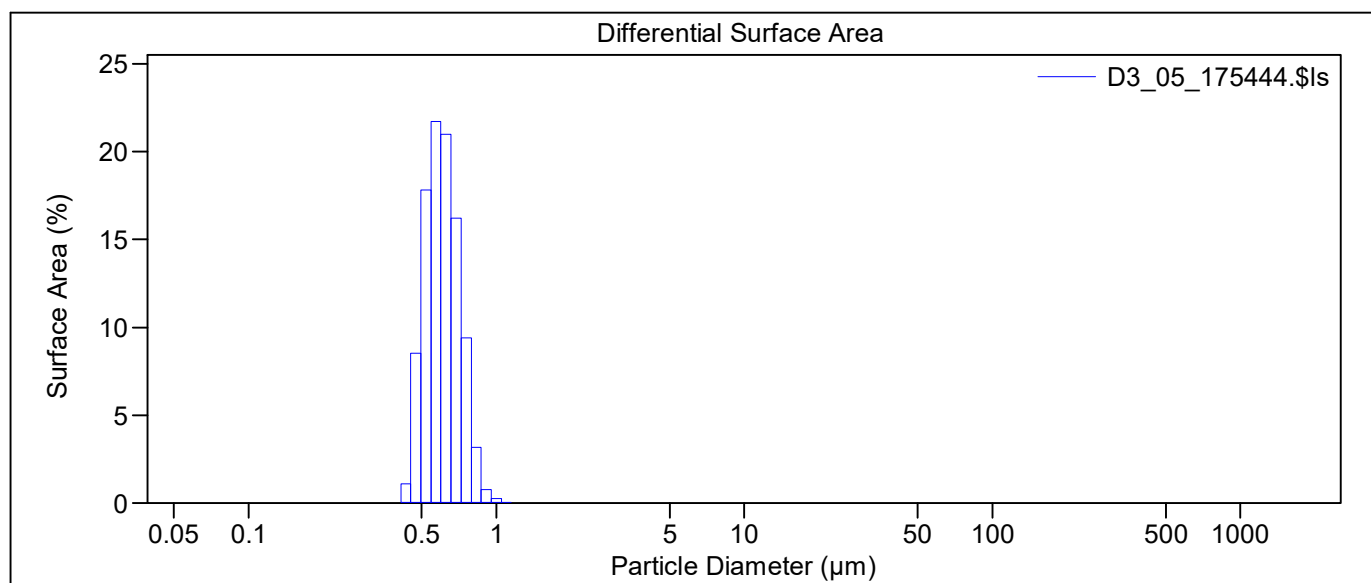
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_05_175444.\$ls		
	D3_05_175444.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	3.30%		
LS 13 320	Universal Liquid Module		
Start time:	17:53 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_05_175444.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.101 μm
Mean:	0.627 μm		Variance:	0.010 μm ²
Median:	0.618 μm		C.V.:	16.1%
Mean/Median ratio:	1.016		Skewness:	0.636 Right skewed
Mode:	0.627 μm		Kurtosis:	0.478 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.505 μm	0.551 μm	0.618 μm	0.694 μm	0.766 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.0073	0.011	0.026
26	0.412	0.431	0.77	1.10	2.06
27	0.452	0.474	6.60	8.53	13.3
28	0.496	0.520	15.1	17.8	23.0
29	0.545	0.571	20.2	21.7	23.3
30	0.598	0.627	21.5	21.0	18.7
31	0.656	0.688	18.2	16.2	12.0
32	0.721	0.755	11.6	9.40	5.75
33	0.791	0.829	4.30	3.18	1.61
34	0.868	0.910	1.14	0.77	0.32
35	0.953	0.999	0.43	0.26	0.092
36	1.047	1.097	0.068	0.038	0.011
37	1.149	1.204	0.00074	0.00038	0.000091
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

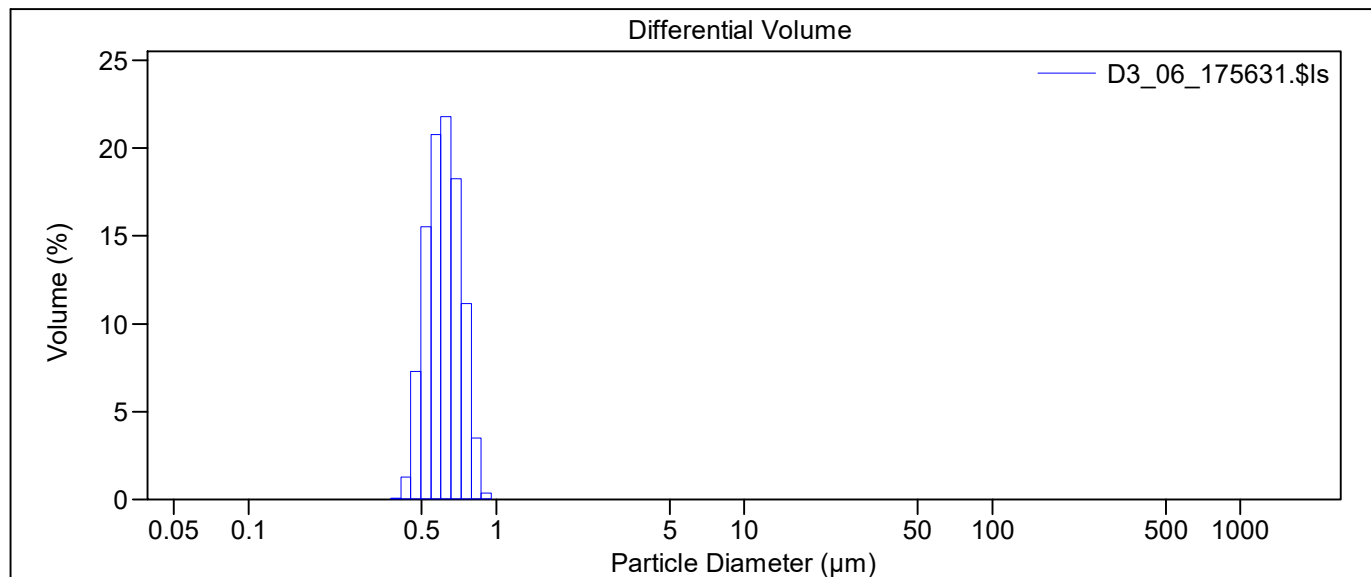
D3.\$av

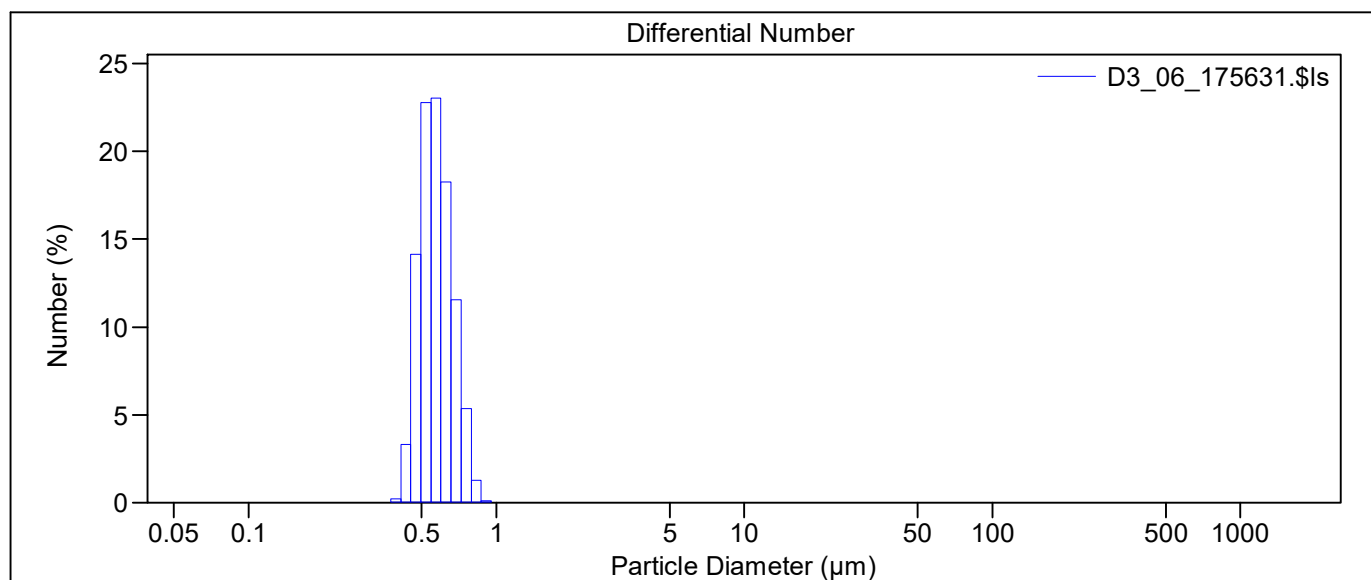
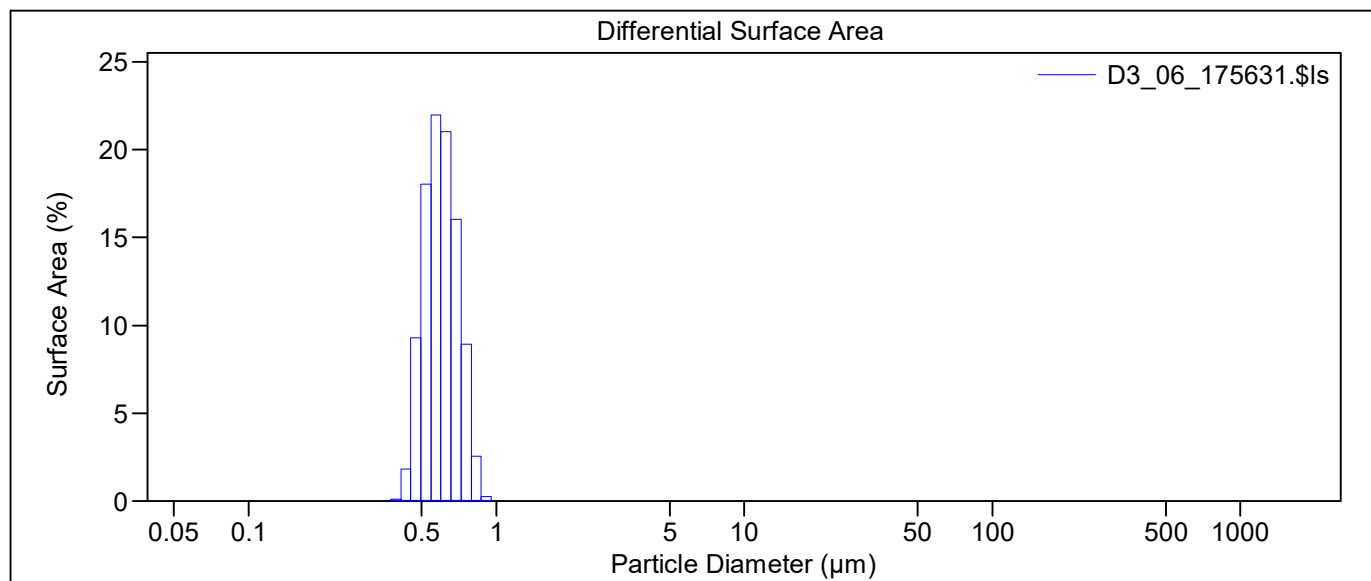
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_06_175631.\$ls		
	D3_06_175631.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	3.52%		
LS 13 320	Universal Liquid Module		
Start time:	17:54 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_06_175631.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.094 μm
Mean:	0.618 μm		Variance:	0.0088 μm ²
Median:	0.612 μm		C.V.:	15.2%
Mean/Median ratio:	1.011		Skewness:	0.344 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.379 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.500 μm	0.547 μm	0.612 μm	0.686 μm	0.752 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.00033	0.00056	0.0015
25	0.375	0.393	0.060	0.093	0.21
26	0.412	0.431	1.29	1.81	3.31
27	0.452	0.474	7.29	9.31	14.2
28	0.496	0.520	15.5	18.0	22.8
29	0.545	0.571	20.8	22.0	23.0
30	0.598	0.627	21.8	21.0	18.3
31	0.656	0.688	18.3	16.0	11.6
32	0.721	0.755	11.2	8.93	5.34
33	0.791	0.829	3.50	2.55	1.27
34	0.868	0.910	0.36	0.24	0.098
35	0.953	0.999	0.0069	0.0041	0.0014
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

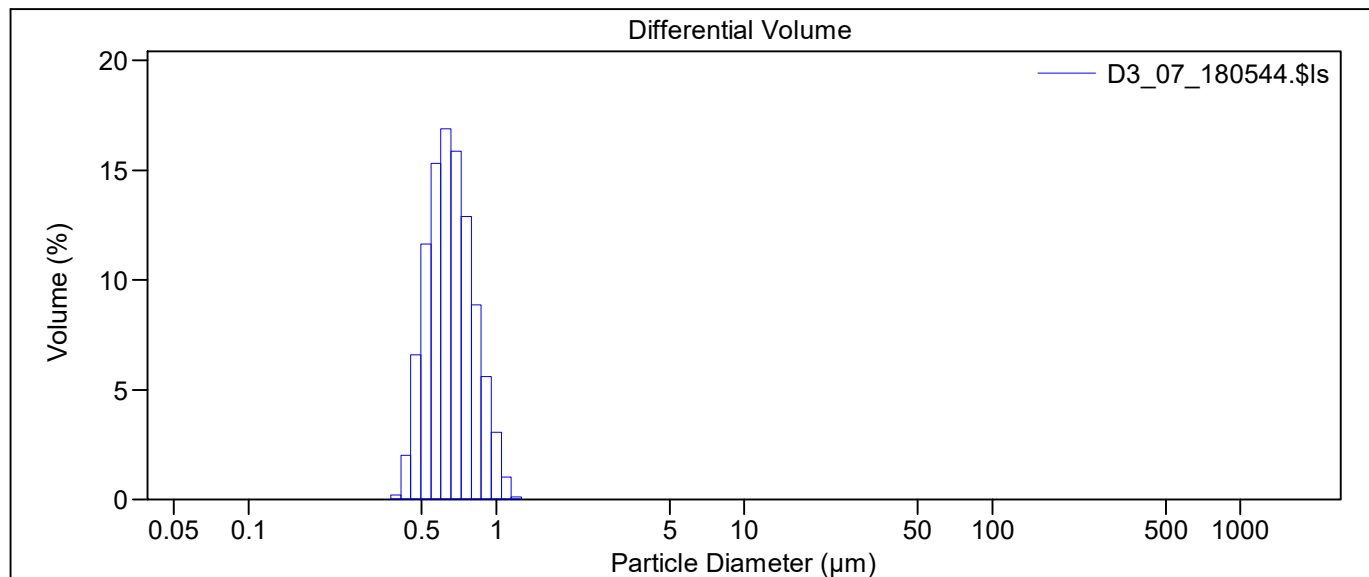
D3.\$av

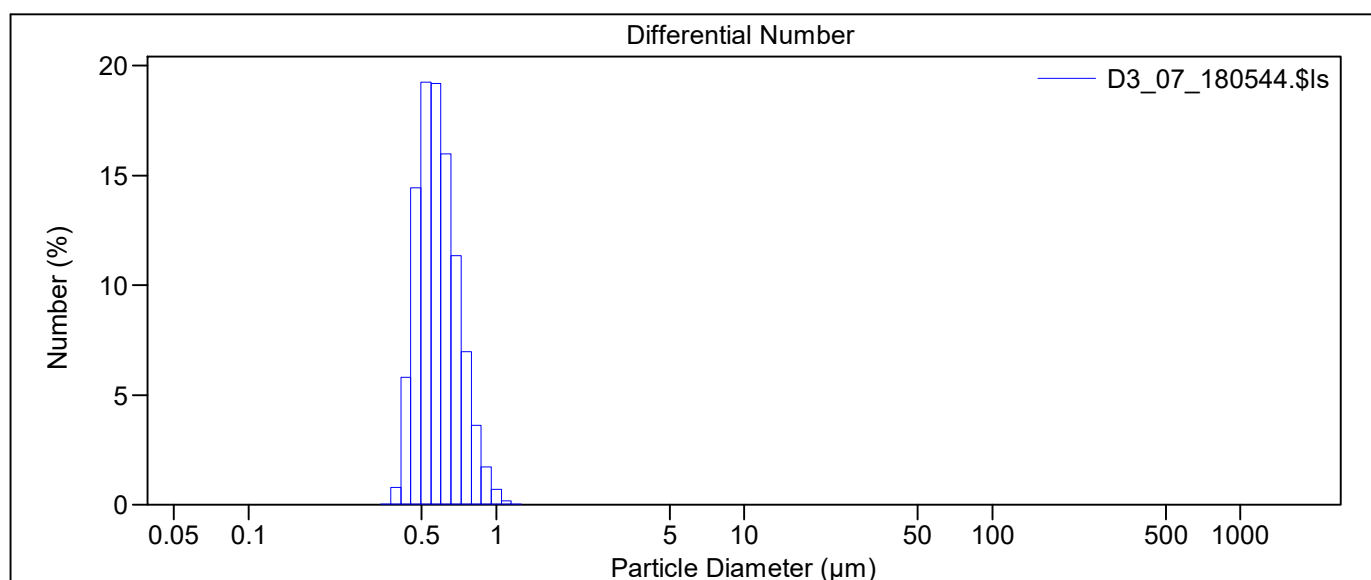
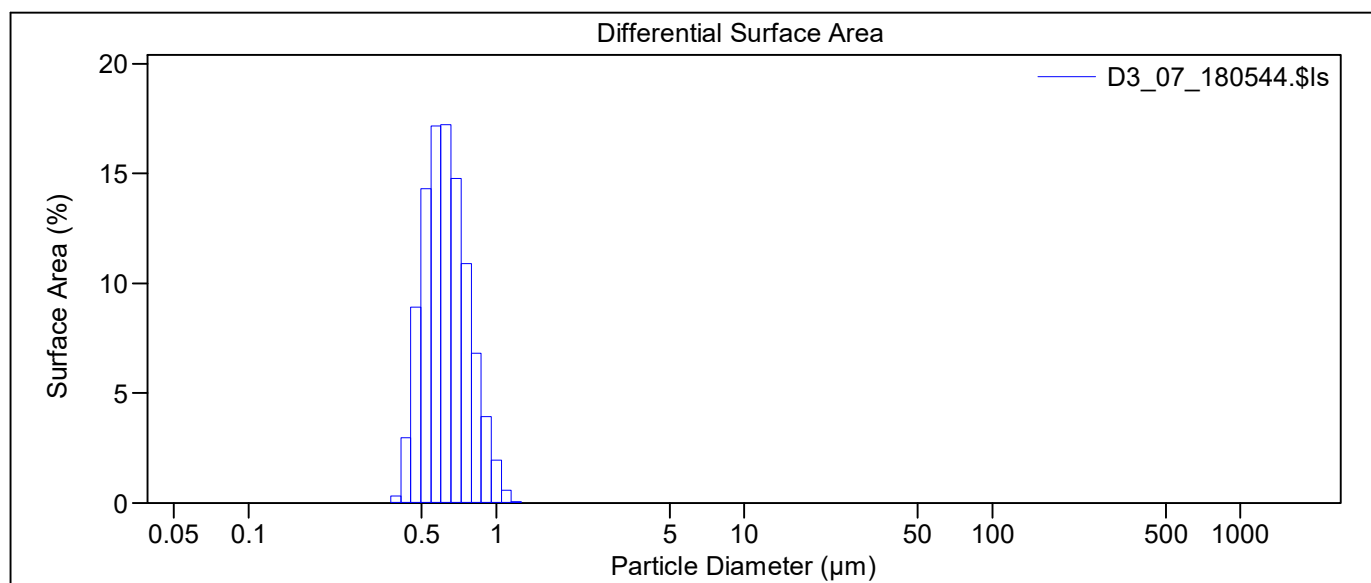
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_07_180544.\$ls		
	D3_07_180544.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.15%		
LS 13 320	Universal Liquid Module		
Start time:	18:04 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	42%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_07_180544.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.142 µm
Mean:	0.668 µm		Variance:	0.020 µm ²
Median:	0.647 µm		C.V.:	21.3%
Mean/Median ratio:	1.032		Skewness:	0.701 Right skewed
Mode:	0.627 µm		Kurtosis:	0.195 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.501 µm	0.561 µm	0.647 µm	0.756 µm	0.866 µm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0039	0.0070	0.020
25	0.375	0.393	0.20	0.33	0.78
26	0.412	0.431	2.00	2.97	5.80
27	0.452	0.474	6.60	8.91	14.4
28	0.496	0.520	11.6	14.3	19.3
29	0.545	0.571	15.3	17.2	19.2
30	0.598	0.627	16.9	17.2	16.0
31	0.656	0.688	15.9	14.8	11.4
32	0.721	0.755	12.9	10.9	6.96
33	0.791	0.829	8.85	6.84	3.62
34	0.868	0.910	5.59	3.93	1.73
35	0.953	0.999	3.05	1.95	0.71
36	1.047	1.097	1.01	0.59	0.18
37	1.149	1.204	0.11	0.061	0.015
38	1.261	1.321	0.0025	0.0012	0.00025
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

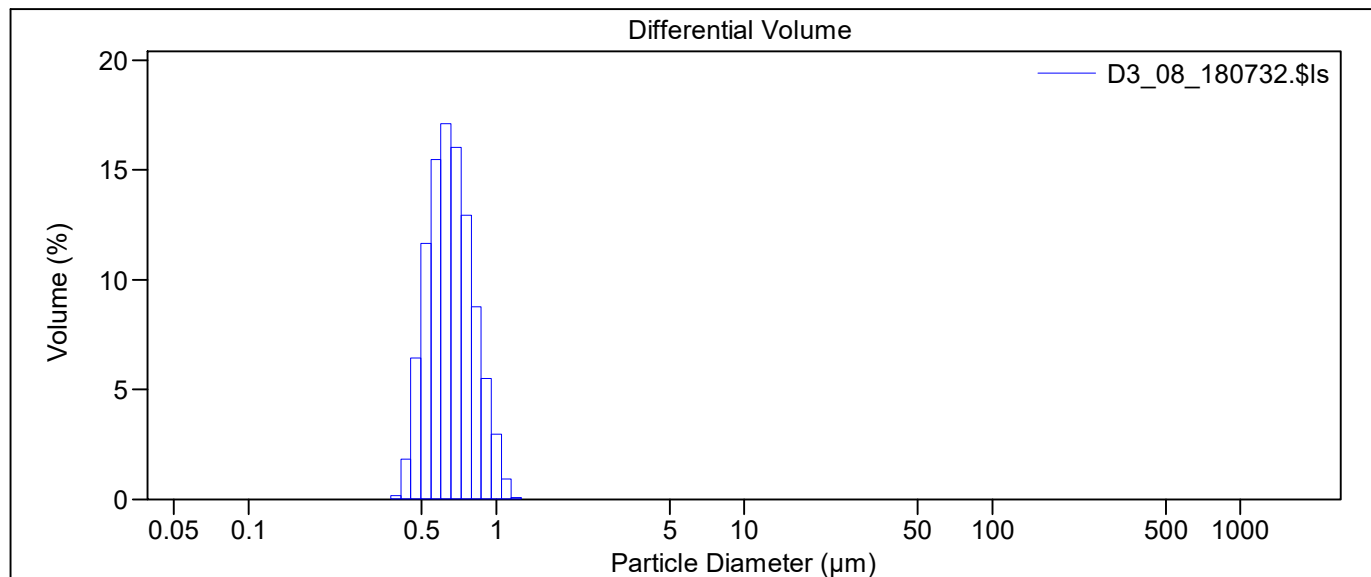
D3.\$av

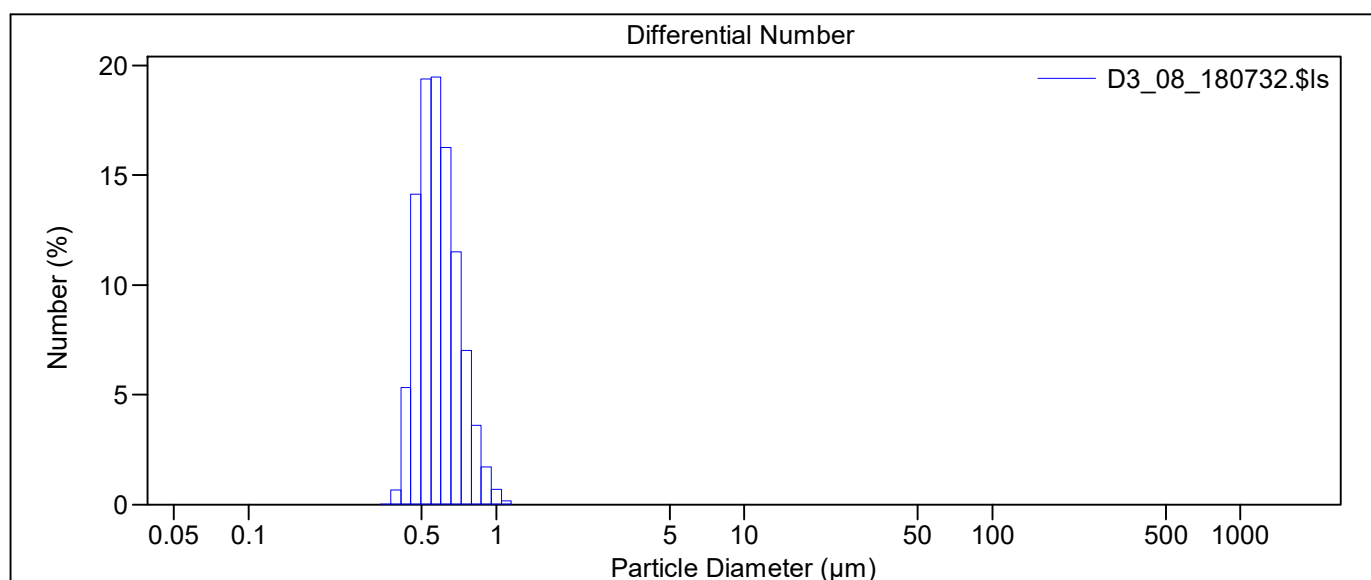
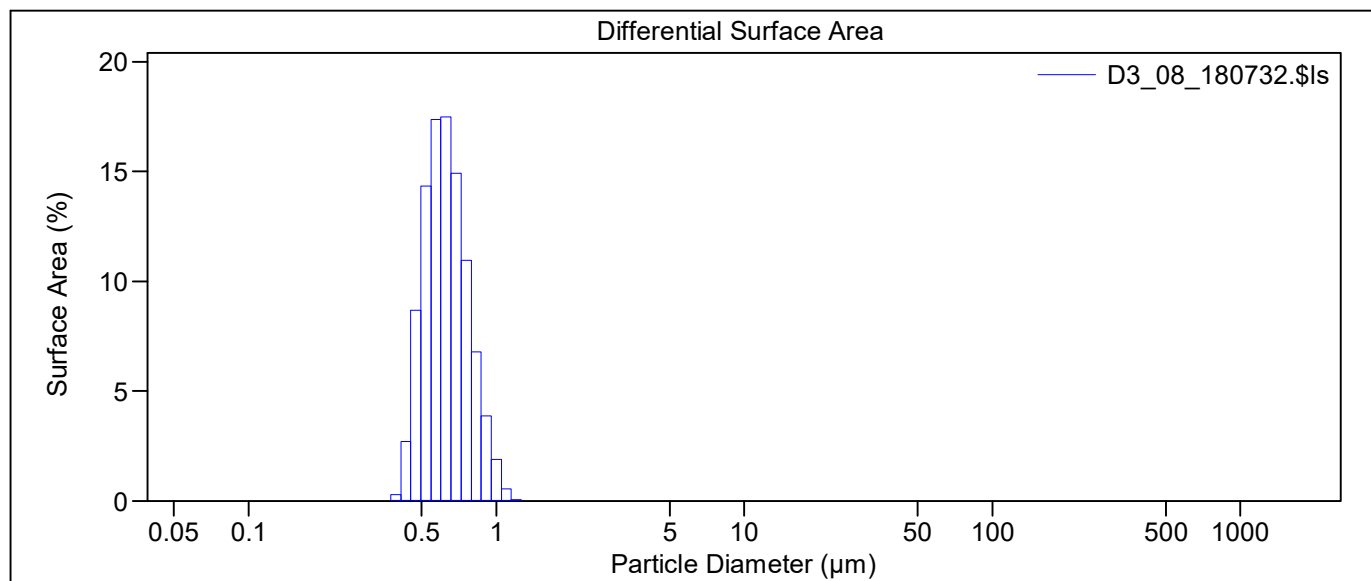
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_08_180732.\$ls		
	D3_08_180732.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.21%		
LS 13 320	Universal Liquid Module		
Start time:	18:05 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	42%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_08_180732.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.140 μm
Mean:	0.668 μm		Variance:	0.020 μm ²
Median:	0.647 μm		C.V.:	21.0%
Mean/Median ratio:	1.031		Skewness:	0.703 Right skewed
Mode:	0.627 μm		Kurtosis:	0.207 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.503 μm	0.562 μm	0.647 μm	0.755 μm	0.864 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0031	0.0056	0.016
25	0.375	0.393	0.17	0.28	0.67
26	0.412	0.431	1.83	2.72	5.33
27	0.452	0.474	6.43	8.69	14.1
28	0.496	0.520	11.7	14.4	19.4
29	0.545	0.571	15.5	17.4	19.5
30	0.598	0.627	17.1	17.5	16.3
31	0.656	0.688	16.0	14.9	11.5
32	0.721	0.755	12.9	11.0	7.03
33	0.791	0.829	8.79	6.79	3.61
34	0.868	0.910	5.51	3.88	1.71
35	0.953	0.999	2.97	1.90	0.70
36	1.047	1.097	0.94	0.55	0.17
37	1.149	1.204	0.10	0.053	0.013
38	1.261	1.321	0.0021	0.0010	0.00021
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

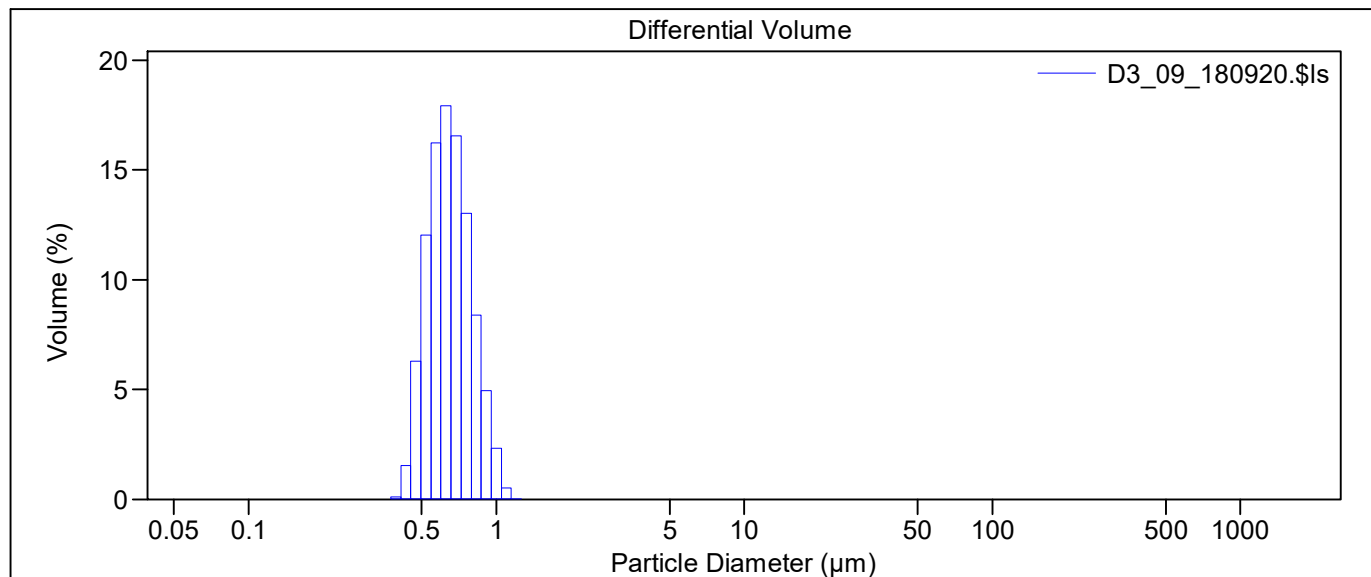
D3.\$av

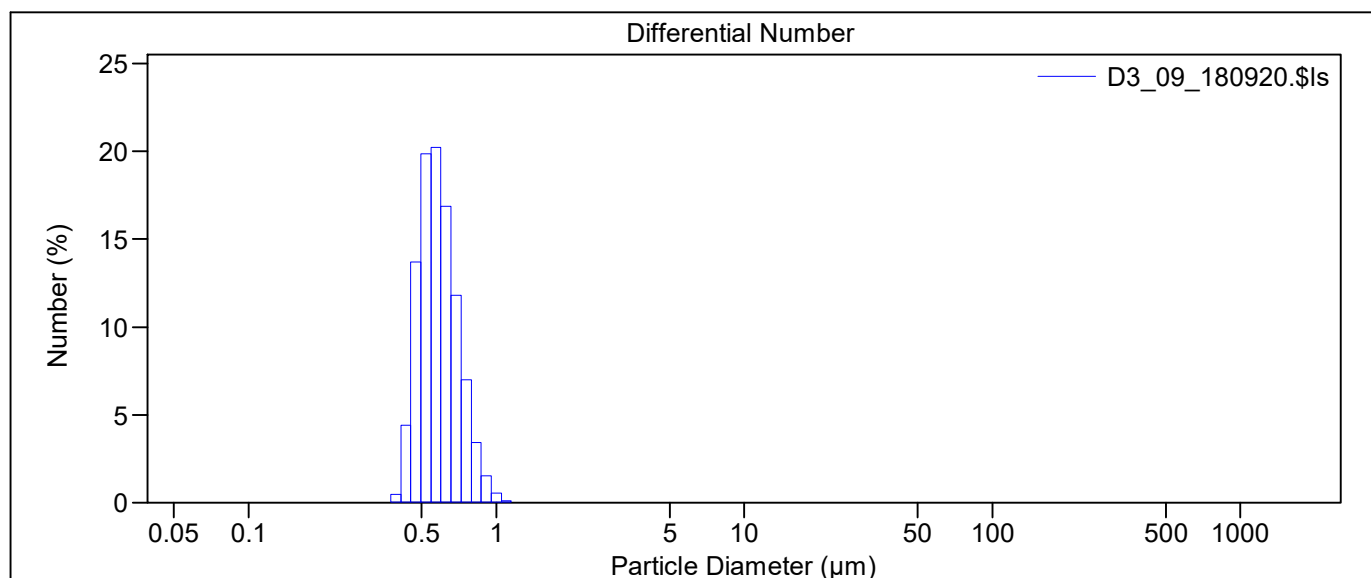
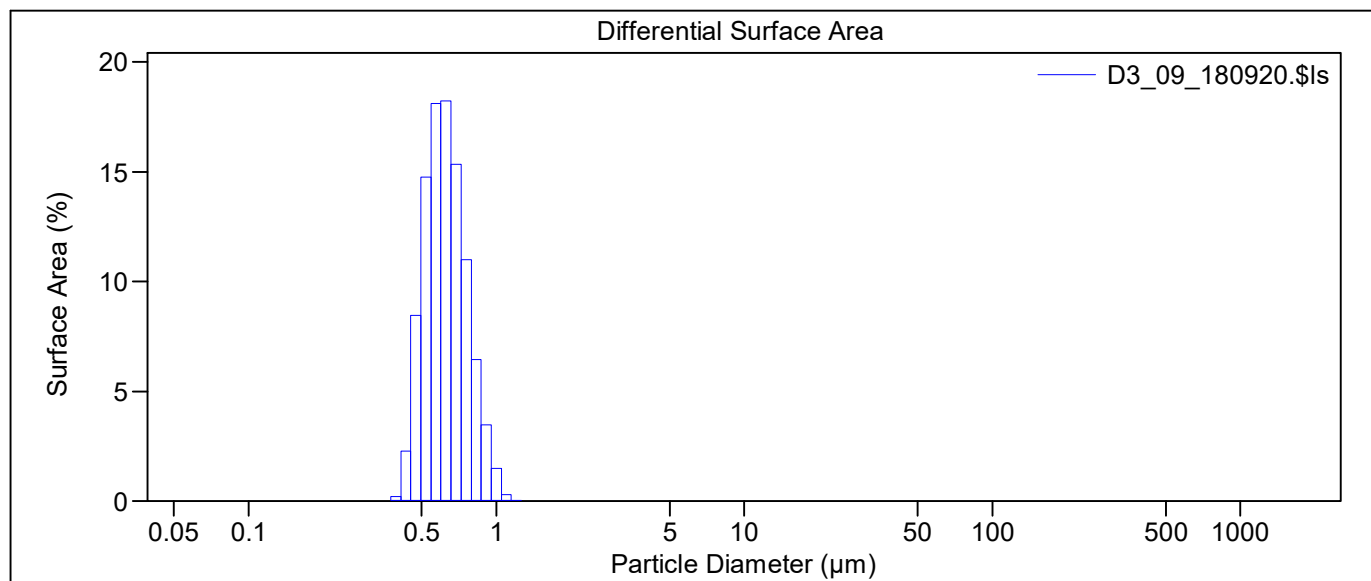
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_09_180920.\$ls		
	D3_09_180920.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.38%		
LS 13 320	Universal Liquid Module		
Start time:	18:07 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	42%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_09_180920.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.132 μm
Mean:	0.661 μm		Variance:	0.018 μm ²
Median:	0.643 μm		C.V.:	20.0%
Mean/Median ratio:	1.028		Skewness:	0.681 Right skewed
Mode:	0.627 μm		Kurtosis:	0.190 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.505 μm	0.561 μm	0.643 μm	0.744 μm	0.849 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0017	0.0031	0.0087
25	0.375	0.393	0.12	0.19	0.46
26	0.412	0.431	1.53	2.26	4.43
27	0.452	0.474	6.29	8.45	13.7
28	0.496	0.520	12.1	14.8	19.9
29	0.545	0.571	16.2	18.1	20.2
30	0.598	0.627	17.9	18.2	16.9
31	0.656	0.688	16.6	15.3	11.8
32	0.721	0.755	13.0	11.0	7.01
33	0.791	0.829	8.39	6.44	3.42
34	0.868	0.910	4.96	3.47	1.52
35	0.953	0.999	2.32	1.48	0.54
36	1.047	1.097	0.52	0.30	0.092
37	1.149	1.204	0.038	0.020	0.0050
38	1.261	1.321	0.00049	0.00024	0.000049
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

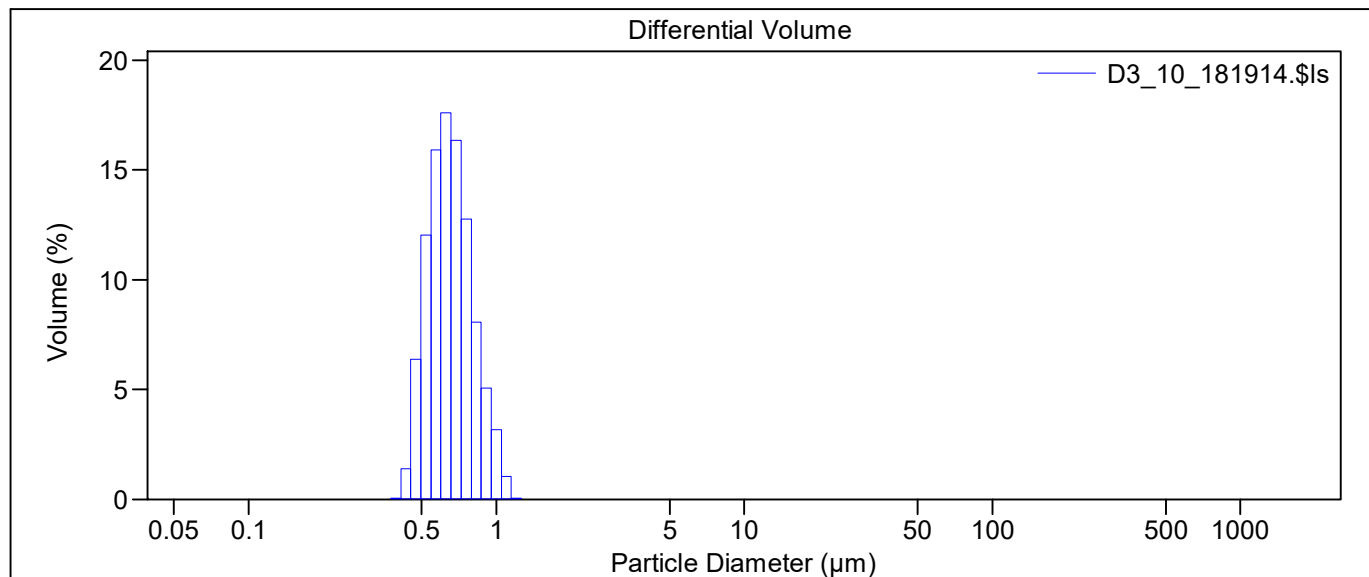
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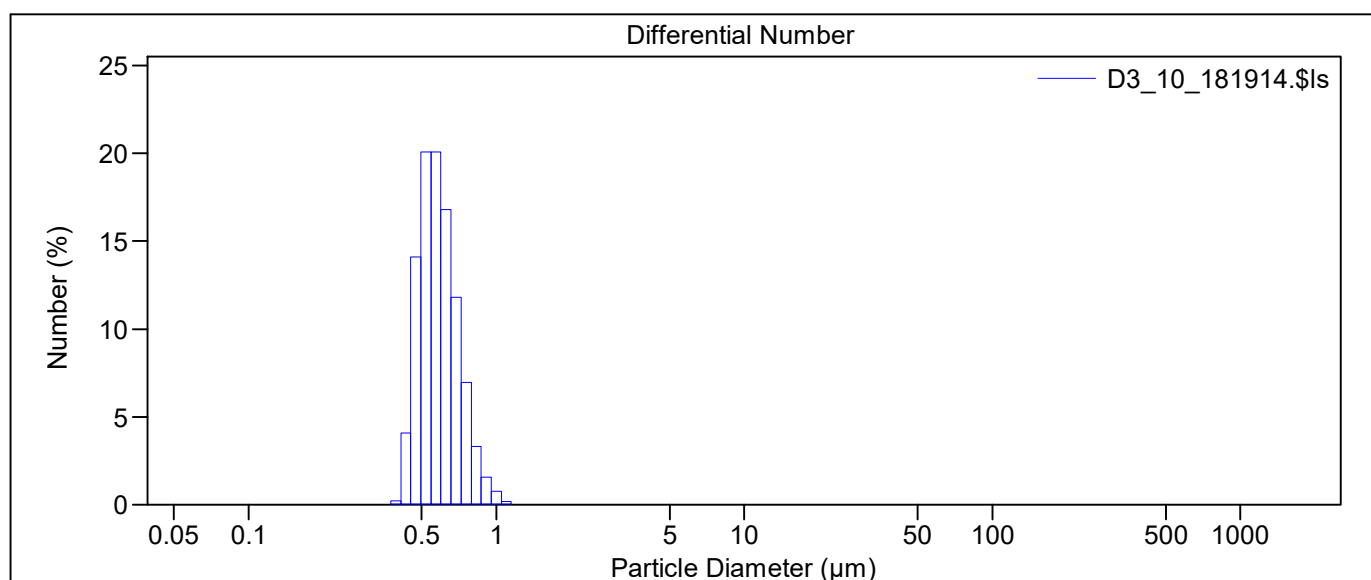
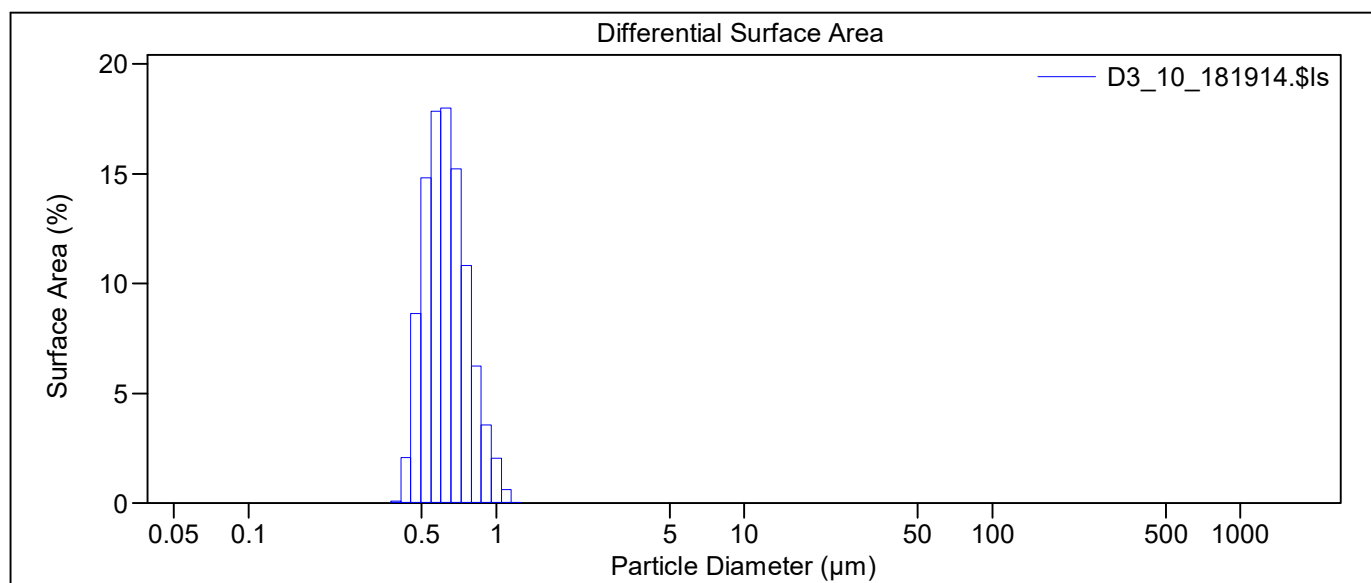
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_10_181914.\$ls		
	D3_10_181914.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.05%		
LS 13 320	Universal Liquid Module		
Start time:	18:17 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	51%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_10_181914.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.139 μm
Mean:	0.667 μm		Variance:	0.019 μm ²
Median:	0.645 μm		C.V.:	20.9%
Mean/Median ratio:	1.033		Skewness:	0.777 Right skewed
Mode:	0.627 μm		Kurtosis:	0.332 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.505 μm	0.562 μm	0.645 μm	0.750 μm	0.863 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.057	0.093	0.22
26	0.412	0.431	1.40	2.08	4.09
27	0.452	0.474	6.39	8.63	14.1
28	0.496	0.520	12.0	14.8	20.1
29	0.545	0.571	15.9	17.8	20.1
30	0.598	0.627	17.6	18.0	16.8
31	0.656	0.688	16.4	15.2	11.8
32	0.721	0.755	12.8	10.8	6.96
33	0.791	0.829	8.08	6.24	3.33
34	0.868	0.910	5.06	3.56	1.58
35	0.953	0.999	3.19	2.04	0.75
36	1.047	1.097	1.05	0.61	0.19
37	1.149	1.204	0.073	0.039	0.0098
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

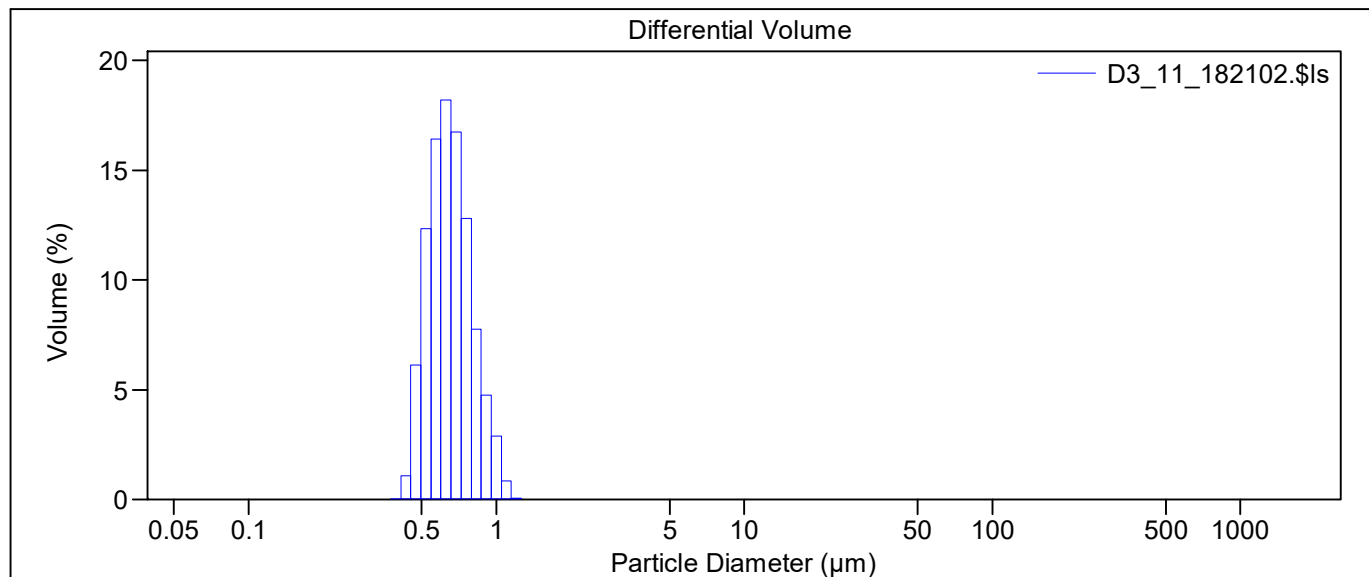
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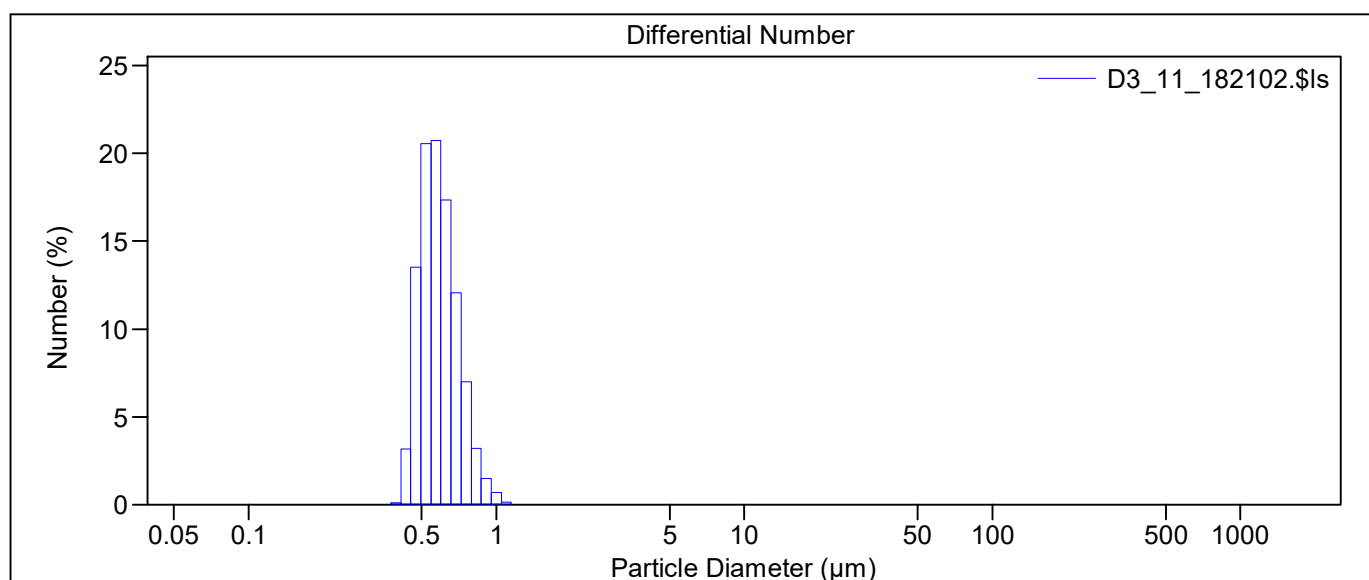
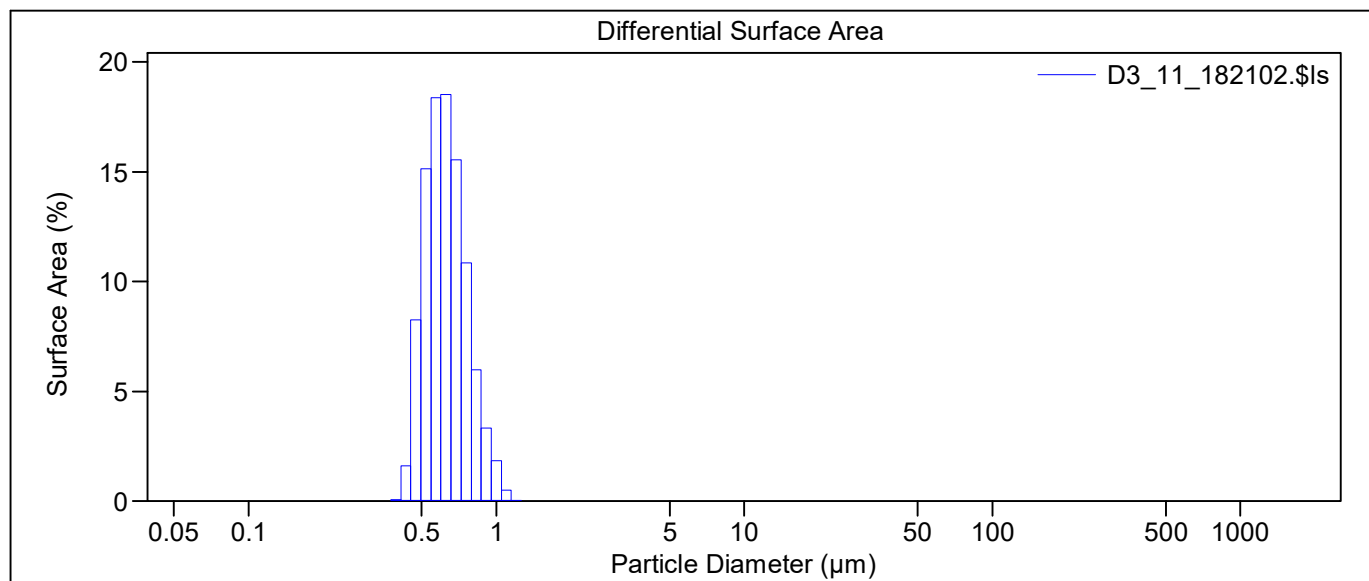
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_11_182102.\$ls		
	D3_11_182102.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.12%		
LS 13 320	Universal Liquid Module		
Start time:	18:19 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	52%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_11_182102.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.135 μm
Mean:	0.664 μm		Variance:	0.018 μm ²
Median:	0.643 μm		C.V.:	20.3%
Mean/Median ratio:	1.032		Skewness:	0.794 Right skewed
Mode:	0.627 μm		Kurtosis:	0.402 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.507 μm	0.562 μm	0.643 μm	0.743 μm	0.854 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0.027	0.044	0.11
26	0.412	0.431	1.09	1.61	3.17
27	0.452	0.474	6.13	8.26	13.5
28	0.496	0.520	12.3	15.1	20.6
29	0.545	0.571	16.4	18.4	20.7
30	0.598	0.627	18.2	18.5	17.3
31	0.656	0.688	16.7	15.5	12.1
32	0.721	0.755	12.8	10.8	6.98
33	0.791	0.829	7.76	5.98	3.20
34	0.868	0.910	4.75	3.33	1.48
35	0.953	0.999	2.88	1.84	0.68
36	1.047	1.097	0.84	0.49	0.15
37	1.149	1.204	0.049	0.026	0.0066
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

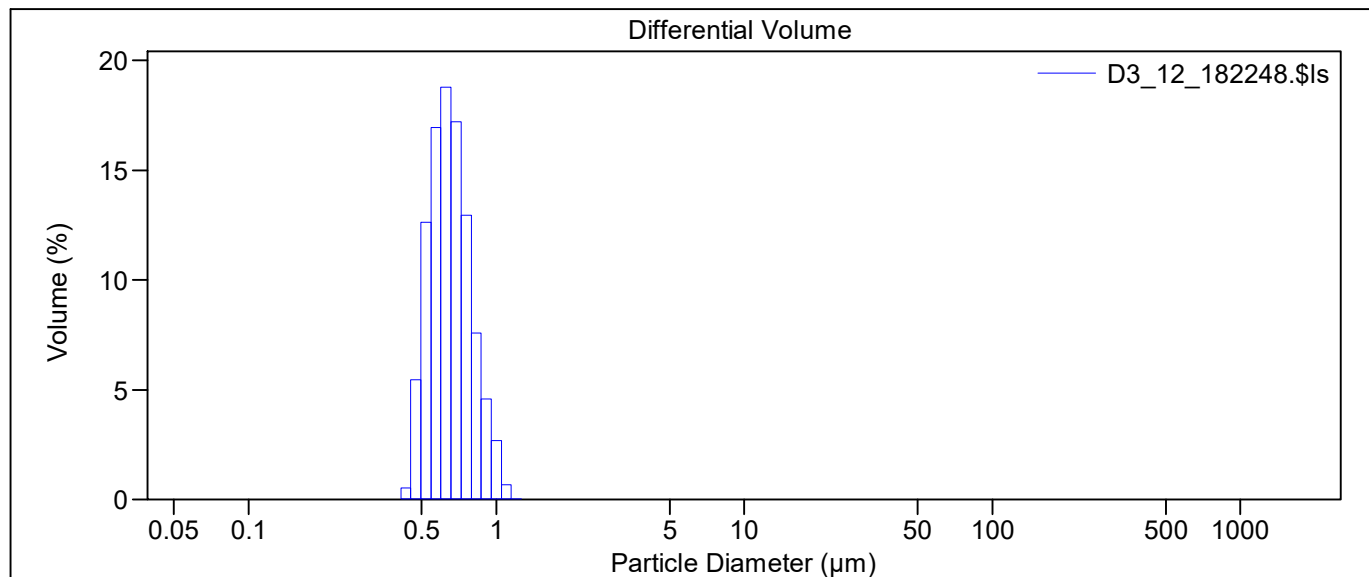
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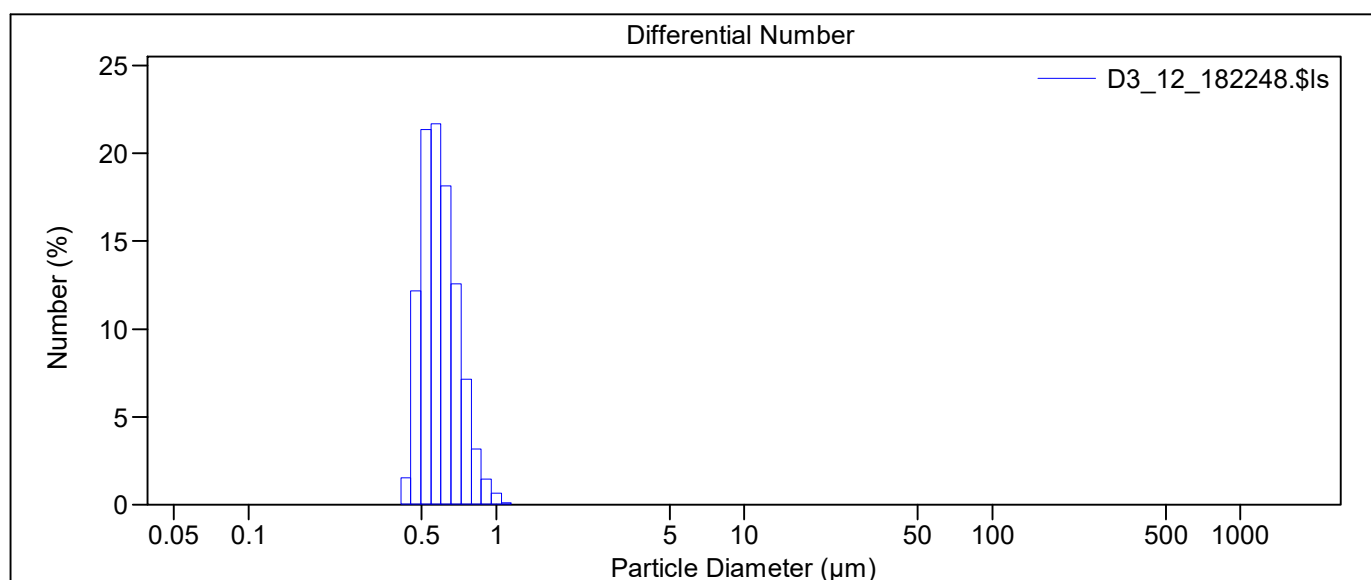
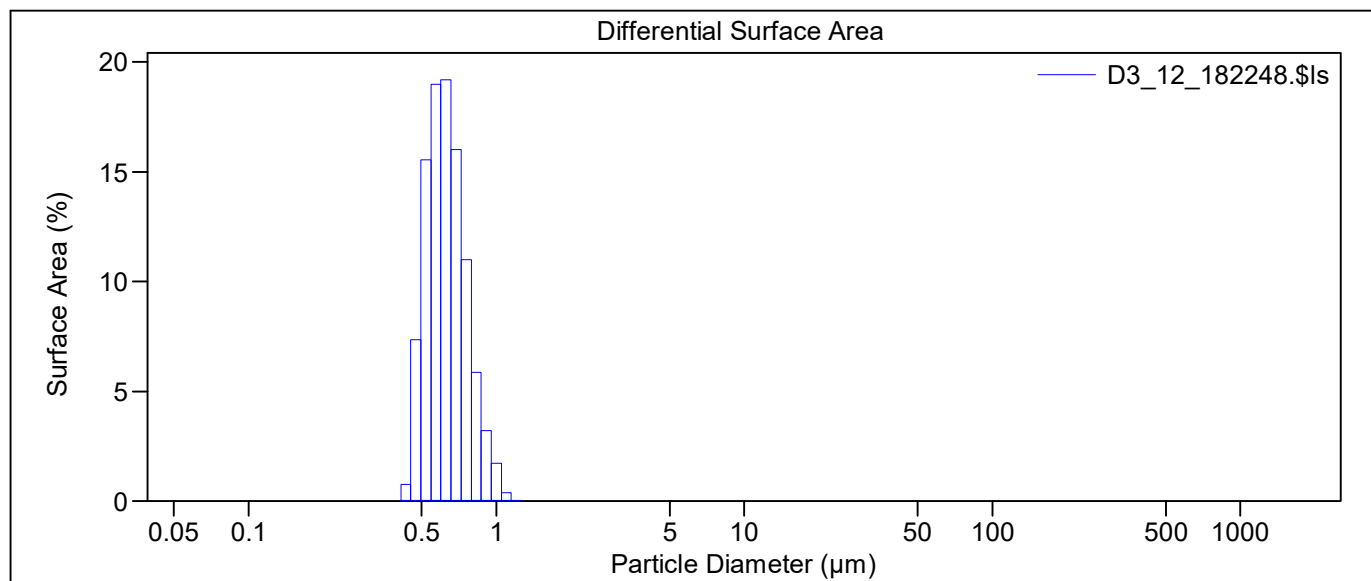
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_12_182248.\$ls		
	D3_12_182248.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.19%		
LS 13 320	Universal Liquid Module		
Start time:	18:21 1	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	52%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_12_182248.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.130 μm
Mean:	0.663 μm		Variance:	0.017 μm ²
Median:	0.643 μm		C.V.:	19.6%
Mean/Median ratio:	1.031		Skewness:	0.814 Right skewed
Mode:	0.627 μm		Kurtosis:	0.446 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.512 μm	0.565 μm	0.643 μm	0.740 μm	0.848 μm





D3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0	0	0
25	0.375	0.393	0	0	0
26	0.412	0.431	0.52	0.76	1.53
27	0.452	0.474	5.45	7.36	12.2
28	0.496	0.520	12.6	15.5	21.4
29	0.545	0.571	16.9	19.0	21.7
30	0.598	0.627	18.8	19.2	18.1
31	0.656	0.688	17.2	16.0	12.6
32	0.721	0.755	13.0	11.0	7.16
33	0.791	0.829	7.59	5.86	3.17
34	0.868	0.910	4.57	3.22	1.44
35	0.953	0.999	2.67	1.71	0.64
36	1.047	1.097	0.67	0.39	0.12
37	1.149	1.204	0.031	0.016	0.0042
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

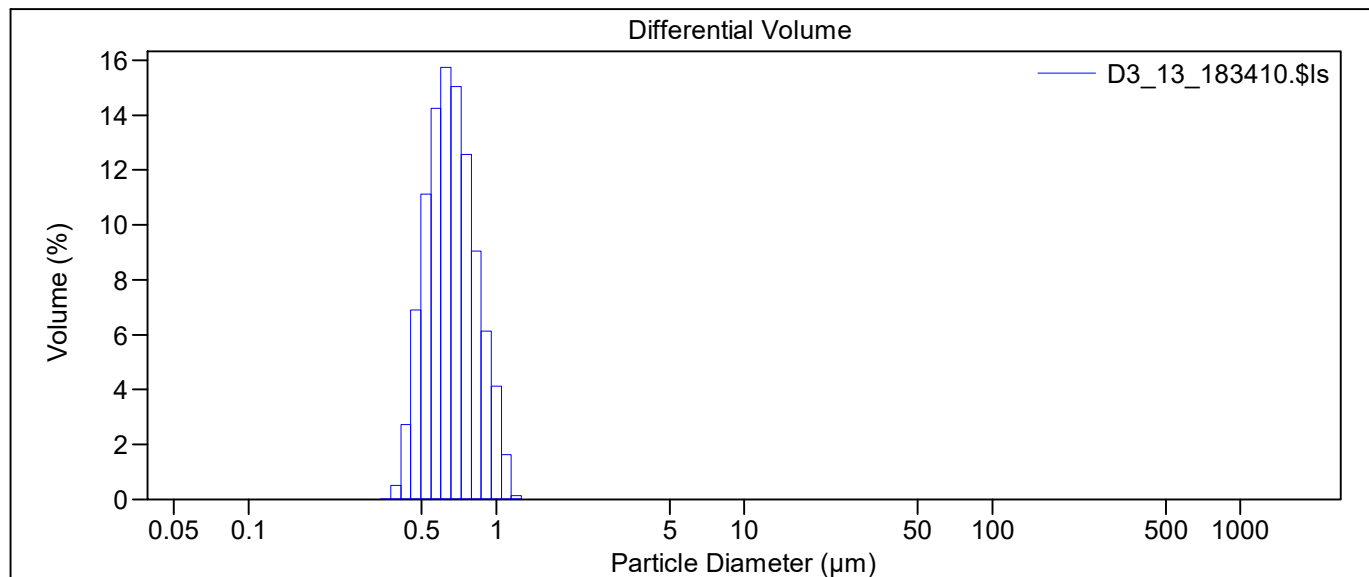
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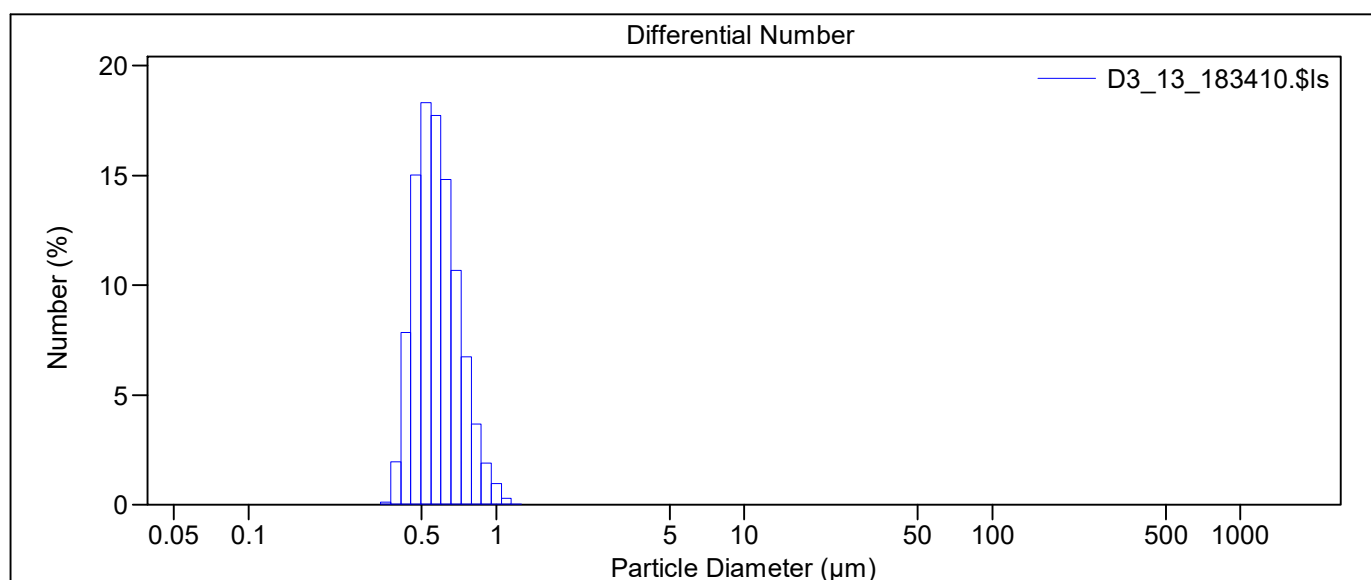
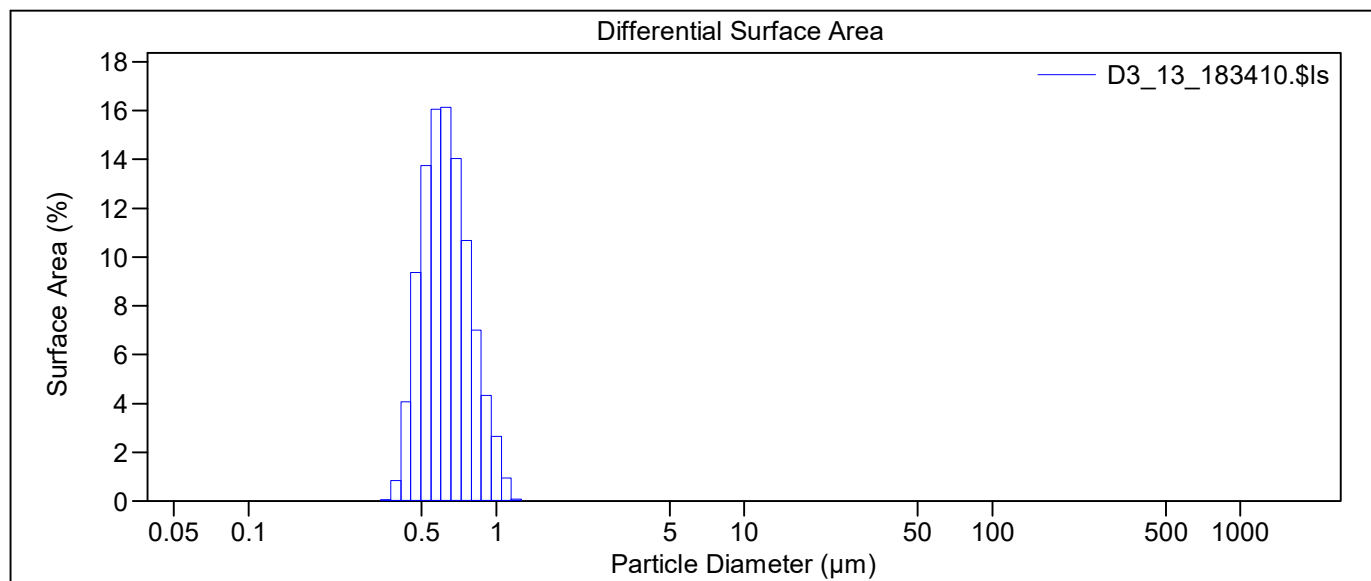
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_13_183410.\$ls		
	D3_13_183410.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.88%		
LS 13 320	Universal Liquid Module		
Start time:	18:32 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_13_183410.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.153 μm
Mean:	0.675 μm		Variance:	0.023 μm ²
Median:	0.652 μm		C.V.:	22.7%
Mean/Median ratio:	1.035		Skewness:	0.664 Right skewed
Mode:	0.627 μm		Kurtosis:	0.010 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.495 μm	0.559 μm	0.652 μm	0.769 μm	0.897 μm





D3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.025	0.044	0.12
25	0.375	0.393	0.51	0.84	1.95
26	0.412	0.431	2.72	4.05	7.84
27	0.452	0.474	6.90	9.35	15.0
28	0.496	0.520	11.1	13.8	18.3
29	0.545	0.571	14.3	16.0	17.7
30	0.598	0.627	15.7	16.1	14.8
31	0.656	0.688	15.0	14.0	10.7
32	0.721	0.755	12.6	10.7	6.75
33	0.791	0.829	9.05	7.01	3.67
34	0.868	0.910	6.14	4.33	1.88
35	0.953	0.999	4.13	2.66	0.96
36	1.047	1.097	1.63	0.95	0.29
37	1.149	1.204	0.14	0.074	0.018
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

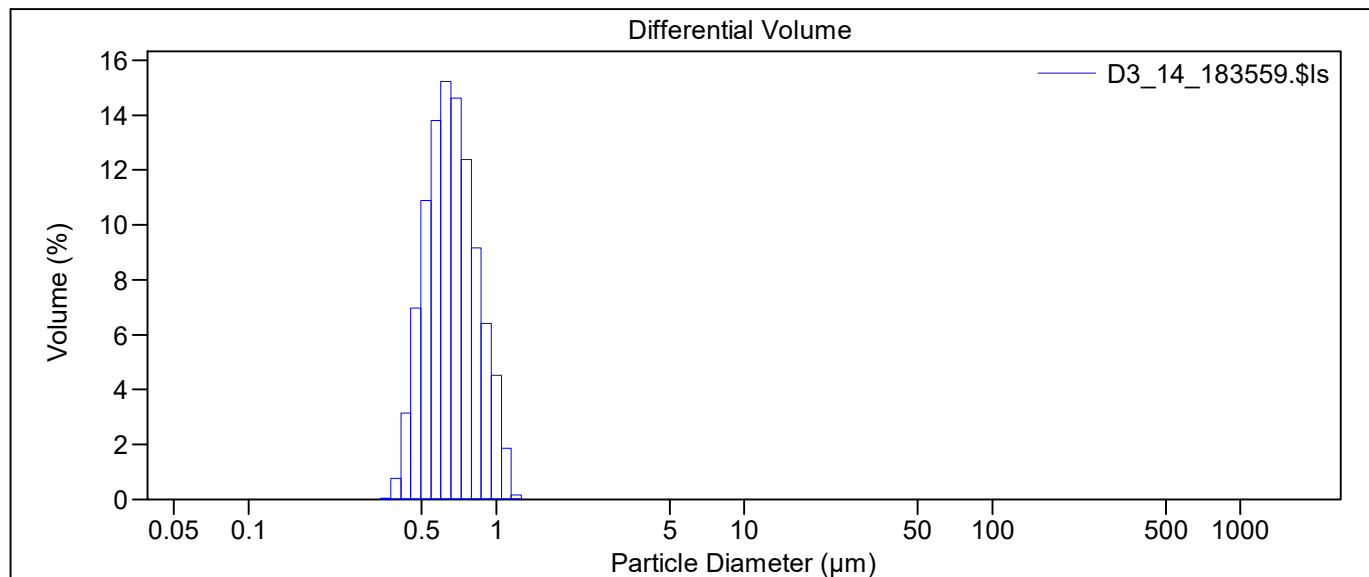
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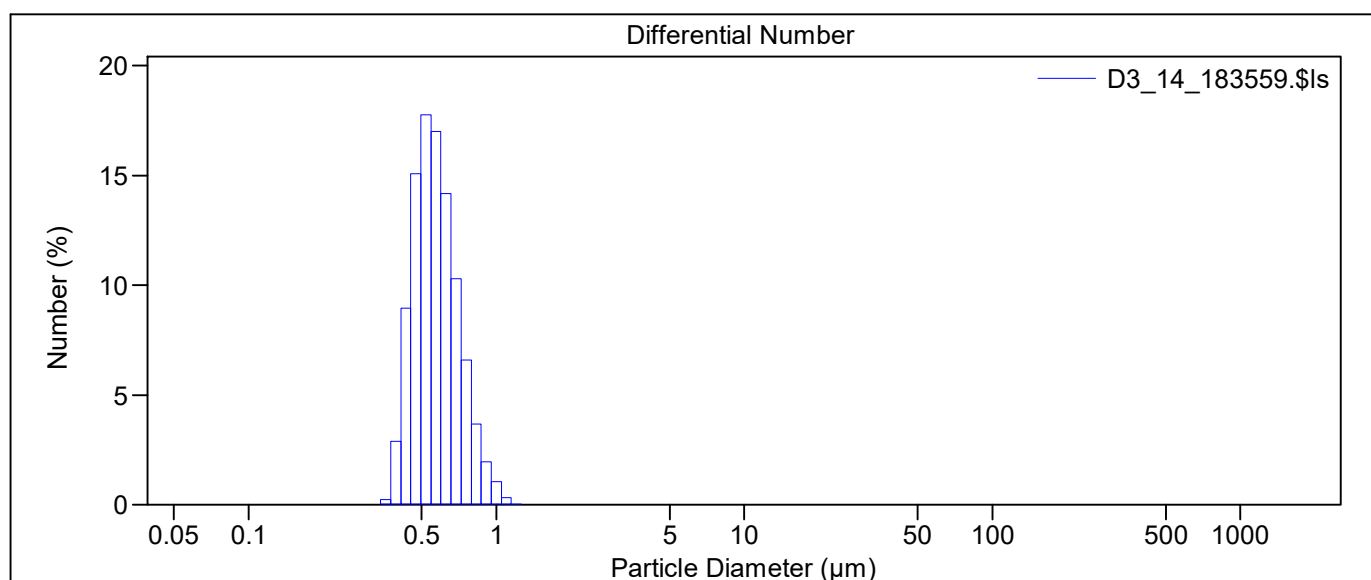
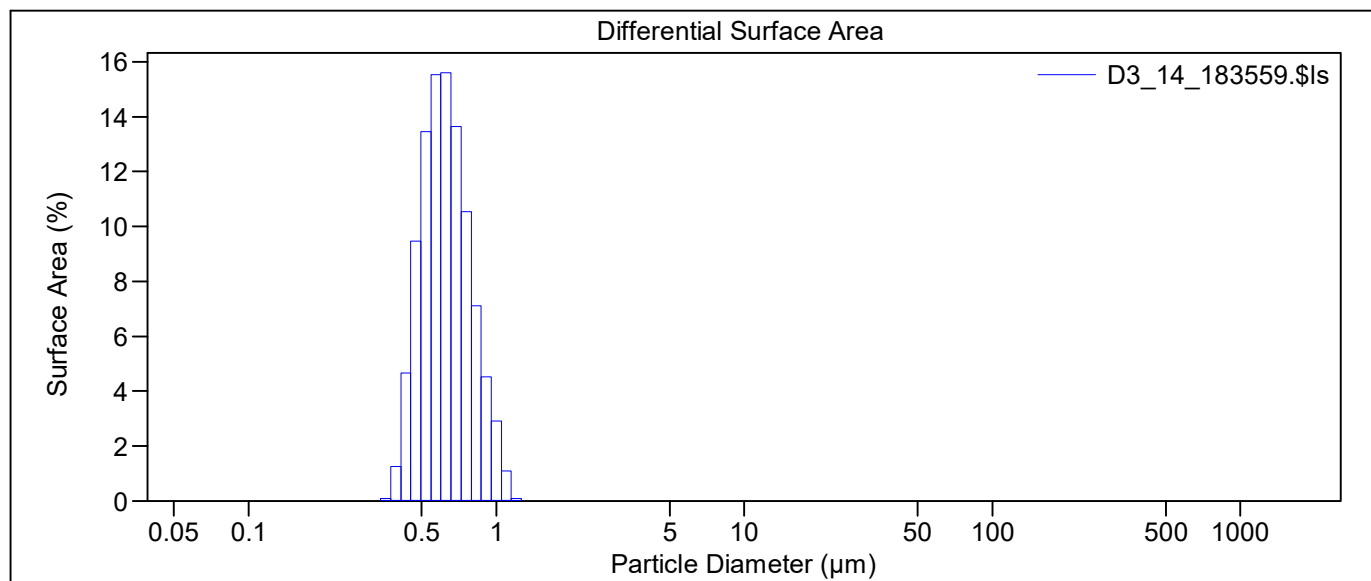
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_14_183559.\$ls		
	D3_14_183559.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.87%		
LS 13 320	Universal Liquid Module		
Start time:	18:34 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	51%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_14_183559.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.158 µm
Mean:	0.677 µm		Variance:	0.025 µm ²
Median:	0.653 µm		C.V.:	23.3%
Mean/Median ratio:	1.036		Skewness:	0.635 Right skewed
Mode:	0.627 µm		Kurtosis:	-0.078 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.490 µm	0.557 µm	0.653 µm	0.775 µm	0.908 µm





D3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.048	0.087	0.24
25	0.375	0.393	0.76	1.25	2.88
26	0.412	0.431	3.14	4.67	8.96
27	0.452	0.474	6.98	9.47	15.1
28	0.496	0.520	10.9	13.5	17.8
29	0.545	0.571	13.8	15.5	17.0
30	0.598	0.627	15.2	15.6	14.2
31	0.656	0.688	14.6	13.7	10.3
32	0.721	0.755	12.4	10.5	6.60
33	0.791	0.829	9.16	7.10	3.69
34	0.868	0.910	6.41	4.53	1.95
35	0.953	0.999	4.53	2.91	1.04
36	1.047	1.097	1.86	1.09	0.32
37	1.149	1.204	0.16	0.087	0.021
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

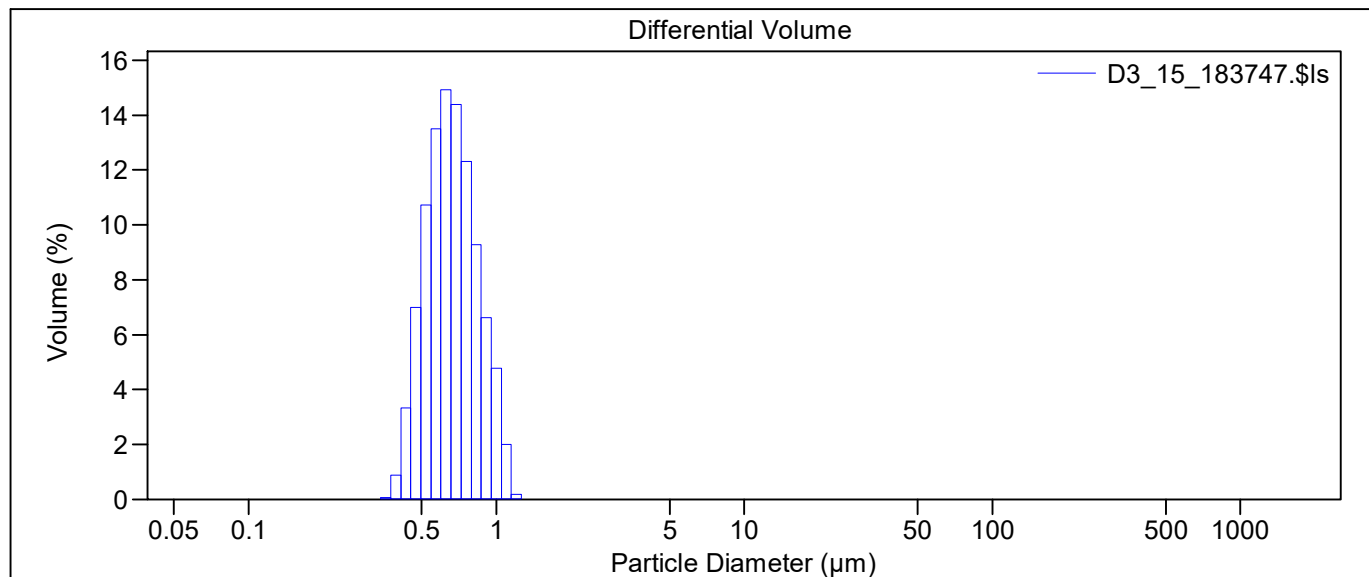
D3.\$av

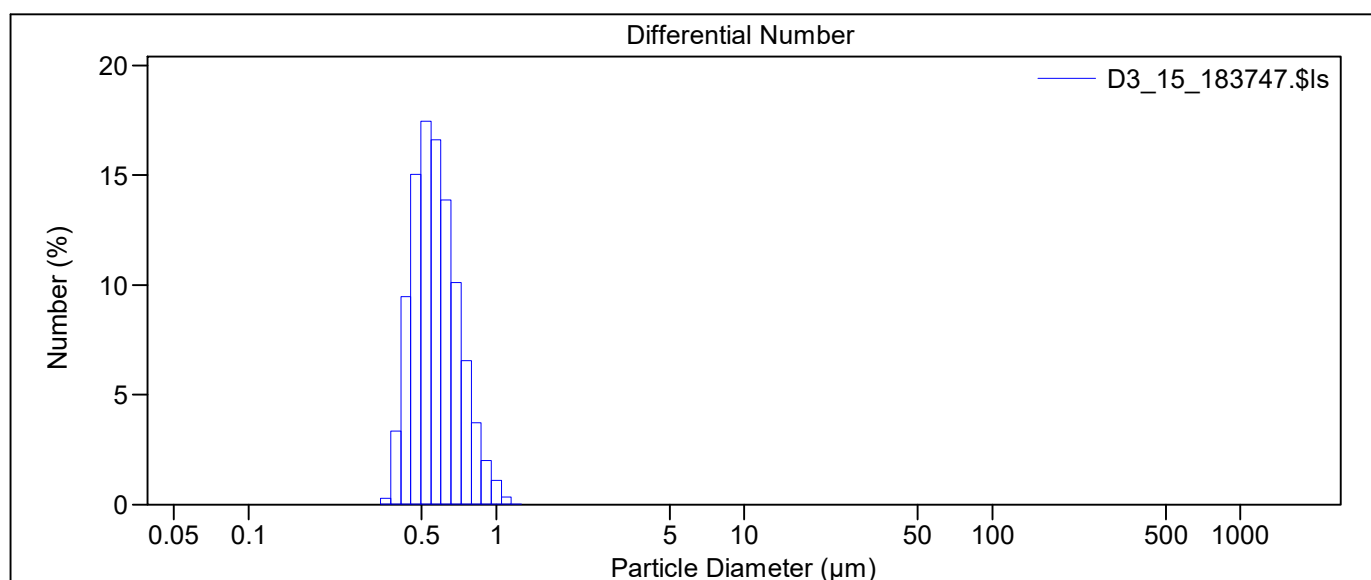
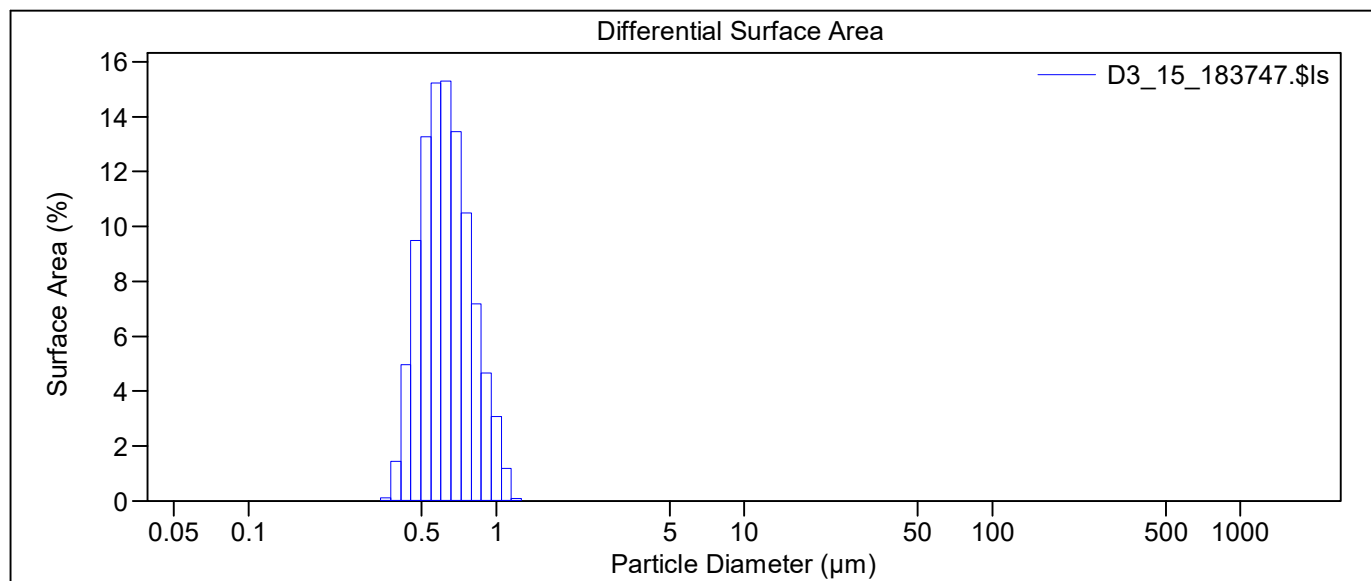
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\D3\D3_15_183747.\$ls		
	D3_15_183747.\$ls		
File ID:	D3		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.87%		
LS 13 320	Universal Liquid Module		
Start time:	18:36 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	53%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			D3_15_183747.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.160 μm
Mean:	0.679 μm		Variance:	0.026 μm ²
Median:	0.655 μm		C.V.:	23.6%
Mean/Median ratio:	1.036		Skewness:	0.615 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.136 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.488 μm	0.557 μm	0.655 μm	0.779 μm	0.915 μm





D3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.060	0.11	0.30
25	0.375	0.393	0.89	1.45	3.34
26	0.412	0.431	3.33	4.96	9.47
27	0.452	0.474	6.99	9.50	15.1
28	0.496	0.520	10.7	13.3	17.5
29	0.545	0.571	13.5	15.2	16.6
30	0.598	0.627	14.9	15.3	13.9
31	0.656	0.688	14.4	13.5	10.1
32	0.721	0.755	12.3	10.5	6.55
33	0.791	0.829	9.27	7.19	3.72
34	0.868	0.910	6.61	4.67	2.01
35	0.953	0.999	4.79	3.09	1.10
36	1.047	1.097	2.02	1.18	0.35
37	1.149	1.204	0.18	0.095	0.023
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

D3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M1\M1.\$av M1.\$av

File ID: M1

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_01_200248.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_02_200436.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_03_200624.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_04_201552.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_05_201740.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_06_201927.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_07_202814.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_08_203002.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_09_203150.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_10_204019.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_11_204206.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_12_204353.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_13_205257.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_14_205445.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M1\M1_15_205633.\$ls

Volume Statistics (Arithmetic) M1.\$av

Calculations from 0.040 μm to 2000 μm

Volume: 100%

Mean: 0.652 μm

S.D.: 0.209 μm

Median: 0.628 μm

Variance: 0.044 μm^2

Mean/Median ratio: 1.038

C.V.: 32.1%

Mode: 0.627 μm

Skewness: 4.166 Right skewed

Kurtosis: 61.22 Leptokurtic

<10%

<25%

<50%

<75%

<90%

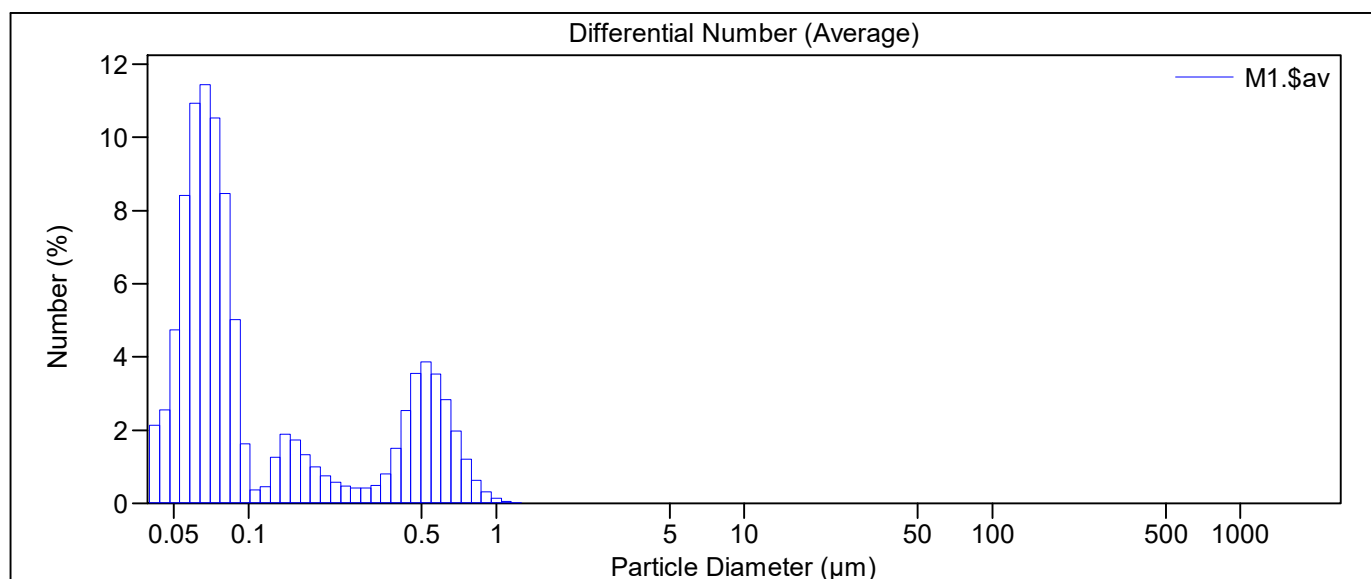
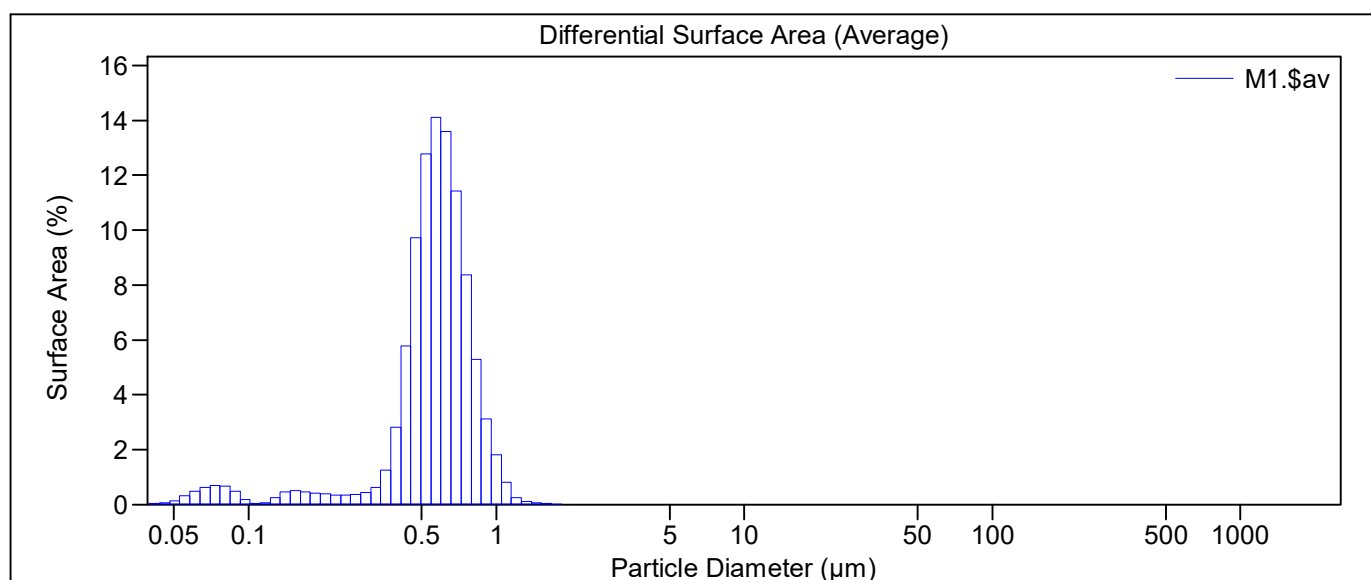
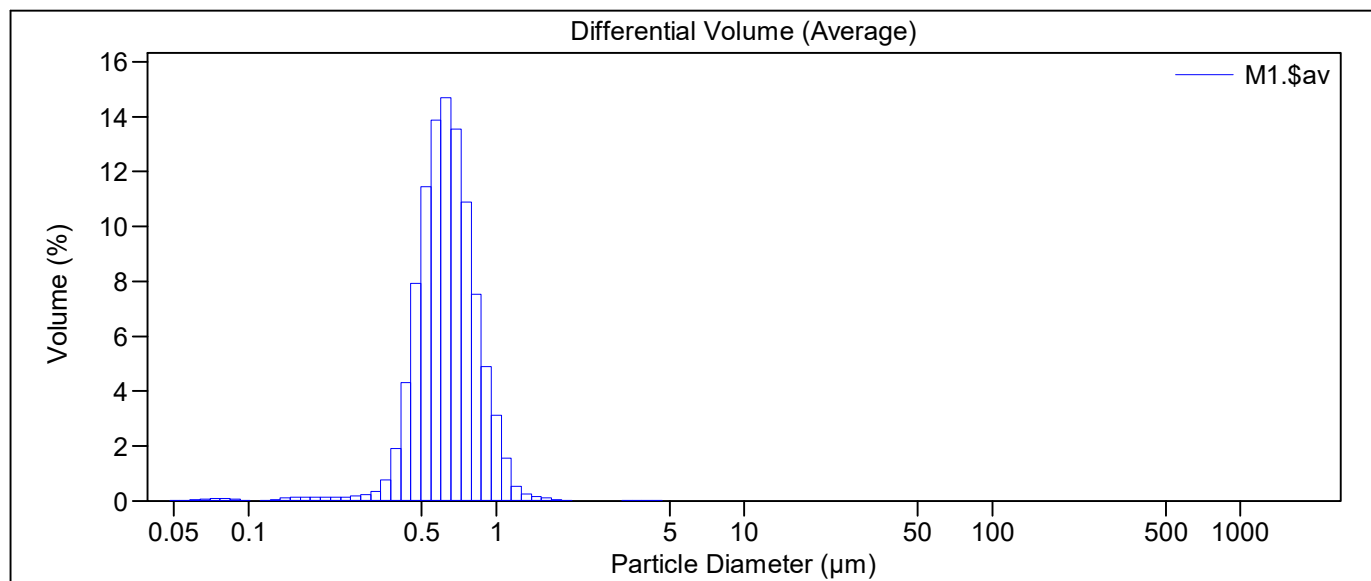
0.456 μm

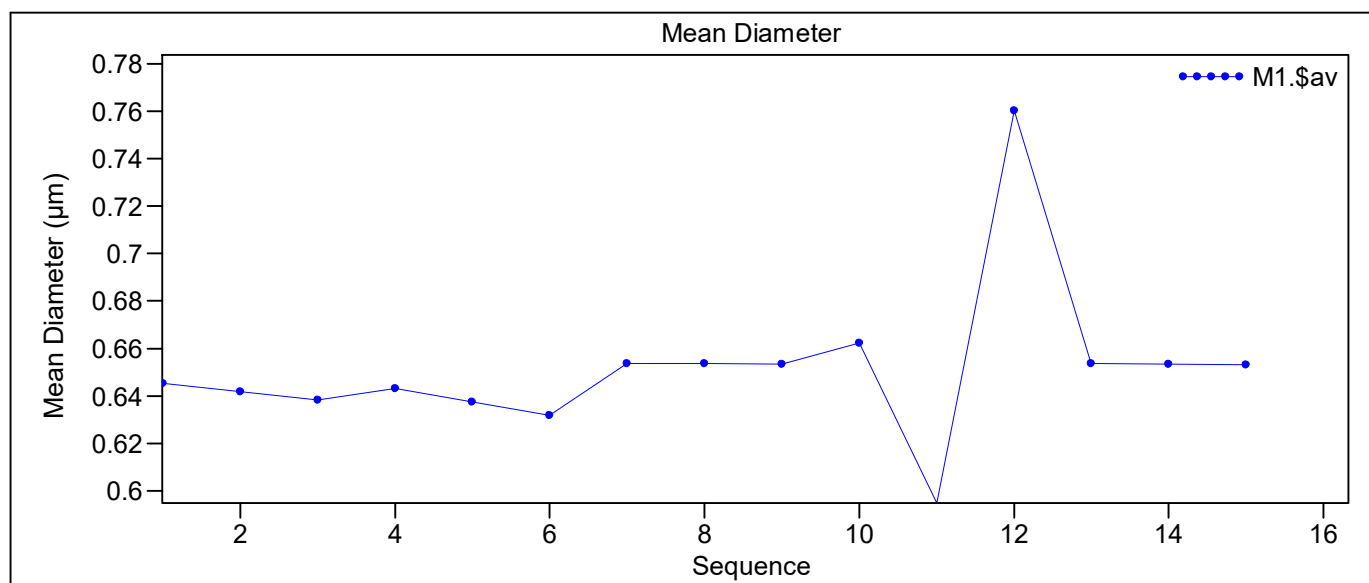
0.529 μm

0.628 μm

0.748 μm

0.883 μm





M1.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.0033	0.046	2.13
2	0.044	0.046	0.0052	0.066	2.56
3	0.048	0.050	0.013	0.15	4.74
4	0.053	0.055	0.030	0.32	8.42
5	0.058	0.061	0.052	0.49	10.9
6	0.064	0.067	0.072	0.62	11.4
7	0.070	0.073	0.087	0.69	10.5
8	0.077	0.080	0.093	0.67	8.47
9	0.084	0.088	0.073	0.48	5.03
10	0.093	0.097	0.031	0.19	1.62
11	0.102	0.106	0.0094	0.051	0.37
12	0.112	0.117	0.015	0.075	0.45
13	0.122	0.128	0.056	0.26	1.27
14	0.134	0.141	0.11	0.46	1.88
15	0.148	0.155	0.13	0.51	1.73
16	0.162	0.170	0.14	0.47	1.34
17	0.178	0.186	0.14	0.43	1.00
18	0.195	0.205	0.14	0.39	0.76
19	0.214	0.225	0.14	0.36	0.58
20	0.235	0.247	0.15	0.35	0.47
21	0.258	0.271	0.18	0.38	0.42
22	0.284	0.297	0.23	0.45	0.42
23	0.311	0.326	0.36	0.64	0.49
24	0.342	0.358	0.77	1.25	0.80
25	0.375	0.393	1.92	2.83	1.50
26	0.412	0.431	4.30	5.79	2.54
27	0.452	0.474	7.93	9.72	3.55
28	0.496	0.520	11.5	12.8	3.87
29	0.545	0.571	13.9	14.1	3.54
30	0.598	0.627	14.7	13.6	2.83
31	0.656	0.688	13.5	11.4	1.98
32	0.721	0.755	10.9	8.37	1.20
33	0.791	0.829	7.54	5.28	0.63
34	0.868	0.910	4.91	3.13	0.31
35	0.953	0.999	3.12	1.81	0.15
36	1.047	1.097	1.56	0.83	0.056
37	1.149	1.204	0.55	0.26	0.015
38	1.261	1.321	0.25	0.11	0.0052
39	1.385	1.451	0.17	0.069	0.0027
40	1.520	1.592	0.11	0.039	0.0013
41	1.668	1.748	0.054	0.018	0.00048

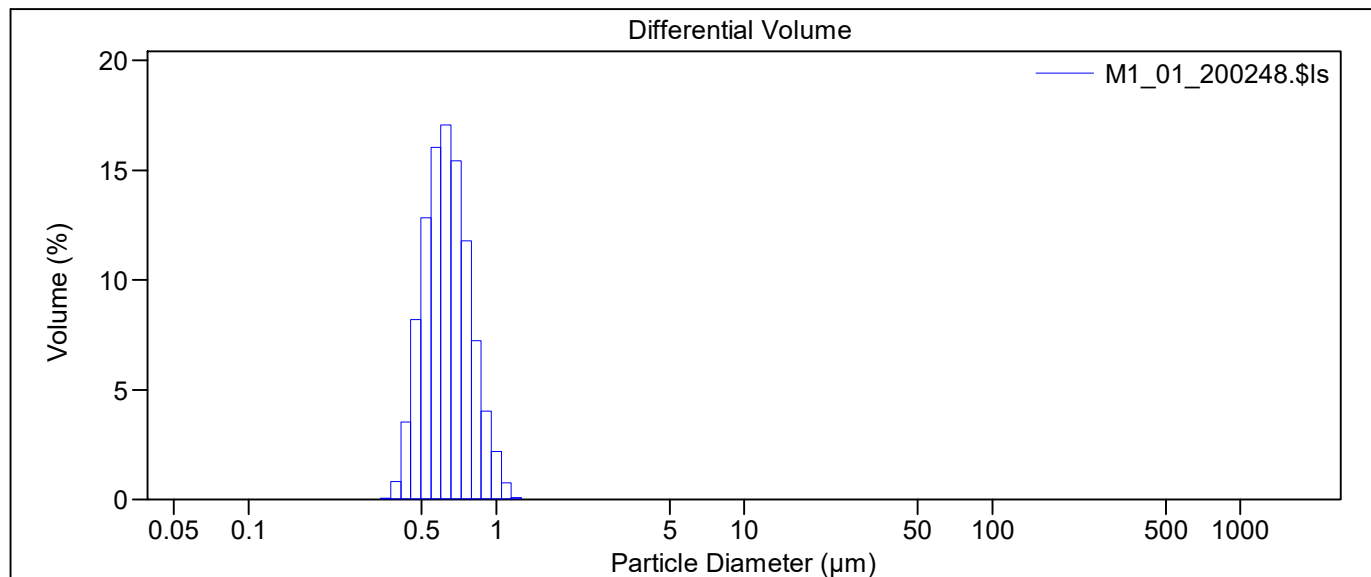
M1.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.020	0.0059	0.00013
43	2.011	2.107	0.0042	0.0012	0.000022
44	2.207	2.313	0.00049	0.00012	0.000002
45	2.423	2.539	0.000099	0.000023	2.88E-7
46	2.660	2.787	0.00073	0.00015	0.000002
47	2.920	3.059	0.0042	0.00080	0.000007
48	3.205	3.358	0.013	0.0023	0.000016
49	3.519	3.687	0.024	0.0038	0.000023
50	3.863	4.047	0.026	0.0037	0.000018
51	4.240	4.443	0.017	0.0022	0.000009
52	4.655	4.877	0.0048	0.00057	0.000002
53	5.110	5.354	0.00070	0.000076	2.16E-7
54	5.610	5.878	0.000007	0.000001	1.66E-9
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

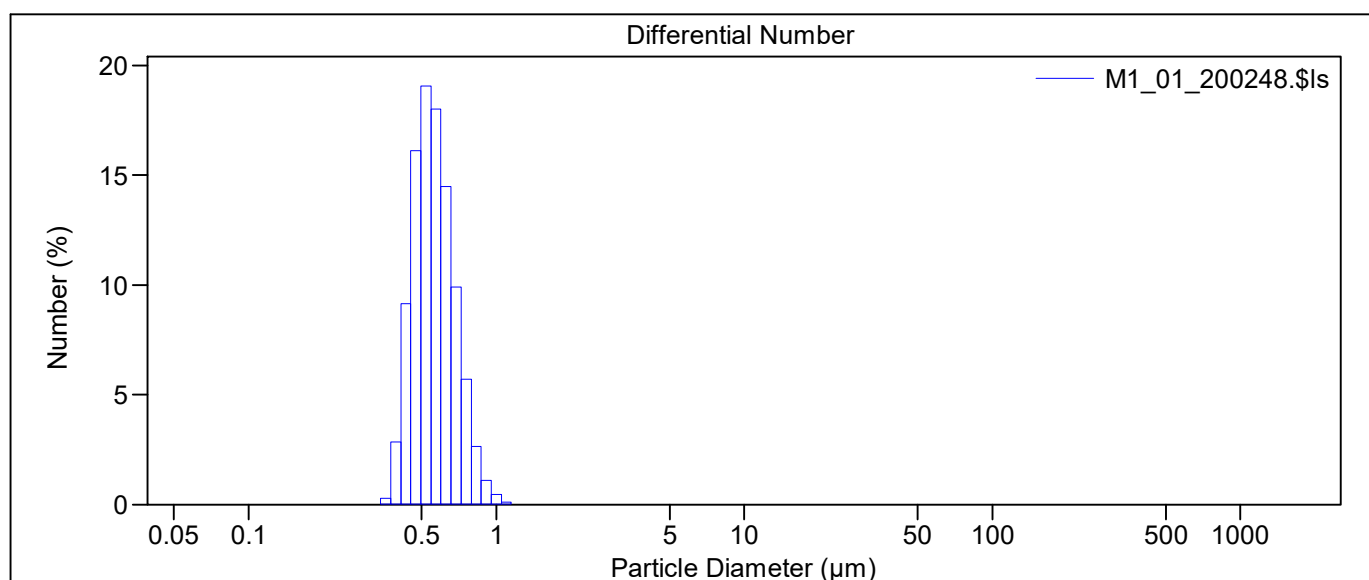
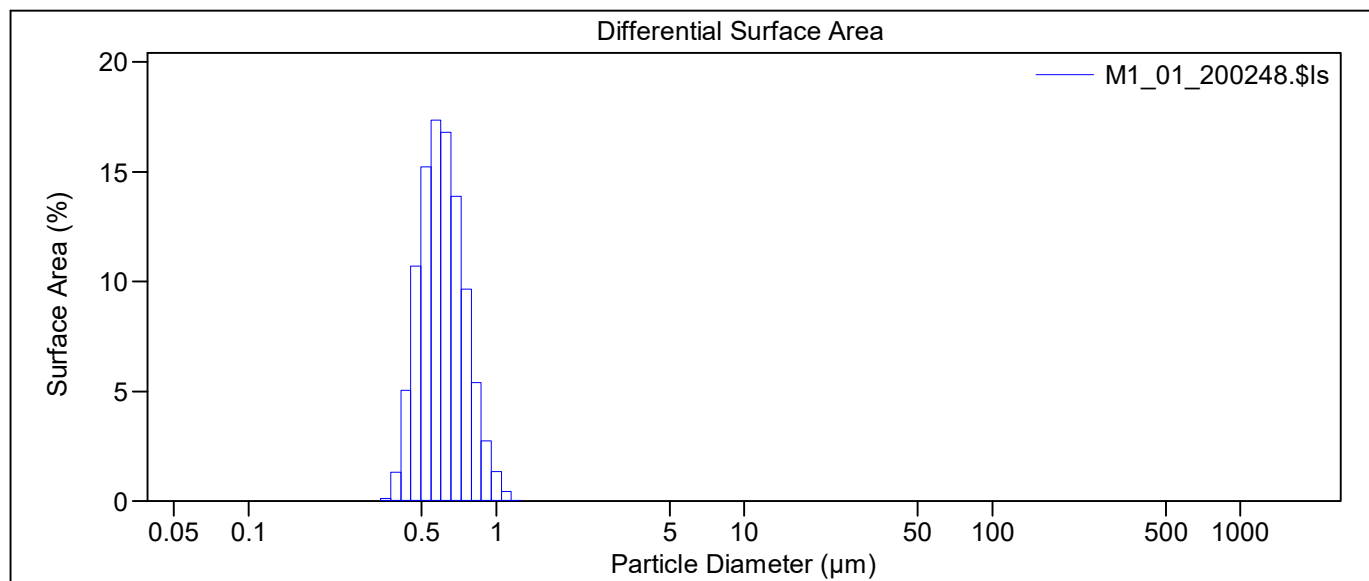
M1.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_01_200248.\$ls		
	M1_01_200248.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.93%		
LS 13 320	Universal Liquid Module		
Start time:	20:01 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	52%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_01_200248.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.138 μm
Mean:	0.645 μm		Variance:	0.019 μm ²
Median:	0.627 μm		C.V.:	21.4%
Mean/Median ratio:	1.029		Skewness:	0.736 Right skewed
Mode:	0.627 μm		Kurtosis:	0.445 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.482 μm	0.543 μm	0.627 μm	0.727 μm	0.837 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00053	0.0010	0.0032
24	0.342	0.358	0.065	0.11	0.30
25	0.375	0.393	0.83	1.31	2.86
26	0.412	0.431	3.52	5.04	9.17
27	0.452	0.474	8.20	10.7	16.1
28	0.496	0.520	12.8	15.2	19.1
29	0.545	0.571	16.0	17.4	18.0
30	0.598	0.627	17.0	16.8	14.5
31	0.656	0.688	15.4	13.9	9.91
32	0.721	0.755	11.8	9.64	5.72
33	0.791	0.829	7.24	5.40	2.66
34	0.868	0.910	4.02	2.73	1.12
35	0.953	0.999	2.17	1.34	0.46
36	1.047	1.097	0.76	0.43	0.12
37	1.149	1.204	0.077	0.040	0.0093
38	1.261	1.321	0.00069	0.00032	0.000063
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

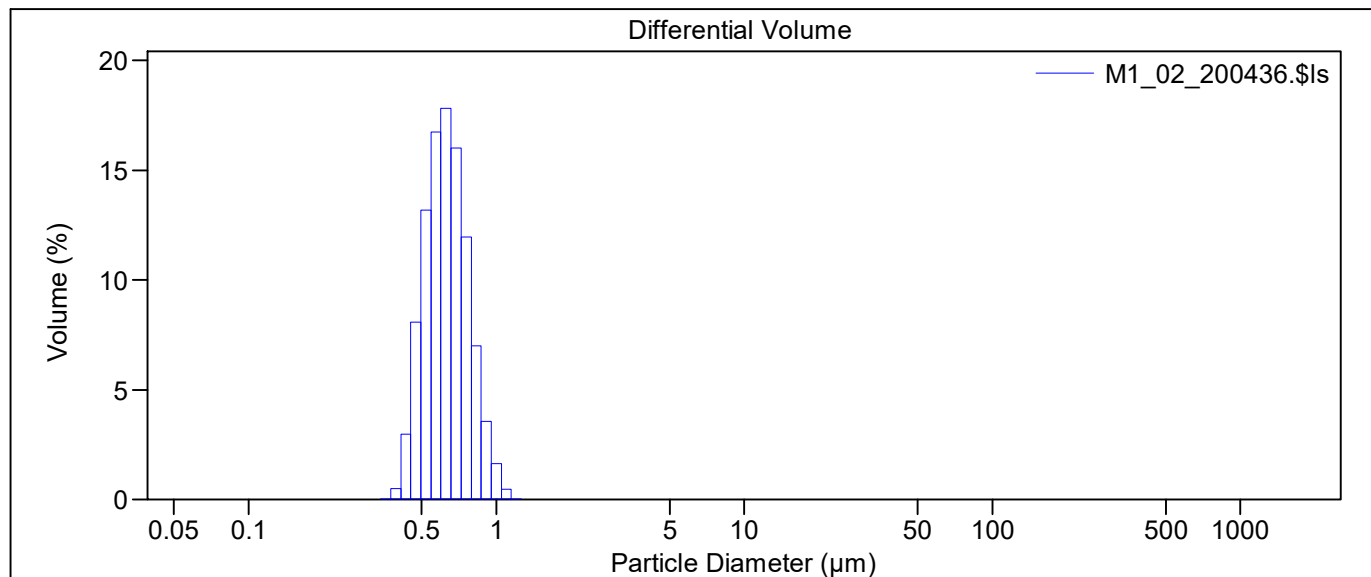
M1.\$av

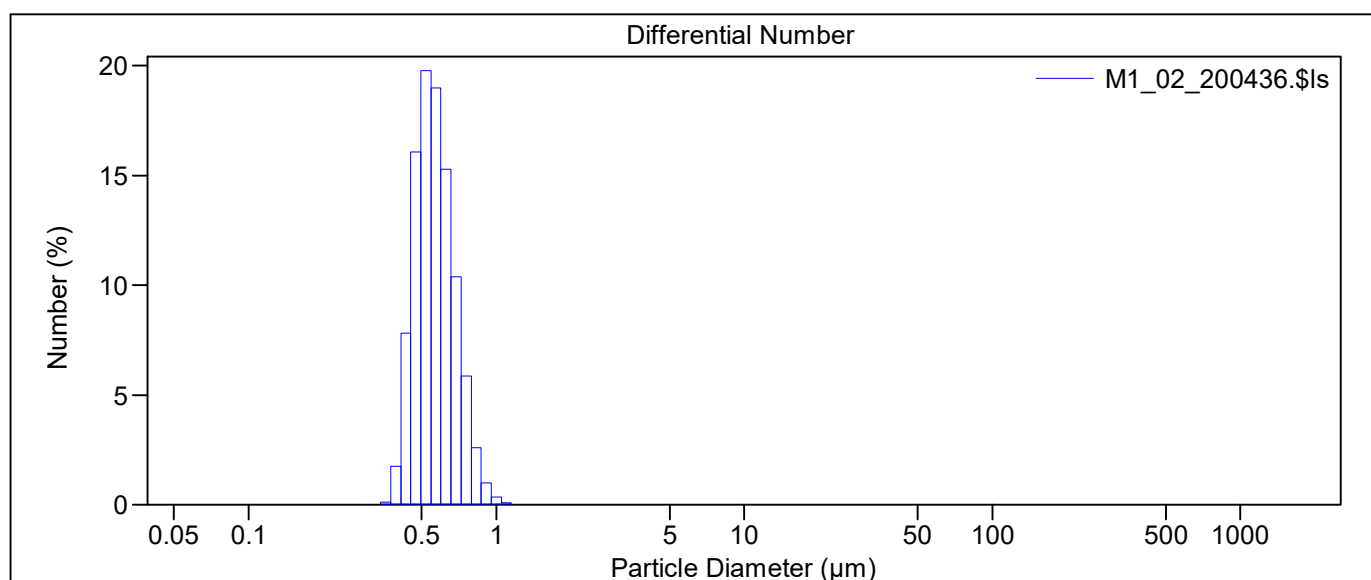
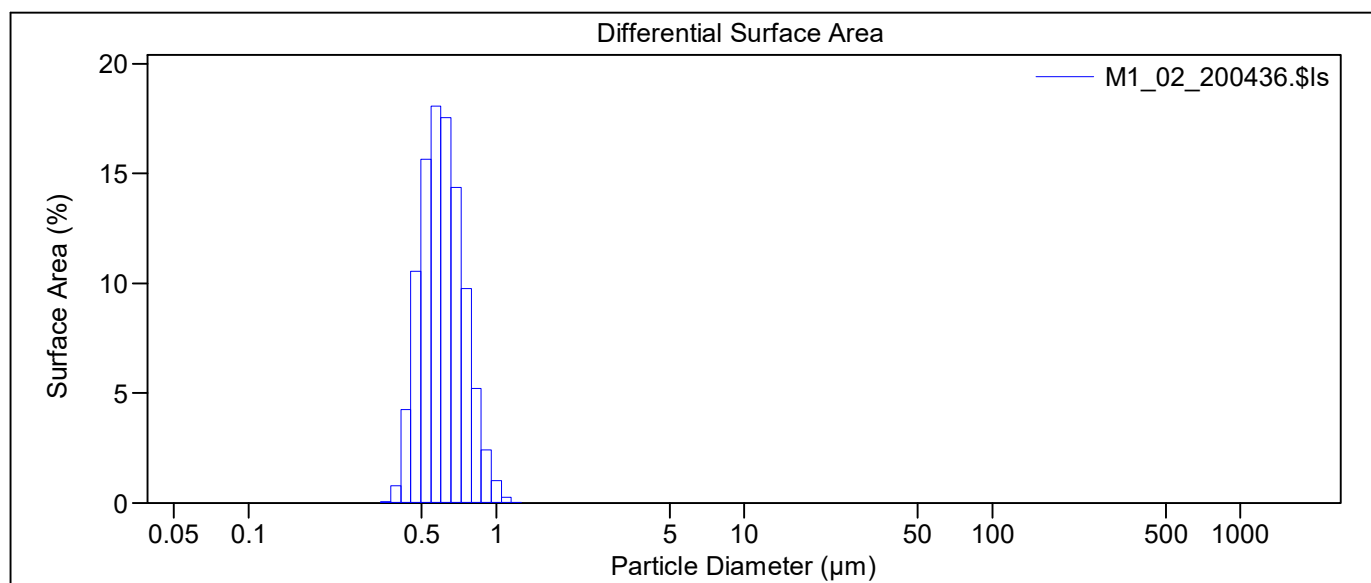
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_02_200436.\$ls		
	M1_02_200436.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.03%		
LS 13 320	Universal Liquid Module		
Start time:	20:02 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	52%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_02_200436.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.130 μm
Mean:	0.642 μm		Variance:	0.017 μm ²
Median:	0.626 μm		C.V.:	20.2%
Mean/Median ratio:	1.025		Skewness:	0.709 Right skewed
Mode:	0.627 μm		Kurtosis:	0.434 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.488 μm	0.545 μm	0.626 μm	0.719 μm	0.821 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.00018	0.00033	0.0011
24	0.342	0.358	0.027	0.046	0.12
25	0.375	0.393	0.50	0.79	1.74
26	0.412	0.431	2.98	4.26	7.81
27	0.452	0.474	8.09	10.5	16.1
28	0.496	0.520	13.2	15.7	19.8
29	0.545	0.571	16.7	18.1	19.0
30	0.598	0.627	17.8	17.5	15.3
31	0.656	0.688	16.0	14.4	10.4
32	0.721	0.755	12.0	9.78	5.86
33	0.791	0.829	7.00	5.21	2.59
34	0.868	0.910	3.57	2.42	1.00
35	0.953	0.999	1.63	1.01	0.35
36	1.047	1.097	0.46	0.26	0.074
37	1.149	1.204	0.041	0.021	0.0050
38	1.261	1.321	0.00035	0.00016	0.000032
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

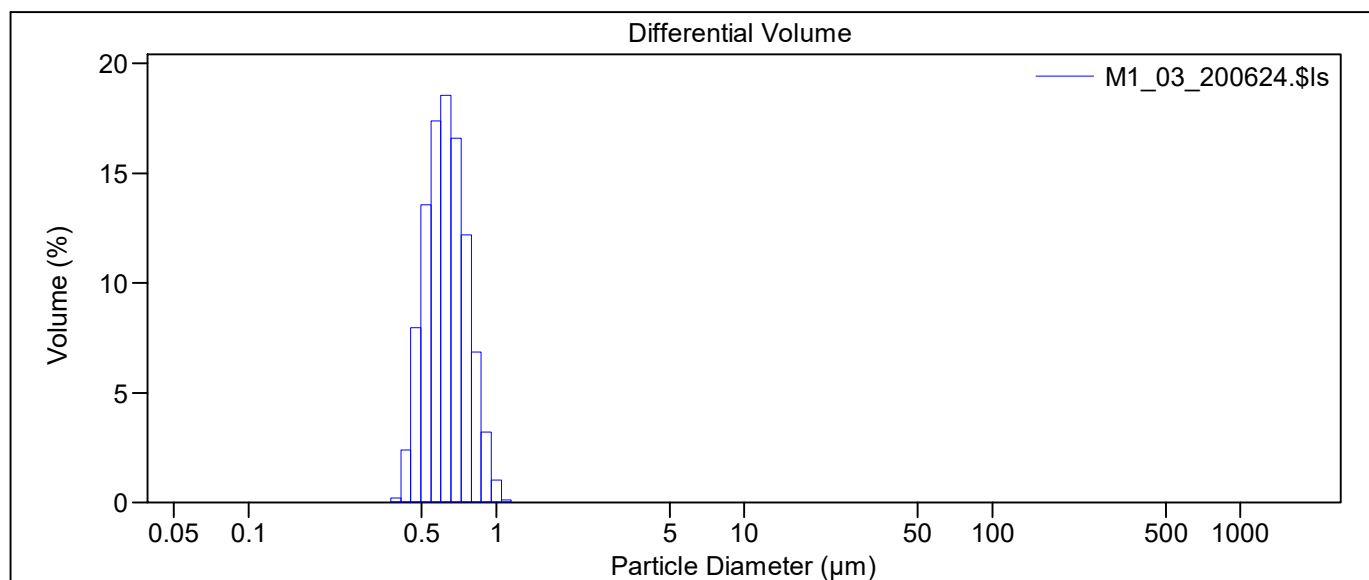
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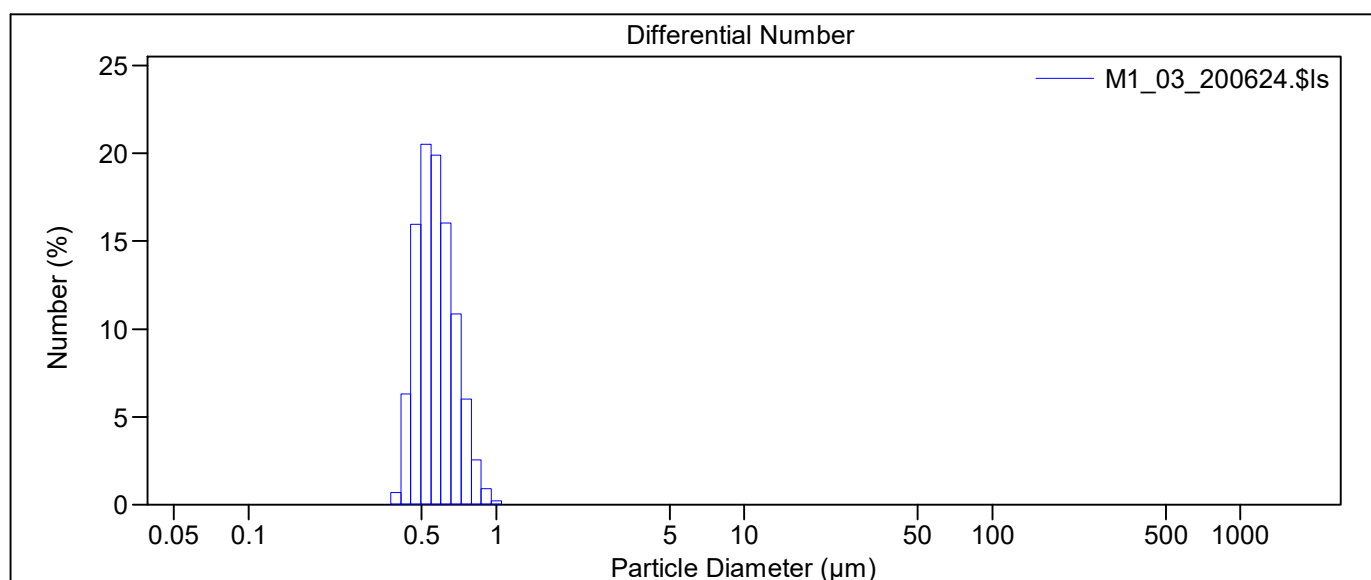
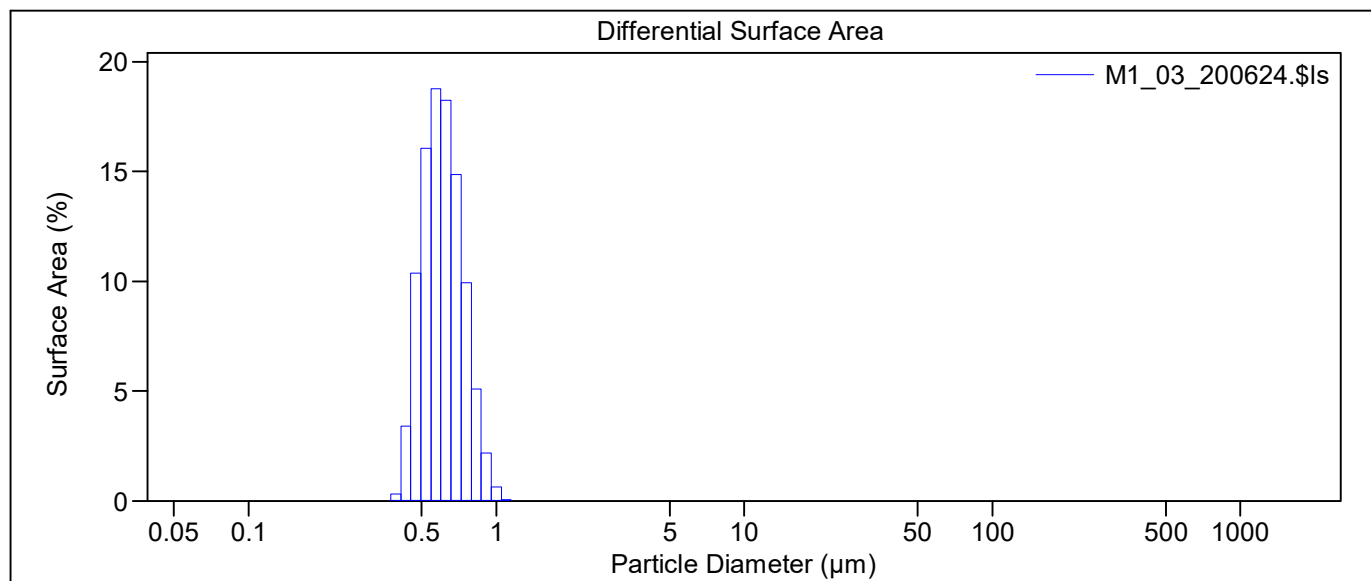
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_03_200624.\$ls		
	M1_03_200624.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.09%		
LS 13 320	Universal Liquid Module		
Start time:	20:04 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	52%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_03_200624.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.120 μm
Mean:	0.638 μm		Variance:	0.015 μm ²
Median:	0.625 μm		C.V.:	18.9%
Mean/Median ratio:	1.021		Skewness:	0.599 Right skewed
Mode:	0.627 μm		Kurtosis:	0.091 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.493 μm	0.548 μm	0.625 μm	0.714 μm	0.805 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0016	0.0027	0.0074
25	0.375	0.393	0.20	0.31	0.69
26	0.412	0.431	2.38	3.41	6.31
27	0.452	0.474	7.97	10.4	16.0
28	0.496	0.520	13.6	16.1	20.5
29	0.545	0.571	17.4	18.8	19.9
30	0.598	0.627	18.5	18.3	16.0
31	0.656	0.688	16.6	14.9	10.9
32	0.721	0.755	12.2	9.95	6.02
33	0.791	0.829	6.84	5.09	2.56
34	0.868	0.910	3.21	2.17	0.91
35	0.953	0.999	1.03	0.64	0.22
36	1.047	1.097	0.10	0.058	0.017
37	1.149	1.204	0.00093	0.00048	0.00011
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

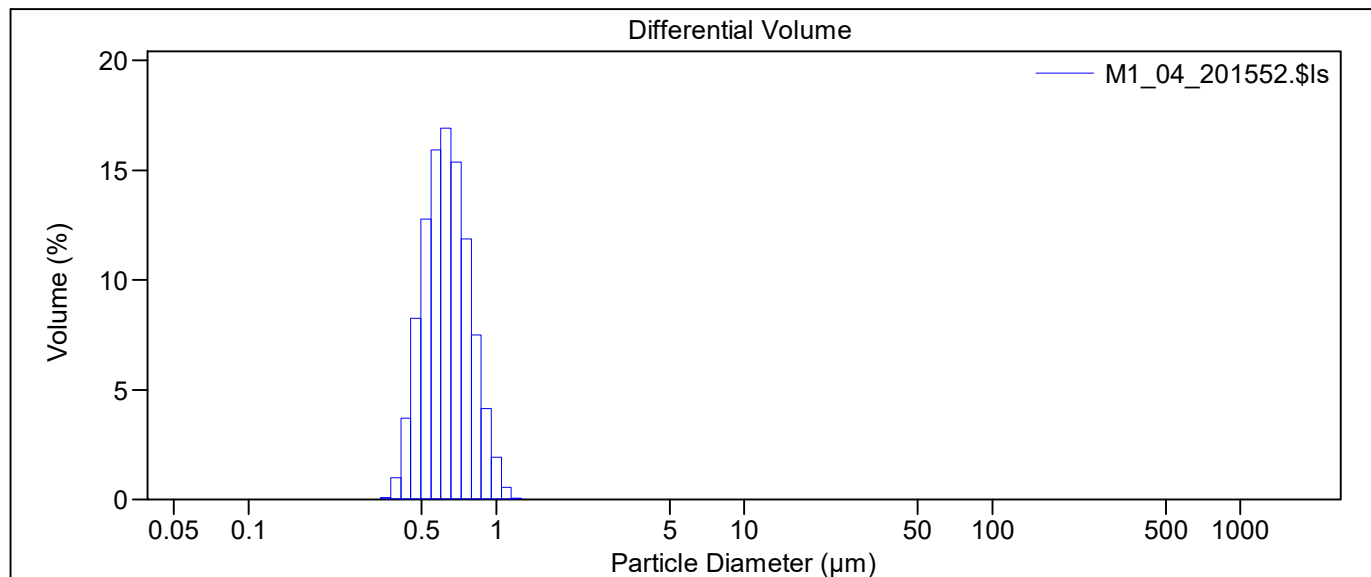
M1.\$av

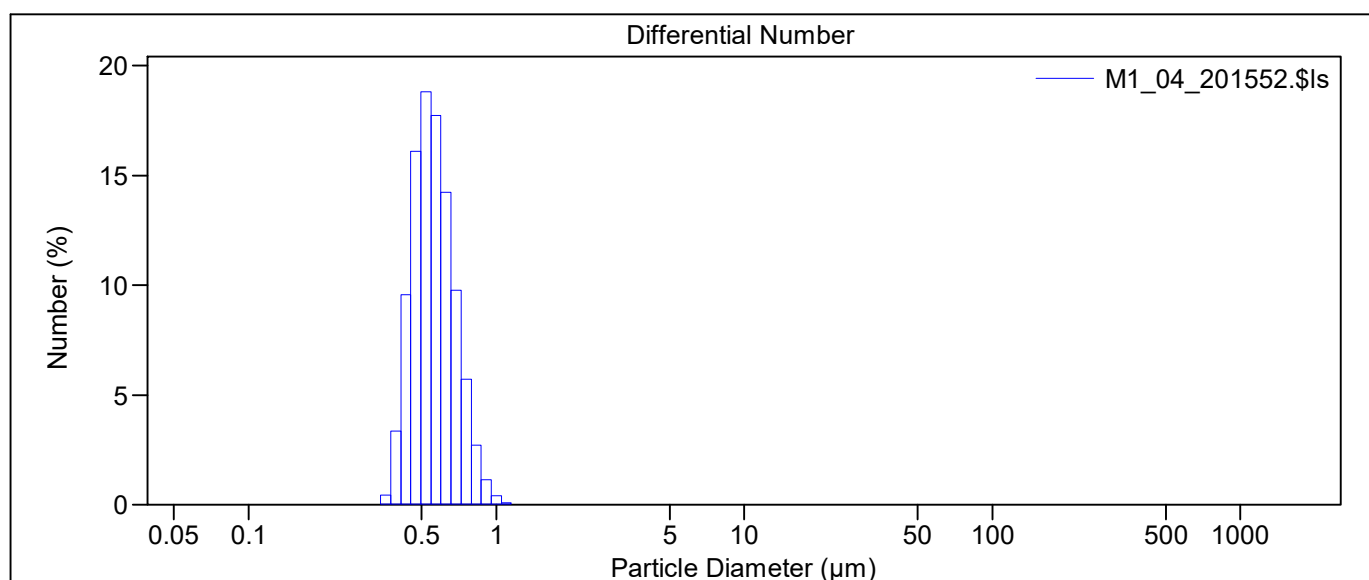
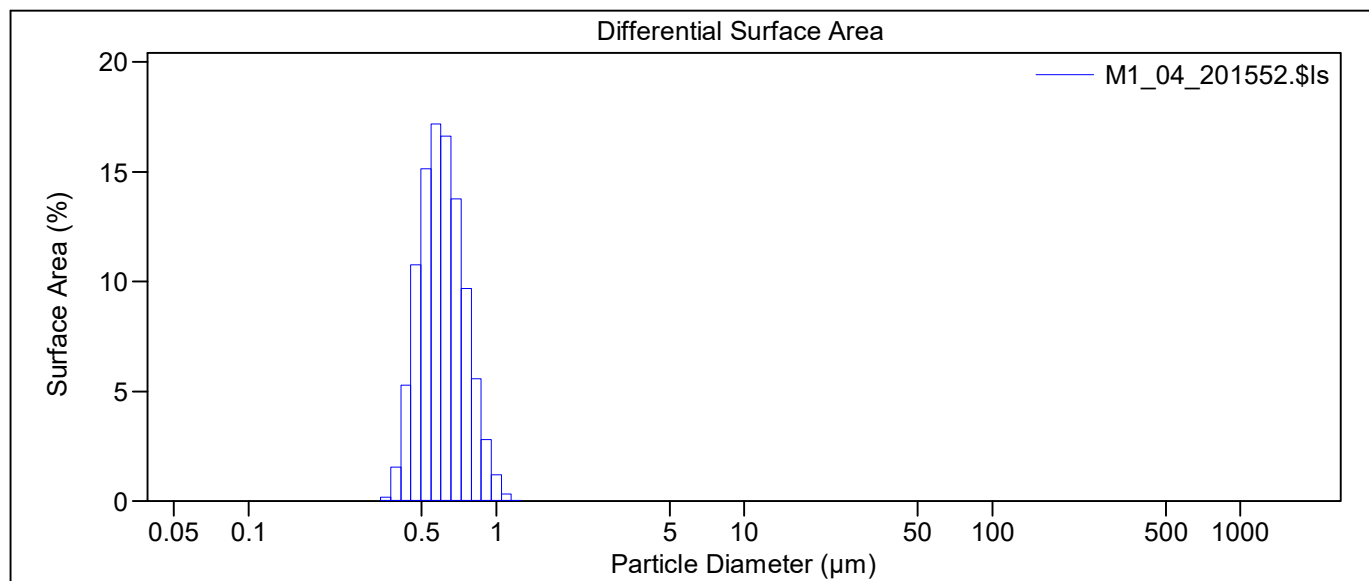
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_04_201552.\$ls		
	M1_04_201552.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.07%		
LS 13 320	Universal Liquid Module		
Start time:	20:14 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_04_201552.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.136 μm
Mean:	0.643 μm		Variance:	0.019 μm ²
Median:	0.627 μm		C.V.:	21.2%
Mean/Median ratio:	1.027		Skewness:	0.665 Right skewed
Mode:	0.627 μm		Kurtosis:	0.280 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.480 μm	0.542 μm	0.627 μm	0.727 μm	0.834 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.0020	0.0038	0.012
24	0.342	0.358	0.098	0.17	0.44
25	0.375	0.393	0.98	1.54	3.35
26	0.412	0.431	3.71	5.29	9.55
27	0.452	0.474	8.26	10.7	16.1
28	0.496	0.520	12.8	15.1	18.8
29	0.545	0.571	15.9	17.2	17.7
30	0.598	0.627	16.9	16.6	14.2
31	0.656	0.688	15.4	13.8	9.76
32	0.721	0.755	11.9	9.68	5.70
33	0.791	0.829	7.49	5.57	2.72
34	0.868	0.910	4.14	2.80	1.14
35	0.953	0.999	1.93	1.19	0.40
36	1.047	1.097	0.55	0.31	0.086
37	1.149	1.204	0.056	0.029	0.0066
38	1.261	1.321	0.0011	0.00052	0.00010
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

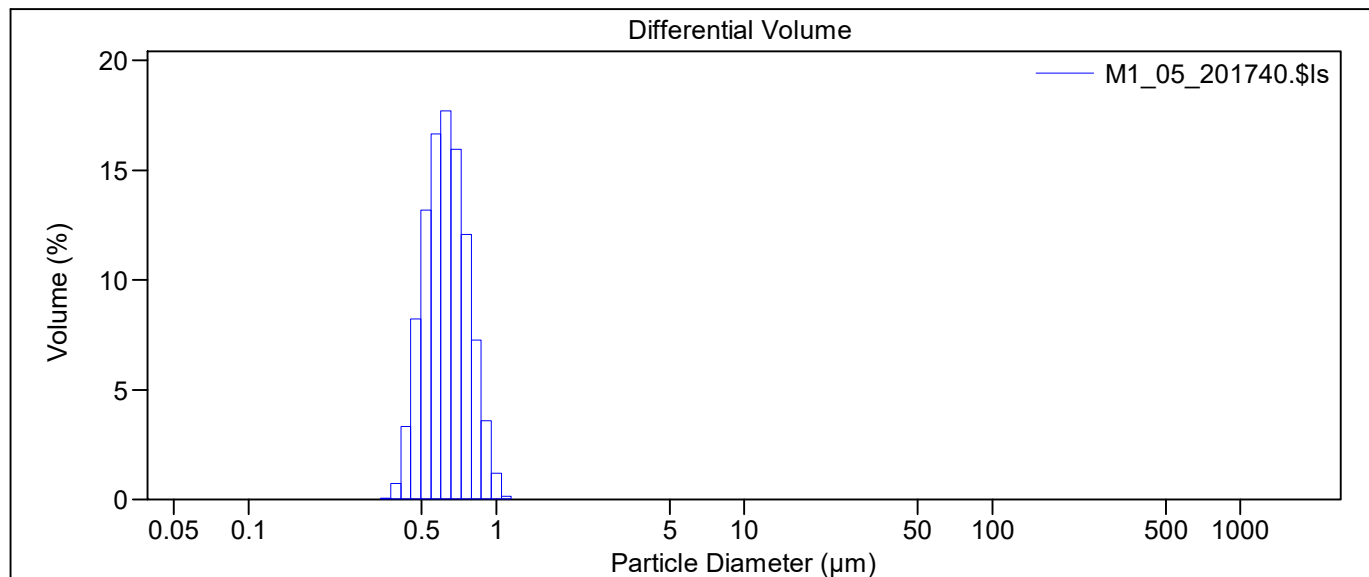
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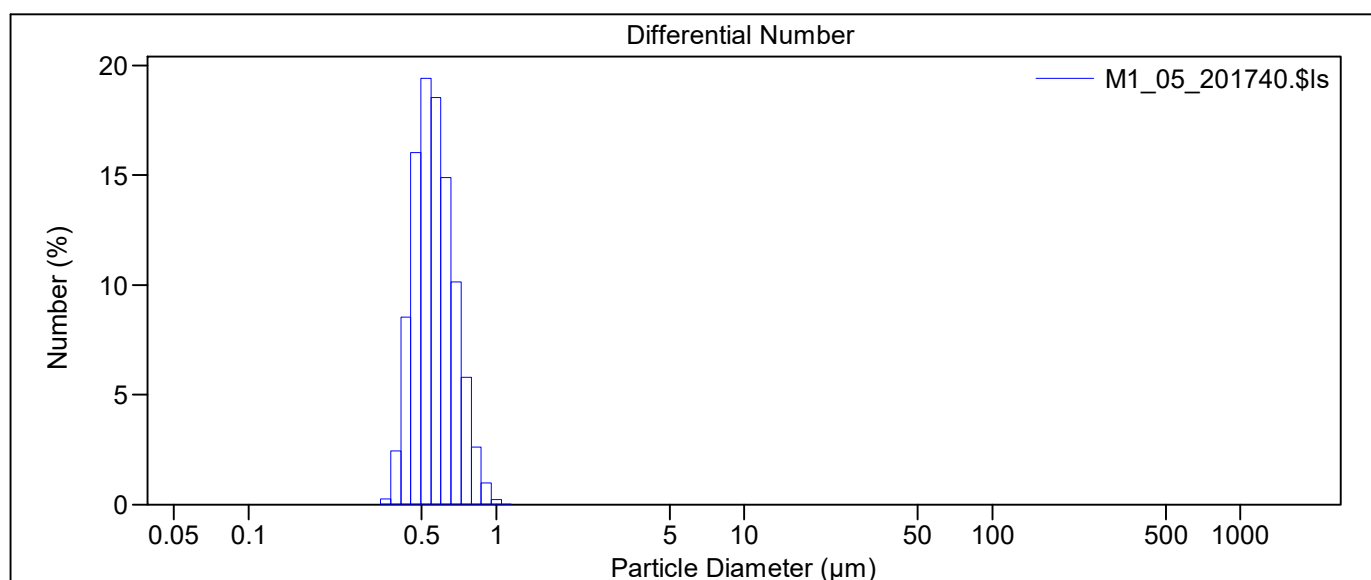
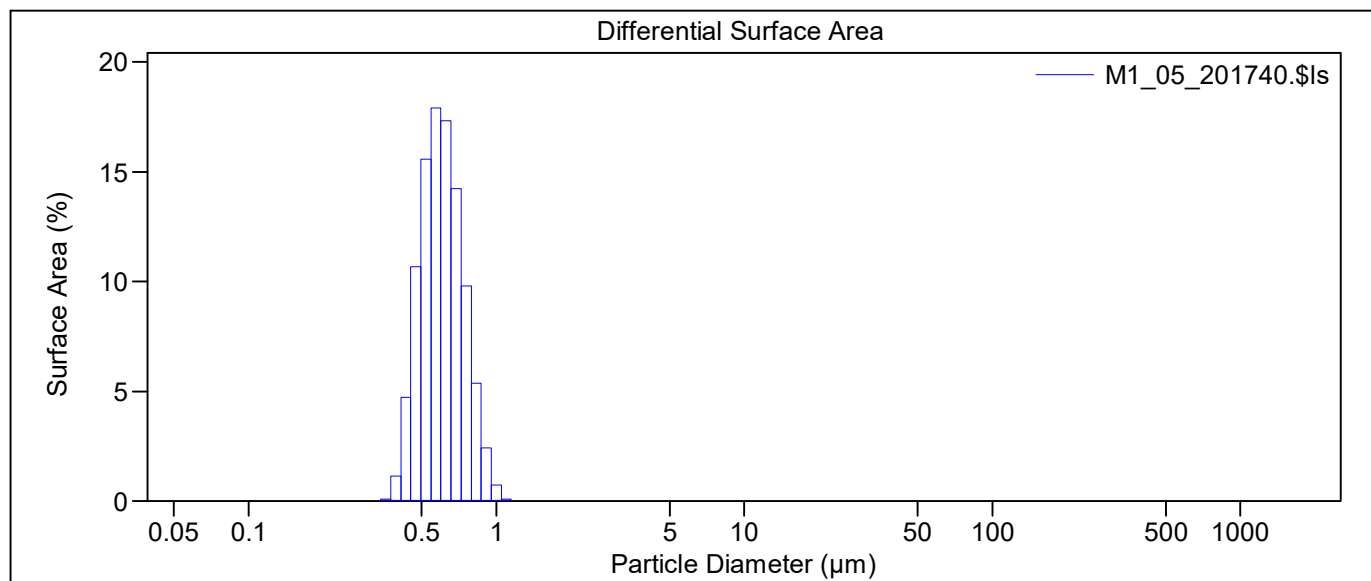
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_05_201740.\$ls		
	M1_05_201740.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.19%		
LS 13 320	Universal Liquid Module		
Start time:	20:15 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_05_201740.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.126 μm
Mean:	0.637 μm		Variance:	0.016 μm ²
Median:	0.624 μm		C.V.:	19.8%
Mean/Median ratio:	1.022		Skewness:	0.556 Right skewed
Mode:	0.627 μm		Kurtosis:	0.015 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.484 μm	0.543 μm	0.624 μm	0.718 μm	0.814 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0.0011	0.0020	0.0063
24	0.342	0.358	0.059	0.10	0.27
25	0.375	0.393	0.72	1.12	2.46
26	0.412	0.431	3.31	4.71	8.54
27	0.452	0.474	8.23	10.7	16.0
28	0.496	0.520	13.2	15.6	19.4
29	0.545	0.571	16.7	17.9	18.5
30	0.598	0.627	17.7	17.3	14.9
31	0.656	0.688	15.9	14.2	10.1
32	0.721	0.755	12.1	9.80	5.80
33	0.791	0.829	7.25	5.37	2.64
34	0.868	0.910	3.58	2.41	0.98
35	0.953	0.999	1.19	0.73	0.25
36	1.047	1.097	0.14	0.079	0.022
37	1.149	1.204	0.0032	0.0017	0.00039
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

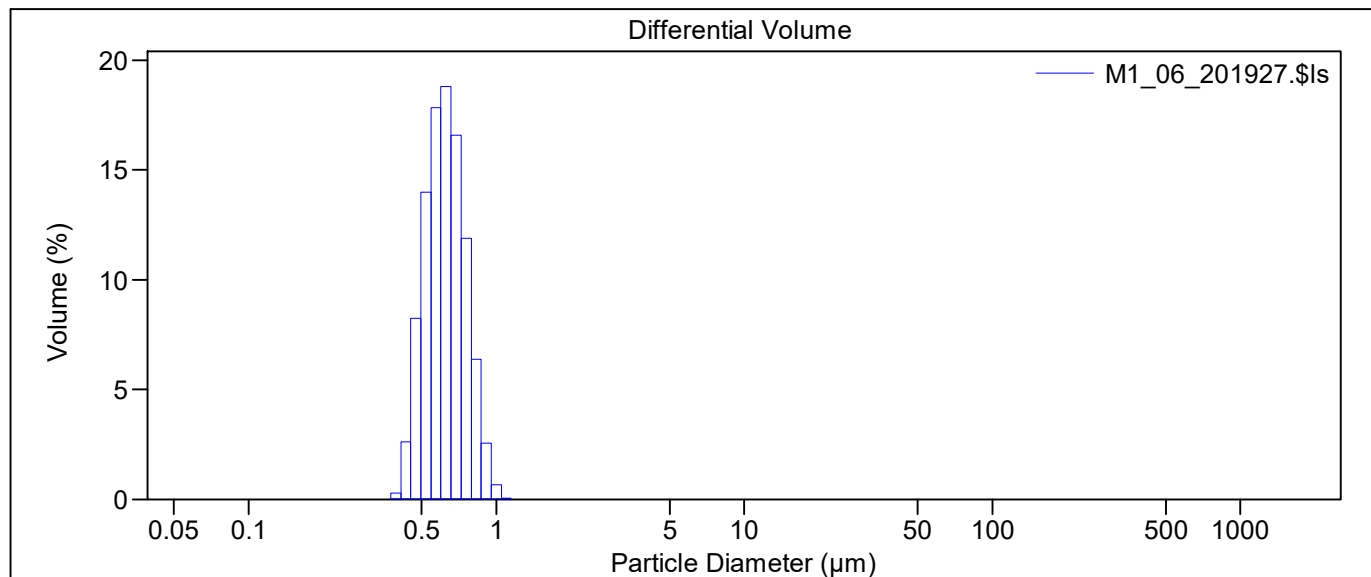
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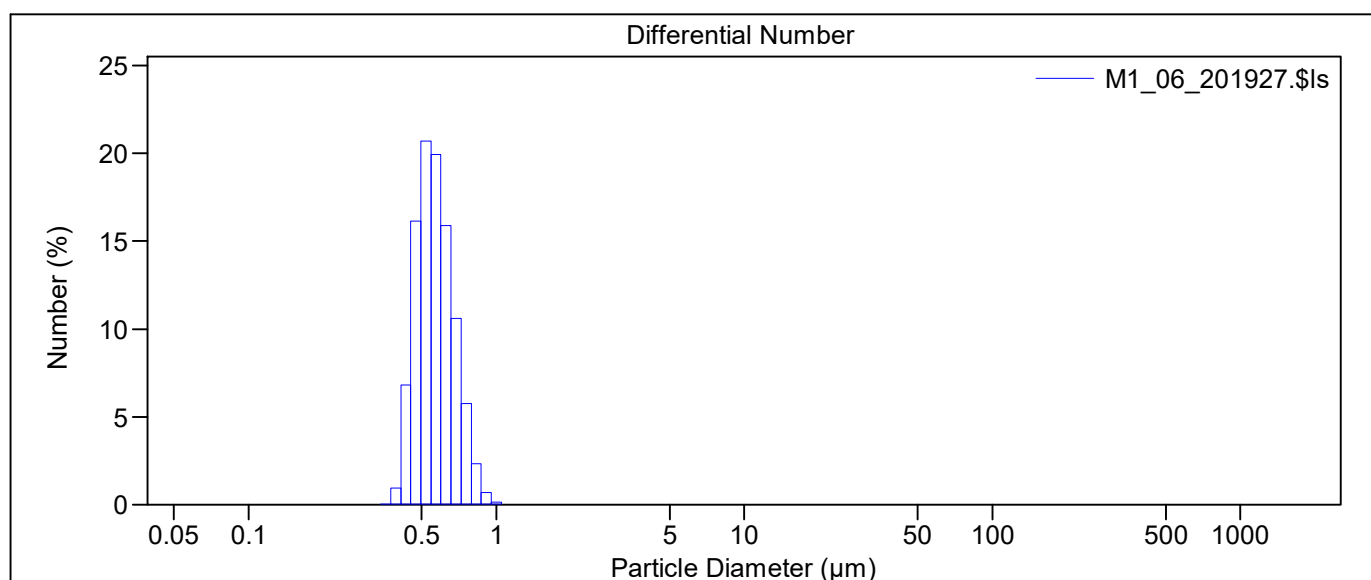
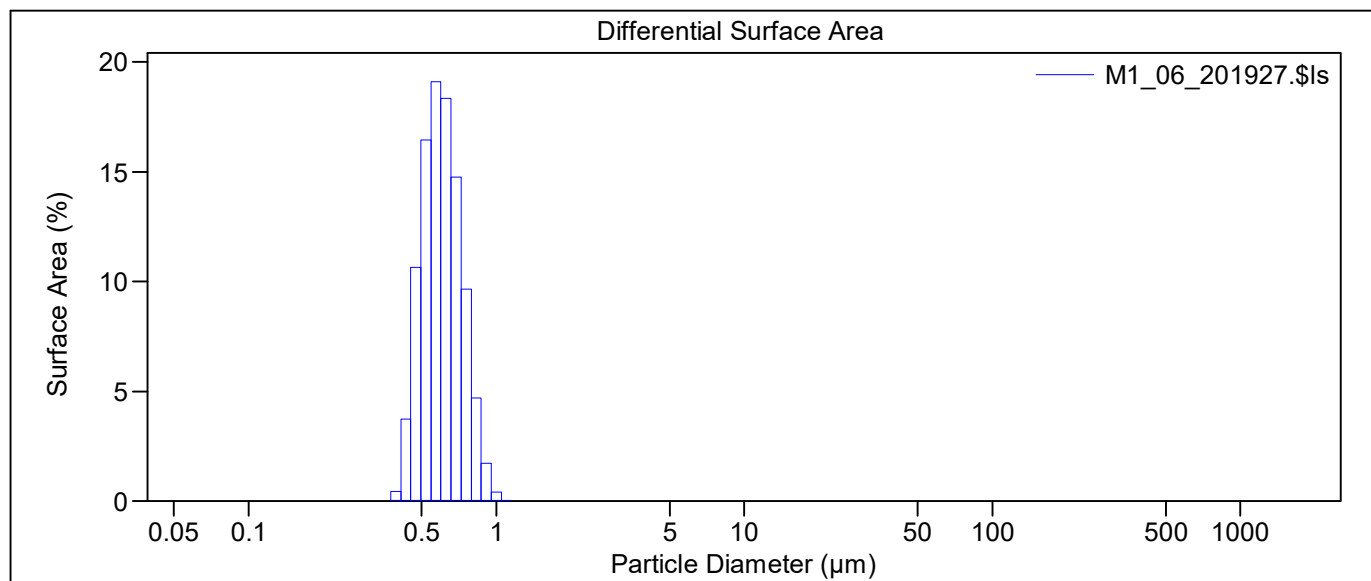
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_06_201927.\$ls		
	M1_06_201927.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.33%		
LS 13 320	Universal Liquid Module		
Start time:	20:17 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_06_201927.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.116 μm
Mean:	0.632 μm		Variance:	0.014 μm ²
Median:	0.620 μm		C.V.:	18.4%
Mean/Median ratio:	1.019		Skewness:	0.562 Right skewed
Mode:	0.627 μm		Kurtosis:	0.063 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.490 μm	0.544 μm	0.620 μm	0.708 μm	0.789 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0	0	0
23	0.311	0.326	0	0	0
24	0.342	0.358	0.0057	0.0097	0.026
25	0.375	0.393	0.28	0.44	0.96
26	0.412	0.431	2.63	3.73	6.82
27	0.452	0.474	8.25	10.6	16.1
28	0.496	0.520	14.0	16.5	20.7
29	0.545	0.571	17.8	19.1	19.9
30	0.598	0.627	18.8	18.3	15.9
31	0.656	0.688	16.6	14.7	10.6
32	0.721	0.755	11.9	9.64	5.75
33	0.791	0.829	6.38	4.70	2.33
34	0.868	0.910	2.57	1.73	0.71
35	0.953	0.999	0.68	0.41	0.14
36	1.047	1.097	0.069	0.038	0.011
37	1.149	1.204	0.0014	0.00073	0.00017
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

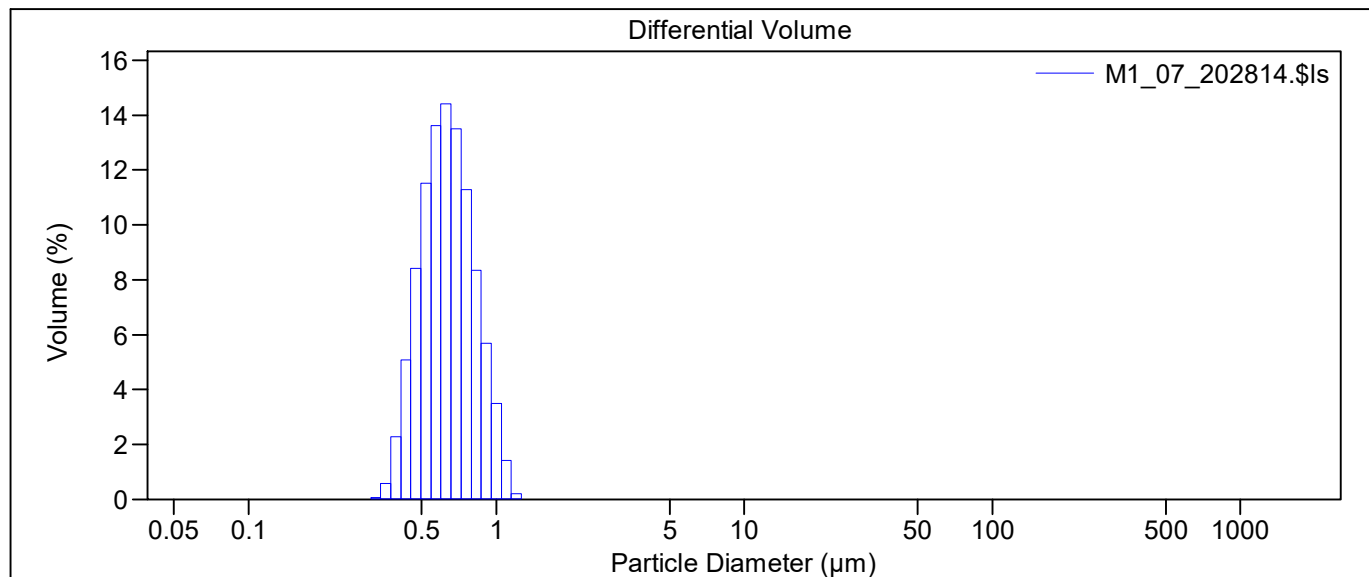
M1.\$av

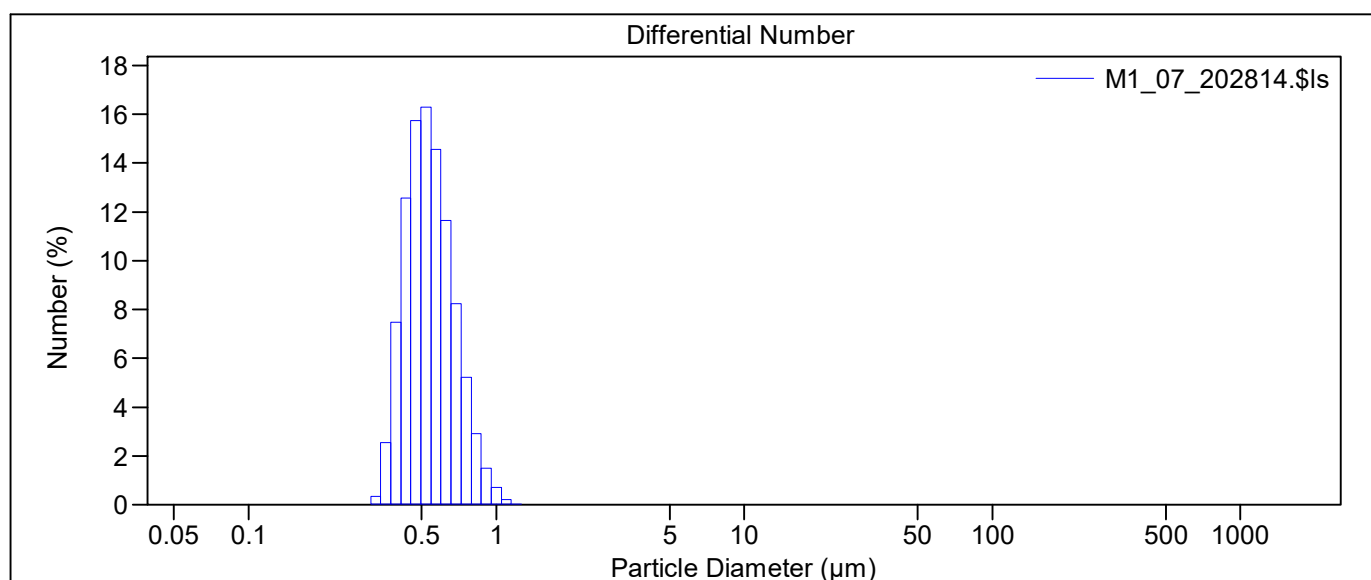
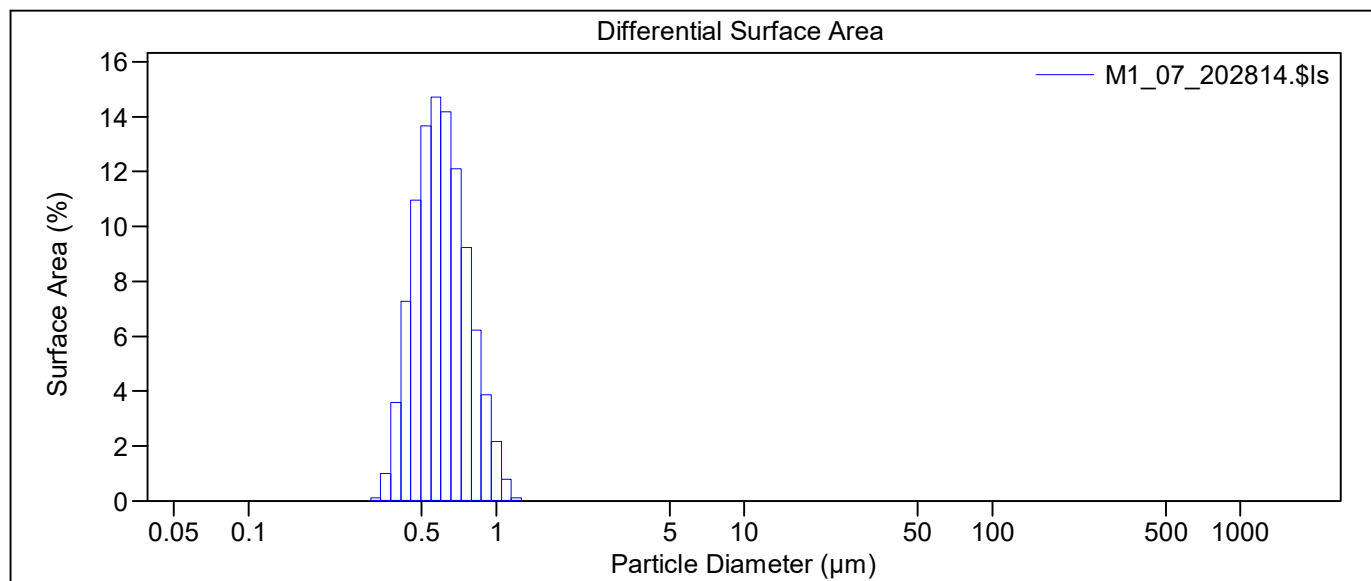
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_07_202814.\$ls		
	M1_07_202814.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.82%		
LS 13 320	Universal Liquid Module		
Start time:	20:26 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_07_202814.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.160 μm
Mean:	0.654 μm		Variance:	0.026 μm ²
Median:	0.632 μm		C.V.:	24.5%
Mean/Median ratio:	1.034		Skewness:	0.630 Right skewed
Mode:	0.627 μm		Kurtosis:	0.025 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.462 μm	0.532 μm	0.632 μm	0.755 μm	0.881 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0015	0.0032	0.012
23	0.311	0.326	0.060	0.11	0.34
24	0.342	0.358	0.59	1.01	2.55
25	0.375	0.393	2.29	3.59	7.48
26	0.412	0.431	5.09	7.27	12.6
27	0.452	0.474	8.43	11.0	15.8
28	0.496	0.520	11.5	13.7	16.3
29	0.545	0.571	13.6	14.7	14.6
30	0.598	0.627	14.4	14.2	11.6
31	0.656	0.688	13.5	12.1	8.24
32	0.721	0.755	11.3	9.23	5.21
33	0.791	0.829	8.36	6.22	2.92
34	0.868	0.910	5.70	3.86	1.50
35	0.953	0.999	3.50	2.16	0.70
36	1.047	1.097	1.42	0.80	0.21
37	1.149	1.204	0.21	0.11	0.024
38	1.261	1.321	0.0081	0.0038	0.00070
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

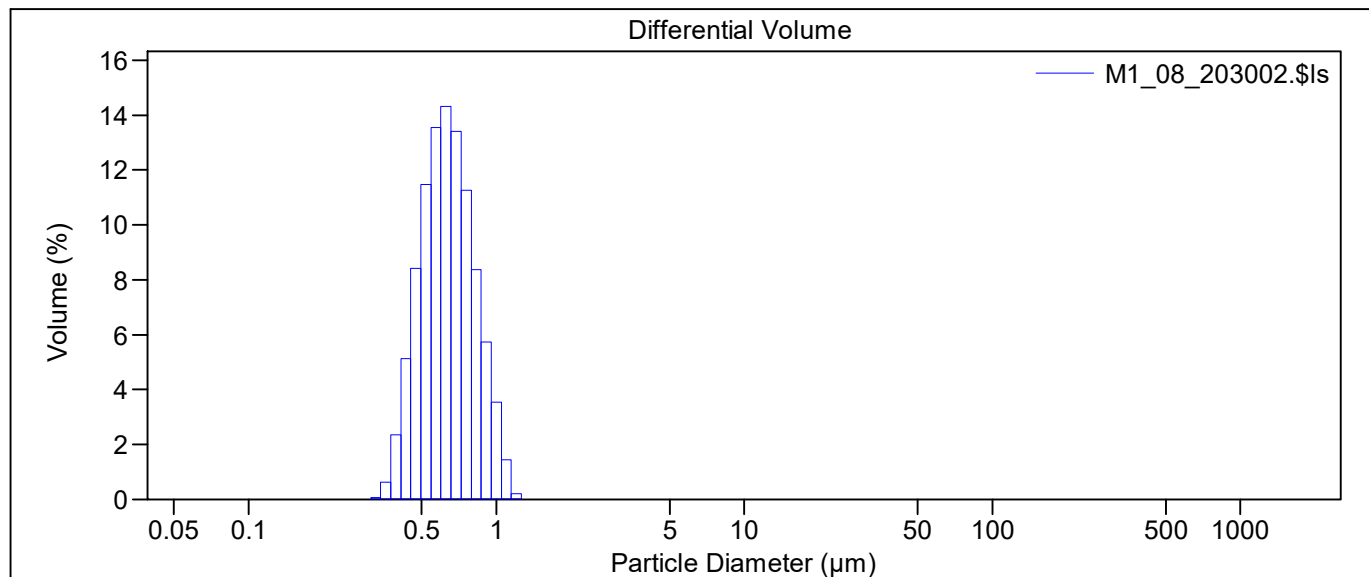
M1.\$av

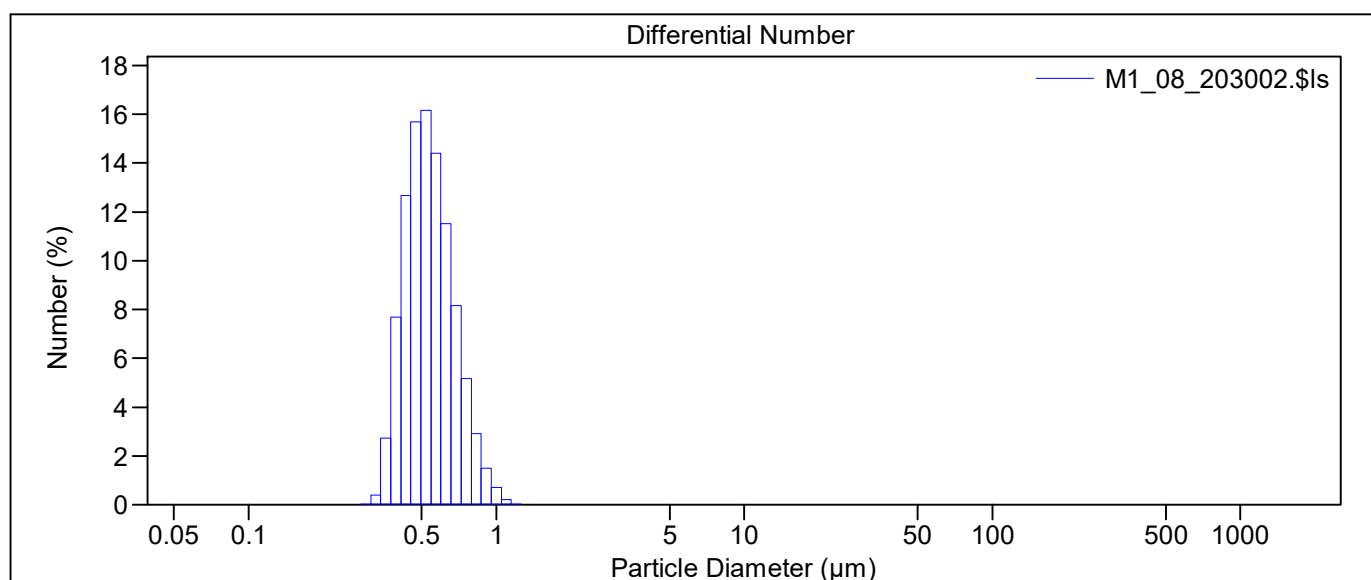
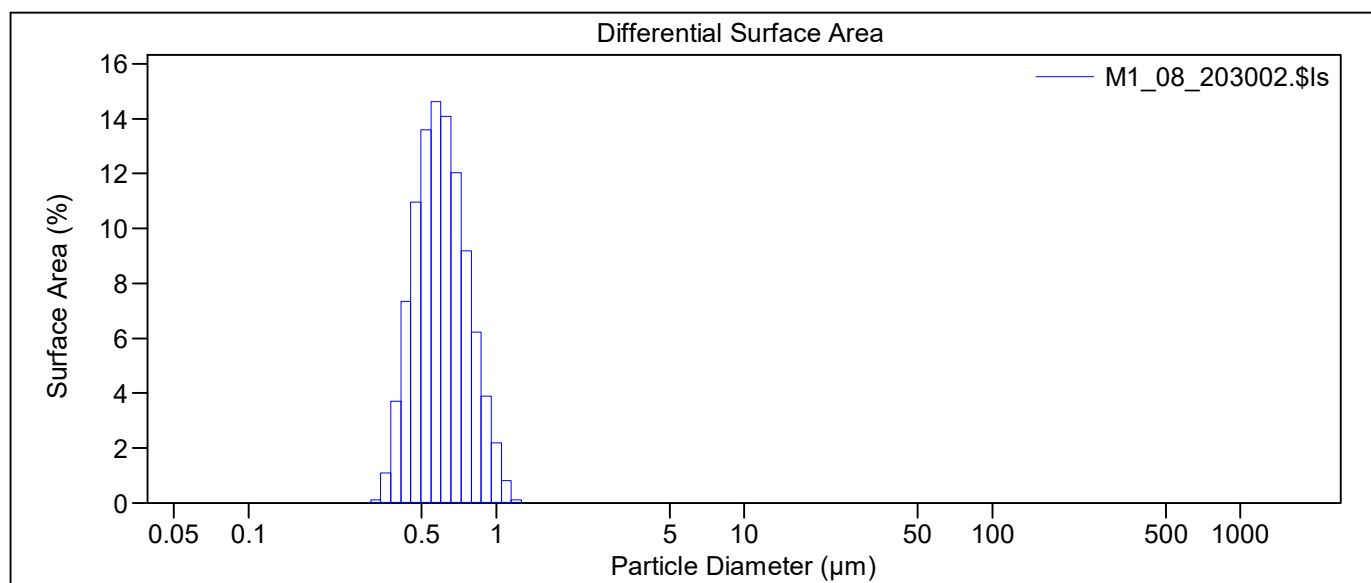
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_08_203002.\$ls		
	M1_08_203002.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.80%		
LS 13 320	Universal Liquid Module		
Start time:	20:28 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_08_203002.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.161 μm
Mean:	0.654 μm		Variance:	0.026 μm ²
Median:	0.632 μm		C.V.:	24.7%
Mean/Median ratio:	1.034		Skewness:	0.626 Right skewed
Mode:	0.627 μm		Kurtosis:	0.011 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.461 μm	0.532 μm	0.632 μm	0.756 μm	0.883 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0018	0.0038	0.014
23	0.311	0.326	0.068	0.13	0.39
24	0.342	0.358	0.63	1.09	2.73
25	0.375	0.393	2.36	3.70	7.70
26	0.412	0.431	5.14	7.34	12.7
27	0.452	0.474	8.43	11.0	15.7
28	0.496	0.520	11.5	13.6	16.2
29	0.545	0.571	13.5	14.6	14.4
30	0.598	0.627	14.3	14.1	11.5
31	0.656	0.688	13.4	12.0	8.16
32	0.721	0.755	11.3	9.19	5.18
33	0.791	0.829	8.38	6.23	2.91
34	0.868	0.910	5.74	3.89	1.51
35	0.953	0.999	3.55	2.19	0.70
36	1.047	1.097	1.45	0.81	0.22
37	1.149	1.204	0.22	0.11	0.025
38	1.261	1.321	0.0083	0.0039	0.00071
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

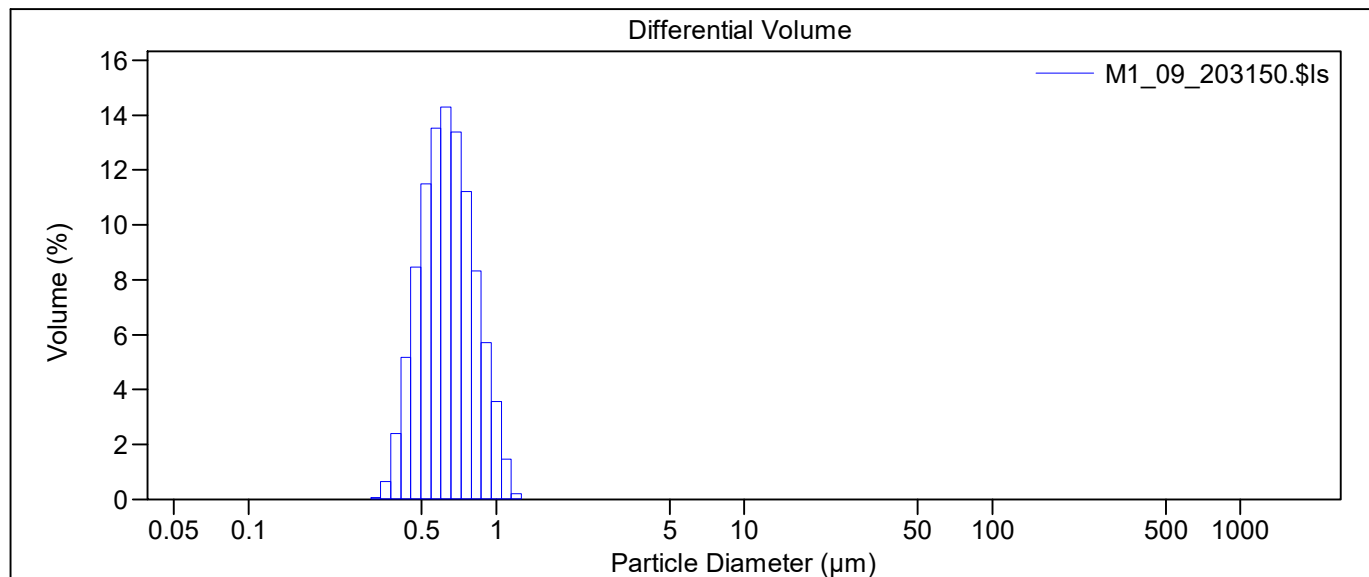
M1.\$av

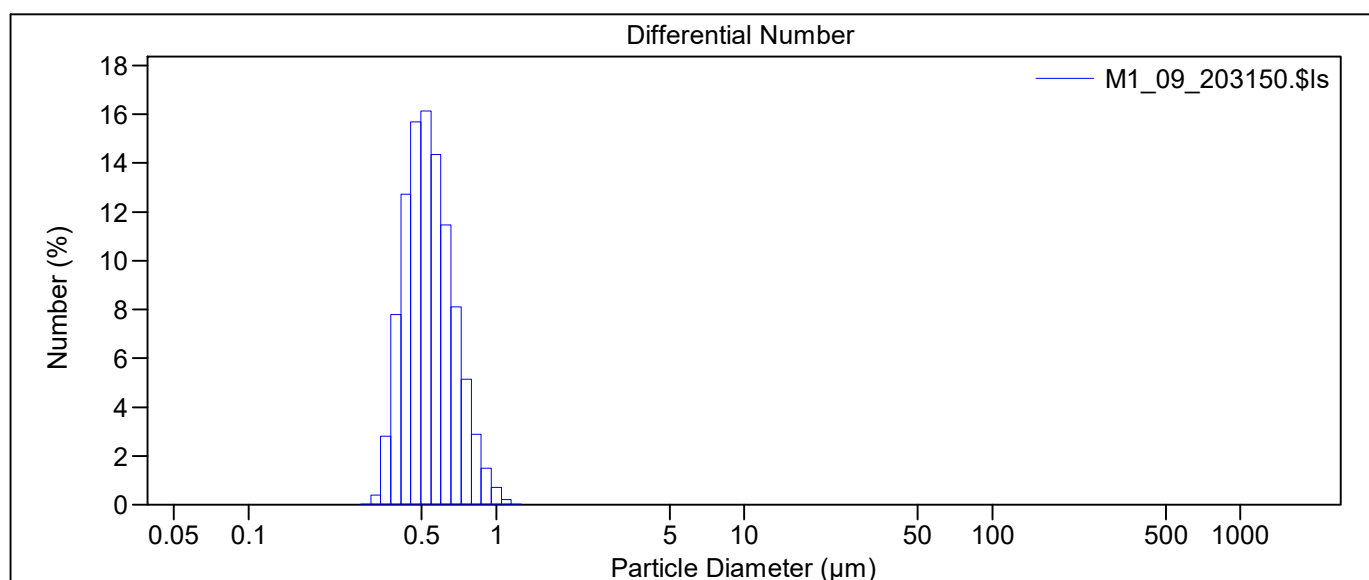
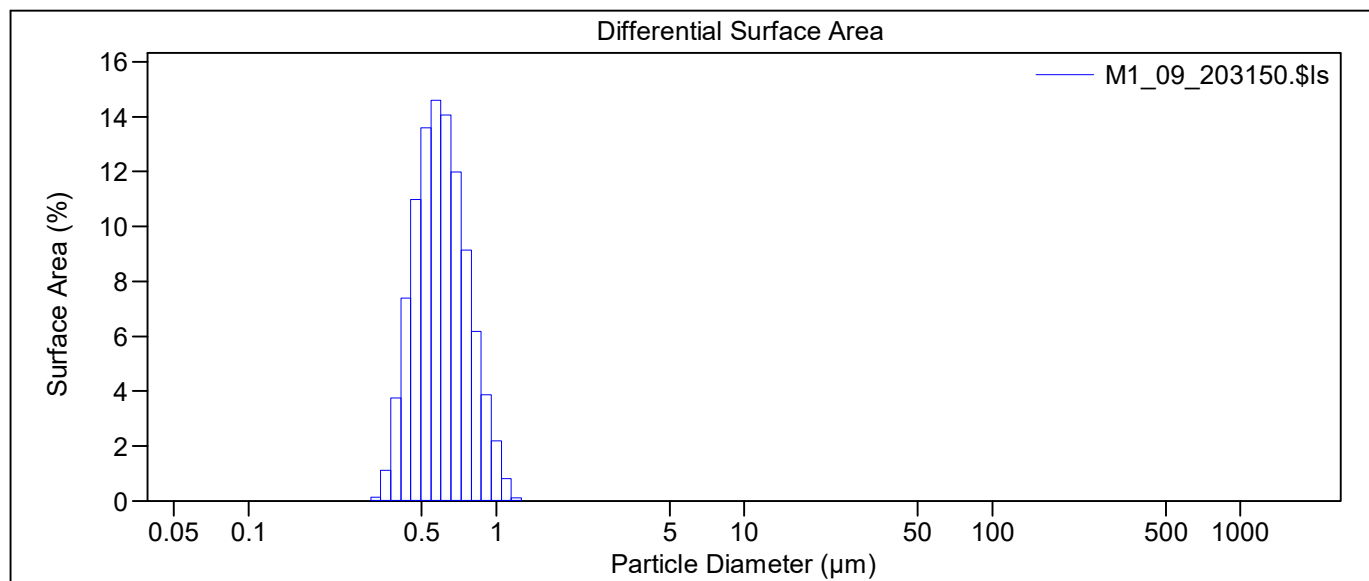
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_09_203150.\$ls		
	M1_09_203150.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.80%		
LS 13 320	Universal Liquid Module		
Start time:	20:30 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_09_203150.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.162 μm
Mean:	0.653 μm		Variance:	0.026 μm ²
Median:	0.632 μm		C.V.:	24.7%
Mean/Median ratio:	1.034		Skewness:	0.630 Right skewed
Mode:	0.627 μm		Kurtosis:	0.018 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.461 μm	0.531 μm	0.632 μm	0.755 μm	0.883 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0020	0.0041	0.015
23	0.311	0.326	0.071	0.13	0.40
24	0.342	0.358	0.65	1.12	2.81
25	0.375	0.393	2.40	3.76	7.80
26	0.412	0.431	5.18	7.39	12.7
27	0.452	0.474	8.46	11.0	15.7
28	0.496	0.520	11.5	13.6	16.1
29	0.545	0.571	13.5	14.6	14.4
30	0.598	0.627	14.3	14.1	11.5
31	0.656	0.688	13.4	12.0	8.12
32	0.721	0.755	11.2	9.15	5.14
33	0.791	0.829	8.33	6.19	2.89
34	0.868	0.910	5.72	3.87	1.50
35	0.953	0.999	3.56	2.19	0.70
36	1.047	1.097	1.47	0.82	0.22
37	1.149	1.204	0.22	0.11	0.025
38	1.261	1.321	0.0086	0.0040	0.00073
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

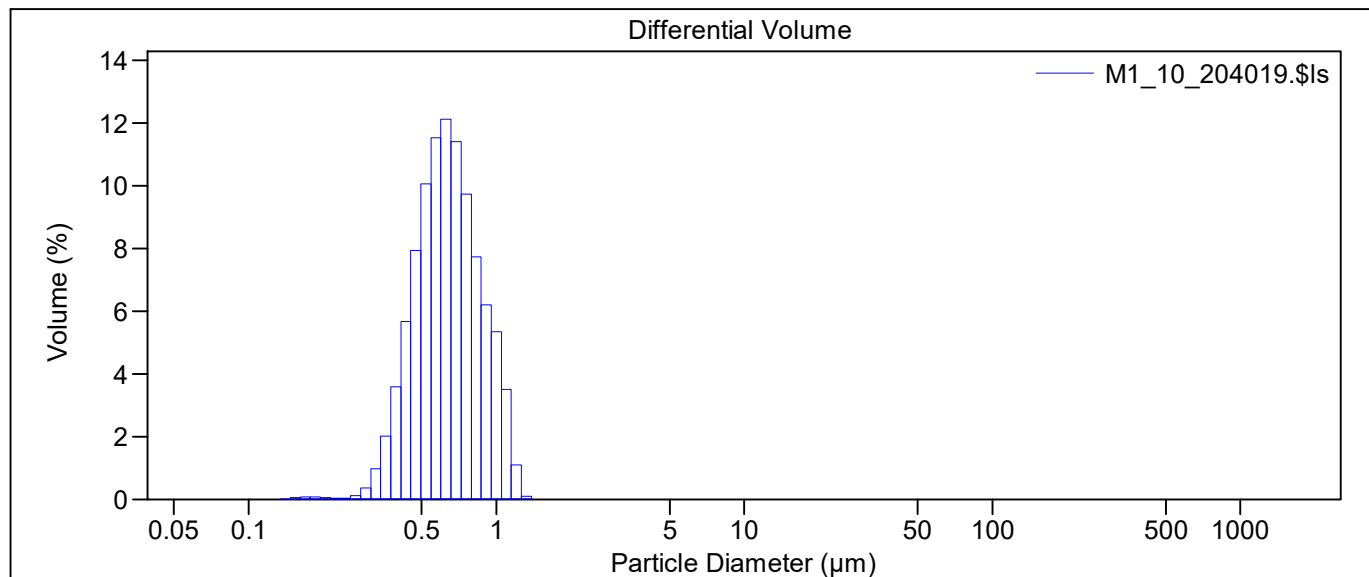
M1.\$av

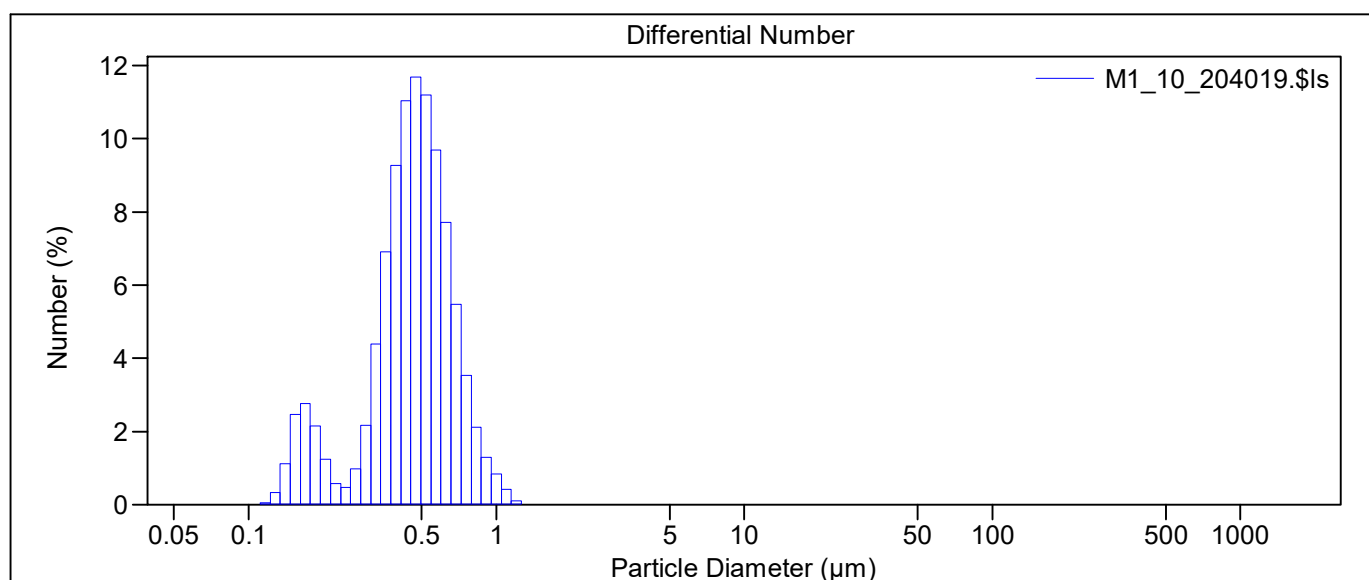
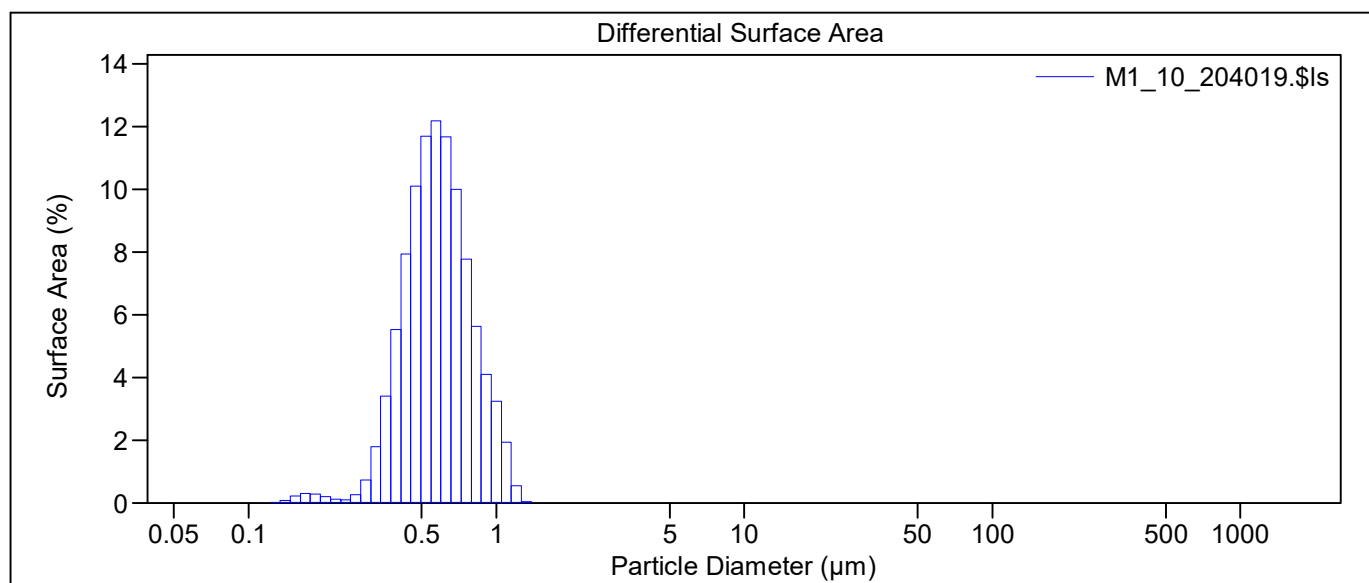
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_10_204019.\$ls		
	M1_10_204019.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.64%		
LS 13 320	Universal Liquid Module		
Start time:	20:38 1	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_10_204019.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%			
Mean:	0.662 µm	S.D.:	0.199 µm	
Median:	0.633 µm	Variance:	0.039 µm ²	
Mean/Median ratio:	1.046	C.V.:	30.0%	
Mode:	0.627 µm	Skewness:	0.563 Right skewed	
		Kurtosis:	-0.112 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.429 µm	0.515 µm	0.633 µm	0.784 µm	0.955 µm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0.000014	0.000077	0.0017
12	0.112	0.117	0.00049	0.0026	0.048
13	0.122	0.128	0.0045	0.021	0.33
14	0.134	0.141	0.020	0.085	1.11
15	0.148	0.155	0.058	0.23	2.47
16	0.162	0.170	0.086	0.31	2.76
17	0.178	0.186	0.089	0.29	2.14

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.068	0.20	1.24
19	0.214	0.225	0.042	0.11	0.58
20	0.235	0.247	0.046	0.11	0.48
21	0.258	0.271	0.12	0.27	0.97
22	0.284	0.297	0.36	0.74	2.18
23	0.311	0.326	0.98	1.80	4.40
24	0.342	0.358	2.03	3.42	6.91
25	0.375	0.393	3.60	5.53	9.28
26	0.412	0.431	5.67	7.93	11.0
27	0.452	0.474	7.94	10.1	11.7
28	0.496	0.520	10.1	11.7	11.2
29	0.545	0.571	11.5	12.2	9.70
30	0.598	0.627	12.1	11.7	7.71
31	0.656	0.688	11.4	10.0	5.48
32	0.721	0.755	9.73	7.77	3.53
33	0.791	0.829	7.74	5.63	2.12
34	0.868	0.910	6.20	4.11	1.29
35	0.953	0.999	5.36	3.23	0.84
36	1.047	1.097	3.52	1.94	0.42
37	1.149	1.204	1.10	0.55	0.098
38	1.261	1.321	0.11	0.049	0.0073
39	1.385	1.451	0.0020	0.00082	0.00010
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

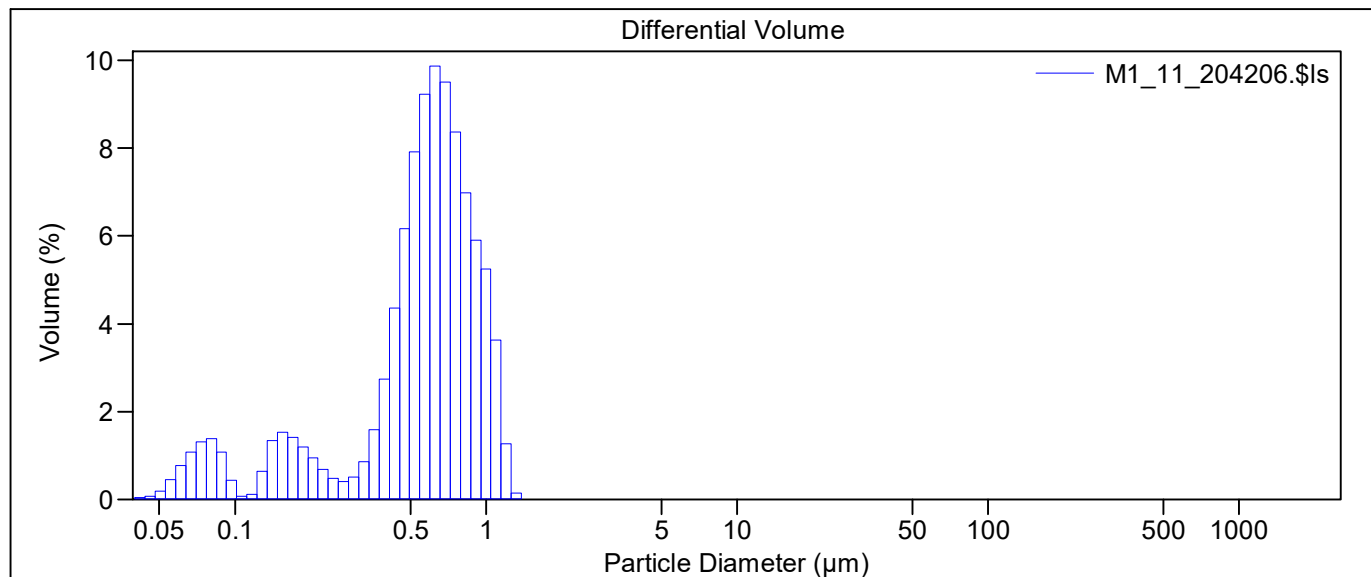
M1.\$av

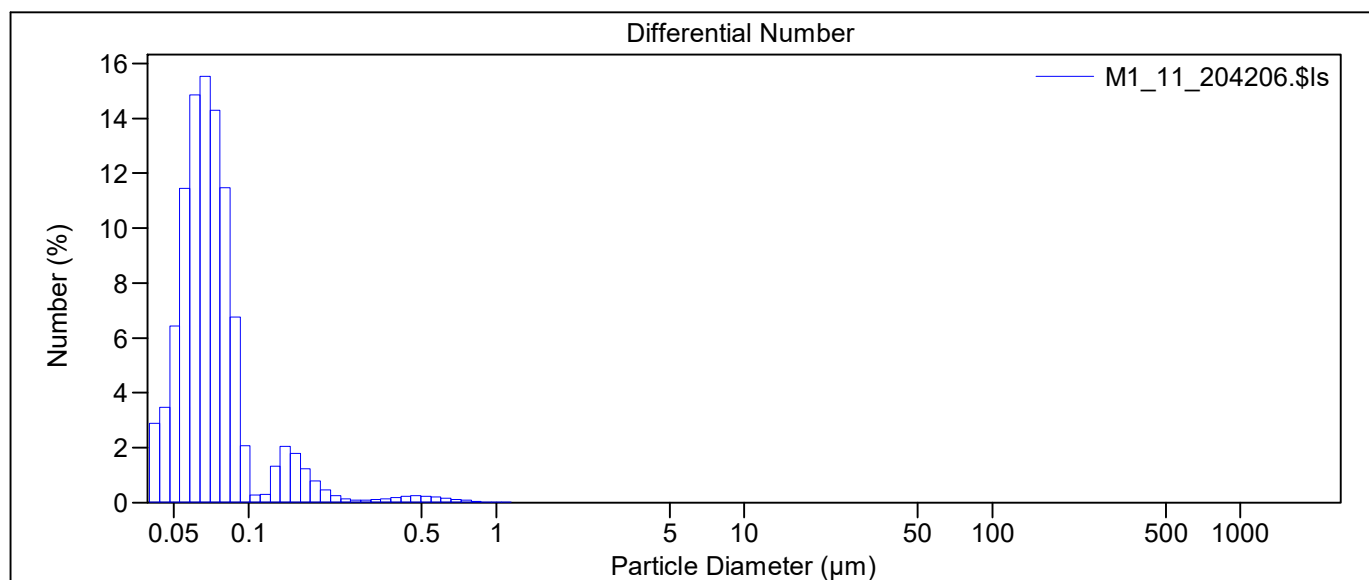
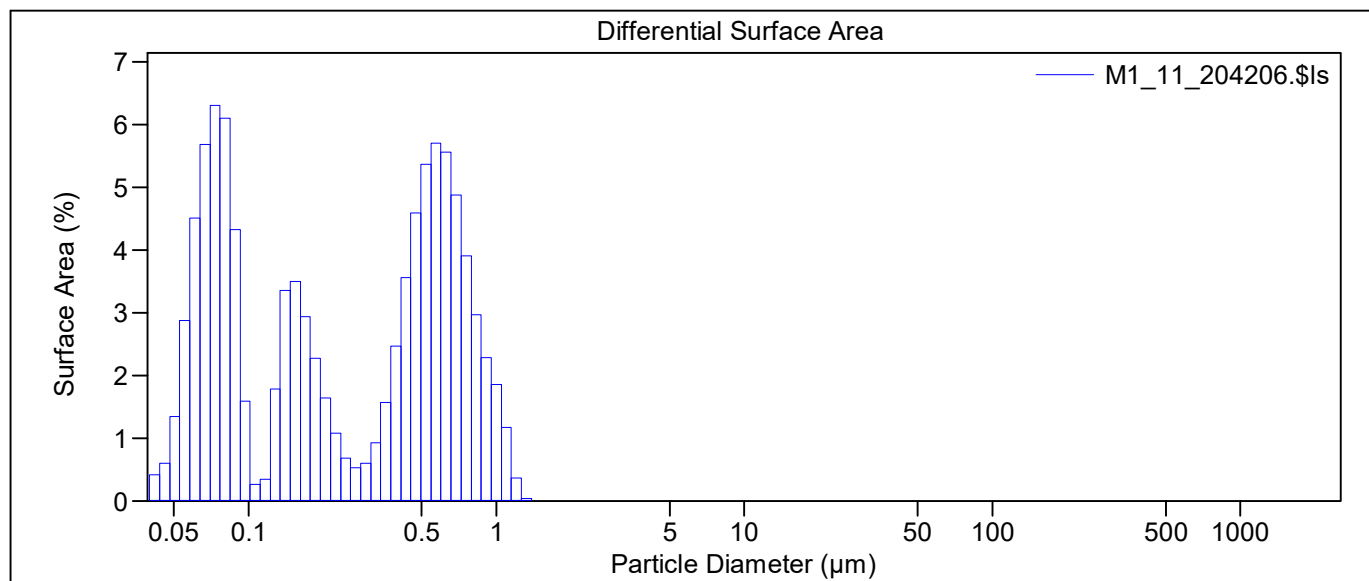
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_11_204206.\$ls		
	M1_11_204206.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.57%		
LS 13 320	Universal Liquid Module		
Start time:	20:40 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_11_204206.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.275 μm
Mean:	0.595 μm		Variance:	0.076 μm ²
Median:	0.604 μm		C.V.:	46.3%
Mean/Median ratio:	0.986		Skewness:	-0.132 Left skewed
Mode:	0.627 μm		Kurtosis:	-0.418 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.157 μm	0.445 μm	0.604 μm	0.776 μm	0.958 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.049	0.42	2.89
2	0.044	0.046	0.079	0.60	3.48
3	0.048	0.050	0.19	1.35	6.44
4	0.053	0.055	0.45	2.88	11.4
5	0.058	0.061	0.78	4.51	14.9
6	0.064	0.067	1.08	5.68	15.5
7	0.070	0.073	1.31	6.30	14.3
8	0.077	0.080	1.39	6.10	11.5
9	0.084	0.088	1.08	4.33	6.76
10	0.093	0.097	0.44	1.59	2.07
11	0.102	0.106	0.079	0.26	0.28
12	0.112	0.117	0.11	0.35	0.31
13	0.122	0.128	0.65	1.78	1.32
14	0.134	0.141	1.34	3.35	2.06
15	0.148	0.155	1.54	3.50	1.79
16	0.162	0.170	1.41	2.94	1.24
17	0.178	0.186	1.20	2.28	0.80

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.95	1.64	0.48
19	0.214	0.225	0.69	1.08	0.26
20	0.235	0.247	0.48	0.69	0.14
21	0.258	0.271	0.41	0.53	0.088
22	0.284	0.297	0.51	0.60	0.083
23	0.311	0.326	0.86	0.93	0.11
24	0.342	0.358	1.59	1.57	0.15
25	0.375	0.393	2.75	2.47	0.19
26	0.412	0.431	4.35	3.56	0.23
27	0.452	0.474	6.16	4.59	0.25
28	0.496	0.520	7.92	5.37	0.24
29	0.545	0.571	9.23	5.70	0.21
30	0.598	0.627	9.87	5.56	0.17
31	0.656	0.688	9.51	4.88	0.13
32	0.721	0.755	8.37	3.91	0.084
33	0.791	0.829	6.99	2.97	0.053
34	0.868	0.910	5.90	2.29	0.034
35	0.953	0.999	5.24	1.85	0.023
36	1.047	1.097	3.63	1.17	0.012
37	1.149	1.204	1.27	0.37	0.0031
38	1.261	1.321	0.14	0.037	0.00026
39	1.385	1.451	0.0029	0.00069	0.000004
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

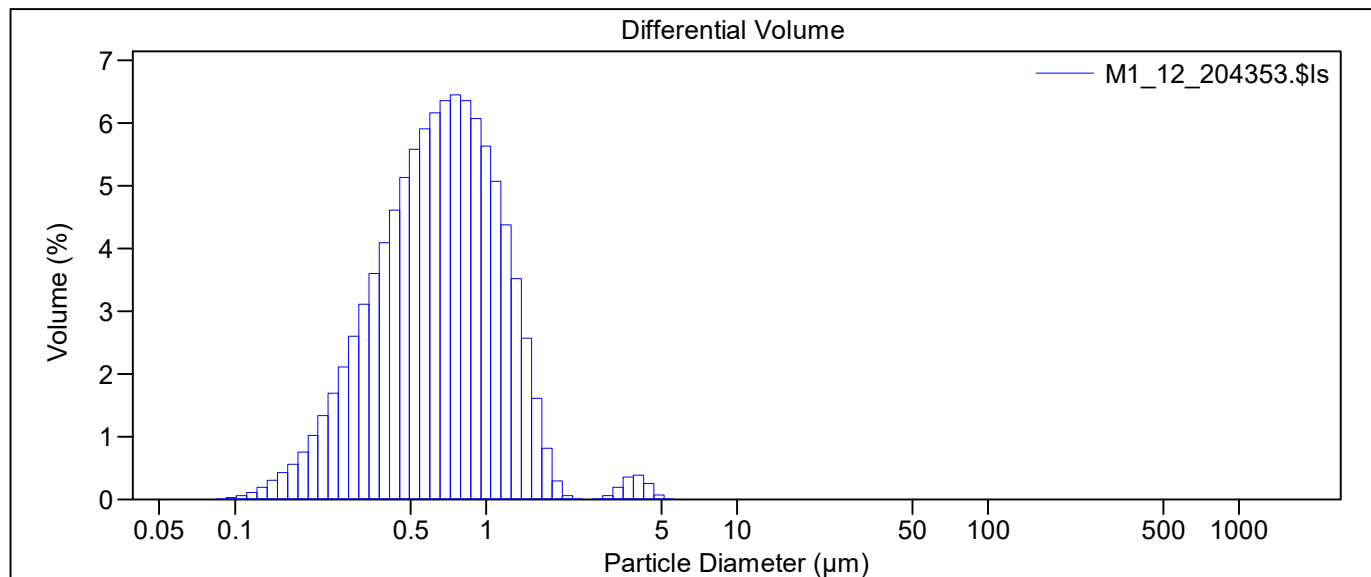
M1.\$av

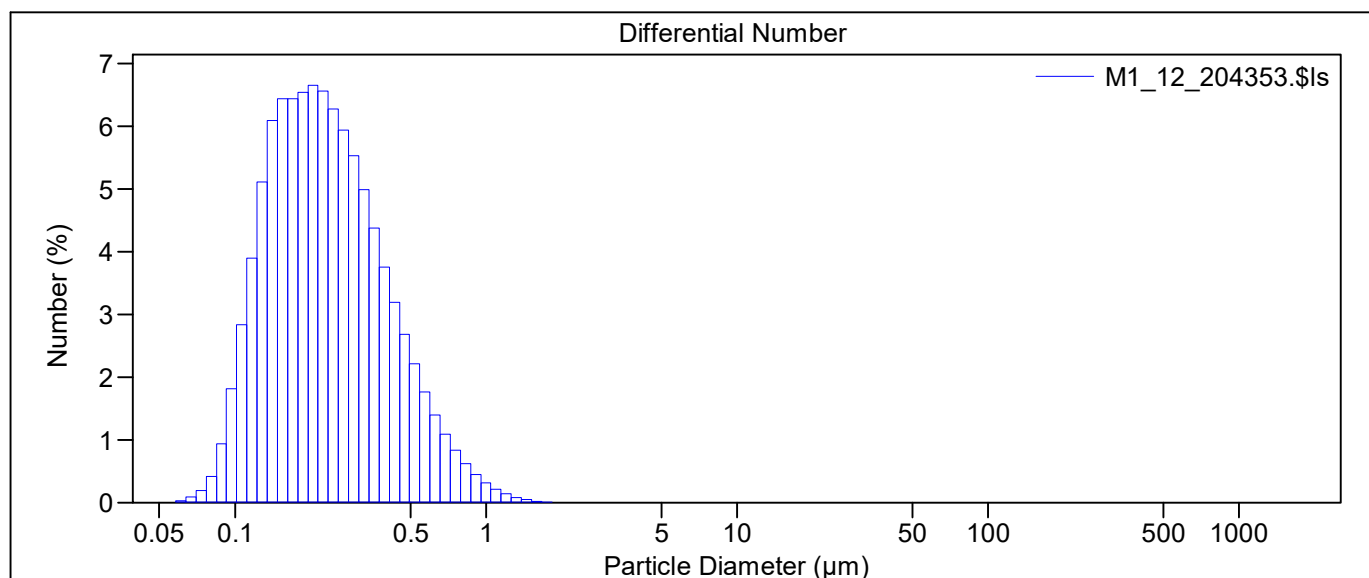
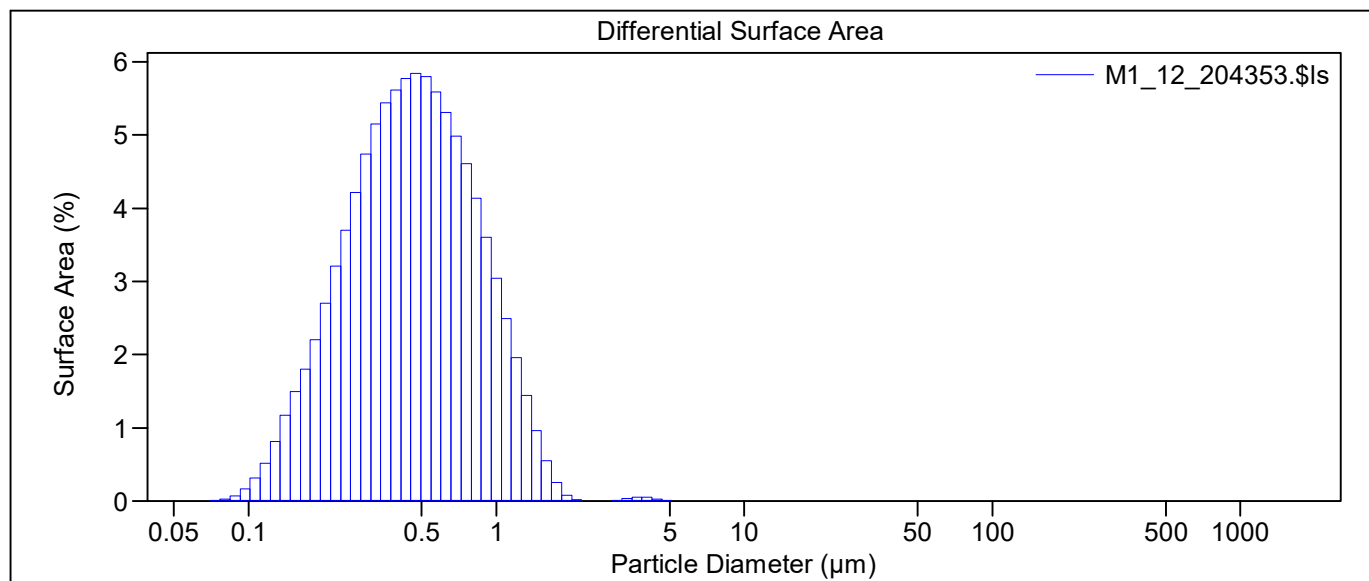
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_12_204353.\$ls		
	M1_12_204353.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.77%		
LS 13 320	Universal Liquid Module		
Start time:	20:42 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	10%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_12_204353.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.519 μm
Mean:	0.760 μm		Variance:	0.269 μm ²
Median:	0.662 μm		C.V.:	68.2%
Mean/Median ratio:	1.148		Skewness:	3.388 Right skewed
Mode:	0.755 μm		Kurtosis:	18.91 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.298 μm	0.438 μm	0.662 μm	0.959 μm	1.270 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	7.48E-8	0.000001	0.000032
4	0.053	0.055	0.000009	0.000092	0.0031
5	0.058	0.061	0.00011	0.00100	0.028
6	0.064	0.067	0.00050	0.0041	0.094
7	0.070	0.073	0.0014	0.010	0.20
8	0.077	0.080	0.0039	0.026	0.42
9	0.084	0.088	0.012	0.071	0.94
10	0.093	0.097	0.030	0.17	1.81
11	0.102	0.106	0.061	0.31	2.83
12	0.112	0.117	0.11	0.52	3.89
13	0.122	0.128	0.19	0.82	5.11
14	0.134	0.141	0.31	1.17	6.09
15	0.148	0.155	0.43	1.49	6.44
16	0.162	0.170	0.57	1.80	6.44
17	0.178	0.186	0.76	2.20	6.54

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.02	2.70	6.66
19	0.214	0.225	1.34	3.21	6.56
20	0.235	0.247	1.69	3.70	6.28
21	0.258	0.271	2.11	4.21	5.93
22	0.284	0.297	2.61	4.74	5.53
23	0.311	0.326	3.11	5.15	4.99
24	0.342	0.358	3.61	5.44	4.38
25	0.375	0.393	4.09	5.62	3.75
26	0.412	0.431	4.61	5.77	3.20
27	0.452	0.474	5.13	5.85	2.69
28	0.496	0.520	5.58	5.80	2.21
29	0.545	0.571	5.91	5.59	1.77
30	0.598	0.627	6.16	5.31	1.39
31	0.656	0.688	6.35	4.99	1.09
32	0.721	0.755	6.45	4.61	0.83
33	0.791	0.829	6.35	4.14	0.62
34	0.868	0.910	6.07	3.60	0.45
35	0.953	0.999	5.64	3.05	0.31
36	1.047	1.097	5.07	2.50	0.21
37	1.149	1.204	4.38	1.96	0.14
38	1.261	1.321	3.52	1.44	0.085
39	1.385	1.451	2.58	0.96	0.047
40	1.520	1.592	1.62	0.55	0.022
41	1.668	1.748	0.82	0.25	0.0085
42	1.832	1.919	0.29	0.083	0.0023
43	2.011	2.107	0.064	0.016	0.00038
44	2.207	2.313	0.0073	0.0017	0.000033
45	2.423	2.539	0.0015	0.00032	0.000005
46	2.660	2.787	0.011	0.0021	0.000028
47	2.920	3.059	0.063	0.011	0.00012
48	3.205	3.358	0.20	0.032	0.00029
49	3.519	3.687	0.36	0.052	0.00040
50	3.863	4.047	0.38	0.051	0.00032
51	4.240	4.443	0.25	0.031	0.00016
52	4.655	4.877	0.072	0.0080	0.000035
53	5.110	5.354	0.010	0.0011	0.000004
54	5.610	5.878	0.00011	0.000010	2.92E-8
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

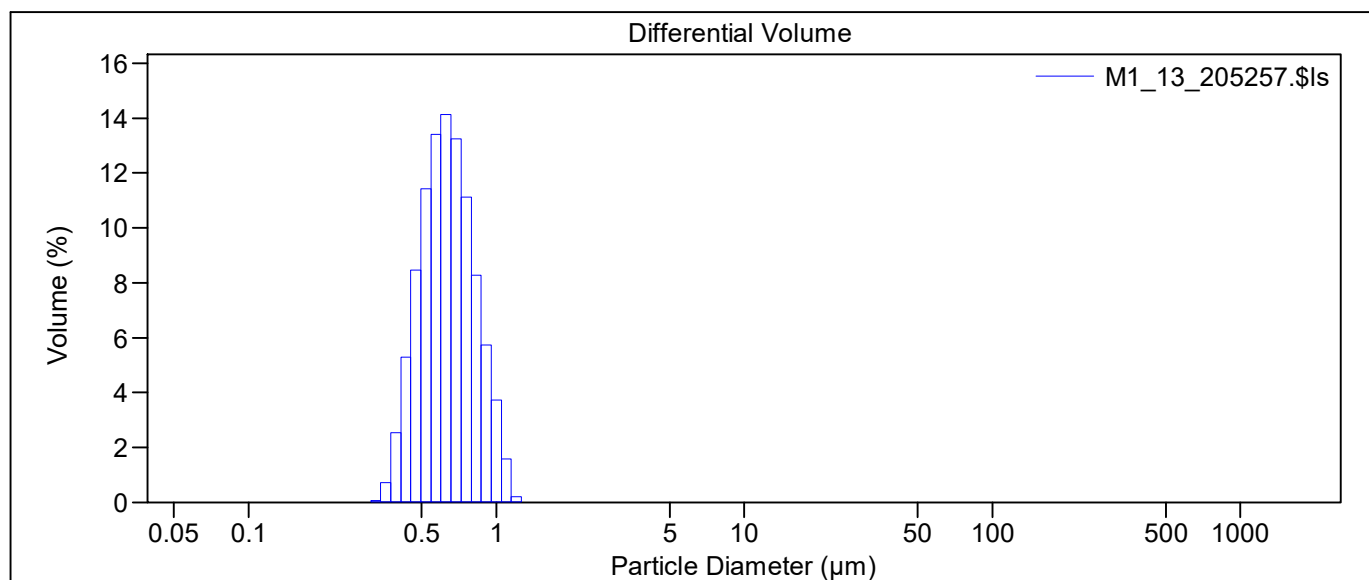
M1.\$av

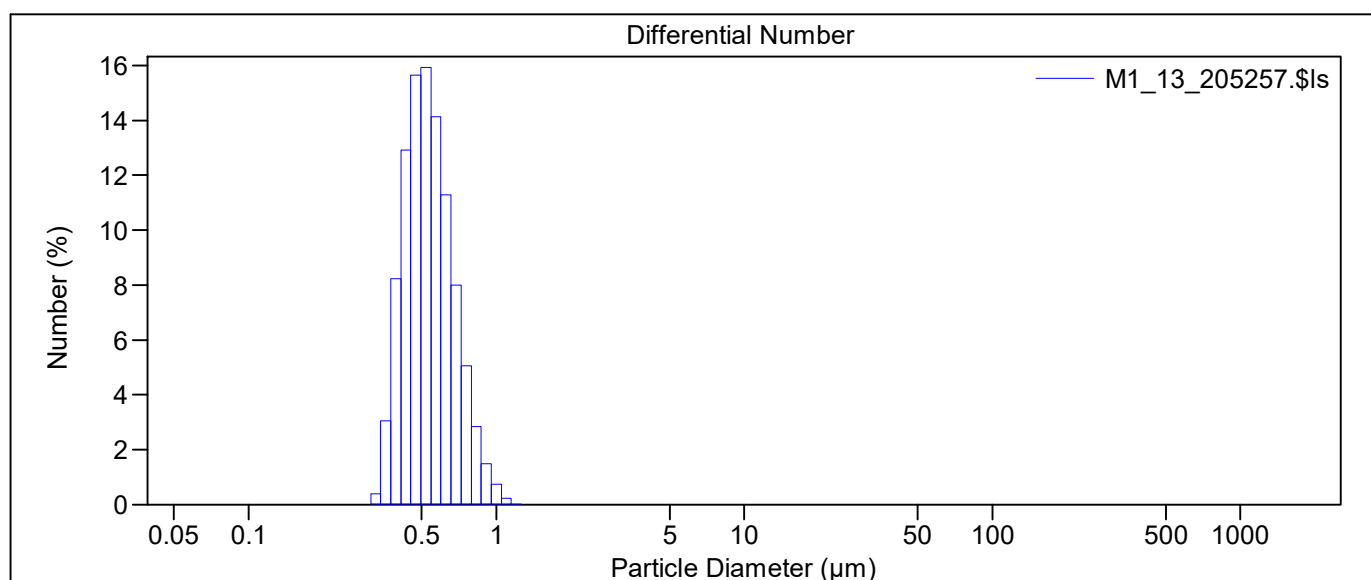
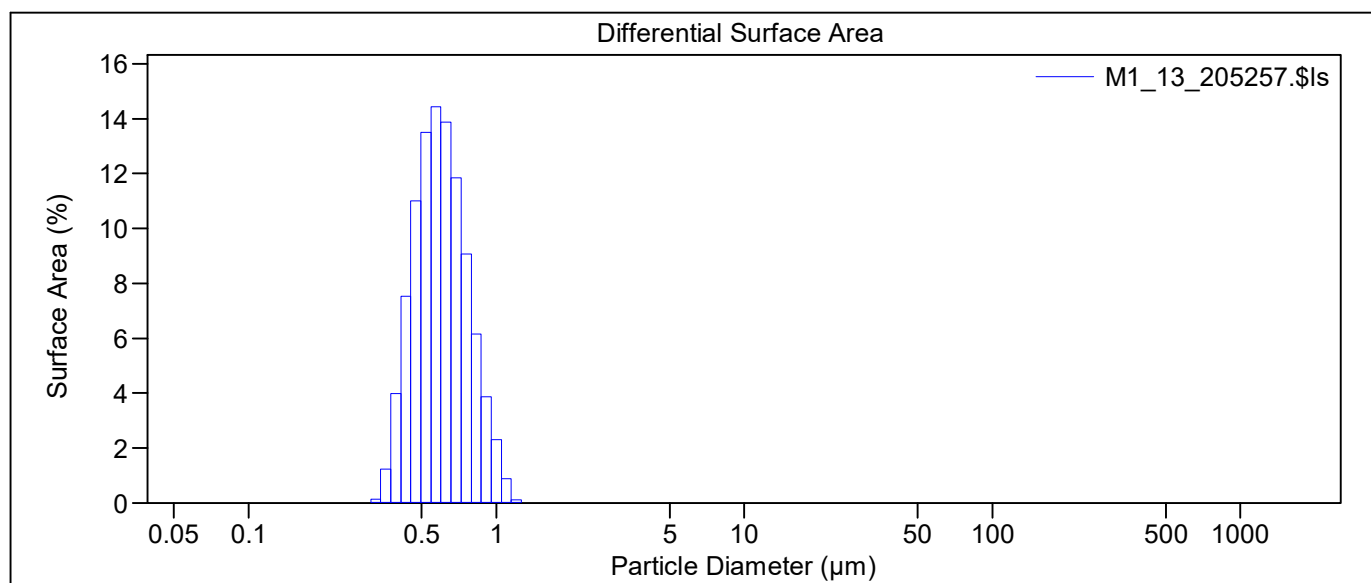
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_13_205257.\$ls		
	M1_13_205257.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.79%		
LS 13 320	Universal Liquid Module		
Start time:	20:51 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_13_205257.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.163 μm
Mean:	0.654 μm		Variance:	0.027 μm ²
Median:	0.631 μm		C.V.:	25.0%
Mean/Median ratio:	1.035		Skewness:	0.626 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.019 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.459 μm	0.530 μm	0.631 μm	0.757 μm	0.887 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0014	0.0029	0.011
23	0.311	0.326	0.071	0.13	0.40
24	0.342	0.358	0.72	1.23	3.06
25	0.375	0.393	2.55	3.99	8.23
26	0.412	0.431	5.29	7.54	12.9
27	0.452	0.474	8.47	11.0	15.6
28	0.496	0.520	11.4	13.5	15.9
29	0.545	0.571	13.4	14.4	14.1
30	0.598	0.627	14.1	13.9	11.3
31	0.656	0.688	13.3	11.9	7.99
32	0.721	0.755	11.1	9.07	5.07
33	0.791	0.829	8.28	6.15	2.85
34	0.868	0.910	5.73	3.88	1.49
35	0.953	0.999	3.74	2.30	0.74
36	1.047	1.097	1.58	0.89	0.23
37	1.149	1.204	0.21	0.11	0.024
38	1.261	1.321	0.0052	0.0024	0.00044
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

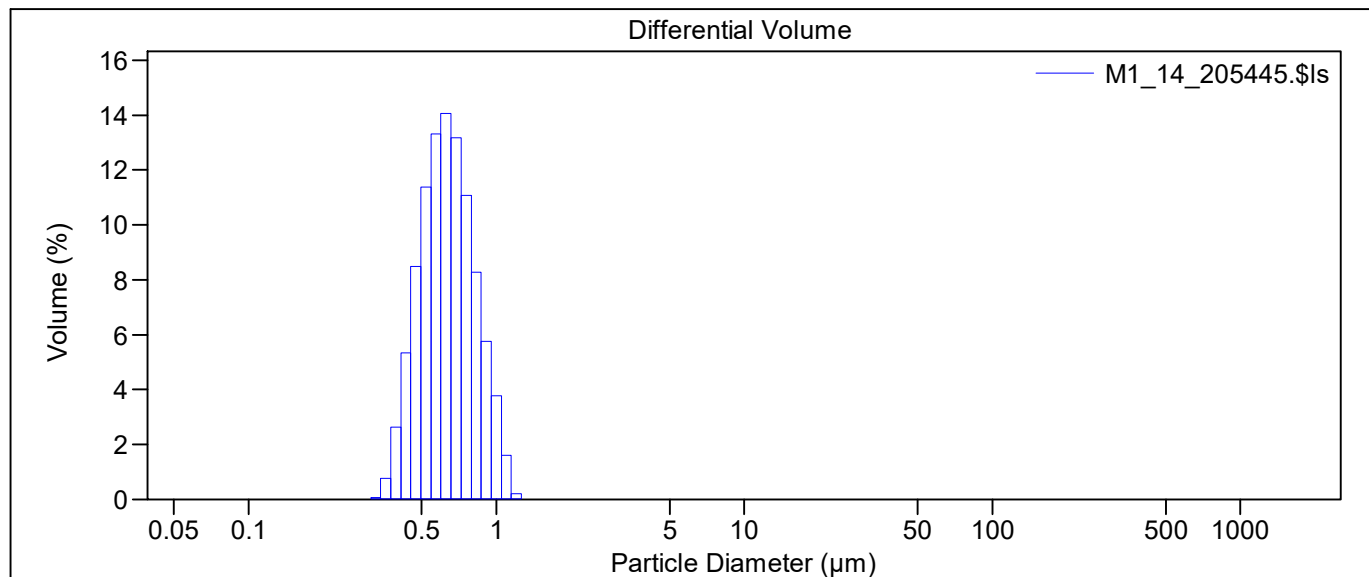
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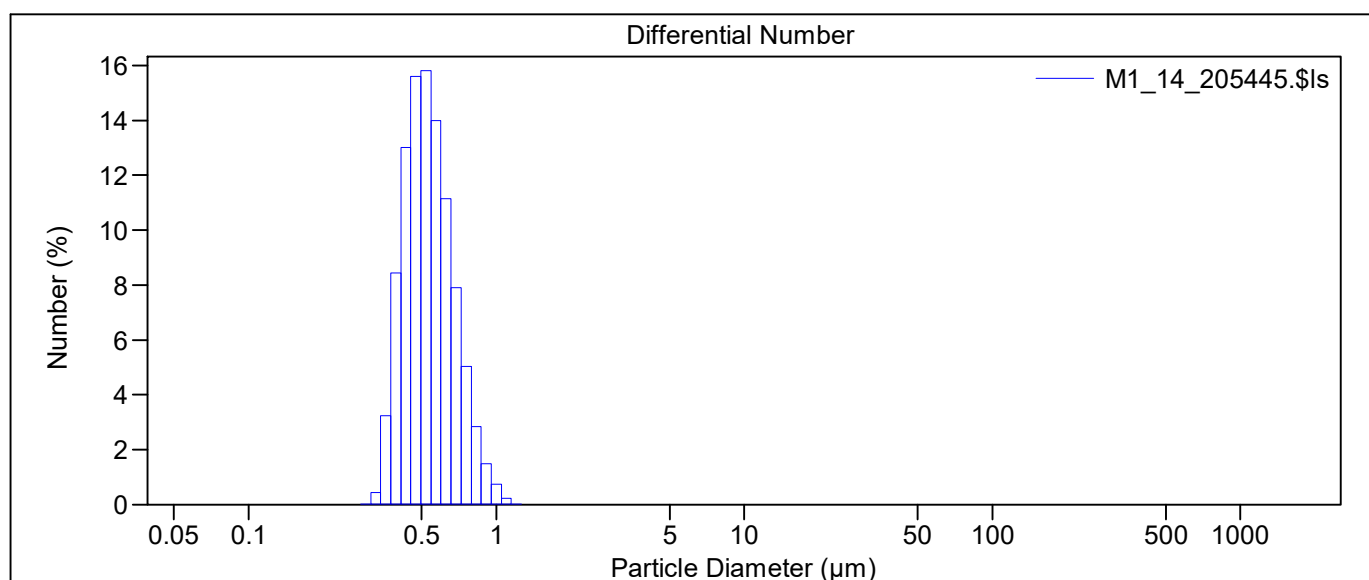
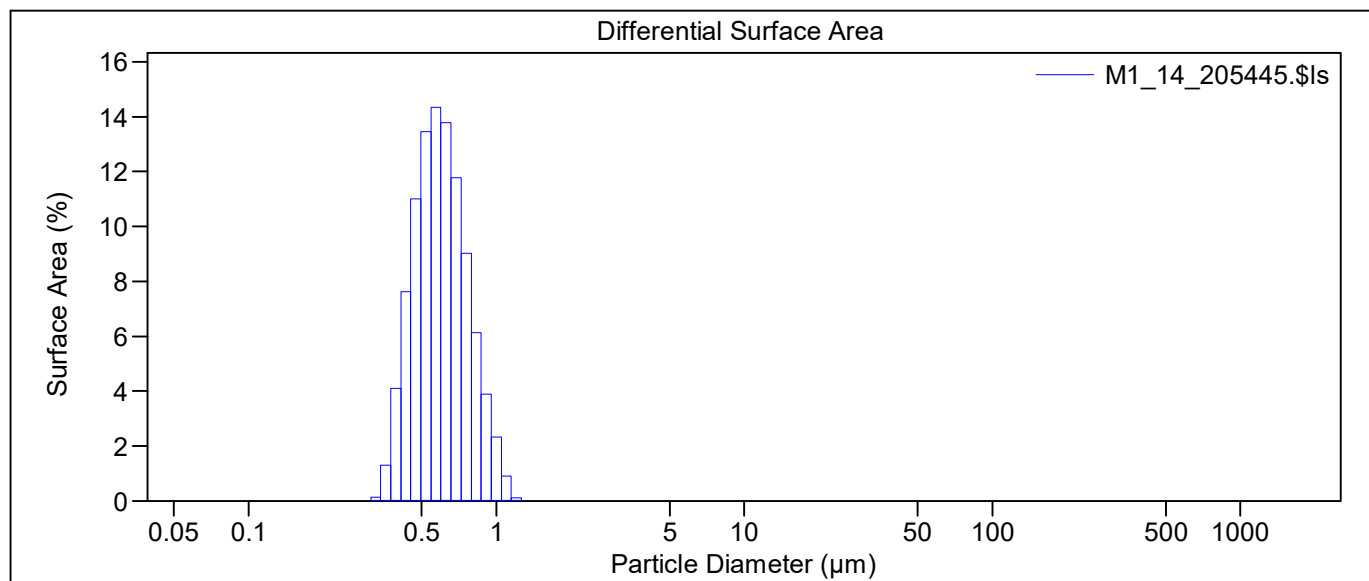
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_14_205445.\$ls		
	M1_14_205445.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.77%		
LS 13 320	Universal Liquid Module		
Start time:	20:53 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_14_205445.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.164 µm
Mean:	0.654 µm		Variance:	0.027 µm ²
Median:	0.631 µm		C.V.:	25.1%
Mean/Median ratio:	1.035		Skewness:	0.623 Right skewed
Mode:	0.627 µm		Kurtosis:	-0.031 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.458 µm	0.529 µm	0.631 µm	0.757 µm	0.889 µm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0016	0.0033	0.012
23	0.311	0.326	0.078	0.15	0.44
24	0.342	0.358	0.76	1.31	3.24
25	0.375	0.393	2.63	4.11	8.45
26	0.412	0.431	5.35	7.62	13.0
27	0.452	0.474	8.49	11.0	15.6
28	0.496	0.520	11.4	13.5	15.8
29	0.545	0.571	13.3	14.4	14.0
30	0.598	0.627	14.1	13.8	11.2
31	0.656	0.688	13.2	11.8	7.91
32	0.721	0.755	11.1	9.03	5.03
33	0.791	0.829	8.29	6.15	2.84
34	0.868	0.910	5.76	3.89	1.49
35	0.953	0.999	3.78	2.33	0.74
36	1.047	1.097	1.61	0.90	0.24
37	1.149	1.204	0.22	0.11	0.024
38	1.261	1.321	0.0054	0.0025	0.00045
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

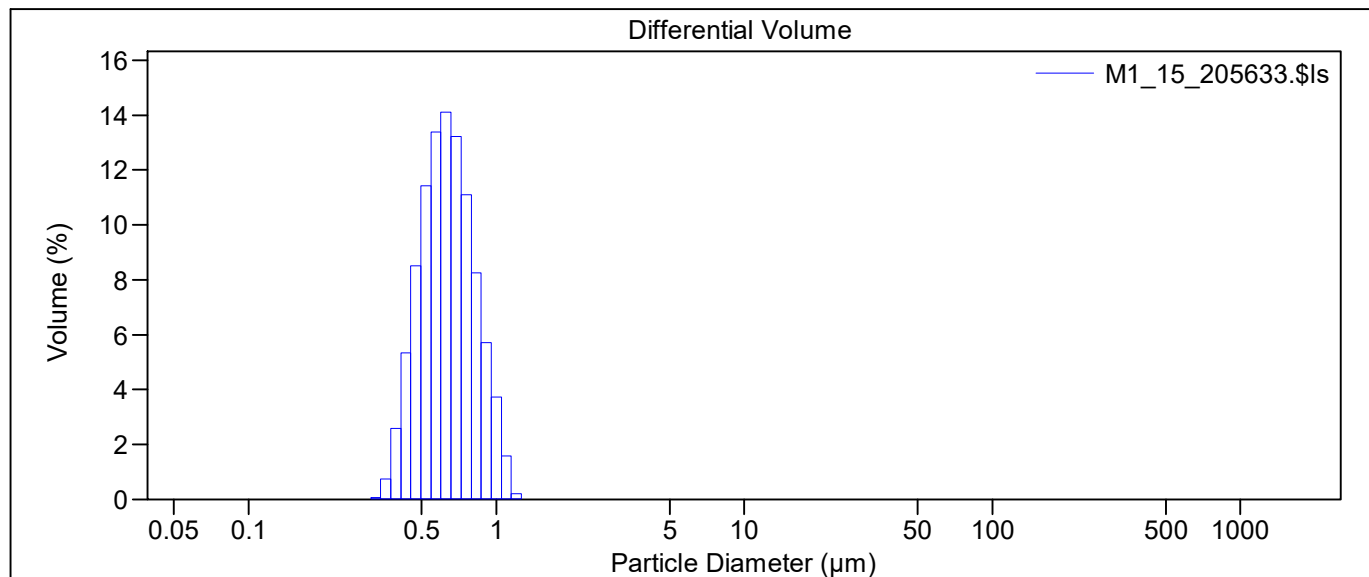
M1.\$av

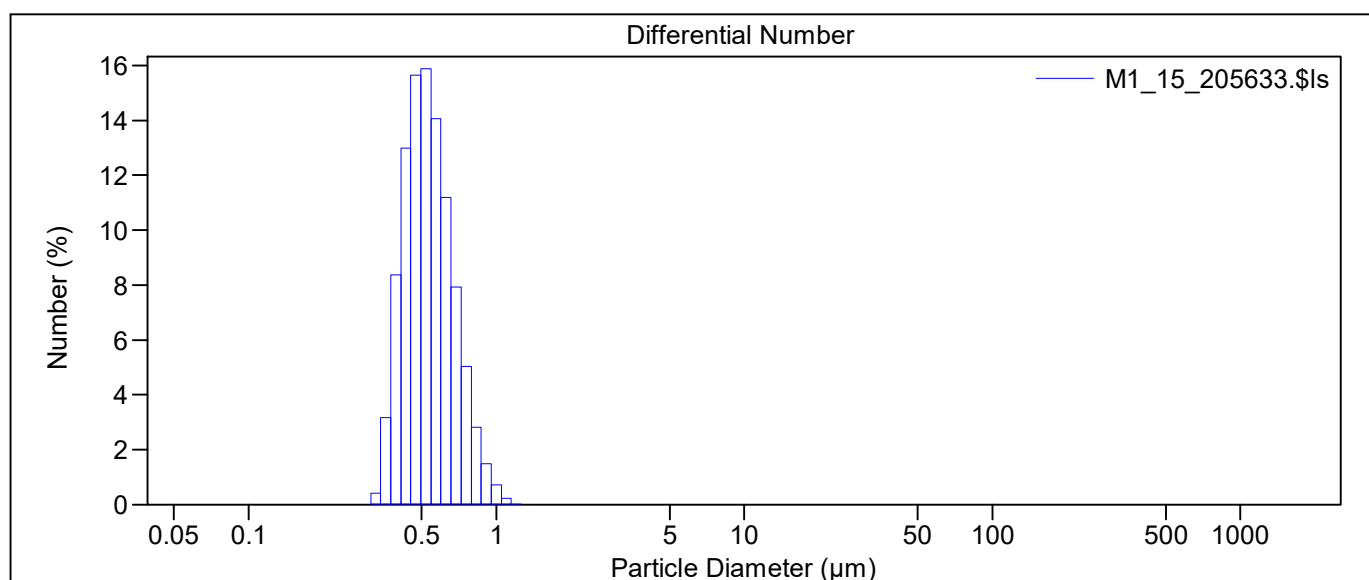
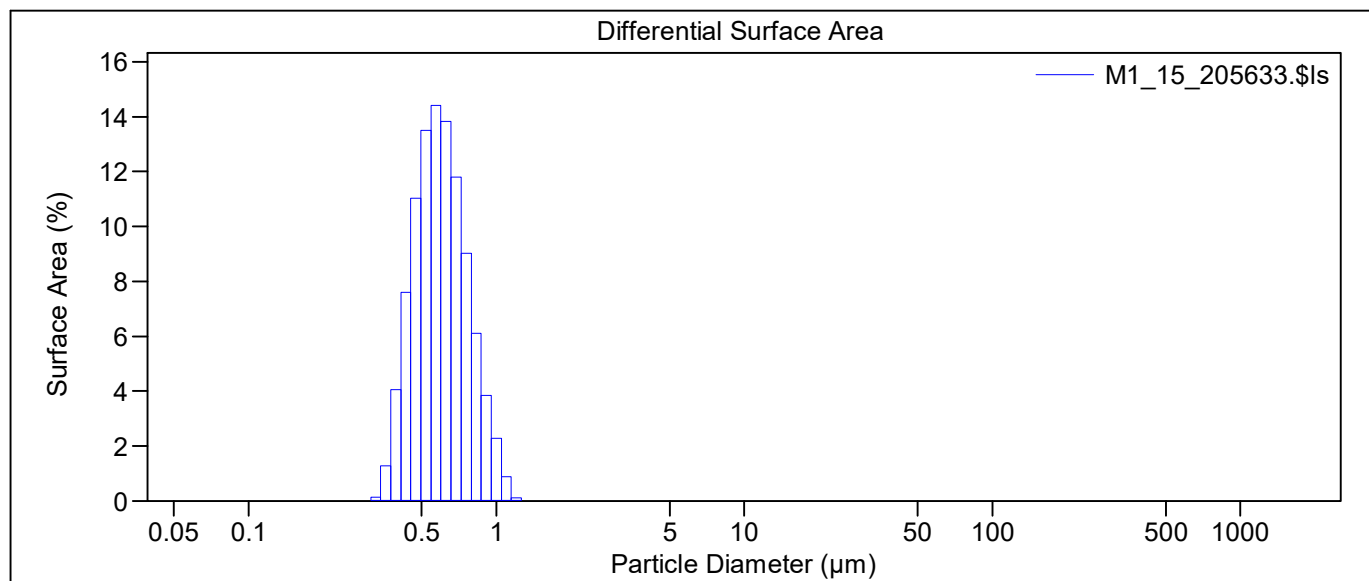
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M1\M1_15_205633.\$ls		
	M1_15_205633.\$ls		
File ID:	M1		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.79%		
LS 13 320	Universal Liquid Module		
Start time:	20:54 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M1_15_205633.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.164 μm
Mean:	0.653 μm		Variance:	0.027 μm ²
Median:	0.631 μm		C.V.:	25.0%
Mean/Median ratio:	1.035		Skewness:	0.626 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.019 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.458 μm	0.529 μm	0.631 μm	0.756 μm	0.887 μm





M1.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0015	0.0031	0.011
23	0.311	0.326	0.076	0.14	0.43
24	0.342	0.358	0.74	1.28	3.17
25	0.375	0.393	2.60	4.07	8.37
26	0.412	0.431	5.34	7.61	13.0
27	0.452	0.474	8.51	11.0	15.6
28	0.496	0.520	11.4	13.5	15.9
29	0.545	0.571	13.4	14.4	14.1
30	0.598	0.627	14.1	13.8	11.2
31	0.656	0.688	13.2	11.8	7.93
32	0.721	0.755	11.1	9.03	5.03
33	0.791	0.829	8.26	6.12	2.83
34	0.868	0.910	5.71	3.86	1.48
35	0.953	0.999	3.73	2.30	0.73
36	1.047	1.097	1.58	0.88	0.23
37	1.149	1.204	0.21	0.11	0.024
38	1.261	1.321	0.0052	0.0024	0.00044
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M1.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

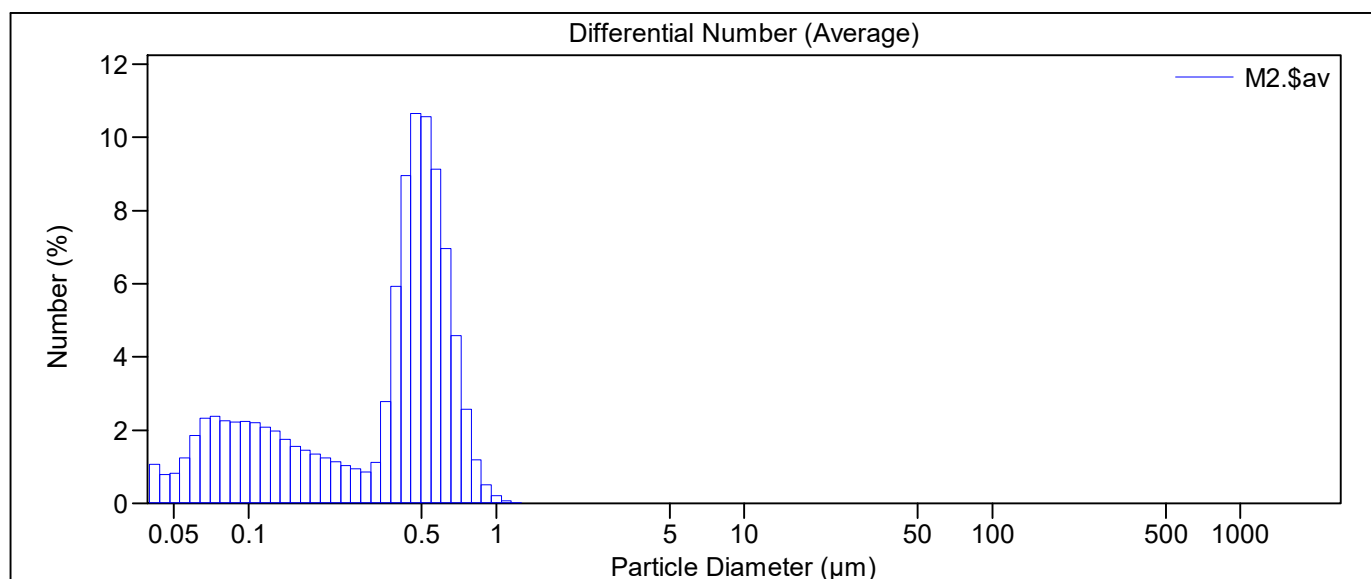
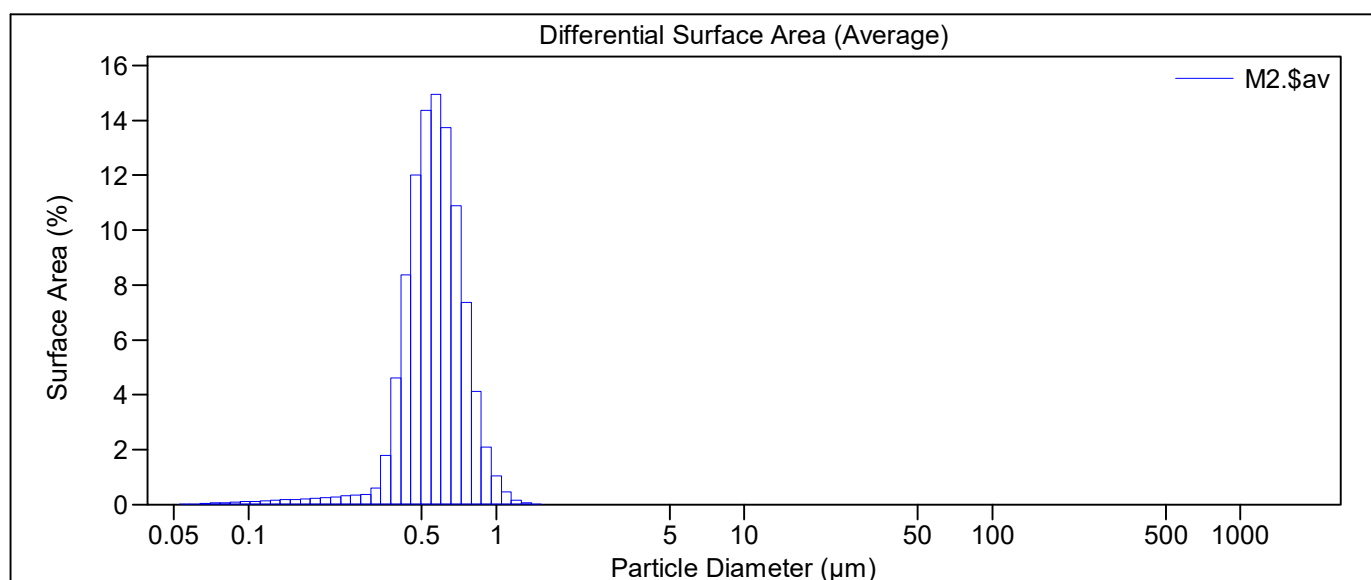
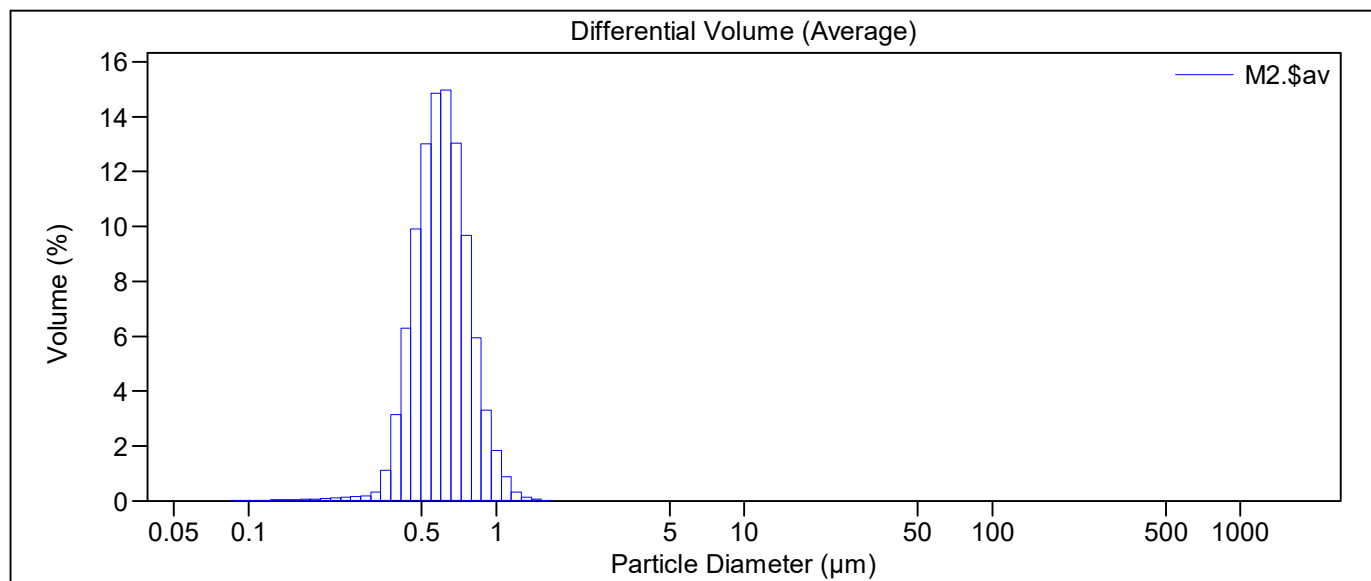
M1.\$av

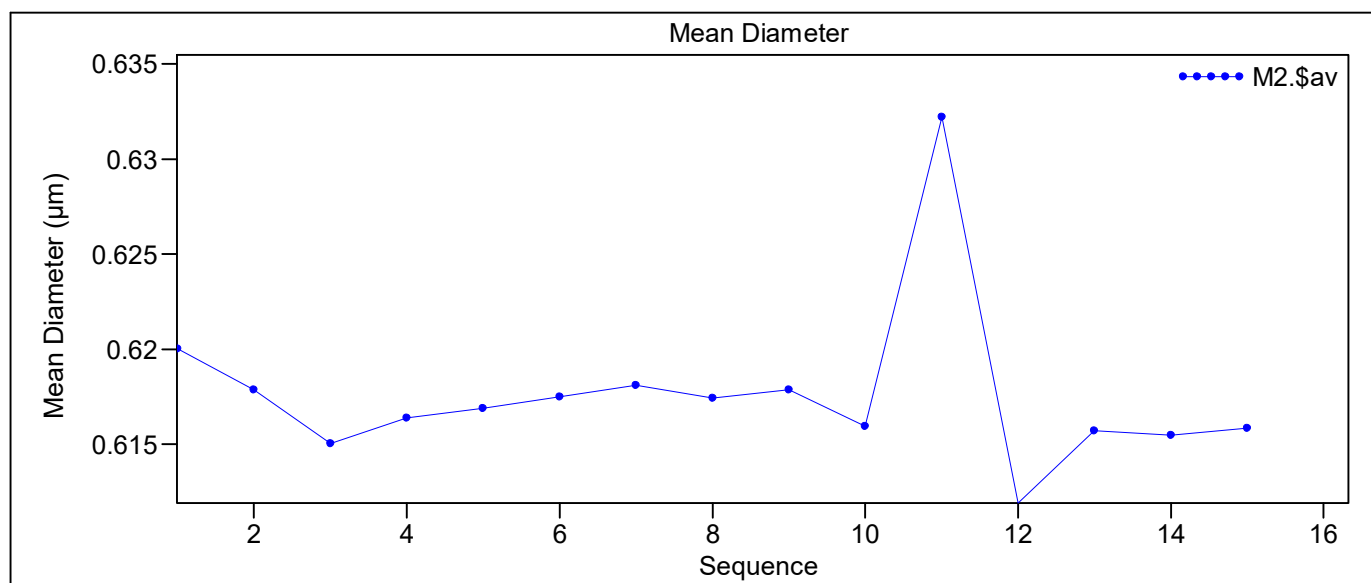
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2.\$av M2.\$av		
File ID:	M2		
Operator:	KW		
Optical model:	TiO2_KW.rf780d PIDS included		
LS 13 320	Universal Liquid Module		
Pump speed:	50%		
Fluid:	water		
Average of 15 files			
D:\KW\PROFARB\POMIARY\	TiO2\M2\M2_01_210616.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\M2\M2_02_210804.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\M2\M2_03_210951.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\M2\M2_04_211917.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\M2\M2_05_212104.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\M2\M2_06_212252.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\M2\M2_07_213212.\$ls	D:\KW	
\PROFARB\POMIARY\	TiO2\M2\M2_08_213400.\$ls	D:\KW	
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\PROFARB\POMIARY\	TiO2\M2\M2_13_215840.\$ls	D:\KW	
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\PROFARB\POMIARY\	TiO2\M2\M2_15_220216.\$ls		

Volume Statistics (Arithmetic)			M2.\$av	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.618 μm	S.D.:	0.159 μm	
Median:	0.599 μm	Variance:	0.025 μm ²	
Mean/Median ratio:	1.031	C.V.:	25.8%	
Mode:	0.627 μm	Skewness:	0.791 Right skewed	
		Kurtosis:	1.889 Leptokurtic	
<10%	<25%	<50%	<75%	<90%
0.439 μm	0.508 μm	0.599 μm	0.707 μm	0.824 μm





M2.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.00069	0.0095	1.08
2	0.044	0.046	0.00067	0.0084	0.79
3	0.048	0.050	0.00093	0.011	0.82
4	0.053	0.055	0.0018	0.019	1.24
5	0.058	0.061	0.0036	0.034	1.85
6	0.064	0.067	0.0061	0.052	2.33
7	0.070	0.073	0.0082	0.064	2.37
8	0.077	0.080	0.010	0.073	2.25
9	0.084	0.088	0.013	0.087	2.22
10	0.093	0.097	0.018	0.11	2.24
11	0.102	0.106	0.023	0.13	2.20
12	0.112	0.117	0.029	0.14	2.08
13	0.122	0.128	0.036	0.16	1.97
14	0.134	0.141	0.043	0.17	1.75
15	0.148	0.155	0.051	0.19	1.57
16	0.162	0.170	0.062	0.21	1.44
17	0.178	0.186	0.076	0.24	1.35
18	0.195	0.205	0.093	0.26	1.24
19	0.214	0.225	0.11	0.29	1.13
20	0.235	0.247	0.14	0.32	1.03
21	0.258	0.271	0.16	0.35	0.94
22	0.284	0.297	0.20	0.38	0.86
23	0.311	0.326	0.34	0.60	1.11
24	0.342	0.358	1.11	1.79	2.77
25	0.375	0.393	3.15	4.61	5.94
26	0.412	0.431	6.30	8.38	8.95
27	0.452	0.474	9.90	12.0	10.6
28	0.496	0.520	13.0	14.4	10.6
29	0.545	0.571	14.9	15.0	9.13
30	0.598	0.627	15.0	13.7	6.96
31	0.656	0.688	13.0	10.9	4.58
32	0.721	0.755	9.68	7.37	2.57
33	0.791	0.829	5.95	4.12	1.19
34	0.868	0.910	3.32	2.09	0.50
35	0.953	0.999	1.83	1.05	0.21
36	1.047	1.097	0.88	0.46	0.077
37	1.149	1.204	0.33	0.16	0.021
38	1.261	1.321	0.14	0.062	0.0070
39	1.385	1.451	0.062	0.025	0.0023
40	1.520	1.592	0.020	0.0071	0.00056
41	1.668	1.748	0.0038	0.0013	0.000082

M2.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.00041	0.00012	0.000007
43	2.011	2.107	0.000013	0.000003	1.55E-7
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

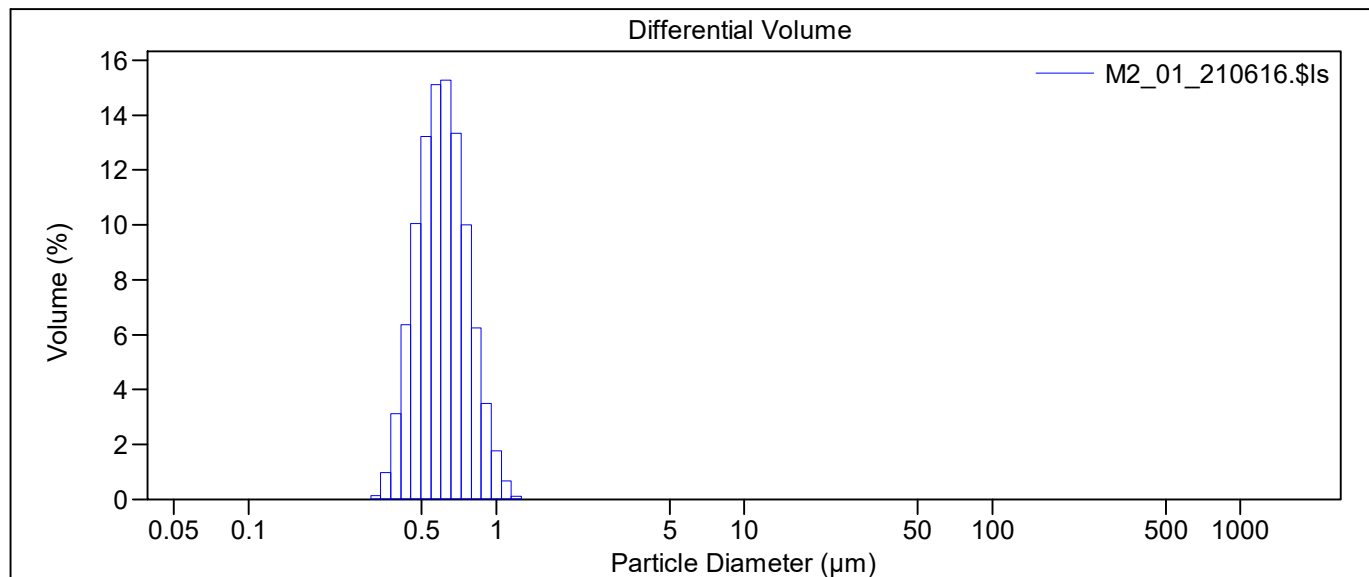
M2.\$av

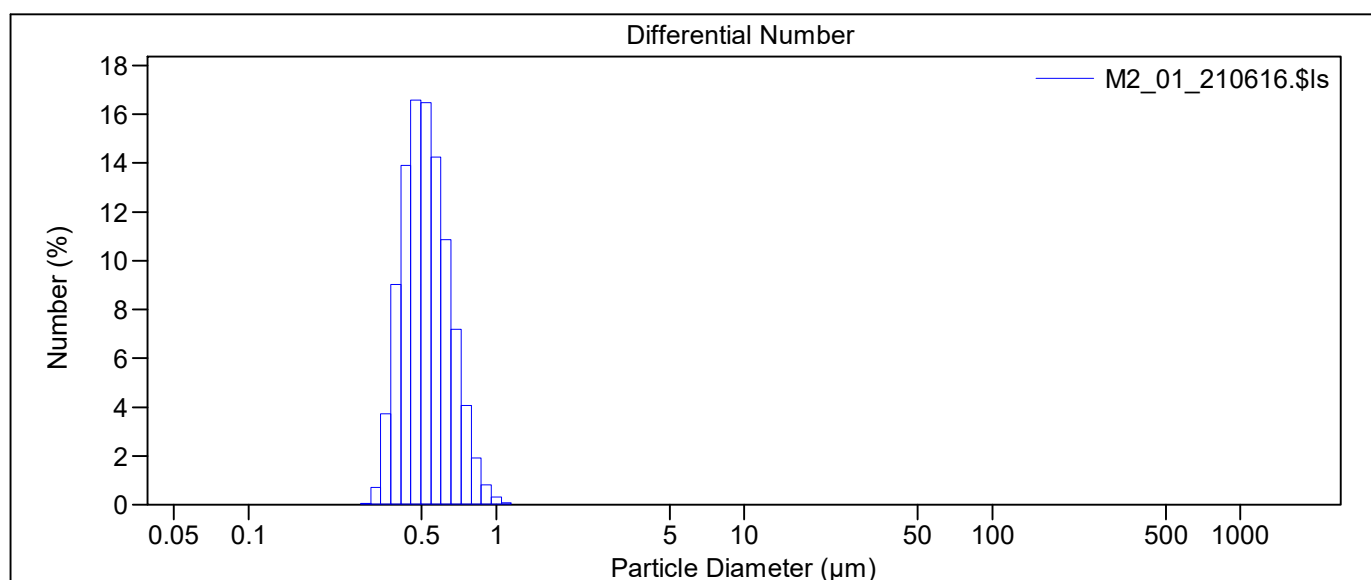
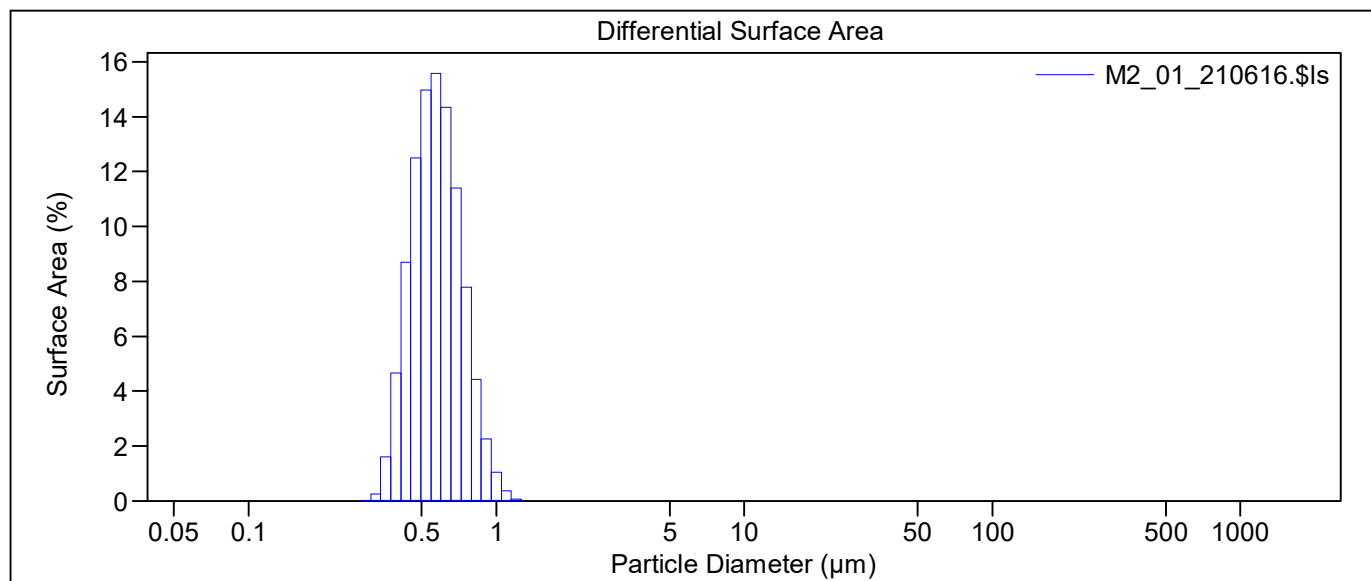
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_01_210616.\$ls		
	M2_01_210616.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.79%		
LS 13 320	Universal Liquid Module		
Start time:	21:04 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_01_210616.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.146 μm
Mean:	0.620 μm		Variance:	0.021 μm ²
Median:	0.602 μm		C.V.:	23.5%
Mean/Median ratio:	1.030		Skewness:	0.716 Right skewed
Mode:	0.627 μm		Kurtosis:	0.474 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.448 μm	0.512 μm	0.602 μm	0.708 μm	0.820 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0065	0.013	0.044
23	0.311	0.326	0.14	0.25	0.71
24	0.342	0.358	0.98	1.60	3.73
25	0.375	0.393	3.12	4.68	9.01
26	0.412	0.431	6.38	8.70	13.9
27	0.452	0.474	10.1	12.5	16.6
28	0.496	0.520	13.2	15.0	16.5
29	0.545	0.571	15.1	15.6	14.2
30	0.598	0.627	15.3	14.3	10.9
31	0.656	0.688	13.3	11.4	7.18
32	0.721	0.755	10.0	7.80	4.07
33	0.791	0.829	6.26	4.44	1.93
34	0.868	0.910	3.50	2.26	0.81
35	0.953	0.999	1.77	1.04	0.31
36	1.047	1.097	0.68	0.37	0.091
37	1.149	1.204	0.12	0.059	0.012
38	1.261	1.321	0.0074	0.0033	0.00056
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

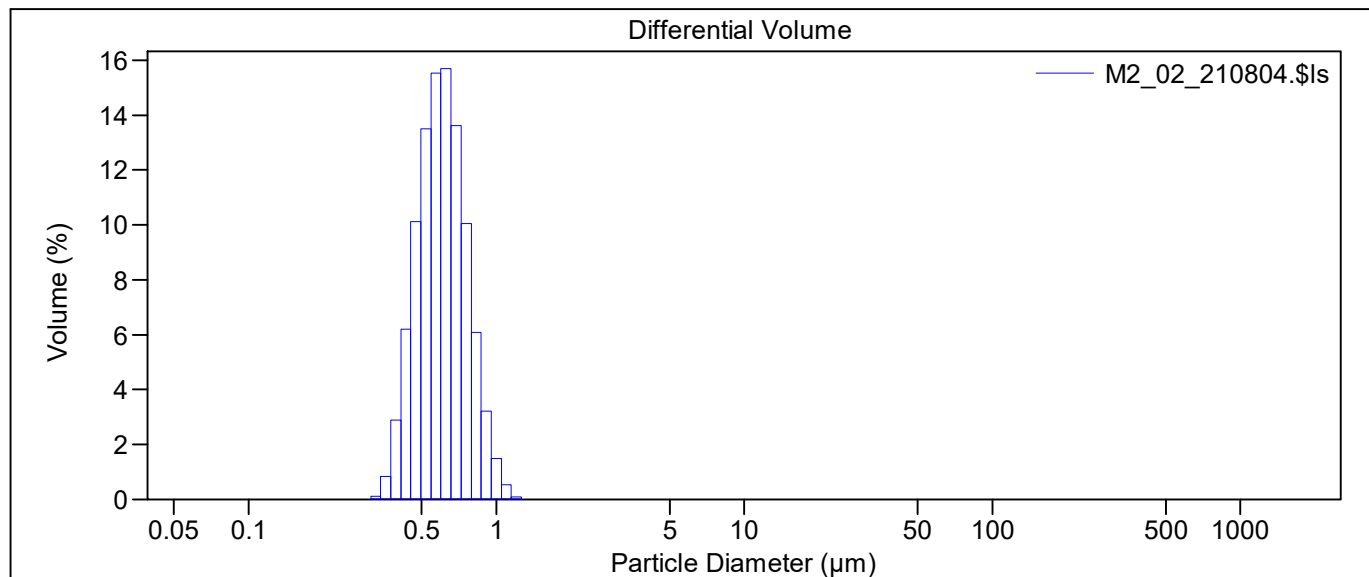
M2.\$av

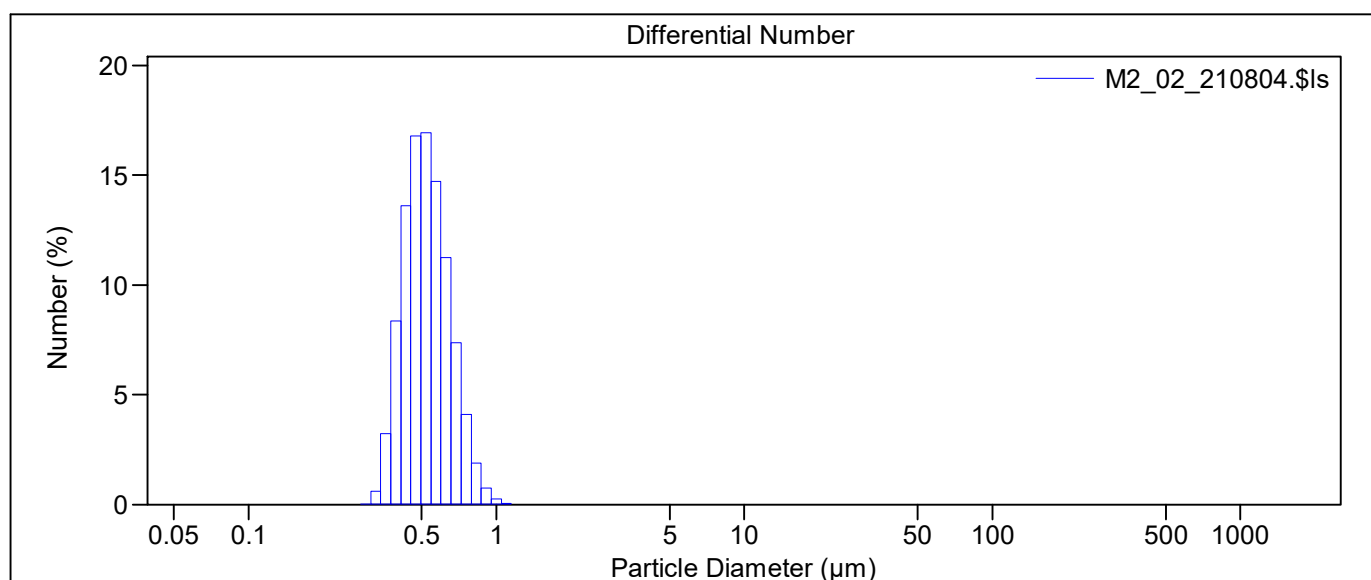
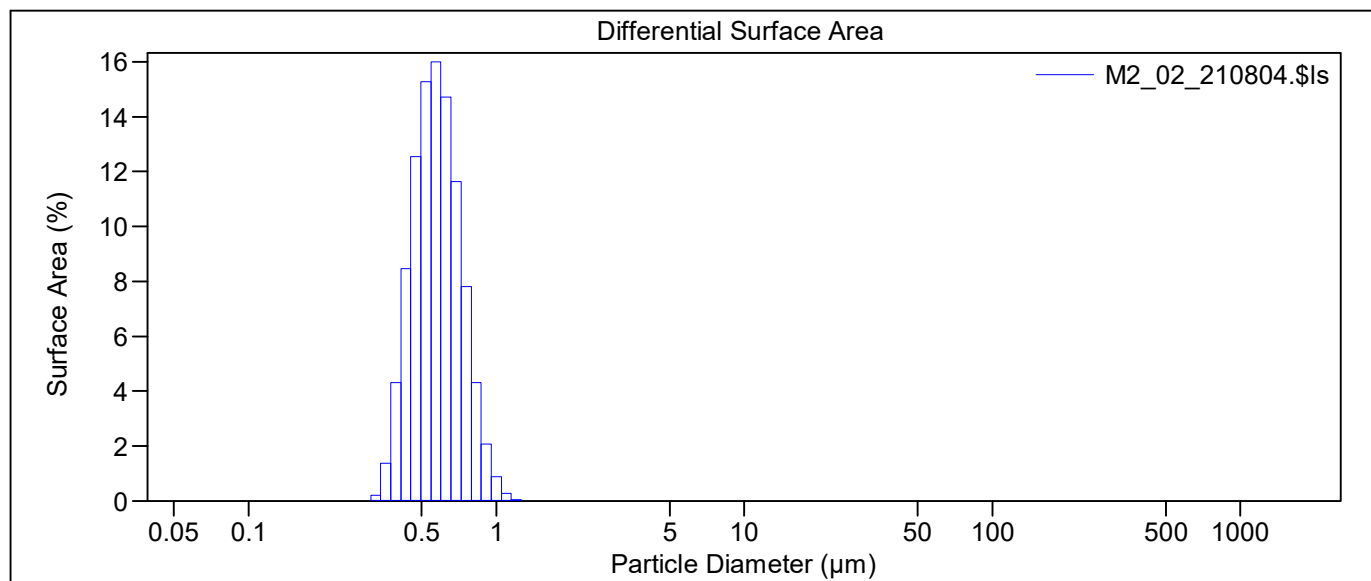
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_02_210804.\$ls		
	M2_02_210804.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.83%		
LS 13 320	Universal Liquid Module		
Start time:	21:06 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_02_210804.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.141 μm
Mean:	0.618 μm		Variance:	0.020 μm ²
Median:	0.601 μm		C.V.:	22.8%
Mean/Median ratio:	1.028		Skewness:	0.698 Right skewed
Mode:	0.627 μm		Kurtosis:	0.488 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.452 μm	0.514 μm	0.601 μm	0.704 μm	0.809 μm





M2.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0053	0.011	0.036
23	0.311	0.326	0.12	0.21	0.60
24	0.342	0.358	0.84	1.38	3.23
25	0.375	0.393	2.89	4.32	8.38
26	0.412	0.431	6.21	8.46	13.6
27	0.452	0.474	10.1	12.6	16.8
28	0.496	0.520	13.5	15.3	16.9
29	0.545	0.571	15.5	16.0	14.7
30	0.598	0.627	15.7	14.7	11.2
31	0.656	0.688	13.6	11.6	7.37
32	0.721	0.755	10.0	7.82	4.11
33	0.791	0.829	6.09	4.32	1.88
34	0.868	0.910	3.22	2.08	0.75
35	0.953	0.999	1.49	0.88	0.26
36	1.047	1.097	0.53	0.29	0.071
37	1.149	1.204	0.095	0.046	0.0096
38	1.261	1.321	0.0063	0.0028	0.00048
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

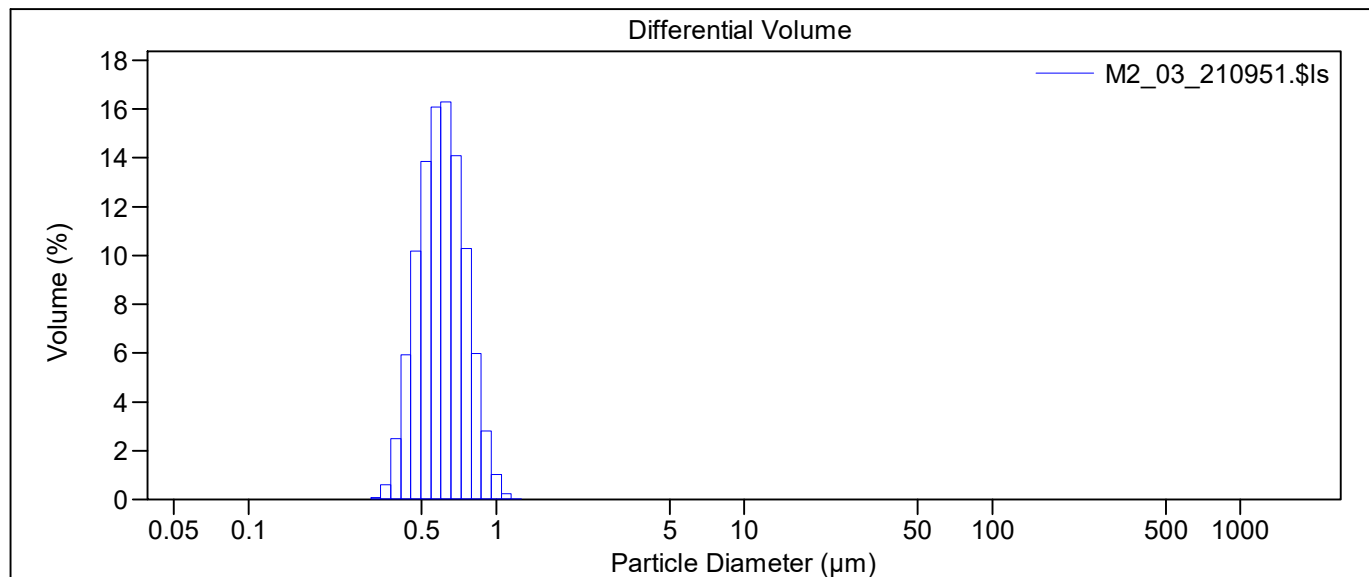
M2.\$av

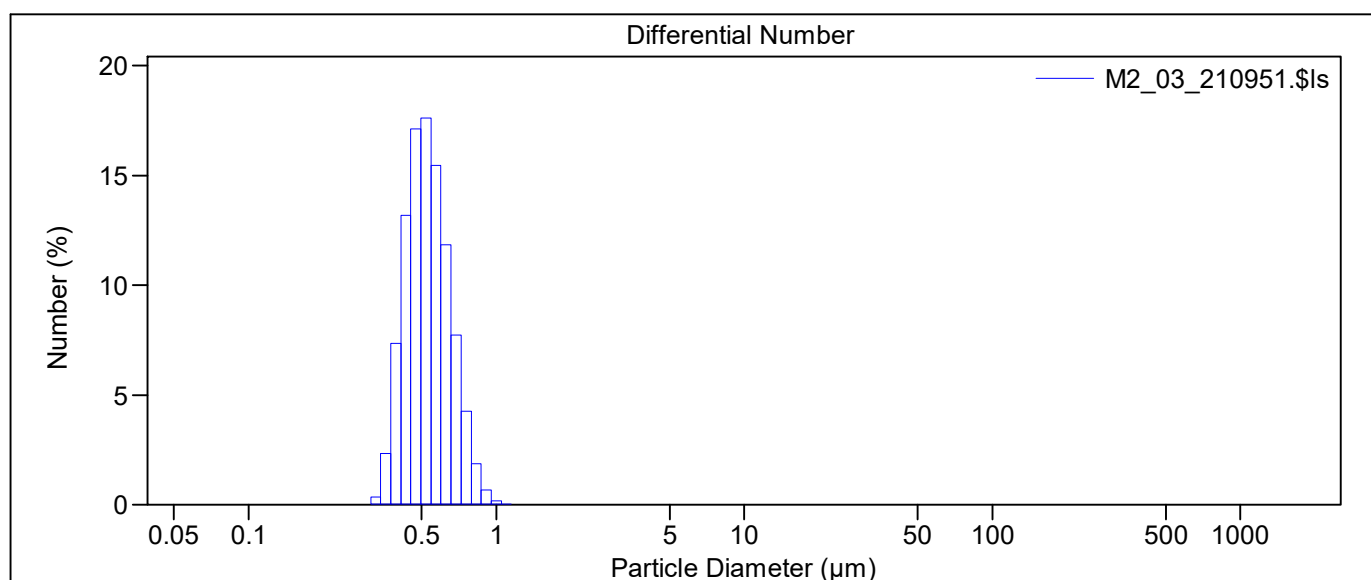
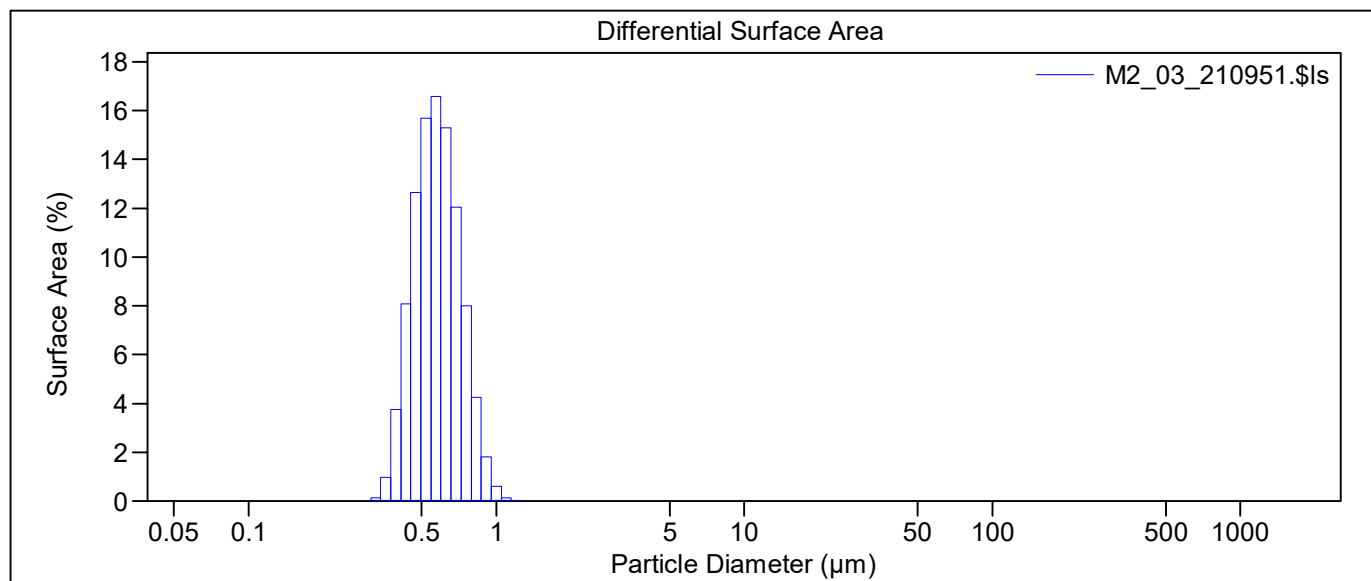
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_03_210951.\$ls		
	M2_03_210951.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.92%		
LS 13 320	Universal Liquid Module		
Start time:	21:08 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_03_210951.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.132 μm
Mean:	0.615 μm		Variance:	0.017 μm ²
Median:	0.601 μm		C.V.:	21.5%
Mean/Median ratio:	1.024		Skewness:	0.595 Right skewed
Mode:	0.627 μm		Kurtosis:	0.226 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.456 μm	0.516 μm	0.601 μm	0.700 μm	0.792 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0017	0.0034	0.012
23	0.311	0.326	0.068	0.12	0.35
24	0.342	0.358	0.60	0.98	2.33
25	0.375	0.393	2.50	3.74	7.36
26	0.412	0.431	5.93	8.08	13.2
27	0.452	0.474	10.2	12.6	17.1
28	0.496	0.520	13.9	15.7	17.6
29	0.545	0.571	16.1	16.6	15.5
30	0.598	0.627	16.3	15.3	11.8
31	0.656	0.688	14.1	12.0	7.73
32	0.721	0.755	10.3	8.01	4.26
33	0.791	0.829	5.99	4.25	1.88
34	0.868	0.910	2.82	1.82	0.67
35	0.953	0.999	1.02	0.60	0.18
36	1.047	1.097	0.24	0.13	0.032
37	1.149	1.204	0.028	0.014	0.0029
38	1.261	1.321	0.00078	0.00035	0.000060
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

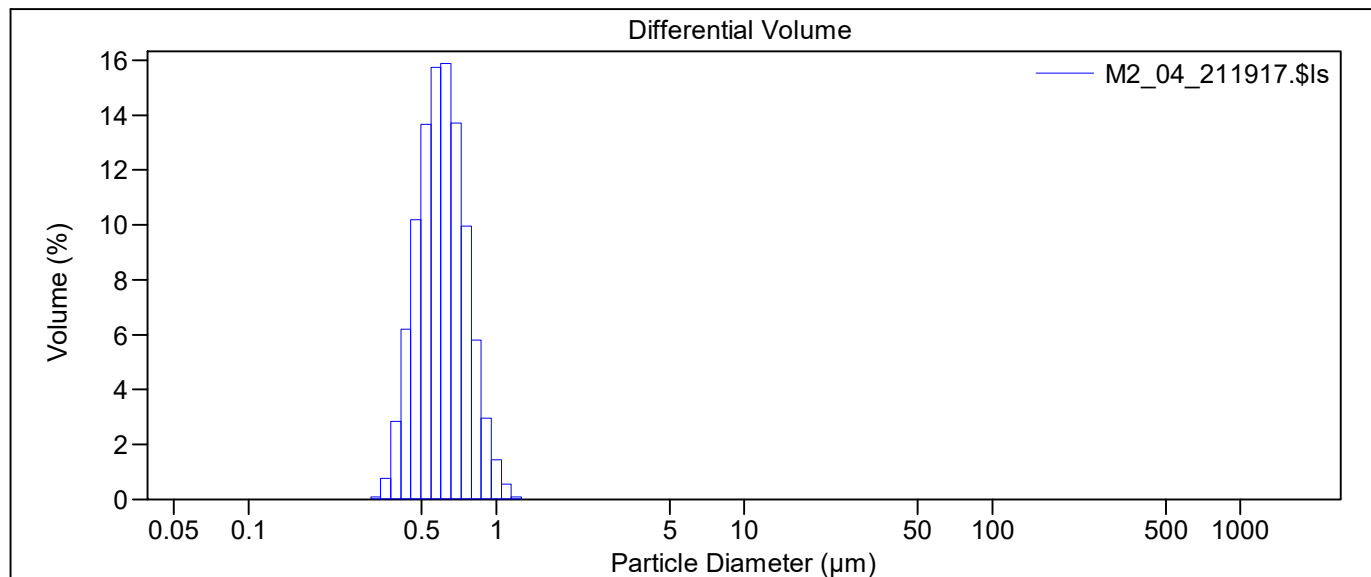
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_04_211917.\$ls		
	M2_04_211917.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.83%		
LS 13 320	Universal Liquid Module		
Start time:	21:17 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

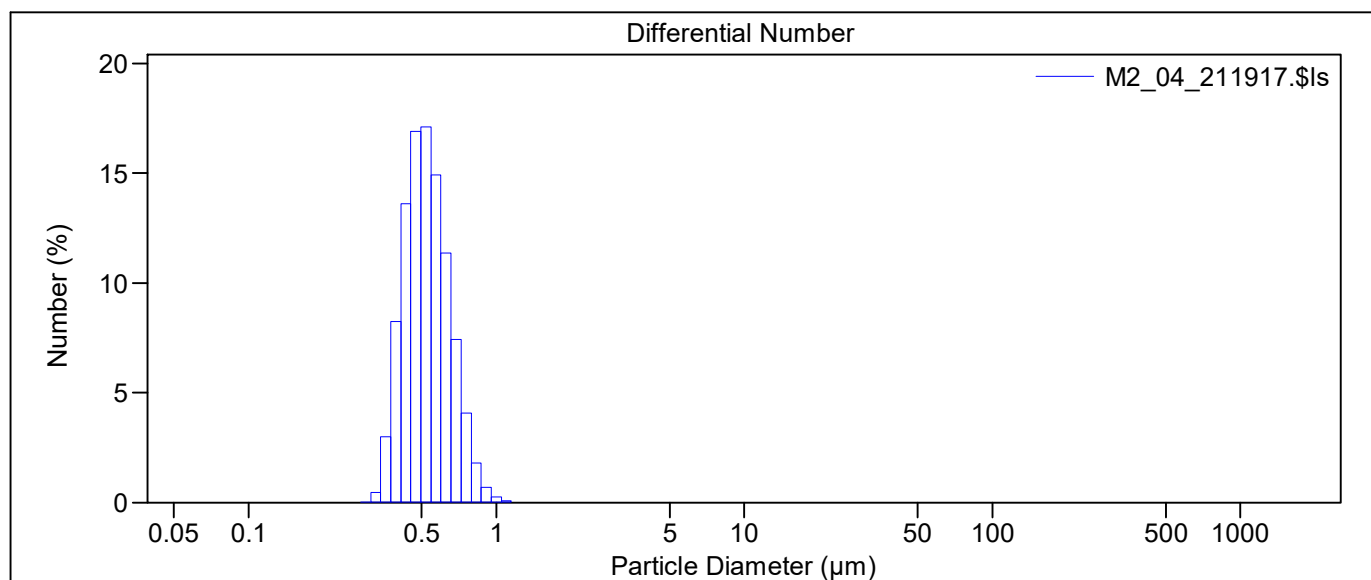
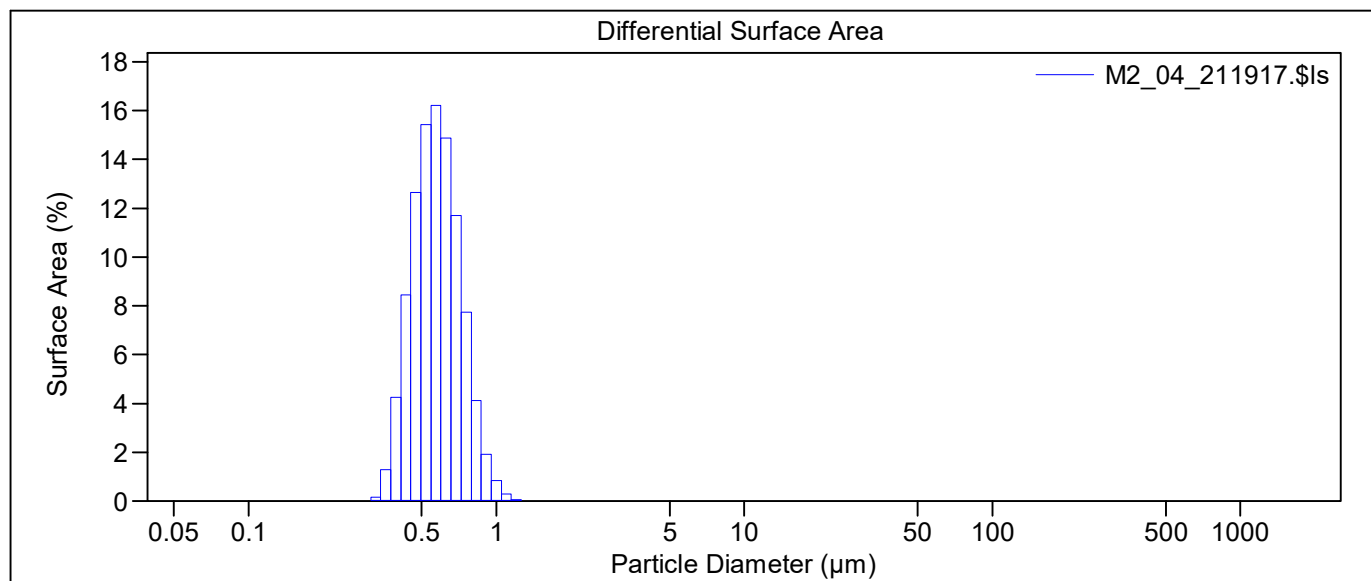
Volume Statistics (Arithmetic) M2_04_211917.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.139 µm
Mean:	0.616 µm	Variance:	0.019 µm ²
Median:	0.600 µm	C.V.:	22.6%
Mean/Median ratio:	1.028	Skewness:	0.723 Right skewed
Mode:	0.627 µm	Kurtosis:	0.586 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.452 µm	0.514 µm	0.600 µm	0.701 µm	0.803 µm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0032	0.0062	0.021
23	0.311	0.326	0.093	0.17	0.47
24	0.342	0.358	0.78	1.28	2.99
25	0.375	0.393	2.84	4.24	8.24
26	0.412	0.431	6.21	8.45	13.6
27	0.452	0.474	10.2	12.6	16.9
28	0.496	0.520	13.7	15.4	17.1
29	0.545	0.571	15.8	16.2	14.9
30	0.598	0.627	15.9	14.9	11.4
31	0.656	0.688	13.7	11.7	7.43
32	0.721	0.755	9.97	7.75	4.08
33	0.791	0.829	5.80	4.11	1.79
34	0.868	0.910	2.96	1.91	0.69
35	0.953	0.999	1.45	0.85	0.26
36	1.047	1.097	0.56	0.30	0.074
37	1.149	1.204	0.092	0.045	0.0093
38	1.261	1.321	0.0048	0.0021	0.00036
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

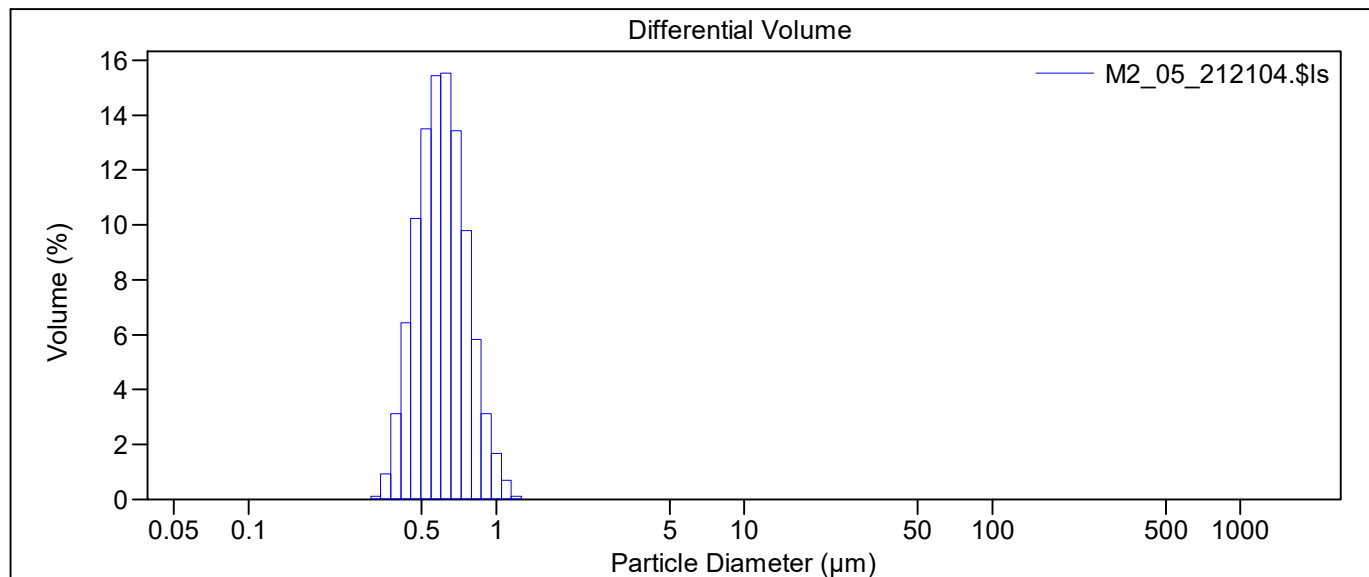
M2.\$av

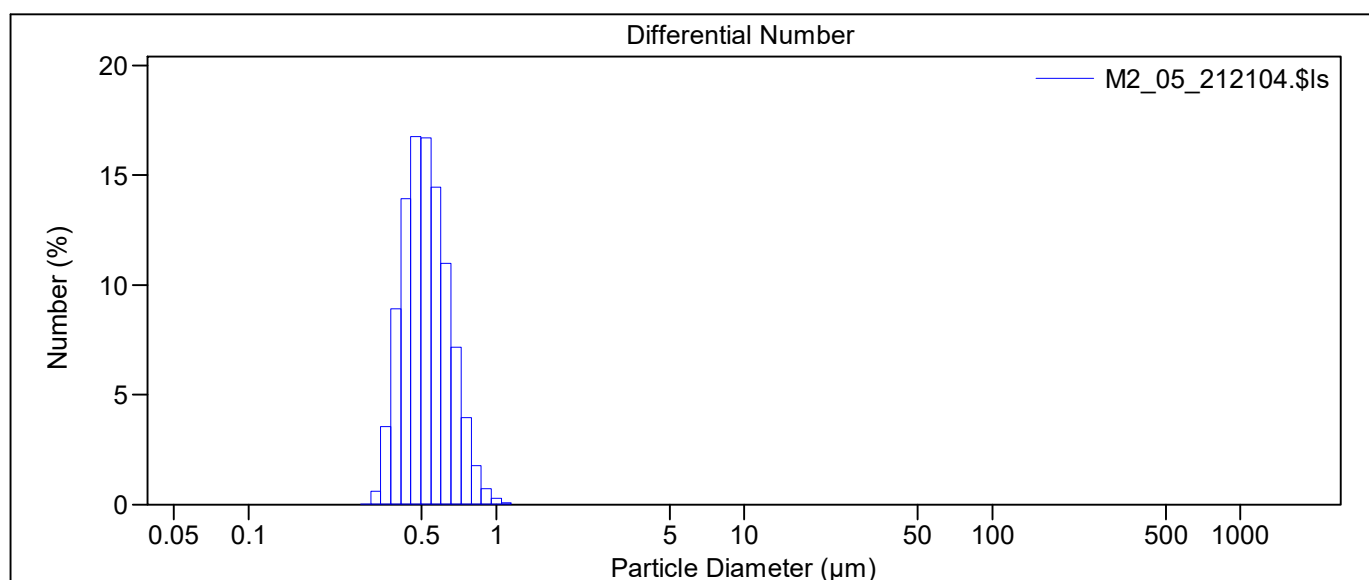
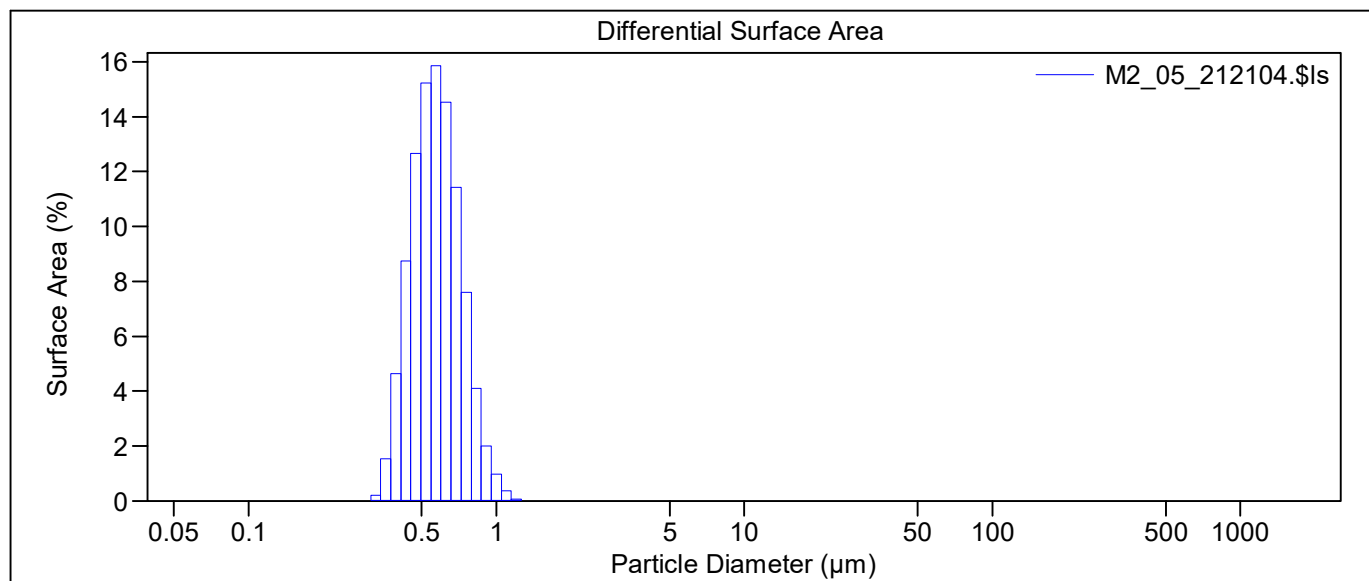
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_05_212104.\$ls		
	M2_05_212104.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.81%		
LS 13 320	Universal Liquid Module		
Start time:	21:19 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_05_212104.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.143 μm
Mean:	0.617 μm		Variance:	0.021 μm ²
Median:	0.599 μm		C.V.:	23.3%
Mean/Median ratio:	1.030		Skewness:	0.757 Right skewed
Mode:	0.627 μm		Kurtosis:	0.635 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.448 μm	0.511 μm	0.599 μm	0.703 μm	0.810 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0048	0.0094	0.032
23	0.311	0.326	0.12	0.22	0.62
24	0.342	0.358	0.94	1.54	3.57
25	0.375	0.393	3.11	4.64	8.92
26	0.412	0.431	6.43	8.74	13.9
27	0.452	0.474	10.2	12.7	16.8
28	0.496	0.520	13.5	15.2	16.7
29	0.545	0.571	15.4	15.9	14.4
30	0.598	0.627	15.5	14.5	11.0
31	0.656	0.688	13.4	11.4	7.18
32	0.721	0.755	9.80	7.61	3.96
33	0.791	0.829	5.82	4.12	1.78
34	0.868	0.910	3.12	2.01	0.72
35	0.953	0.999	1.67	0.98	0.29
36	1.047	1.097	0.70	0.38	0.093
37	1.149	1.204	0.12	0.060	0.012
38	1.261	1.321	0.0068	0.0030	0.00051
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

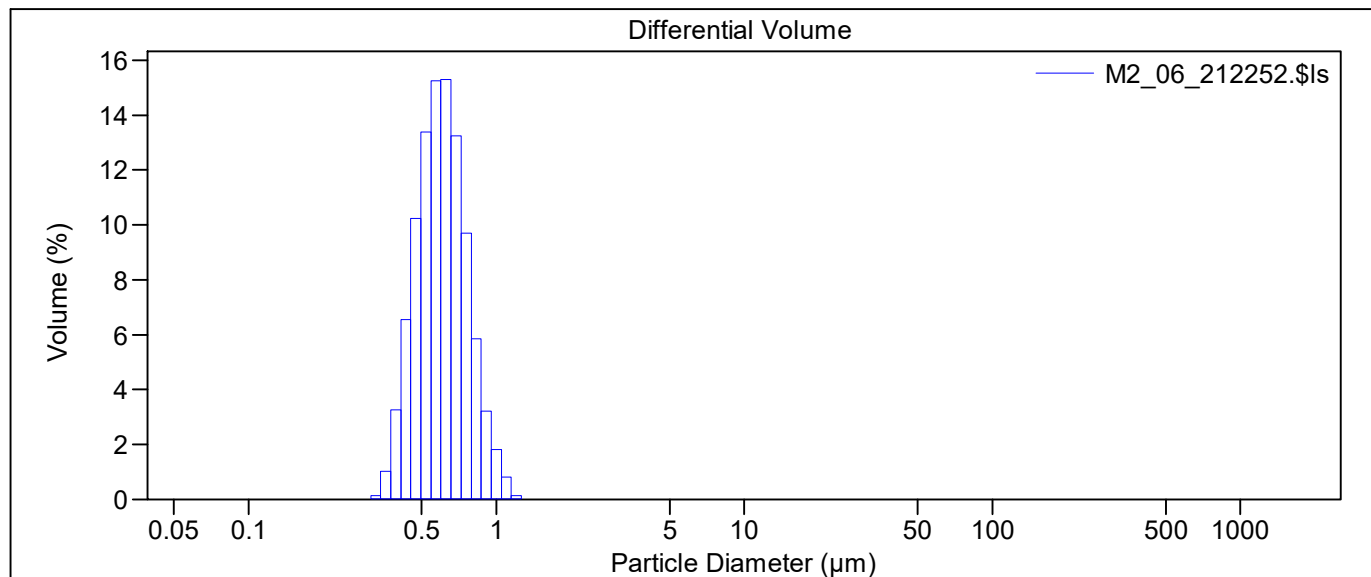
M2.\$av

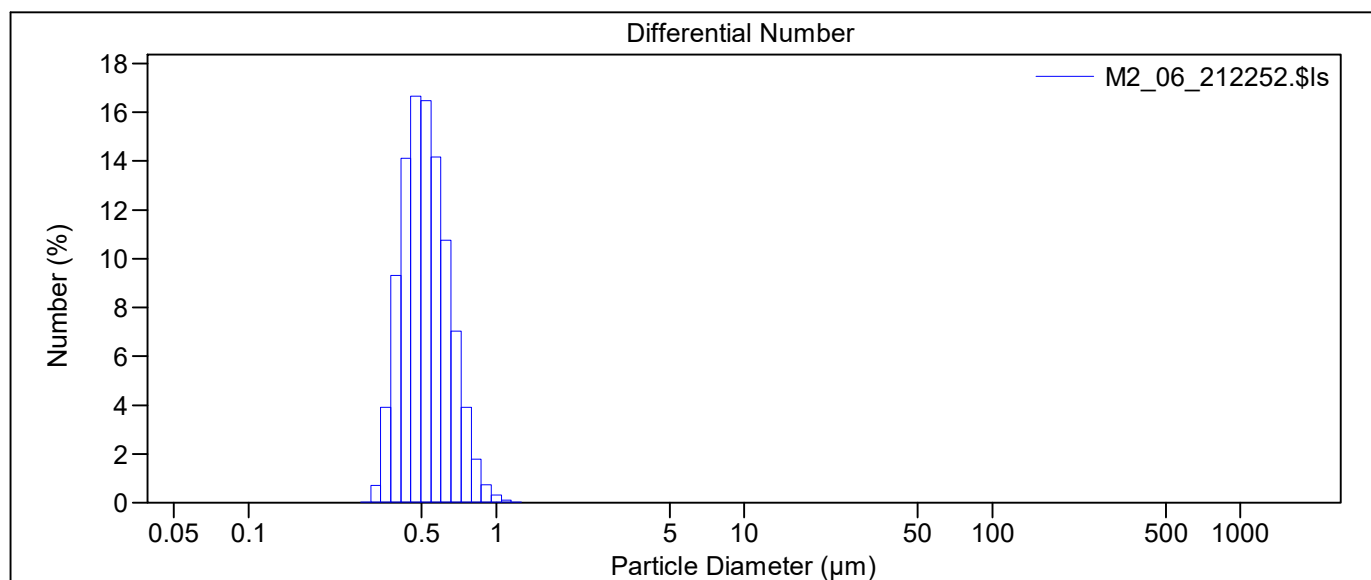
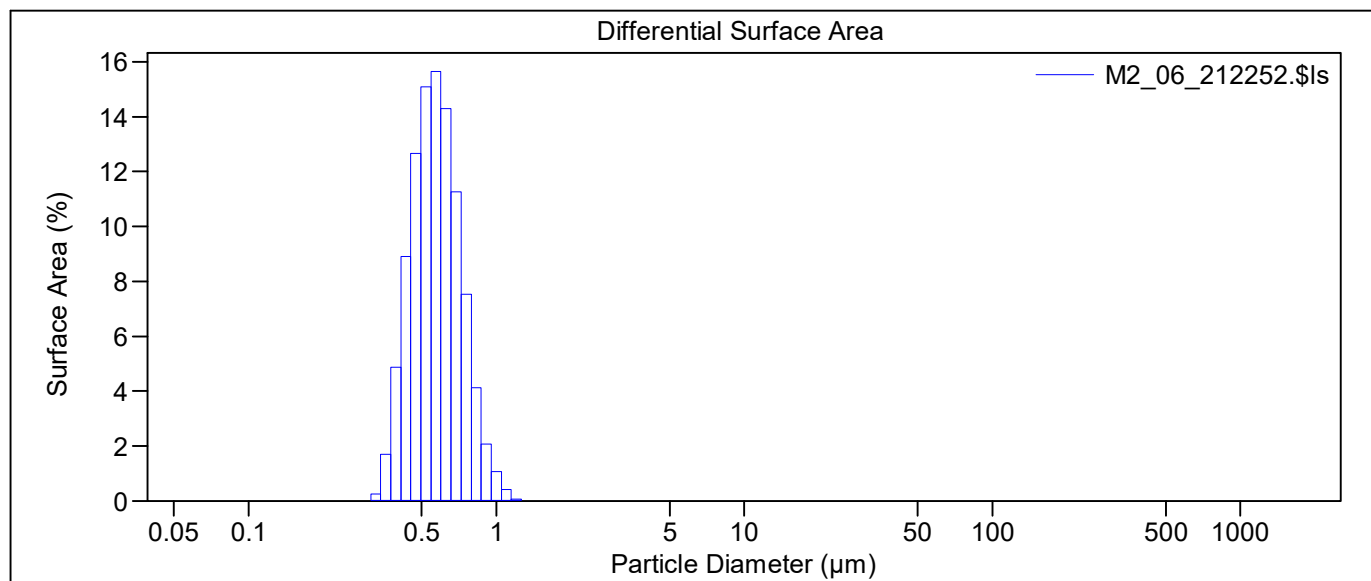
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_06_212252.\$ls		
	M2_06_212252.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.79%		
LS 13 320	Universal Liquid Module		
Start time:	21:21 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_06_212252.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.146 μm
Mean:	0.617 μm		Variance:	0.021 μm ²
Median:	0.598 μm		C.V.:	23.7%
Mean/Median ratio:	1.032		Skewness:	0.774 Right skewed
Mode:	0.627 μm		Kurtosis:	0.649 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.446 μm	0.510 μm	0.598 μm	0.704 μm	0.816 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0058	0.011	0.038
23	0.311	0.326	0.14	0.25	0.70
24	0.342	0.358	1.04	1.69	3.90
25	0.375	0.393	3.27	4.88	9.32
26	0.412	0.431	6.56	8.90	14.1
27	0.452	0.474	10.2	12.7	16.7
28	0.496	0.520	13.4	15.1	16.5
29	0.545	0.571	15.2	15.6	14.2
30	0.598	0.627	15.3	14.3	10.8
31	0.656	0.688	13.2	11.3	7.03
32	0.721	0.755	9.71	7.53	3.90
33	0.791	0.829	5.85	4.13	1.78
34	0.868	0.910	3.23	2.08	0.74
35	0.953	0.999	1.82	1.07	0.32
36	1.047	1.097	0.81	0.43	0.11
37	1.149	1.204	0.15	0.071	0.014
38	1.261	1.321	0.0082	0.0036	0.00061
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

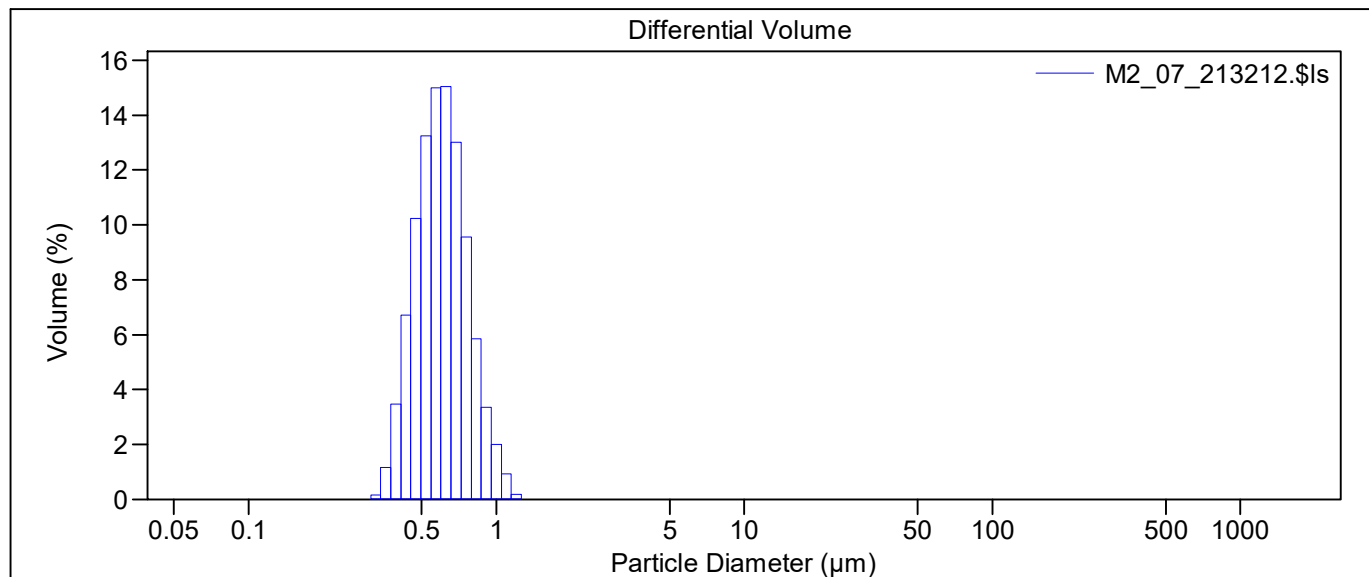
M2.\$av

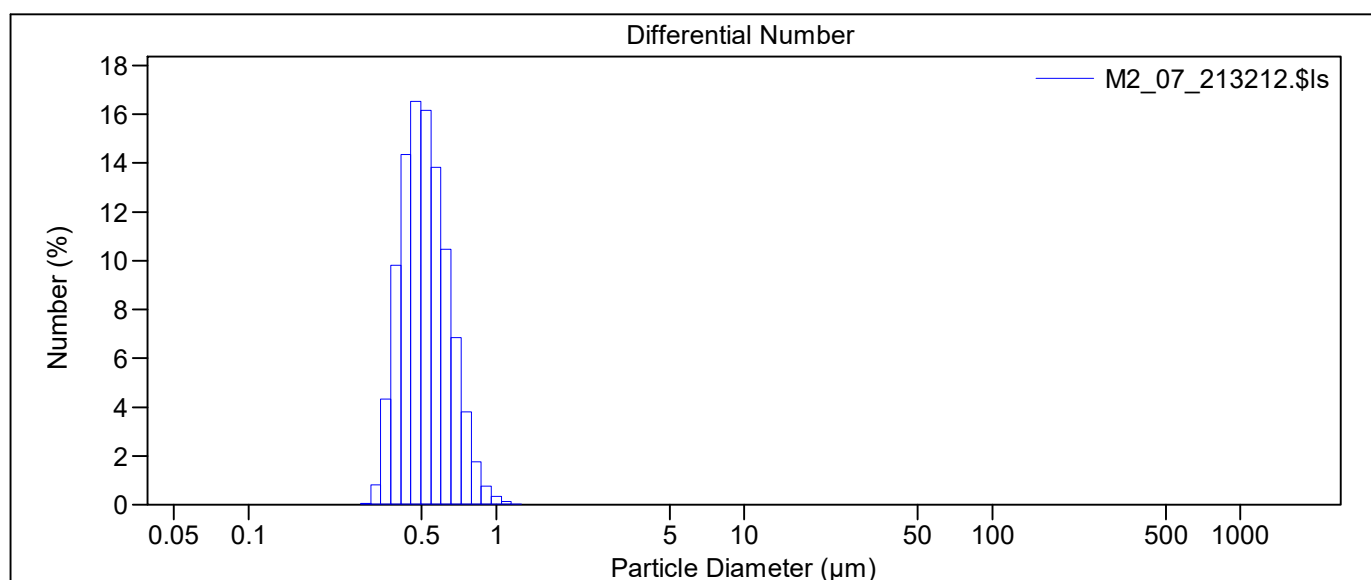
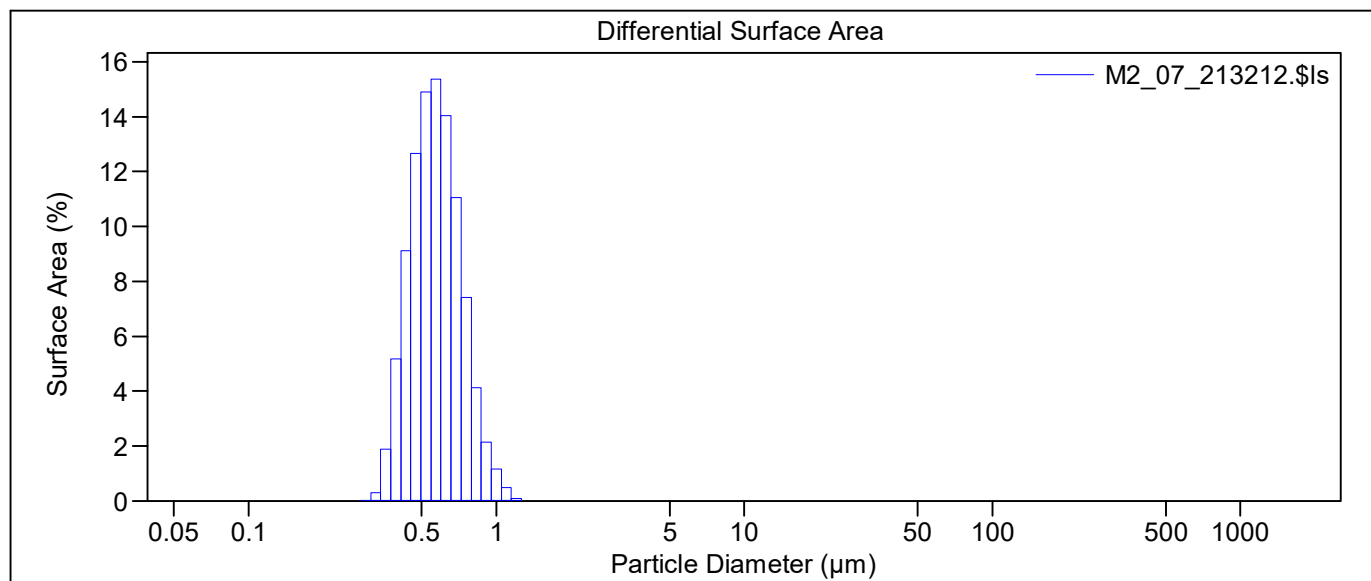
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_07_213212.\$ls		
	M2_07_213212.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.85%		
LS 13 320	Universal Liquid Module		
Start time:	21:30 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_07_213212.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.150 μm
Mean:	0.618 μm		Variance:	0.022 μm ²
Median:	0.598 μm		C.V.:	24.2%
Mean/Median ratio:	1.034		Skewness:	0.795 Right skewed
Mode:	0.627 μm		Kurtosis:	0.658 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.443 μm	0.508 μm	0.598 μm	0.705 μm	0.822 μm





Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0071	0.014	0.047
23	0.311	0.326	0.16	0.29	0.81
24	0.342	0.358	1.16	1.89	4.33
25	0.375	0.393	3.48	5.18	9.82
26	0.412	0.431	6.72	9.11	14.3
27	0.452	0.474	10.3	12.7	16.5
28	0.496	0.520	13.3	14.9	16.2
29	0.545	0.571	15.0	15.4	13.8
30	0.598	0.627	15.0	14.0	10.5
31	0.656	0.688	13.0	11.1	6.85
32	0.721	0.755	9.57	7.42	3.81
33	0.791	0.829	5.86	4.14	1.76
34	0.868	0.910	3.35	2.15	0.76
35	0.953	0.999	2.01	1.18	0.35
36	1.047	1.097	0.94	0.50	0.12
37	1.149	1.204	0.18	0.085	0.017
38	1.261	1.321	0.010	0.0045	0.00075
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

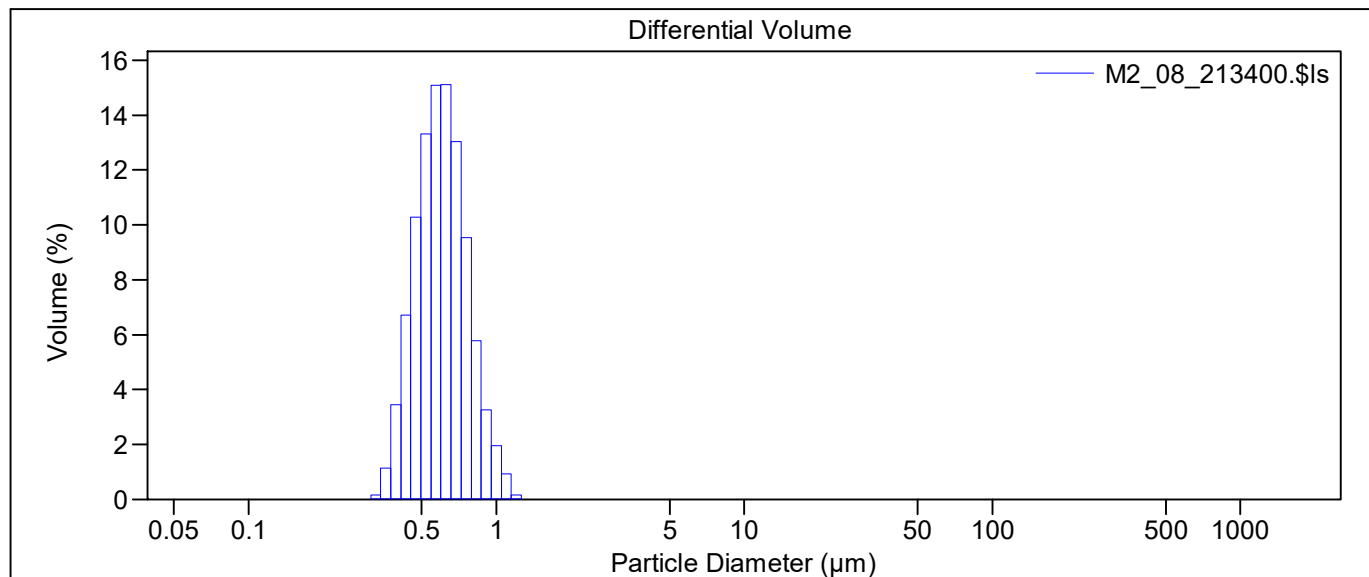
M2.\$av

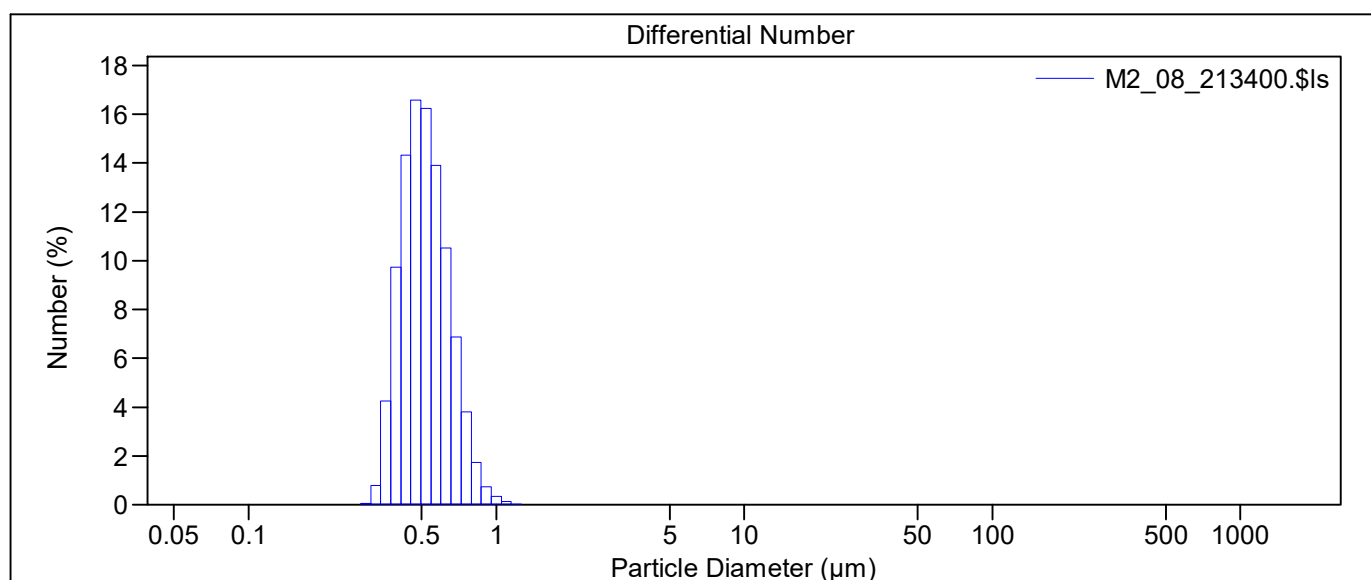
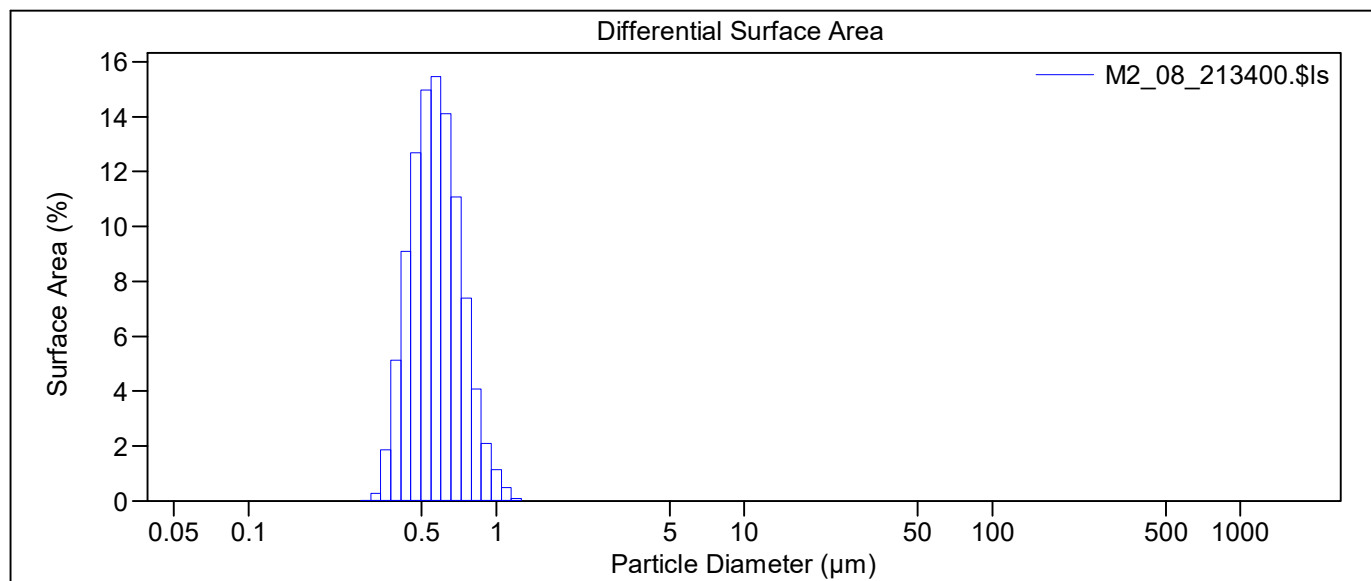
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_08_213400.\$ls		
	M2_08_213400.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.85%		
LS 13 320	Universal Liquid Module		
Start time:	21:32 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_08_213400.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.149 μm
Mean:	0.617 μm		Variance:	0.022 μm ²
Median:	0.597 μm		C.V.:	24.1%
Mean/Median ratio:	1.034		Skewness:	0.801 Right skewed
Mode:	0.627 μm		Kurtosis:	0.691 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.443 μm	0.508 μm	0.597 μm	0.704 μm	0.820 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0069	0.014	0.045
23	0.311	0.326	0.16	0.29	0.79
24	0.342	0.358	1.14	1.86	4.25
25	0.375	0.393	3.45	5.14	9.74
26	0.412	0.431	6.72	9.10	14.3
27	0.452	0.474	10.3	12.7	16.6
28	0.496	0.520	13.3	15.0	16.2
29	0.545	0.571	15.1	15.5	13.9
30	0.598	0.627	15.1	14.1	10.5
31	0.656	0.688	13.0	11.1	6.86
32	0.721	0.755	9.54	7.39	3.80
33	0.791	0.829	5.78	4.08	1.74
34	0.868	0.910	3.27	2.10	0.74
35	0.953	0.999	1.96	1.15	0.34
36	1.047	1.097	0.93	0.49	0.12
37	1.149	1.204	0.17	0.084	0.017
38	1.261	1.321	0.010	0.0044	0.00074
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

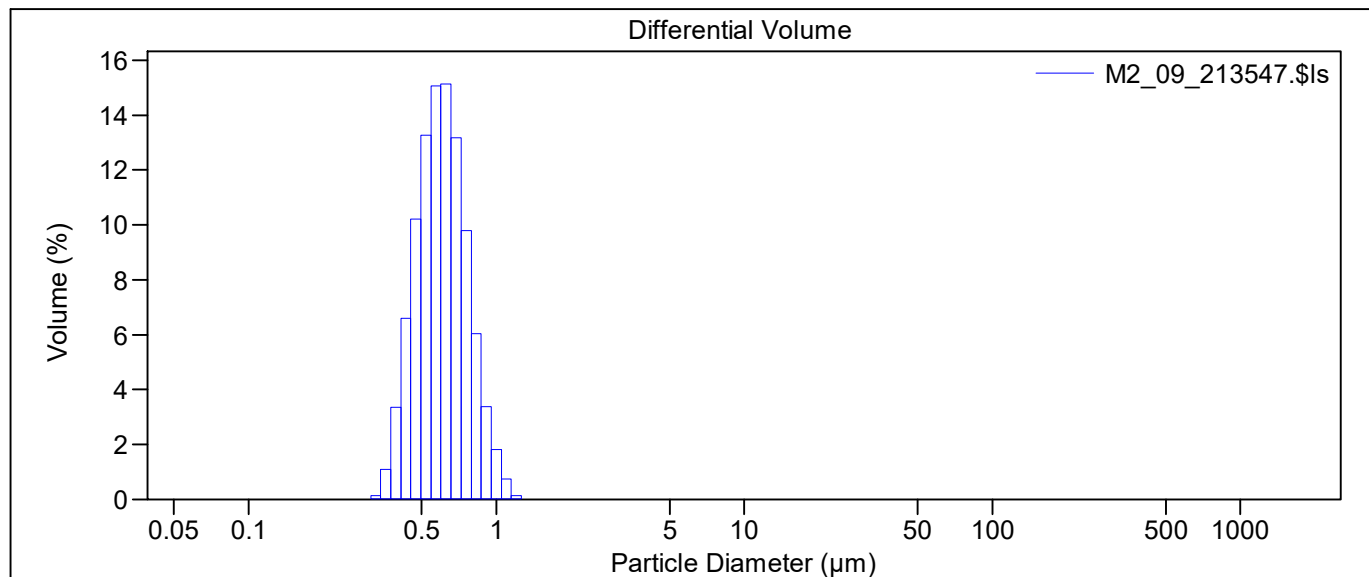
M2.\$av

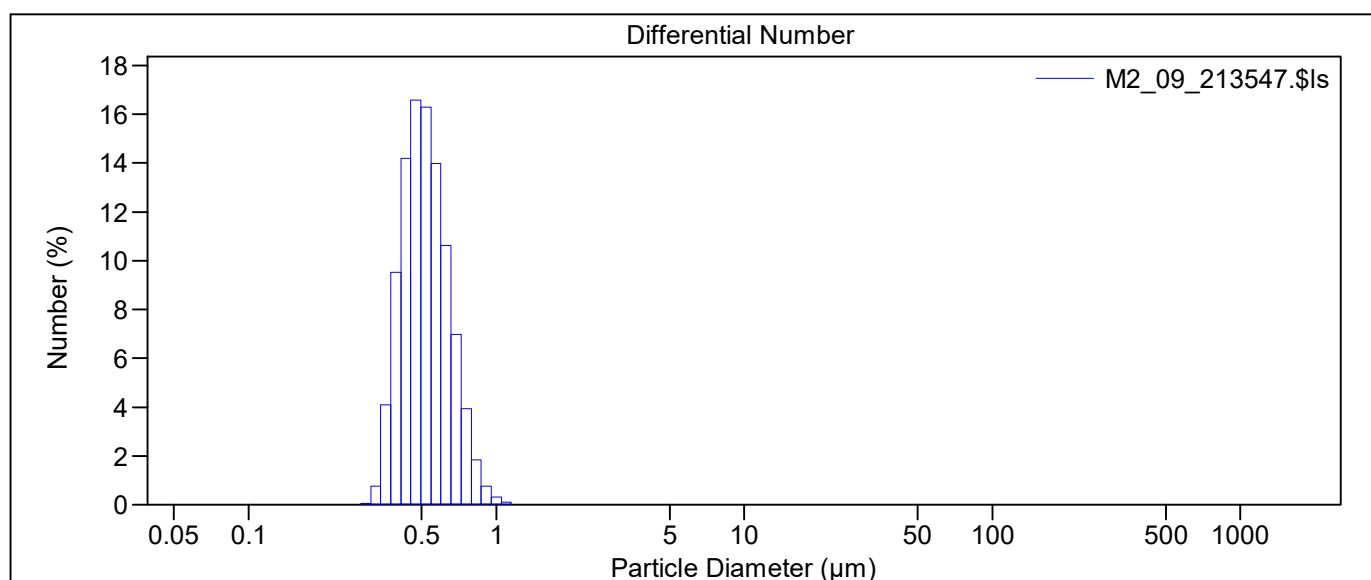
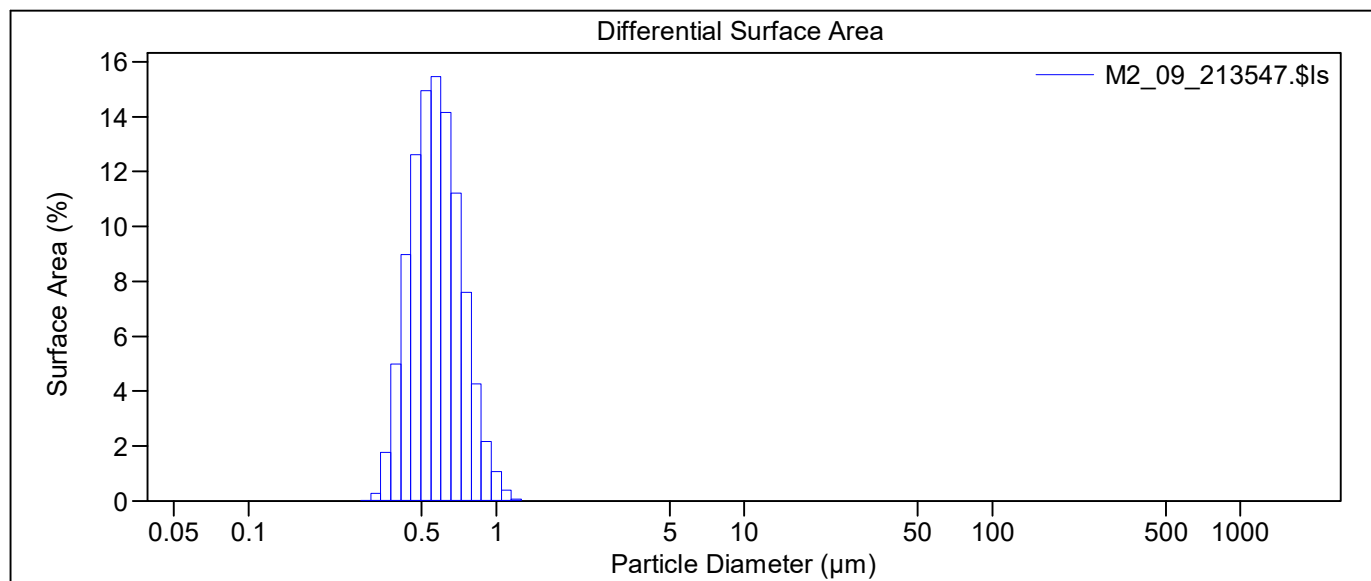
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_09_213547.\$ls		
	M2_09_213547.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.93%		
LS 13 320	Universal Liquid Module		
Start time:	21:34 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_09_213547.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.147 μm
Mean:	0.618 μm		Variance:	0.022 μm ²
Median:	0.599 μm		C.V.:	23.7%
Mean/Median ratio:	1.031		Skewness:	0.741 Right skewed
Mode:	0.627 μm		Kurtosis:	0.535 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.445 μm	0.509 μm	0.599 μm	0.706 μm	0.818 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0063	0.013	0.042
23	0.311	0.326	0.15	0.27	0.75
24	0.342	0.358	1.09	1.78	4.08
25	0.375	0.393	3.36	5.00	9.53
26	0.412	0.431	6.61	8.97	14.2
27	0.452	0.474	10.2	12.6	16.6
28	0.496	0.520	13.3	14.9	16.3
29	0.545	0.571	15.1	15.5	14.0
30	0.598	0.627	15.1	14.2	10.6
31	0.656	0.688	13.2	11.2	6.99
32	0.721	0.755	9.81	7.61	3.93
33	0.791	0.829	6.05	4.27	1.83
34	0.868	0.910	3.37	2.17	0.77
35	0.953	0.999	1.82	1.07	0.31
36	1.047	1.097	0.75	0.40	0.098
37	1.149	1.204	0.13	0.063	0.013
38	1.261	1.321	0.0070	0.0031	0.00052
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

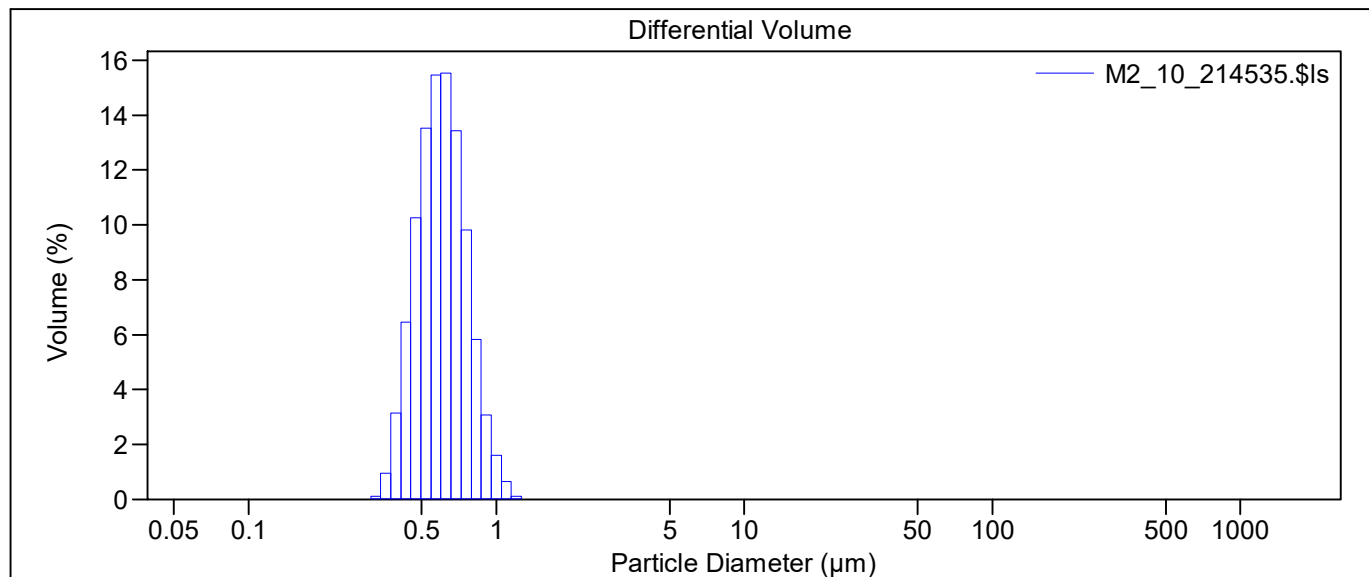
M2.\$av

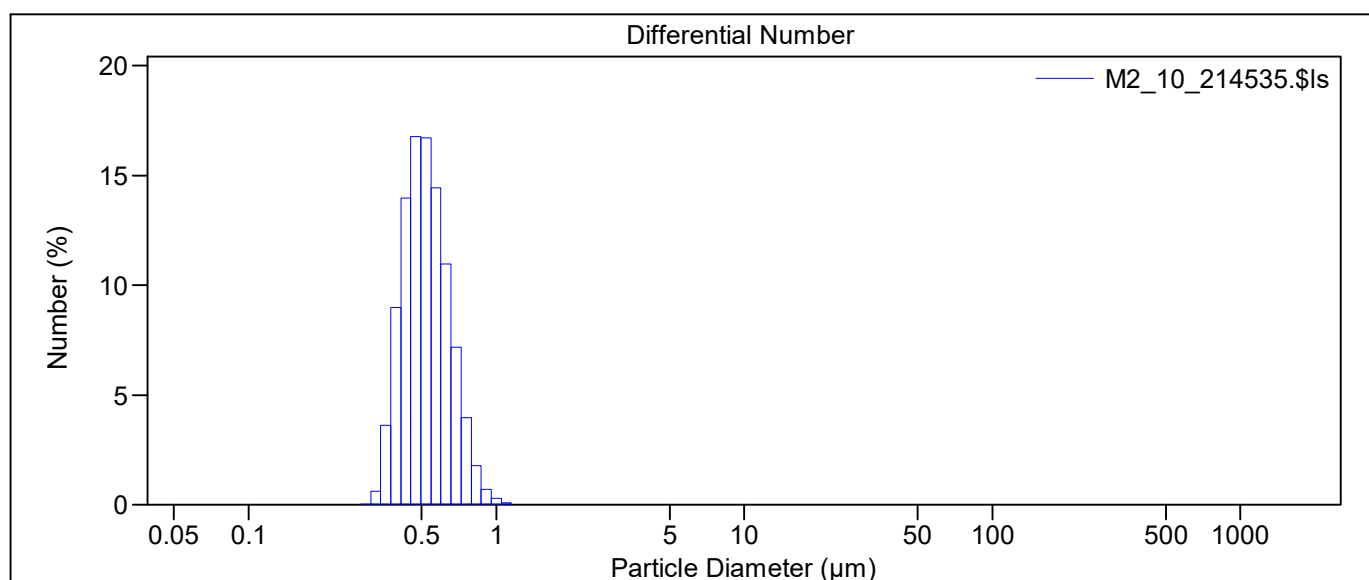
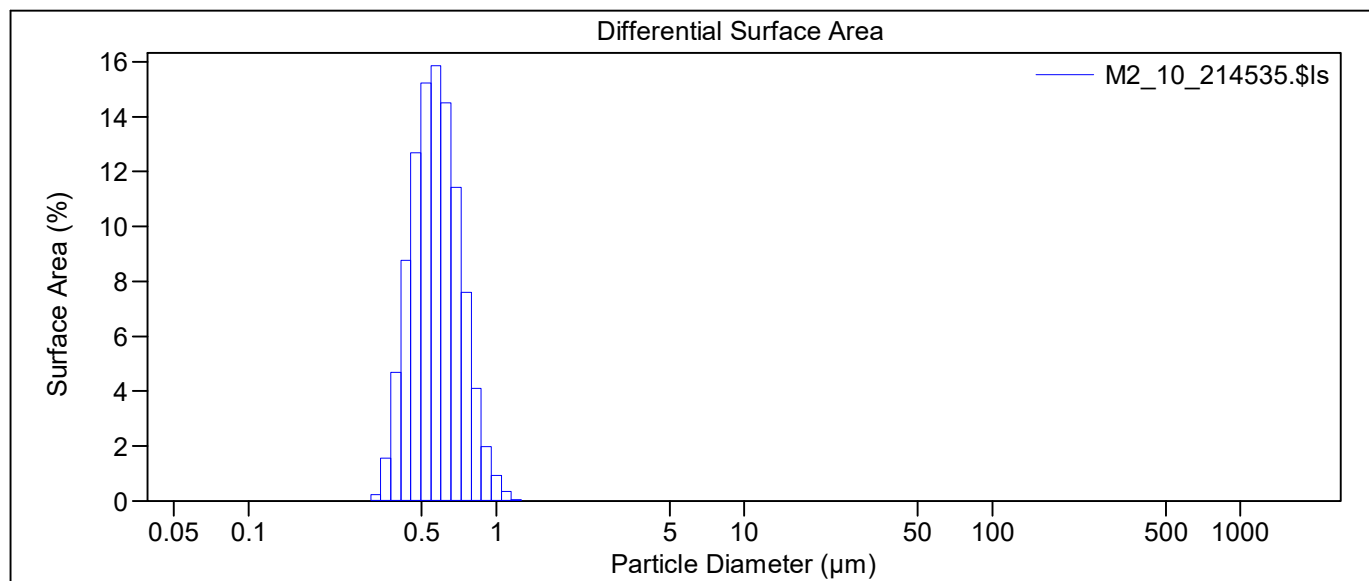
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_10_214535.\$ls		
	M2_10_214535.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.80%		
LS 13 320	Universal Liquid Module		
Start time:	21:43 1	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_10_214535.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.143 μm
Mean:	0.616 μm		Variance:	0.020 μm ²
Median:	0.598 μm		C.V.:	23.1%
Mean/Median ratio:	1.030		Skewness:	0.741 Right skewed
Mode:	0.627 μm		Kurtosis:	0.602 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.448 μm	0.511 μm	0.598 μm	0.702 μm	0.808 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0049	0.0097	0.032
23	0.311	0.326	0.13	0.22	0.63
24	0.342	0.358	0.95	1.56	3.61
25	0.375	0.393	3.14	4.68	8.98
26	0.412	0.431	6.47	8.77	14.0
27	0.452	0.474	10.3	12.7	16.8
28	0.496	0.520	13.5	15.2	16.7
29	0.545	0.571	15.5	15.9	14.4
30	0.598	0.627	15.5	14.5	11.0
31	0.656	0.688	13.4	11.4	7.16
32	0.721	0.755	9.81	7.61	3.95
33	0.791	0.829	5.82	4.11	1.77
34	0.868	0.910	3.08	1.98	0.71
35	0.953	0.999	1.60	0.94	0.28
36	1.047	1.097	0.65	0.35	0.086
37	1.149	1.204	0.11	0.054	0.011
38	1.261	1.321	0.0060	0.0027	0.00045
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

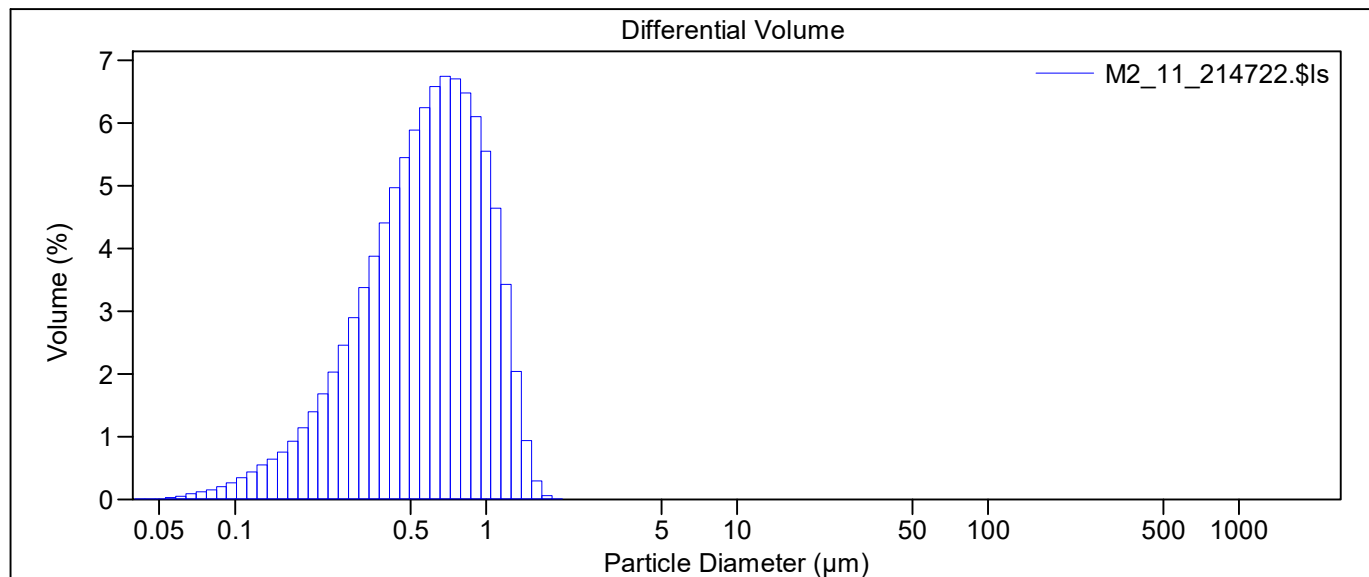
M2.\$av

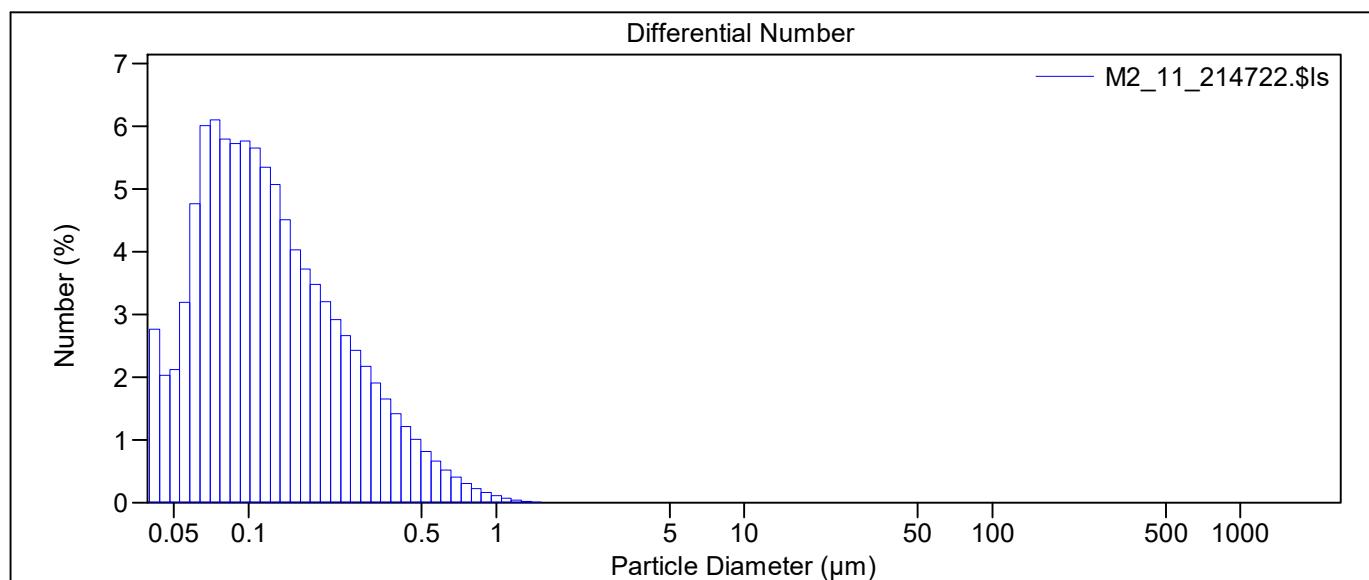
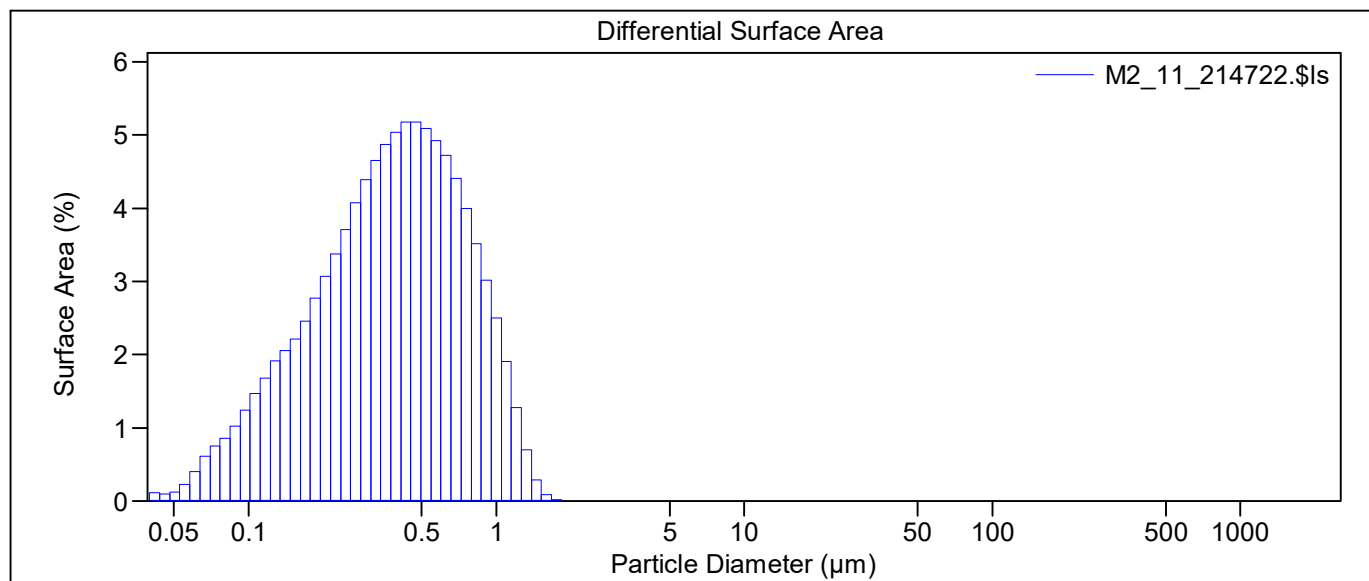
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_11_214722.\$ls		
	M2_11_214722.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.76%		
LS 13 320	Universal Liquid Module		
Start time:	21:45 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_11_214722.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.314 μm
Mean:	0.632 μm		Variance:	0.098 μm ²
Median:	0.594 μm		C.V.:	49.6%
Mean/Median ratio:	1.064		Skewness:	0.500 Right skewed
Mode:	0.688 μm		Kurtosis:	-0.303 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.248 μm	0.388 μm	0.594 μm	0.845 μm	1.078 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.010	0.11	2.77
2	0.044	0.046	0.010	0.099	2.04
3	0.048	0.050	0.014	0.12	2.12
4	0.053	0.055	0.028	0.22	3.19
5	0.058	0.061	0.055	0.40	4.76
6	0.064	0.067	0.091	0.61	6.01
7	0.070	0.073	0.12	0.75	6.10
8	0.077	0.080	0.15	0.86	5.79
9	0.084	0.088	0.20	1.03	5.72
10	0.093	0.097	0.27	1.24	5.76
11	0.102	0.106	0.35	1.47	5.66
12	0.112	0.117	0.44	1.68	5.35
13	0.122	0.128	0.55	1.91	5.07
14	0.134	0.141	0.64	2.05	4.51
15	0.148	0.155	0.76	2.21	4.03
16	0.162	0.170	0.93	2.46	3.72
17	0.178	0.186	1.15	2.77	3.47

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.40	3.07	3.20
19	0.214	0.225	1.68	3.37	2.91
20	0.235	0.247	2.03	3.71	2.66
21	0.258	0.271	2.45	4.08	2.43
22	0.284	0.297	2.90	4.39	2.17
23	0.311	0.326	3.37	4.65	1.91
24	0.342	0.358	3.88	4.87	1.66
25	0.375	0.393	4.41	5.04	1.42
26	0.412	0.431	4.97	5.18	1.21
27	0.452	0.474	5.45	5.17	1.01
28	0.496	0.520	5.89	5.09	0.82
29	0.545	0.571	6.24	4.92	0.66
30	0.598	0.627	6.58	4.72	0.52
31	0.656	0.688	6.74	4.41	0.41
32	0.721	0.755	6.71	4.00	0.31
33	0.791	0.829	6.47	3.51	0.22
34	0.868	0.910	6.10	3.02	0.16
35	0.953	0.999	5.55	2.50	0.11
36	1.047	1.097	4.64	1.91	0.069
37	1.149	1.204	3.42	1.28	0.038
38	1.261	1.321	2.04	0.70	0.017
39	1.385	1.451	0.93	0.29	0.0060
40	1.520	1.592	0.30	0.084	0.0014
41	1.668	1.748	0.058	0.015	0.00021
42	1.832	1.919	0.0061	0.0014	0.000017
43	2.011	2.107	0.00019	0.000041	3.99E-7
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

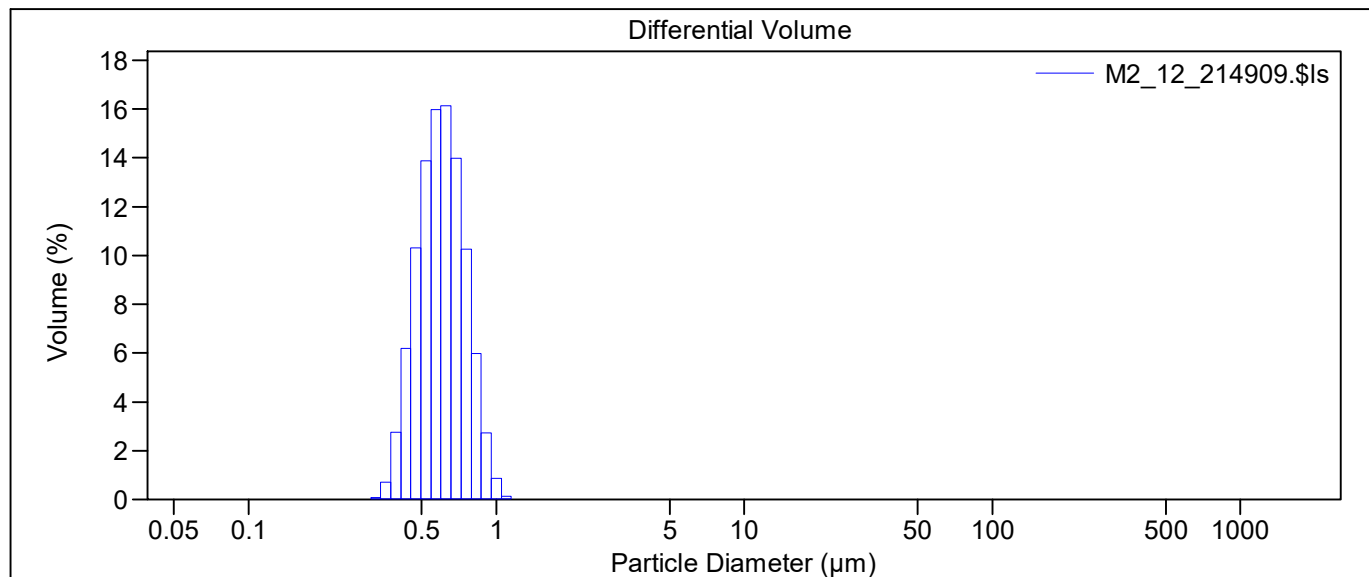
M2.\$av

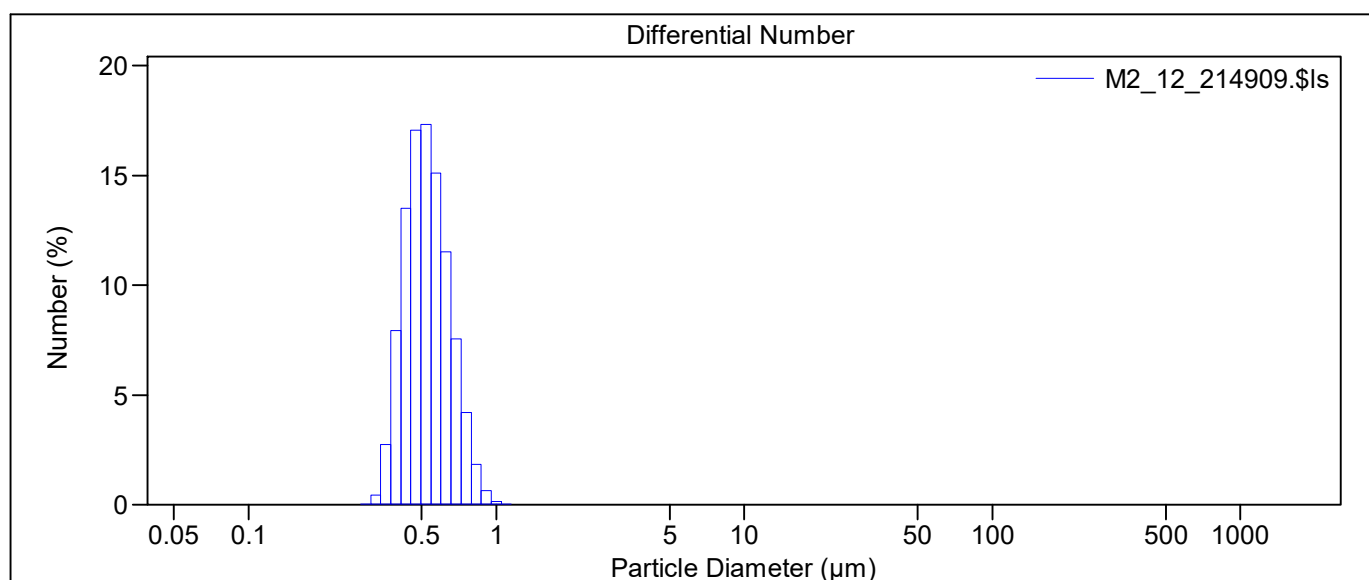
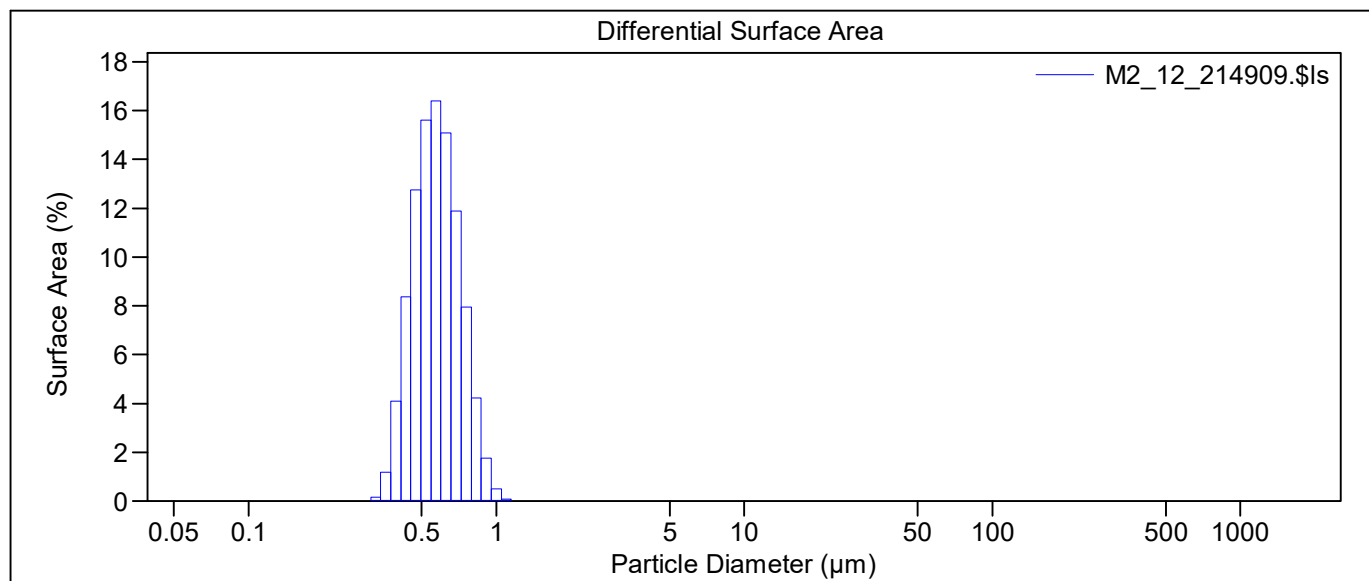
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_12_214909.\$ls		
	M2_12_214909.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.90%		
LS 13 320	Universal Liquid Module		
Start time:	21:47 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_12_214909.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.131 μm
Mean:	0.612 μm		Variance:	0.017 μm ²
Median:	0.598 μm		C.V.:	21.4%
Mean/Median ratio:	1.023		Skewness:	0.530 Right skewed
Mode:	0.627 μm		Kurtosis:	0.030 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.453 μm	0.514 μm	0.598 μm	0.698 μm	0.789 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0028	0.0056	0.019
23	0.311	0.326	0.086	0.15	0.44
24	0.342	0.358	0.72	1.17	2.74
25	0.375	0.393	2.74	4.08	7.93
26	0.412	0.431	6.18	8.38	13.5
27	0.452	0.474	10.3	12.7	17.0
28	0.496	0.520	13.9	15.6	17.3
29	0.545	0.571	16.0	16.4	15.1
30	0.598	0.627	16.1	15.1	11.5
31	0.656	0.688	14.0	11.9	7.54
32	0.721	0.755	10.3	7.95	4.19
33	0.791	0.829	5.99	4.22	1.85
34	0.868	0.910	2.72	1.75	0.63
35	0.953	0.999	0.87	0.51	0.15
36	1.047	1.097	0.13	0.071	0.018
37	1.149	1.204	0.0078	0.0038	0.00078
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

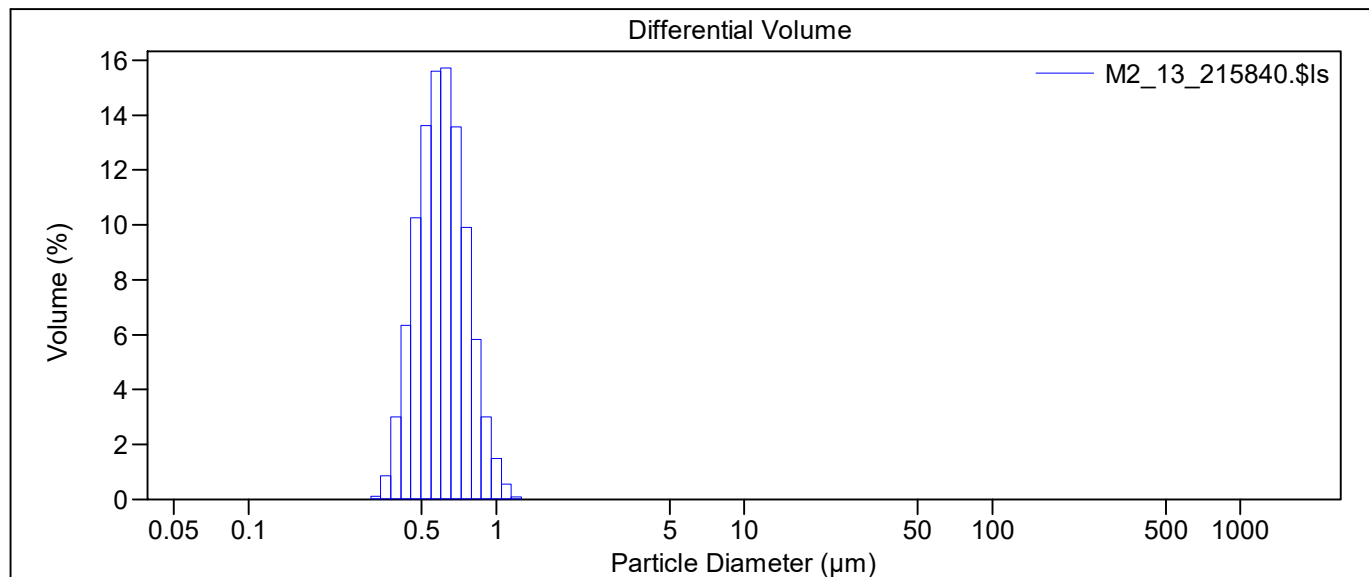
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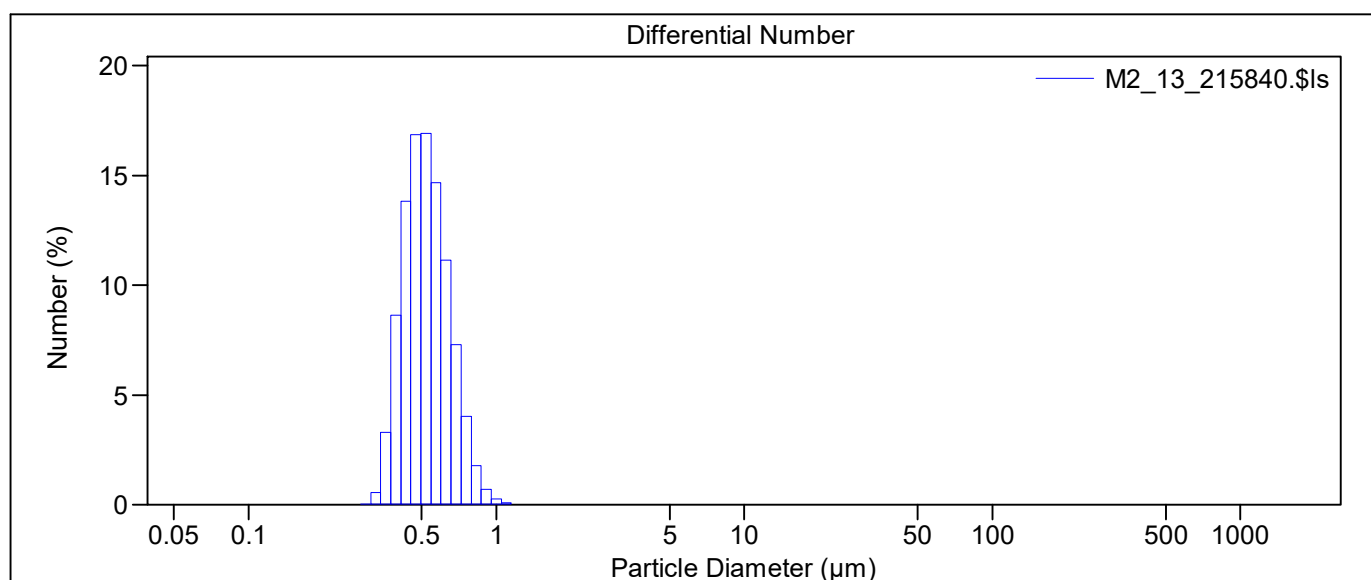
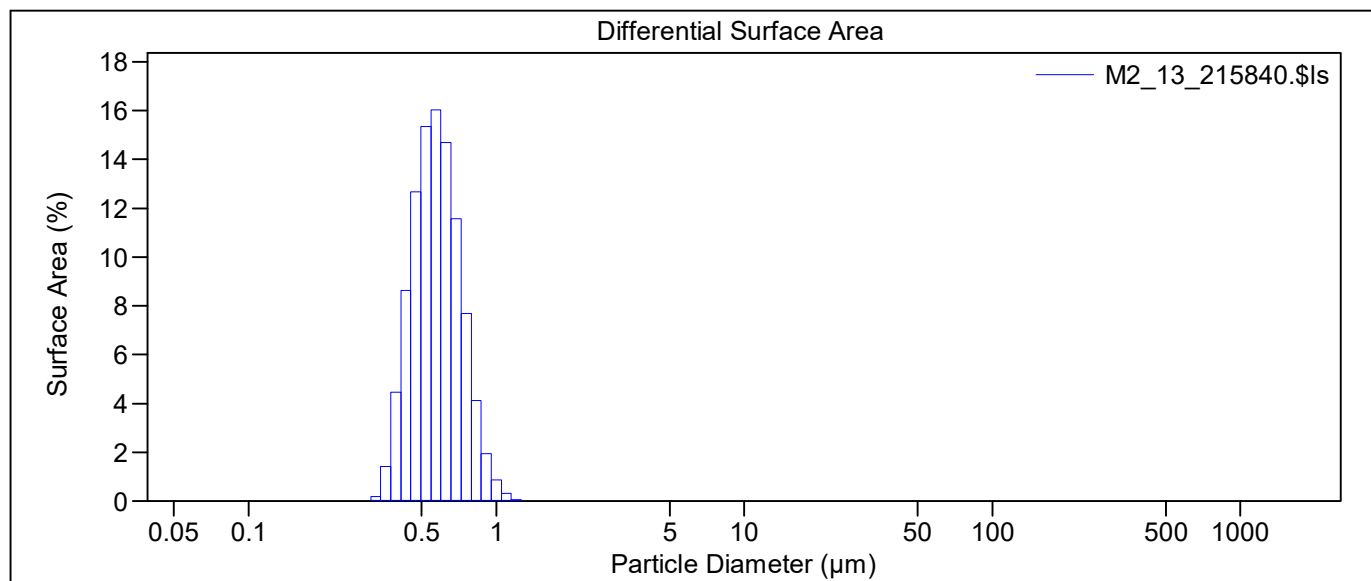
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_13_215840.\$ls		
	M2_13_215840.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.84%		
LS 13 320	Universal Liquid Module		
Start time:	21:56 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_13_215840.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.140 μm
Mean:	0.616 μm		Variance:	0.020 μm ²
Median:	0.599 μm		C.V.:	22.8%
Mean/Median ratio:	1.028		Skewness:	0.719 Right skewed
Mode:	0.627 μm		Kurtosis:	0.558 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.450 μm	0.512 μm	0.599 μm	0.701 μm	0.804 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0040	0.0079	0.027
23	0.311	0.326	0.11	0.20	0.55
24	0.342	0.358	0.87	1.42	3.31
25	0.375	0.393	3.00	4.47	8.62
26	0.412	0.431	6.35	8.63	13.8
27	0.452	0.474	10.3	12.7	16.8
28	0.496	0.520	13.6	15.3	16.9
29	0.545	0.571	15.6	16.0	14.7
30	0.598	0.627	15.7	14.7	11.2
31	0.656	0.688	13.6	11.6	7.28
32	0.721	0.755	9.91	7.69	4.02
33	0.791	0.829	5.83	4.12	1.79
34	0.868	0.910	3.01	1.94	0.70
35	0.953	0.999	1.48	0.87	0.26
36	1.047	1.097	0.56	0.30	0.075
37	1.149	1.204	0.093	0.045	0.0093
38	1.261	1.321	0.0048	0.0021	0.00036
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

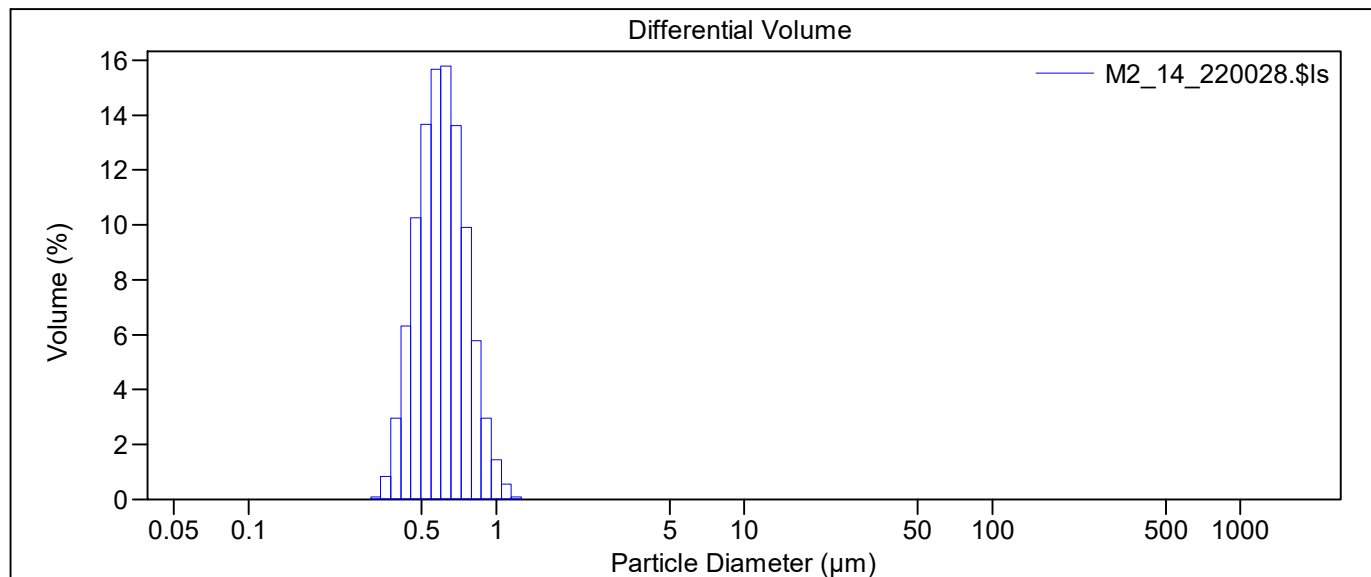
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_14_220028.\$ls		
	M2_14_220028.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.84%		
LS 13 320	Universal Liquid Module		
Start time:	21:58 1	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

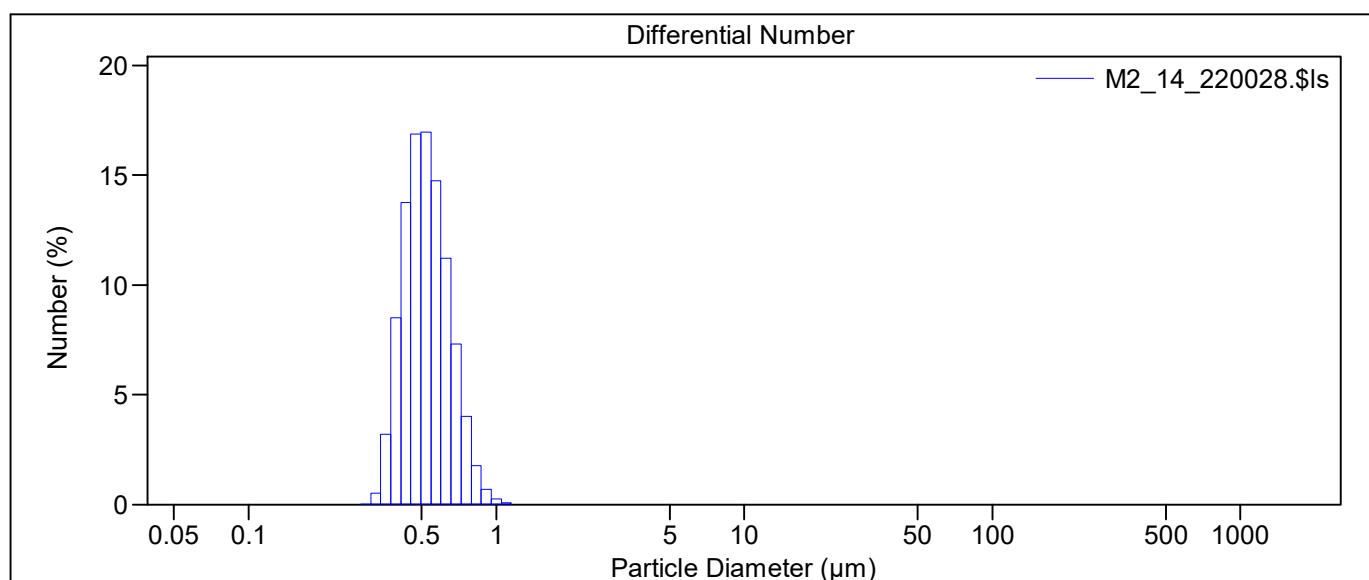
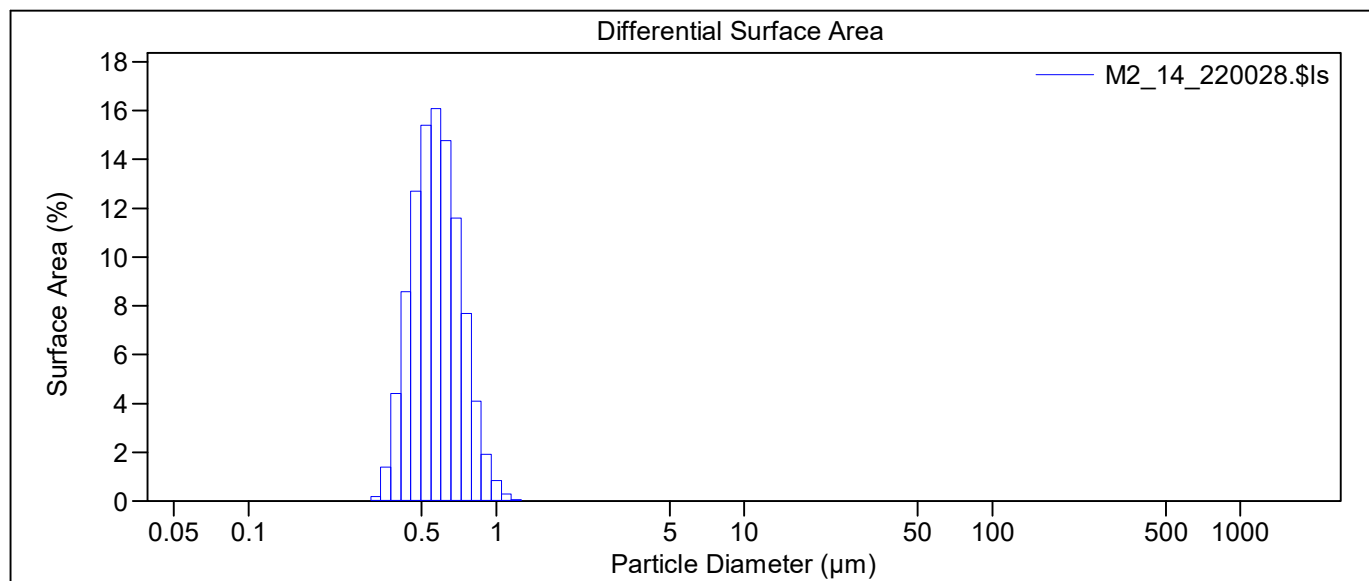
Volume Statistics (Arithmetic) M2_14_220028.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.140 µm
Mean:	0.615 µm	Variance:	0.020 µm ²
Median:	0.599 µm	C.V.:	22.7%
Mean/Median ratio:	1.028	Skewness:	0.720 Right skewed
Mode:	0.627 µm	Kurtosis:	0.574 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.451 µm	0.512 µm	0.599 µm	0.701 µm	0.802 µm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0038	0.0074	0.025
23	0.311	0.326	0.10	0.19	0.53
24	0.342	0.358	0.84	1.38	3.22
25	0.375	0.393	2.96	4.41	8.52
26	0.412	0.431	6.32	8.59	13.8
27	0.452	0.474	10.3	12.7	16.9
28	0.496	0.520	13.7	15.4	17.0
29	0.545	0.571	15.7	16.1	14.7
30	0.598	0.627	15.8	14.8	11.2
31	0.656	0.688	13.6	11.6	7.32
32	0.721	0.755	9.91	7.69	4.02
33	0.791	0.829	5.79	4.09	1.78
34	0.868	0.910	2.96	1.91	0.69
35	0.953	0.999	1.45	0.85	0.25
36	1.047	1.097	0.56	0.30	0.074
37	1.149	1.204	0.092	0.045	0.0092
38	1.261	1.321	0.0047	0.0021	0.00036
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

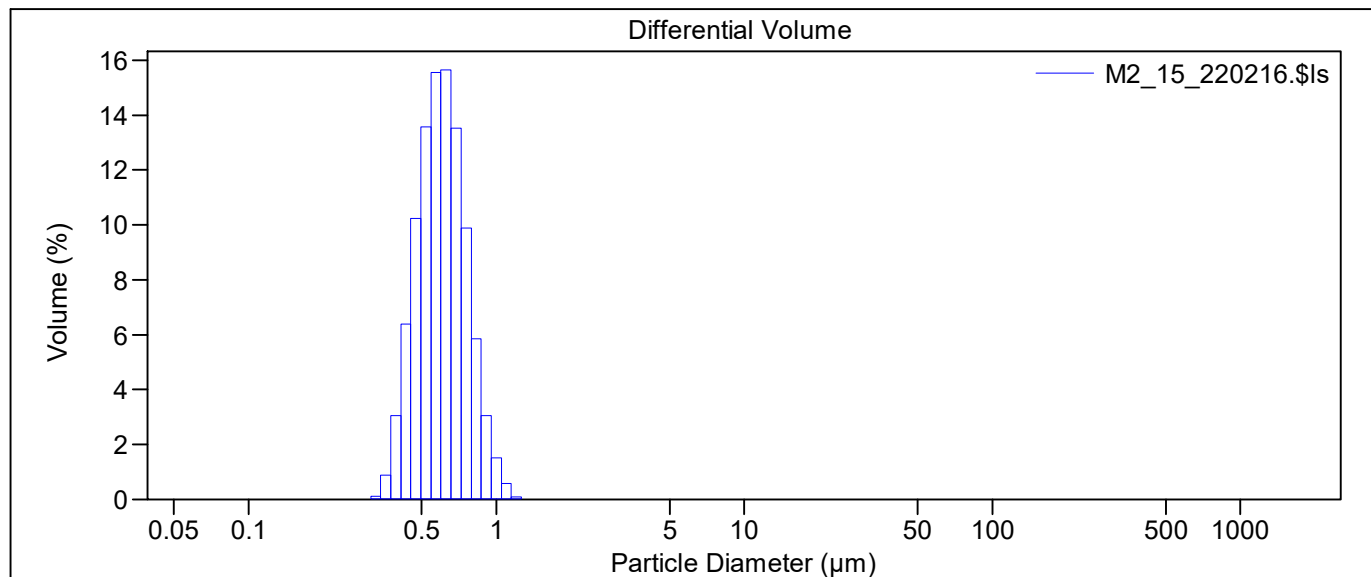
M2.\$av

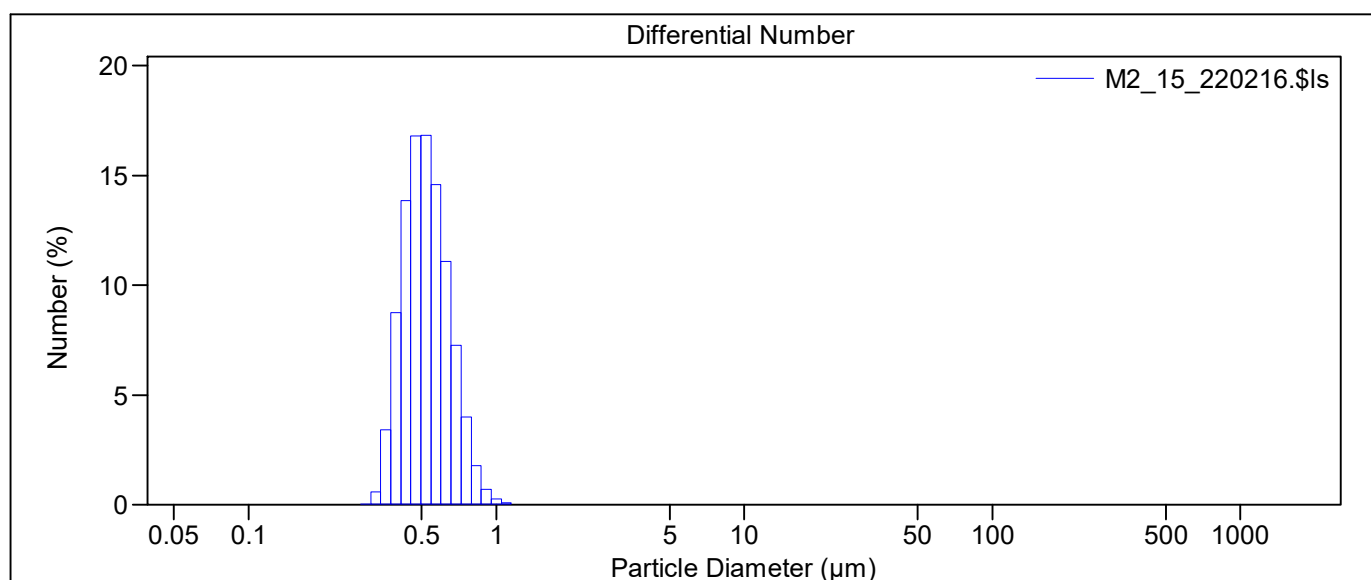
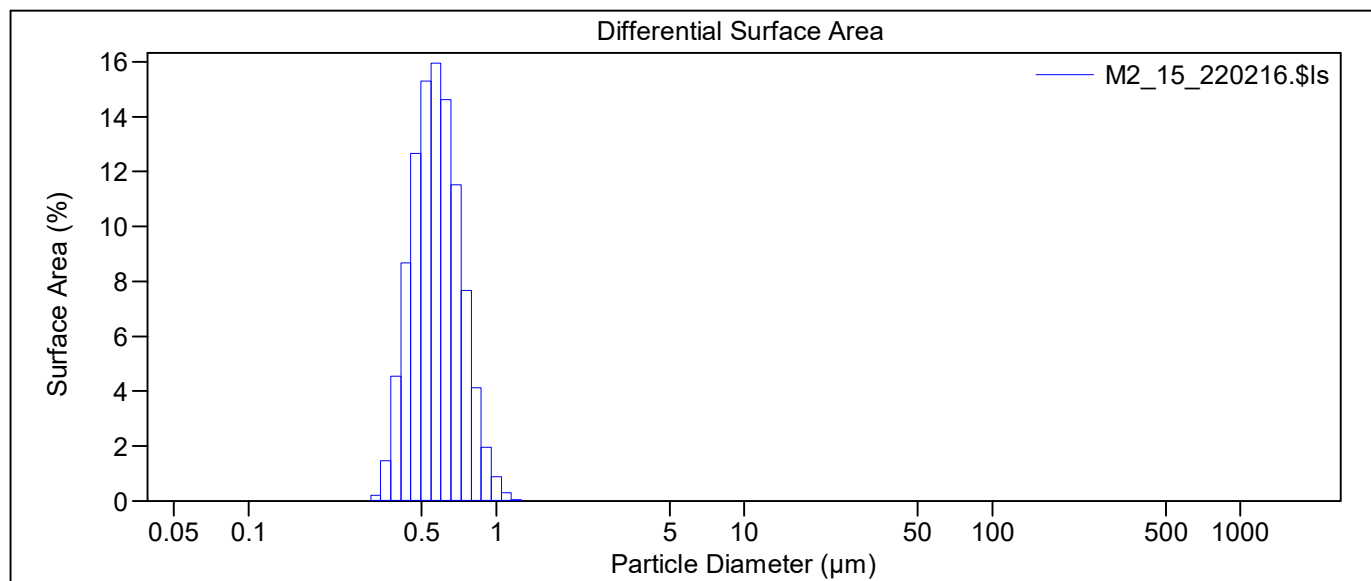
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M2\M2_15_220216.\$ls		
	M2_15_220216.\$ls		
File ID:	M2		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.85%		
LS 13 320	Universal Liquid Module		
Start time:	22:00 1	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M2_15_220216.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.141 μm
Mean:	0.616 μm		Variance:	0.020 μm ²
Median:	0.599 μm		C.V.:	22.9%
Mean/Median ratio:	1.029		Skewness:	0.723 Right skewed
Mode:	0.627 μm		Kurtosis:	0.561 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.449 μm	0.512 μm	0.599 μm	0.702 μm	0.806 μm





M2.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0043	0.0085	0.029
23	0.311	0.326	0.11	0.21	0.58
24	0.342	0.358	0.90	1.47	3.41
25	0.375	0.393	3.05	4.54	8.74
26	0.412	0.431	6.39	8.67	13.9
27	0.452	0.474	10.2	12.7	16.8
28	0.496	0.520	13.6	15.3	16.8
29	0.545	0.571	15.6	16.0	14.6
30	0.598	0.627	15.7	14.6	11.1
31	0.656	0.688	13.5	11.5	7.25
32	0.721	0.755	9.89	7.68	4.00
33	0.791	0.829	5.85	4.13	1.79
34	0.868	0.910	3.05	1.96	0.70
35	0.953	0.999	1.52	0.89	0.27
36	1.047	1.097	0.59	0.31	0.077
37	1.149	1.204	0.097	0.047	0.0097
38	1.261	1.321	0.0050	0.0022	0.00038
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M2.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M3\M3.\$av M3.\$av

File ID: M3

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_01_104235.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_02_104423.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_03_104610.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_04_105648.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_05_105835.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_06_110024.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_07_111048.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_08_111236.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_09_111424.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_10_112435.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_11_112622.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_12_112808.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_13_113816.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_14_114003.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M3\M3_15_114150.\$ls

Volume Statistics (Arithmetic) M3.\$av

Calculations from 0.040 µm to 2000 µm

Volume: 100%

Mean: 0.581 µm

S.D.: 0.188 µm

Median: 0.569 µm

Variance: 0.035 µm²

Mean/Median ratio: 1.021

C.V.: 32.4%

Mode: 0.571 µm

Skewness: 0.709 Right skewed

Kurtosis: 3.502 Leptokurtic

<10%

<25%

<50%

<75%

<90%

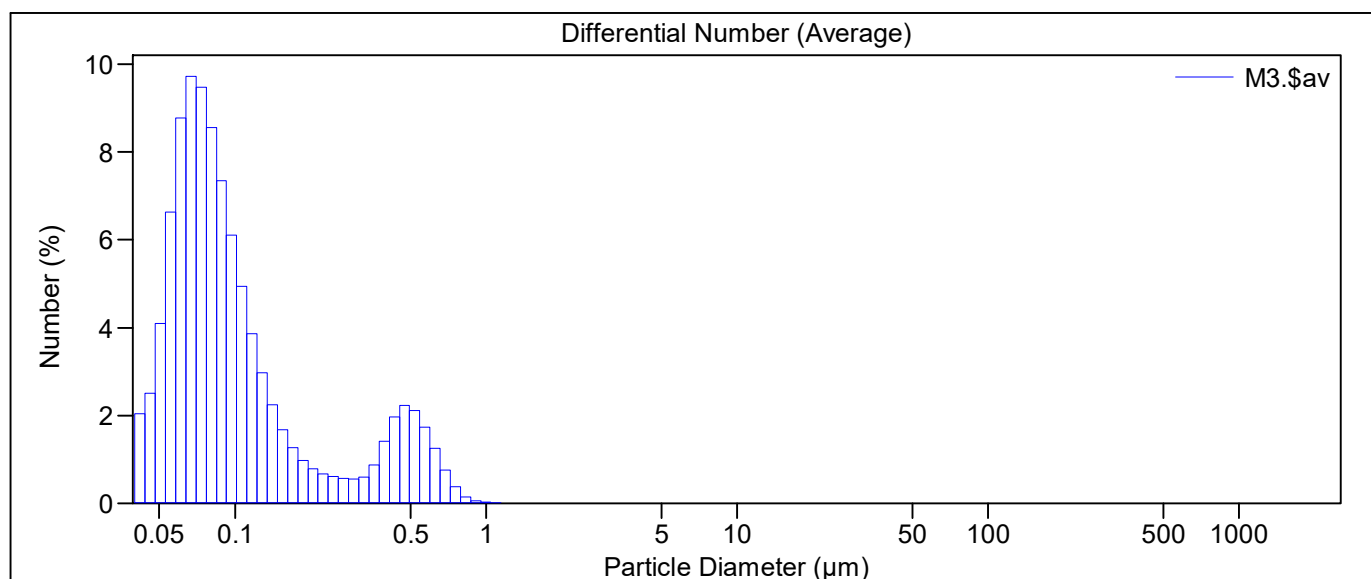
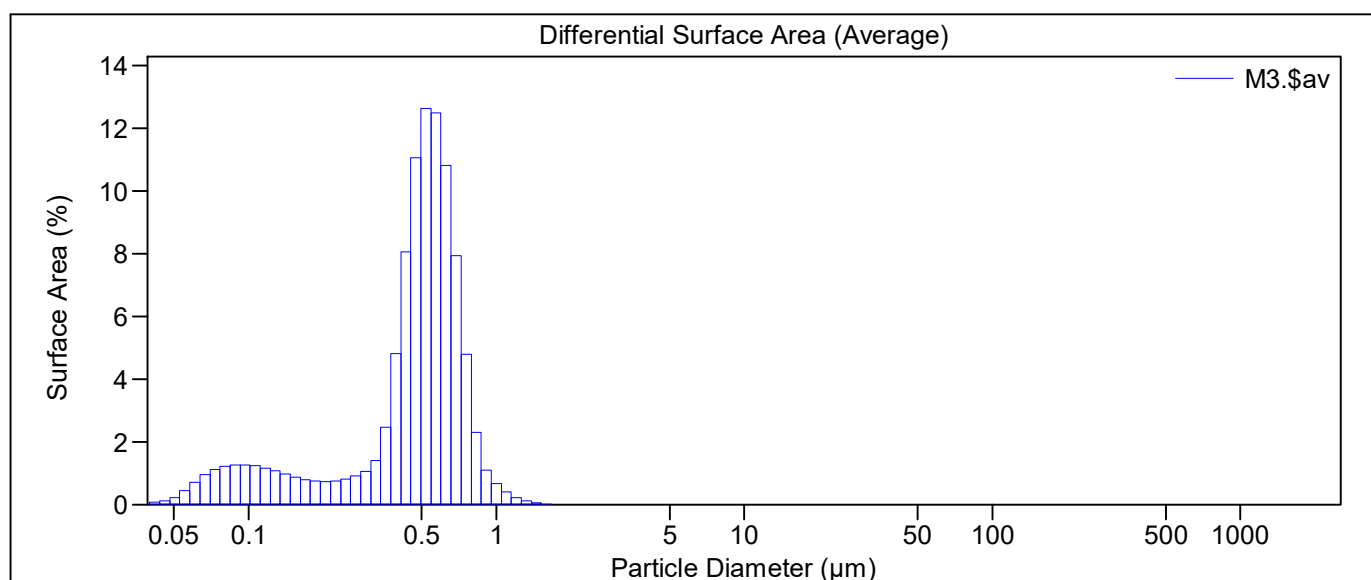
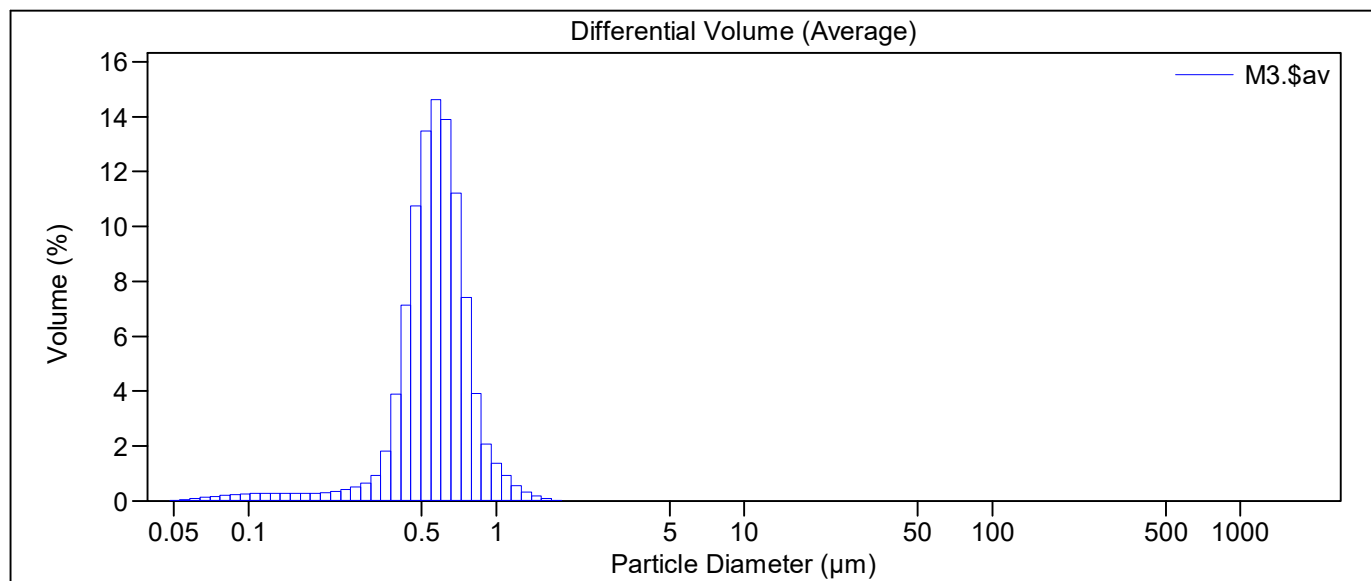
0.393 µm

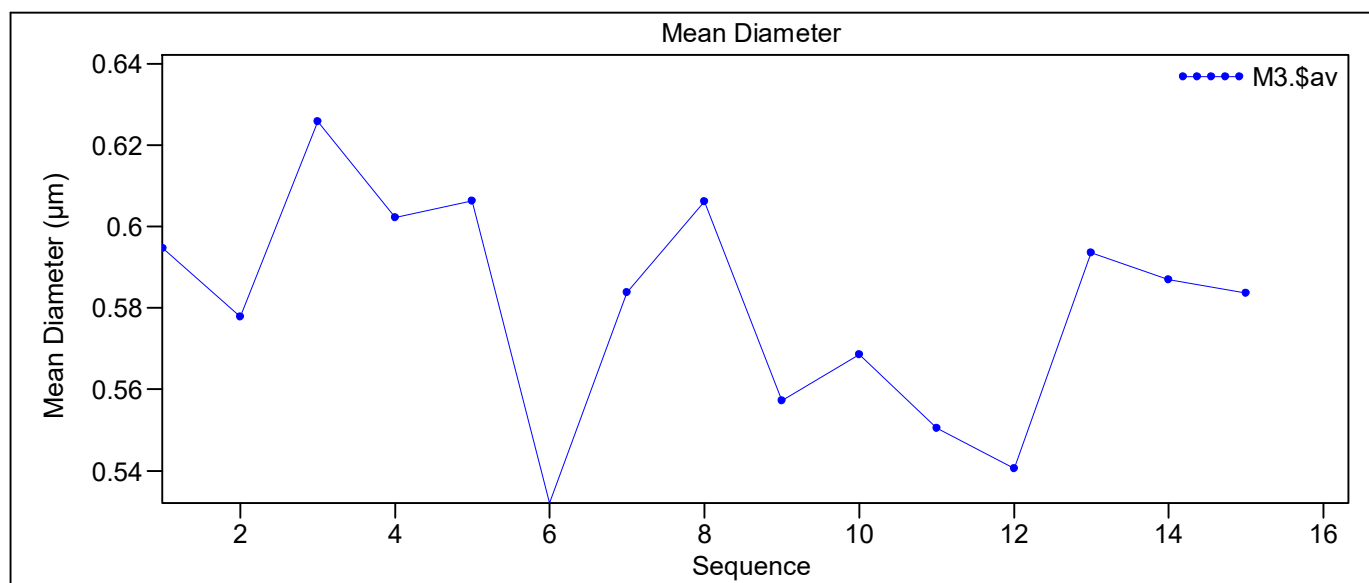
0.476 µm

0.569 µm

0.674 µm

0.786 µm





M3.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.0068	0.079	2.04
2	0.044	0.046	0.011	0.12	2.51
3	0.048	0.050	0.024	0.23	4.09
4	0.053	0.055	0.051	0.45	6.64
5	0.058	0.061	0.089	0.72	8.77
6	0.064	0.067	0.13	0.96	9.73
7	0.070	0.073	0.17	1.12	9.48
8	0.077	0.080	0.20	1.22	8.55
9	0.084	0.088	0.23	1.27	7.35
10	0.093	0.097	0.25	1.27	6.11
11	0.102	0.106	0.27	1.23	4.94
12	0.112	0.117	0.28	1.17	3.87
13	0.122	0.128	0.28	1.08	2.98
14	0.134	0.141	0.28	0.98	2.24
15	0.148	0.155	0.28	0.88	1.68
16	0.162	0.170	0.28	0.80	1.26
17	0.178	0.186	0.29	0.75	0.98
18	0.195	0.205	0.30	0.73	0.79
19	0.214	0.225	0.35	0.75	0.67
20	0.235	0.247	0.41	0.82	0.61
21	0.258	0.271	0.51	0.92	0.57
22	0.284	0.297	0.65	1.07	0.55
23	0.311	0.326	0.94	1.41	0.60
24	0.342	0.358	1.81	2.46	0.87
25	0.375	0.393	3.89	4.82	1.42
26	0.412	0.431	7.13	8.05	1.96
27	0.452	0.474	10.7	11.1	2.23
28	0.496	0.520	13.5	12.6	2.12
29	0.545	0.571	14.6	12.5	1.74
30	0.598	0.627	13.9	10.8	1.25
31	0.656	0.688	11.2	7.94	0.76
32	0.721	0.755	7.42	4.79	0.38
33	0.791	0.829	3.91	2.30	0.15
34	0.868	0.910	2.07	1.11	0.061
35	0.953	0.999	1.37	0.67	0.030
36	1.047	1.097	0.92	0.41	0.015
37	1.149	1.204	0.56	0.23	0.0071
38	1.261	1.321	0.33	0.12	0.0031
39	1.385	1.451	0.18	0.060	0.0013
40	1.520	1.592	0.084	0.026	0.00046
41	1.668	1.748	0.033	0.0091	0.00013

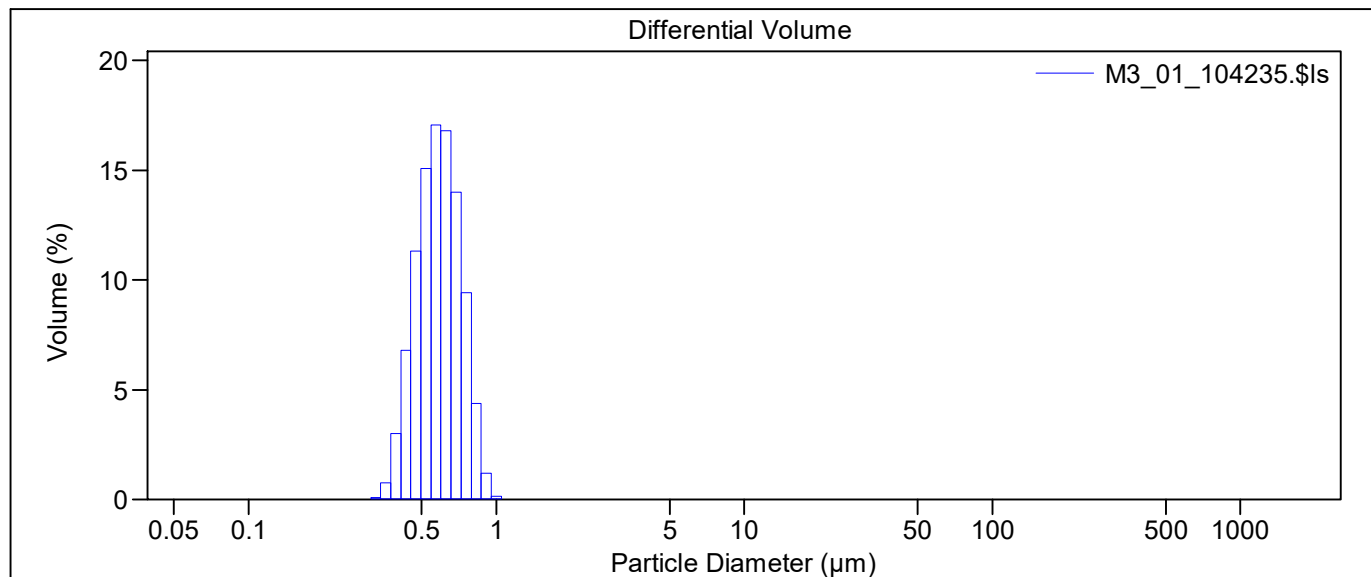
M3.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.0082	0.0021	0.000026
43	2.011	2.107	0.0014	0.00033	0.000003
44	2.207	2.313	0.000098	0.000021	1.76E-7
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

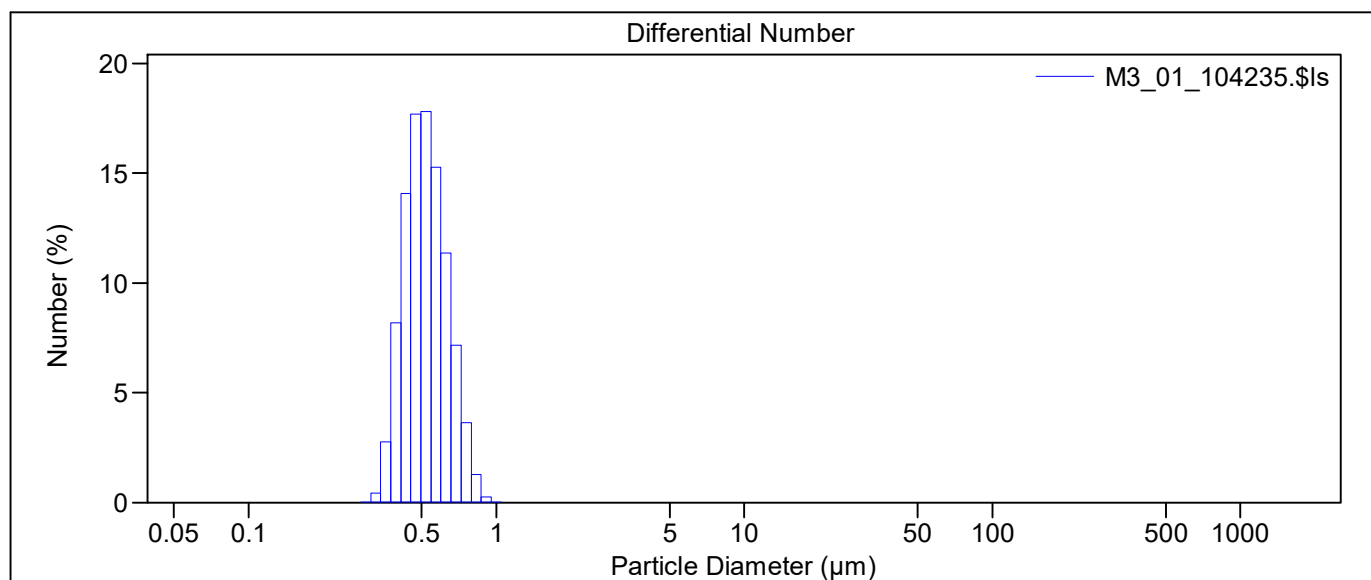
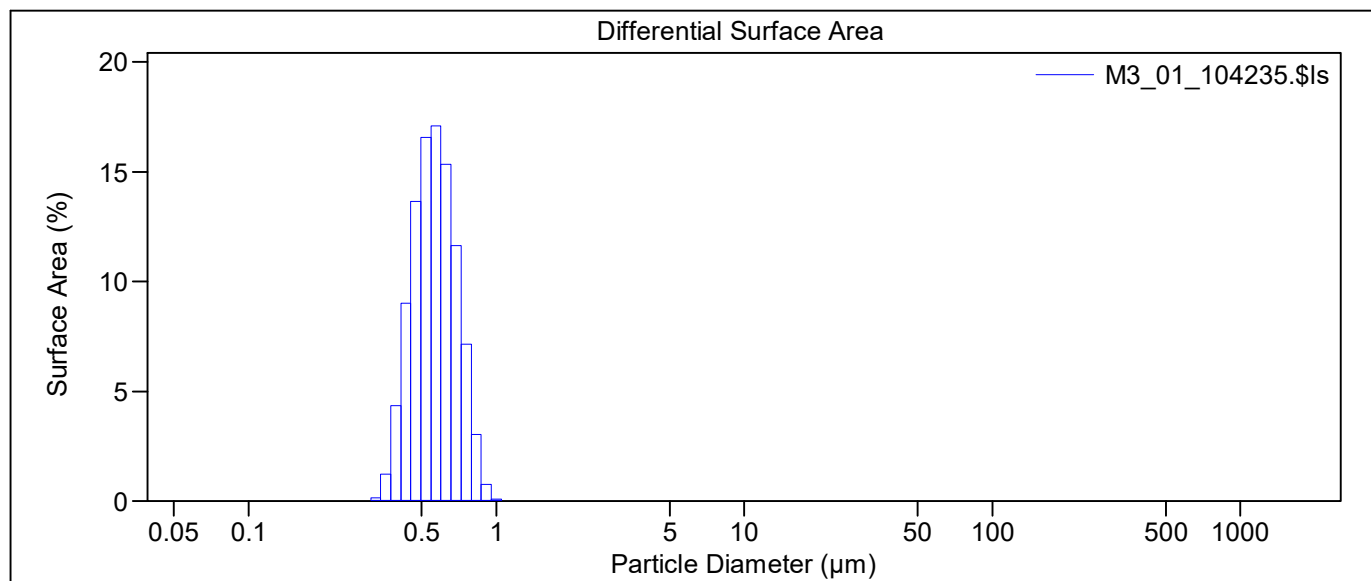
M3.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_01_104235.\$ls		
	M3_01_104235.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.01%		
LS 13 320	Universal Liquid Module		
Start time:	10:40	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_01_104235.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.117 μm
Mean:	0.595 μm		Variance:	0.014 μm ²
Median:	0.585 μm		C.V.:	19.7%
Mean/Median ratio:	1.016		Skewness:	0.385 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.253 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.448 μm	0.506 μm	0.585 μm	0.675 μm	0.759 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0029	0.0055	0.018
23	0.311	0.326	0.090	0.16	0.43
24	0.342	0.358	0.77	1.22	2.78
25	0.375	0.393	2.99	4.35	8.19
26	0.412	0.431	6.79	9.00	14.1
27	0.452	0.474	11.3	13.6	17.7
28	0.496	0.520	15.1	16.6	17.8
29	0.545	0.571	17.1	17.1	15.3
30	0.598	0.627	16.8	15.3	11.4
31	0.656	0.688	14.0	11.6	7.16
32	0.721	0.755	9.42	7.13	3.64
33	0.791	0.829	4.37	3.02	1.28
34	0.868	0.910	1.20	0.75	0.26
35	0.953	0.999	0.14	0.082	0.024
36	1.047	1.097	0.0054	0.0028	0.00068
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0

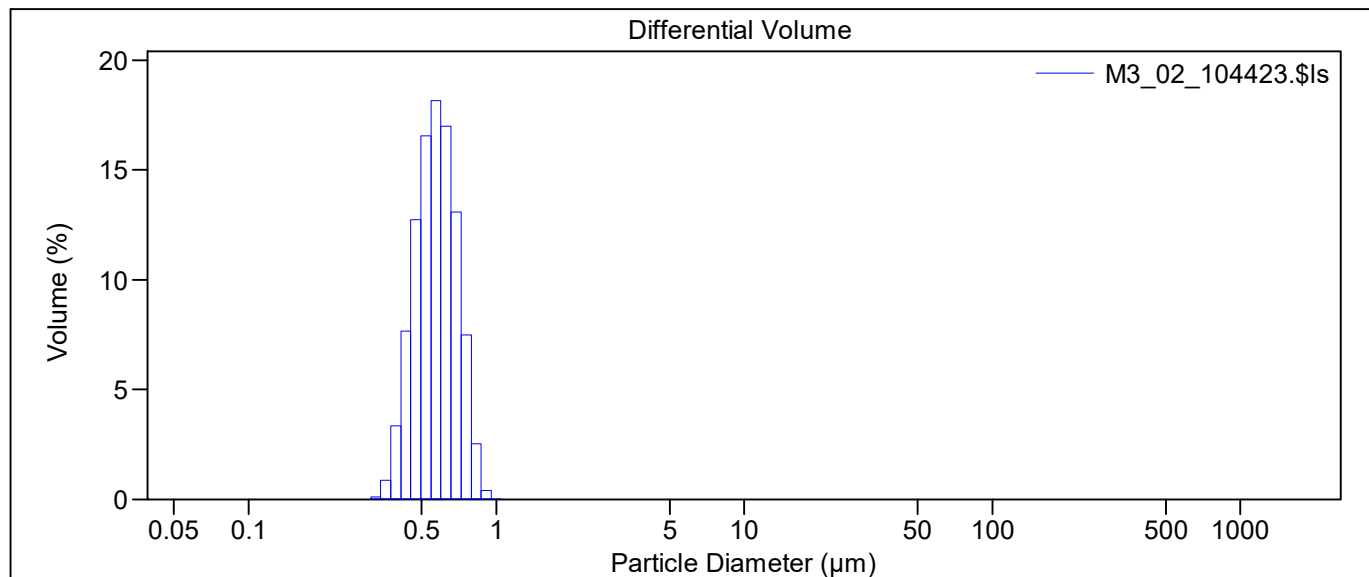
M3.\$av

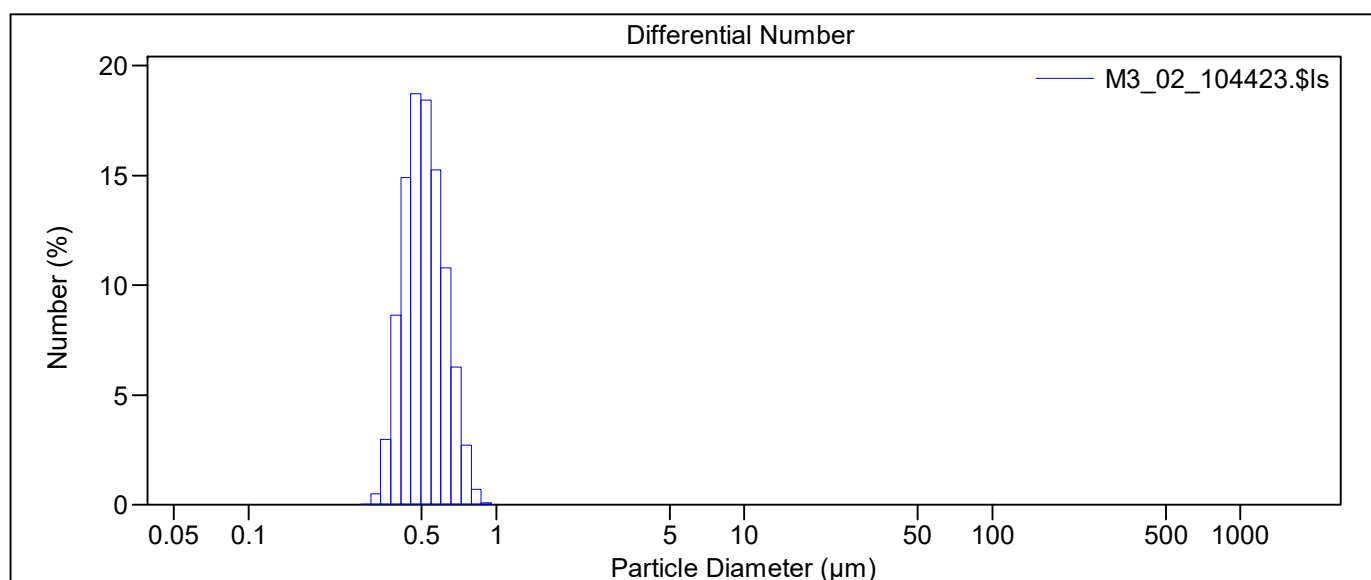
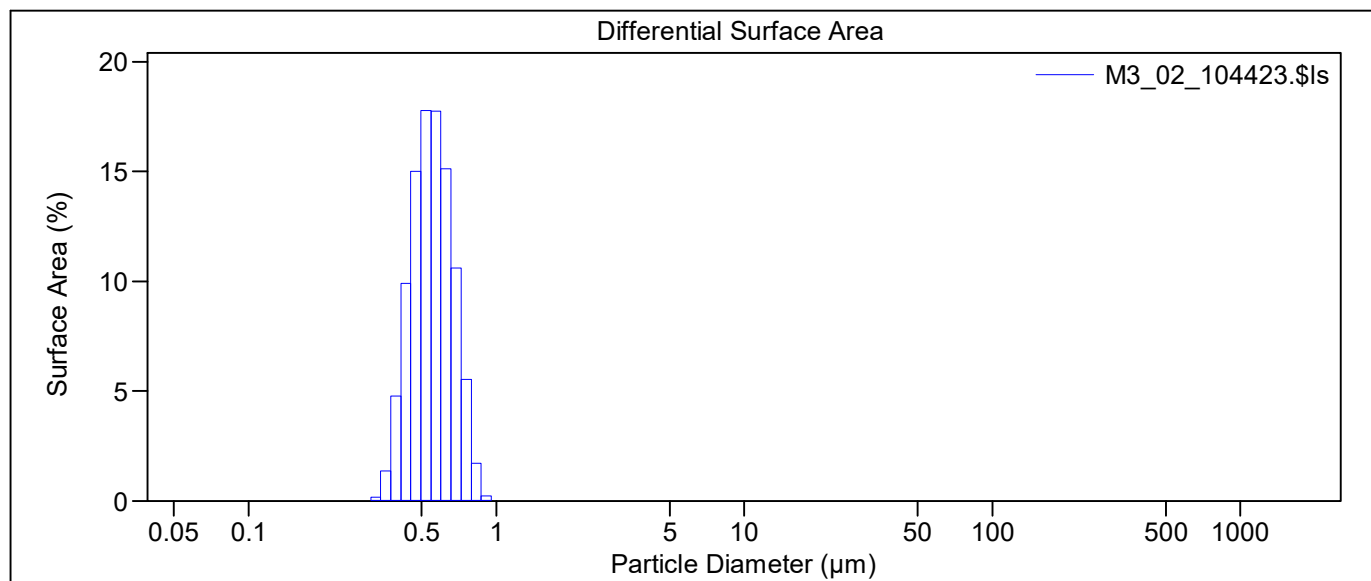
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_02_104423.\$ls		
	M3_02_104423.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.34%		
LS 13 320	Universal Liquid Module		
Start time:	10:42	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_02_104423.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.108 µm
Mean:	0.578 µm		Variance:	0.012 µm ²
Median:	0.570 µm		C.V.:	18.7%
Mean/Median ratio:	1.013		Skewness:	0.346 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.305 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.442 µm	0.497 µm	0.570 µm	0.651 µm	0.725 µm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0038	0.0071	0.022
23	0.311	0.326	0.11	0.19	0.49
24	0.342	0.358	0.87	1.36	2.96
25	0.375	0.393	3.36	4.77	8.64
26	0.412	0.431	7.67	9.91	14.9
27	0.452	0.474	12.7	15.0	18.7
28	0.496	0.520	16.6	17.8	18.4
29	0.545	0.571	18.2	17.7	15.3
30	0.598	0.627	17.0	15.1	10.8
31	0.656	0.688	13.1	10.6	6.28
32	0.721	0.755	7.50	5.54	2.72
33	0.791	0.829	2.54	1.71	0.70
34	0.868	0.910	0.40	0.24	0.082
35	0.953	0.999	0.018	0.010	0.0029
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

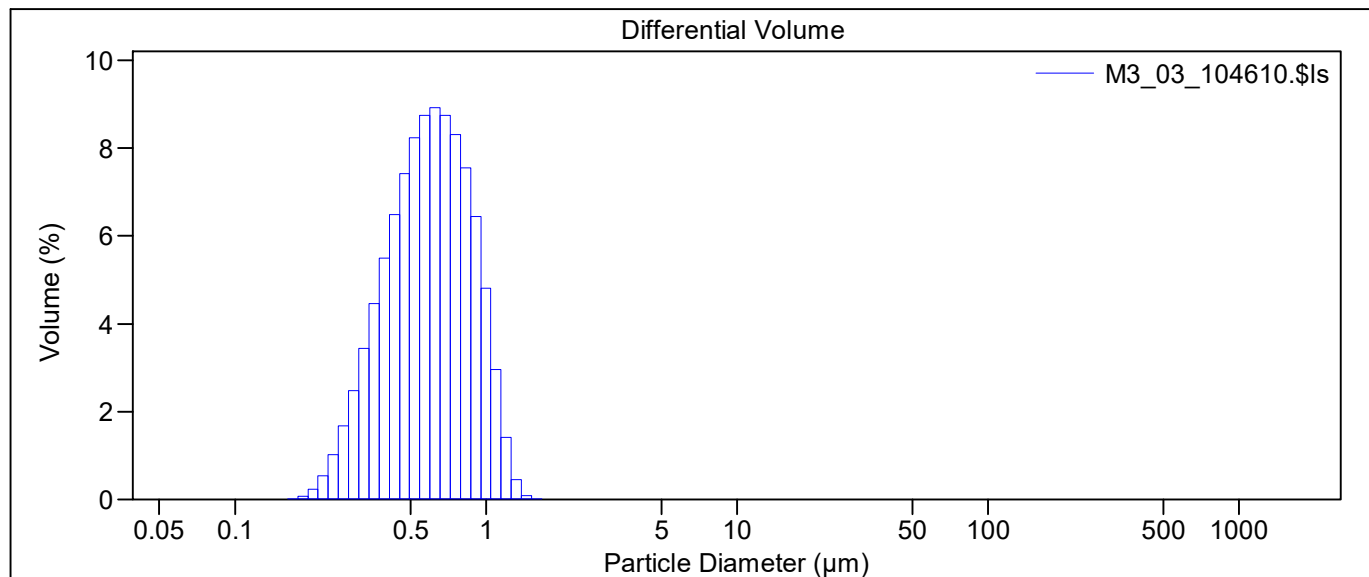
M3.\$av

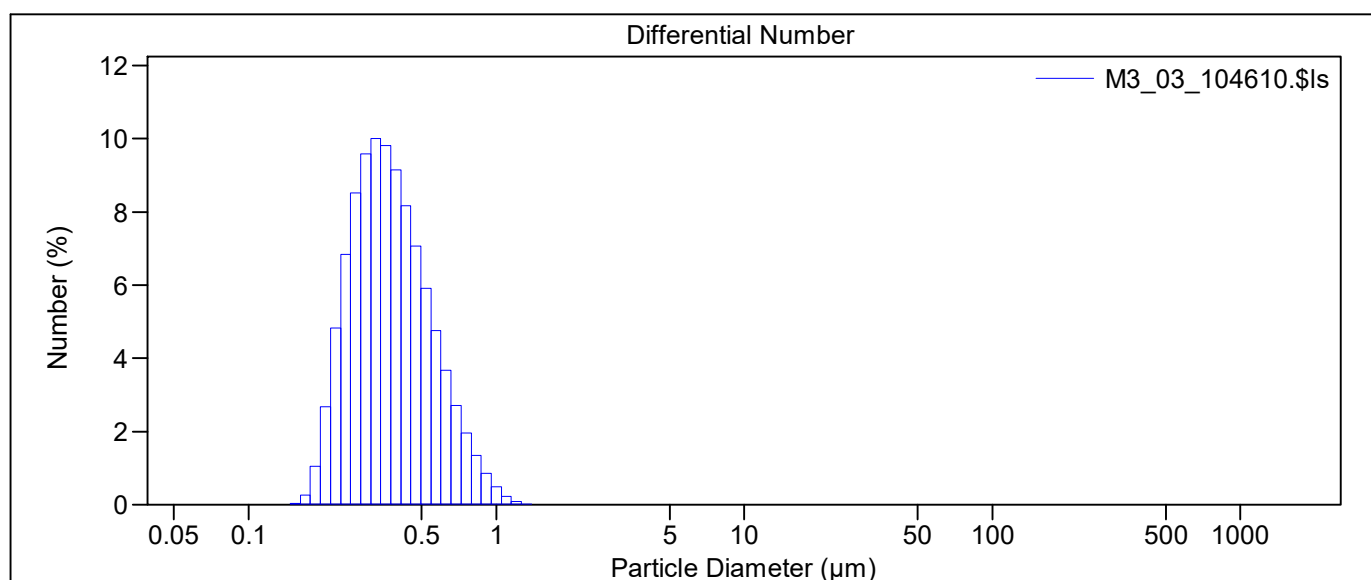
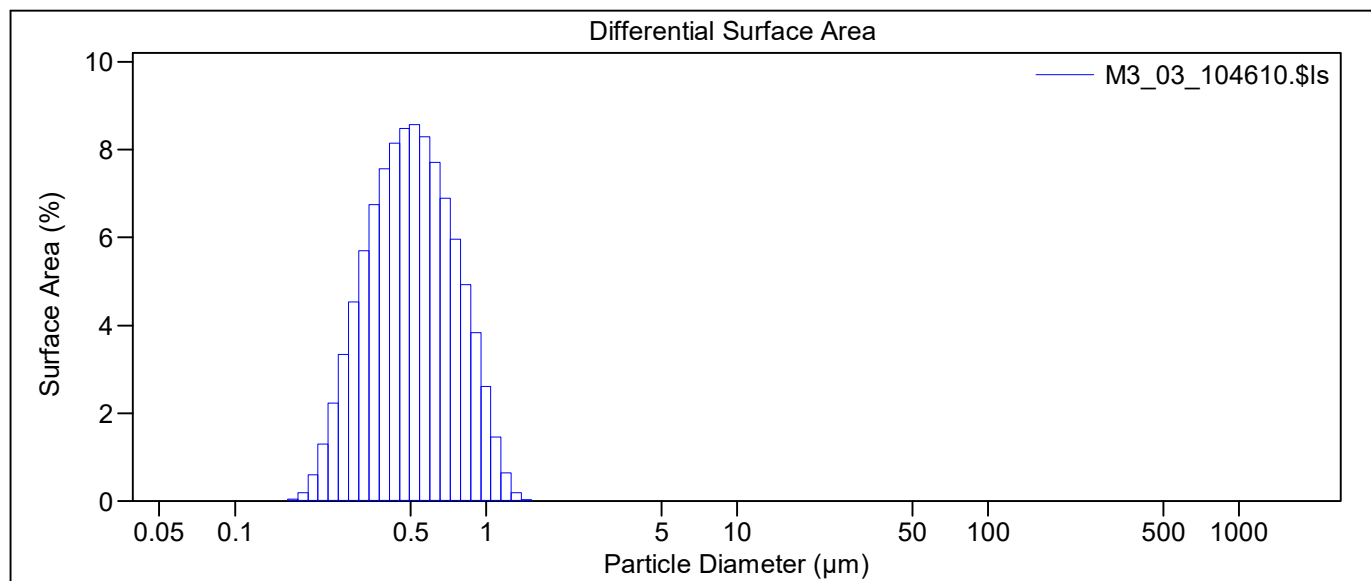
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_03_104610.\$ls		
	M3_03_104610.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.35%		
LS 13 320	Universal Liquid Module		
Start time:	10:44	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_03_104610.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.231 μm
Mean:	0.626 μm		Variance:	0.053 μm ²
Median:	0.596 μm		C.V.:	36.9%
Mean/Median ratio:	1.050		Skewness:	0.541 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.205 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.346 μm	0.447 μm	0.596 μm	0.780 μm	0.950 μm





M3.\$av					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0.000022	0.000085	0.00080
15	0.148	0.155	0.0011	0.0040	0.031
16	0.162	0.170	0.013	0.042	0.27
17	0.178	0.186	0.067	0.20	1.05

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.23	0.60	2.67
19	0.214	0.225	0.54	1.30	4.83
20	0.235	0.247	1.01	2.23	6.84
21	0.258	0.271	1.67	3.34	8.51
22	0.284	0.297	2.48	4.53	9.58
23	0.311	0.326	3.44	5.70	10.0
24	0.342	0.358	4.46	6.74	9.82
25	0.375	0.393	5.49	7.57	9.14
26	0.412	0.431	6.49	8.14	8.16
27	0.452	0.474	7.42	8.48	7.06
28	0.496	0.520	8.23	8.57	5.92
29	0.545	0.571	8.74	8.29	4.75
30	0.598	0.627	8.92	7.71	3.67
31	0.656	0.688	8.75	6.89	2.72
32	0.721	0.755	8.31	5.96	1.95
33	0.791	0.829	7.55	4.93	1.34
34	0.868	0.910	6.44	3.83	0.86
35	0.953	0.999	4.81	2.61	0.49
36	1.047	1.097	2.97	1.46	0.23
37	1.149	1.204	1.42	0.64	0.082
38	1.261	1.321	0.45	0.18	0.020
39	1.385	1.451	0.092	0.034	0.0030
40	1.520	1.592	0.0092	0.0031	0.00023
41	1.668	1.748	0.00013	0.000040	0.000002
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

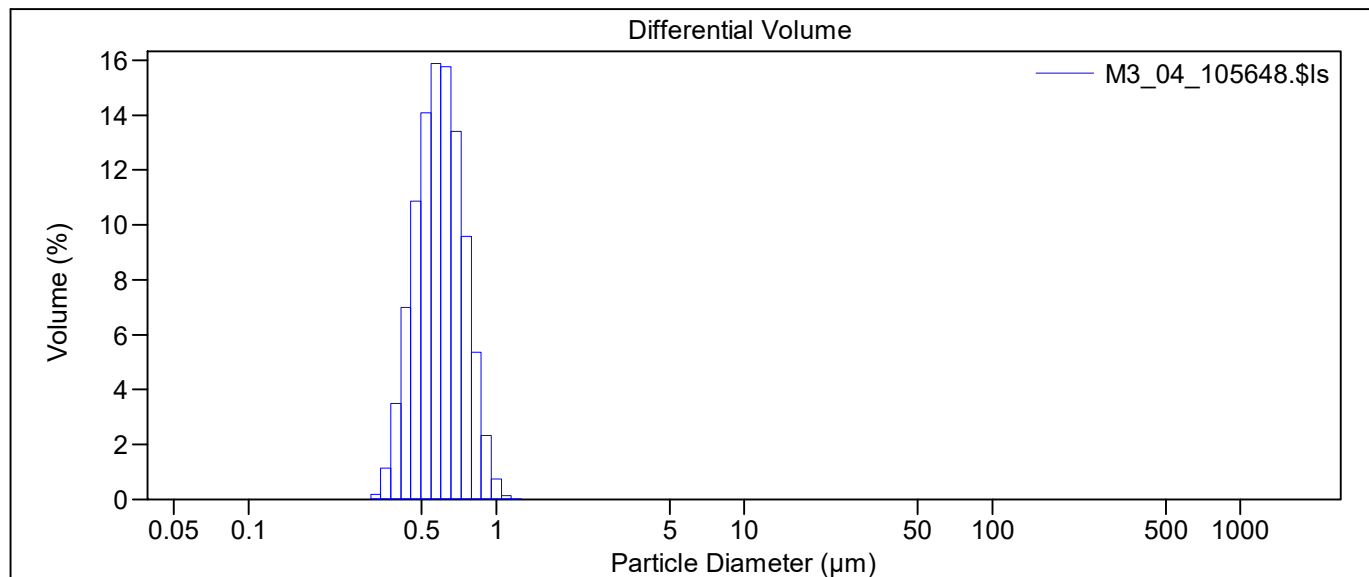
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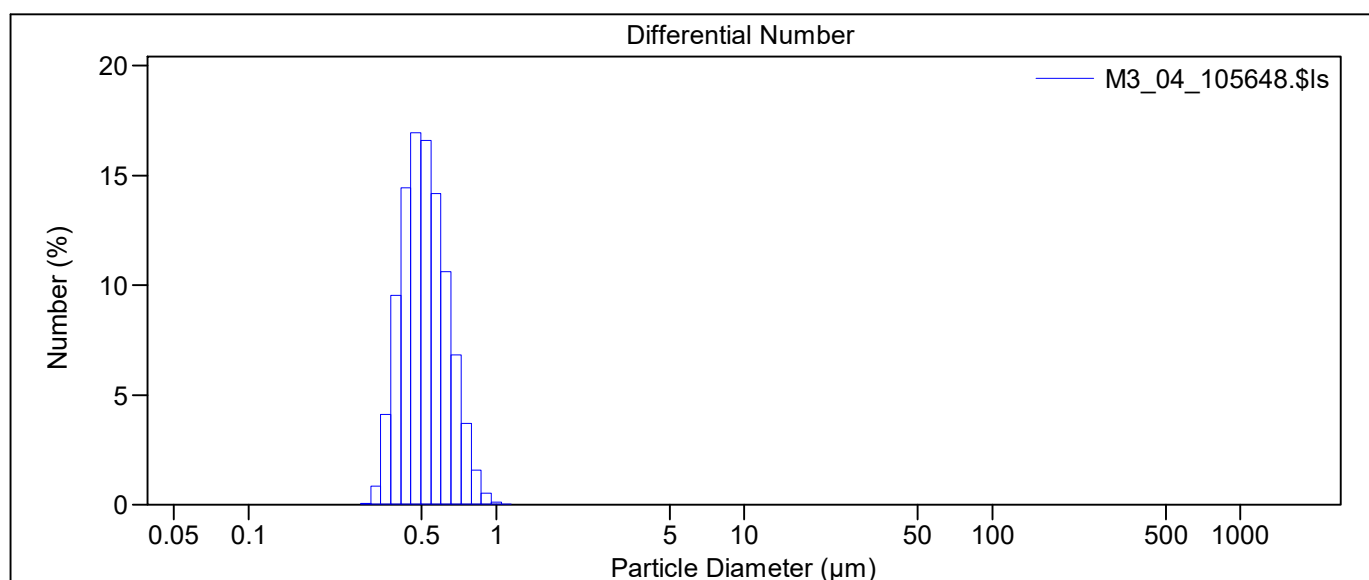
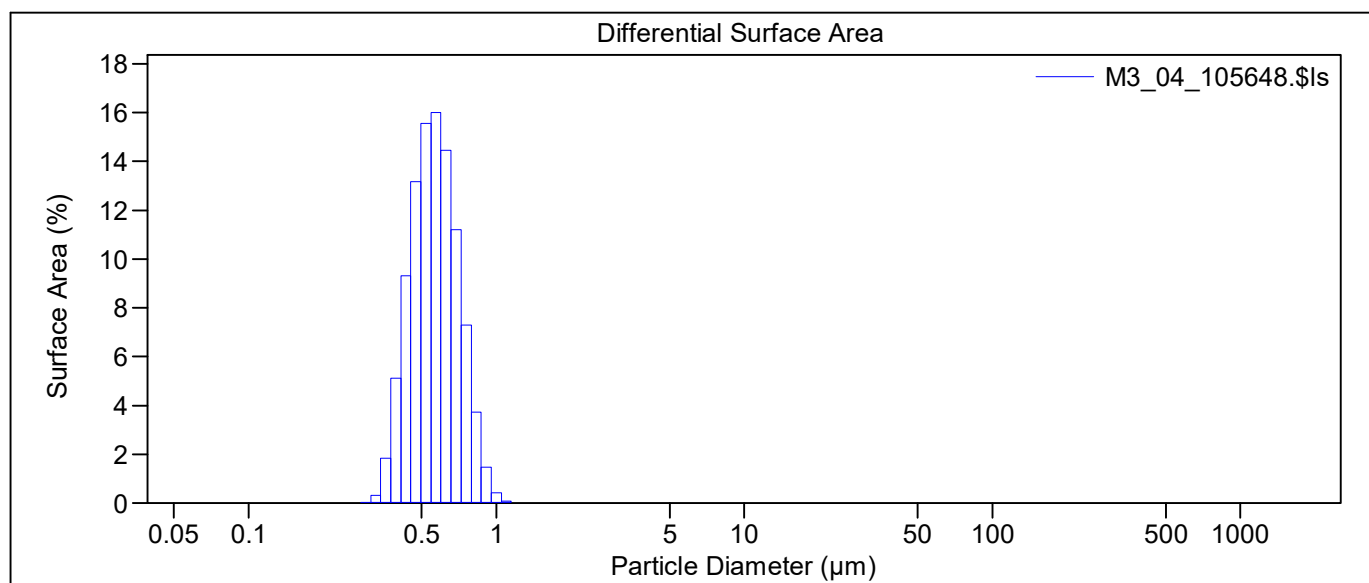
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_04_105648.\$ls		
	M3_04_105648.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.82%		
LS 13 320	Universal Liquid Module		
Start time:	10:55	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_04_105648.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.131 μm
Mean:	0.602 μm		Variance:	0.017 μm ²
Median:	0.589 μm		C.V.:	21.8%
Mean/Median ratio:	1.022		Skewness:	0.543 Right skewed
Mode:	0.571 μm		Kurtosis:	0.112 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.442 μm	0.504 μm	0.589 μm	0.688 μm	0.781 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0097	0.019	0.061
23	0.311	0.326	0.18	0.32	0.85
24	0.342	0.358	1.14	1.83	4.11
25	0.375	0.393	3.49	5.11	9.53
26	0.412	0.431	6.99	9.31	14.4
27	0.452	0.474	10.9	13.2	16.9
28	0.496	0.520	14.1	15.6	16.6
29	0.545	0.571	15.9	16.0	14.2
30	0.598	0.627	15.8	14.5	10.6
31	0.656	0.688	13.4	11.2	6.83
32	0.721	0.755	9.58	7.30	3.69
33	0.791	0.829	5.36	3.72	1.56
34	0.868	0.910	2.33	1.47	0.51
35	0.953	0.999	0.74	0.43	0.12
36	1.047	1.097	0.15	0.077	0.019
37	1.149	1.204	0.015	0.0069	0.0014
38	1.261	1.321	0.00030	0.00013	0.000022
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

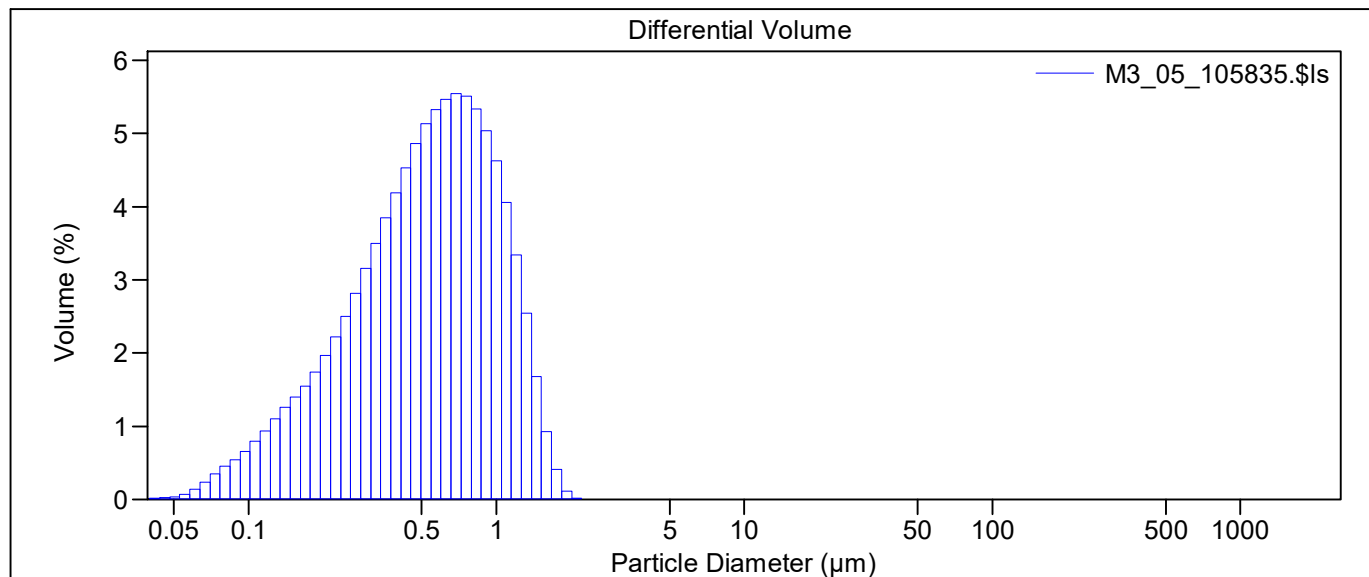
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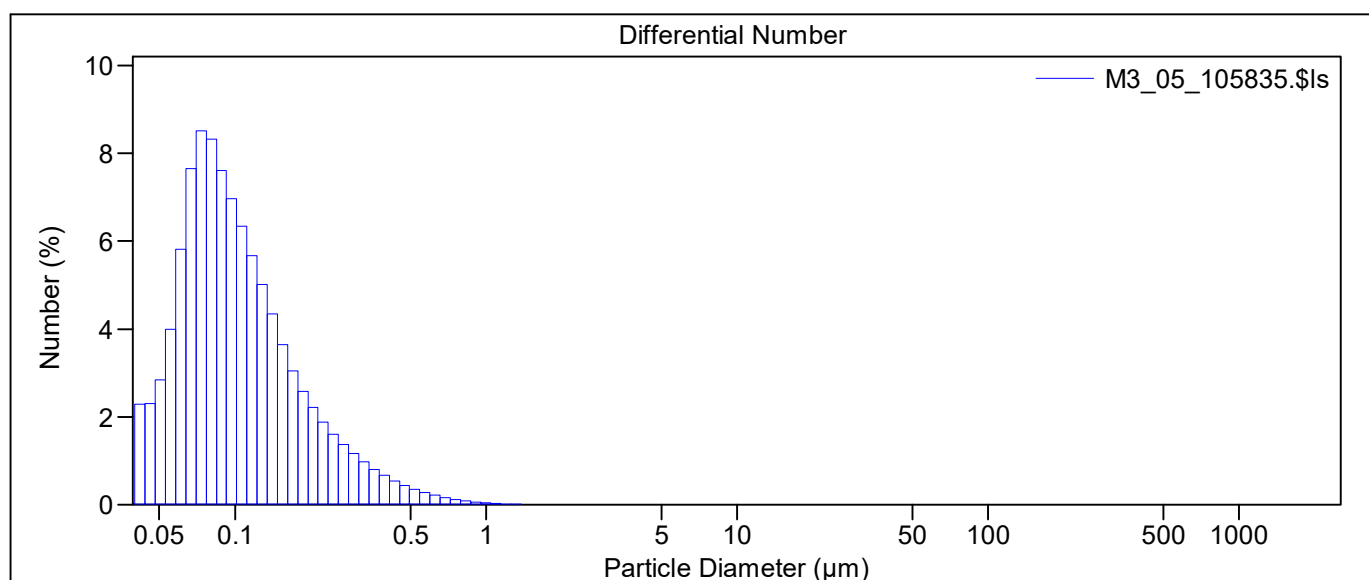
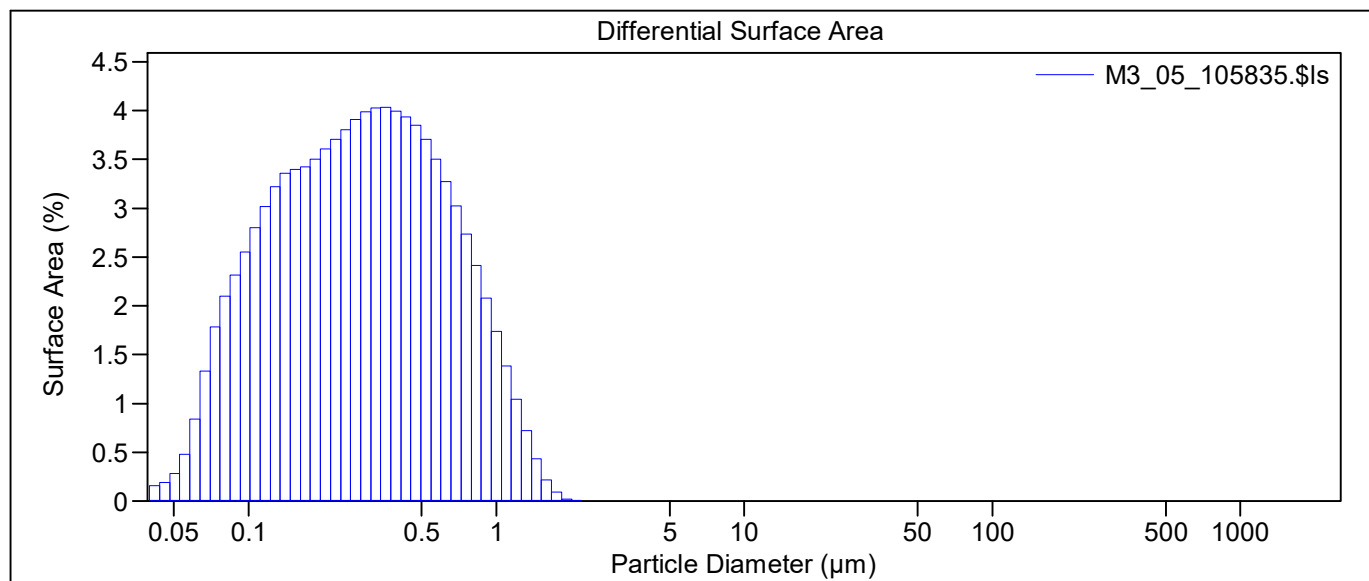
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_05_105835.\$ls		
	M3_05_105835.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.56%		
LS 13 320	Universal Liquid Module		
Start time:	10:56	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_05_105835.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.361 μm
Mean:	0.606 μm		Variance:	0.130 μm ²
Median:	0.544 μm		C.V.:	59.6%
Mean/Median ratio:	1.114		Skewness:	0.737 Right skewed
Mode:	0.688 μm		Kurtosis:	0.065 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.182 μm	0.320 μm	0.544 μm	0.836 μm	1.125 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.017	0.16	2.29
2	0.044	0.046	0.023	0.19	2.30
3	0.048	0.050	0.038	0.28	2.84
4	0.053	0.055	0.071	0.48	3.99
5	0.058	0.061	0.14	0.84	5.81
6	0.064	0.067	0.24	1.33	7.65
7	0.070	0.073	0.35	1.78	8.51
8	0.077	0.080	0.45	2.10	8.32
9	0.084	0.088	0.55	2.32	7.61
10	0.093	0.097	0.66	2.55	6.96
11	0.102	0.106	0.79	2.80	6.34
12	0.112	0.117	0.94	3.02	5.67
13	0.122	0.128	1.10	3.22	5.02
14	0.134	0.141	1.26	3.36	4.34
15	0.148	0.155	1.40	3.40	3.65
16	0.162	0.170	1.55	3.42	3.05
17	0.178	0.186	1.74	3.50	2.59

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.97	3.61	2.21
19	0.214	0.225	2.22	3.71	1.89
20	0.235	0.247	2.50	3.80	1.61
21	0.258	0.271	2.82	3.91	1.37
22	0.284	0.297	3.16	3.99	1.16
23	0.311	0.326	3.50	4.03	0.97
24	0.342	0.358	3.85	4.03	0.81
25	0.375	0.393	4.19	4.00	0.66
26	0.412	0.431	4.53	3.94	0.54
27	0.452	0.474	4.86	3.85	0.44
28	0.496	0.520	5.14	3.71	0.35
29	0.545	0.571	5.33	3.50	0.28
30	0.598	0.627	5.47	3.27	0.21
31	0.656	0.688	5.55	3.03	0.16
32	0.721	0.755	5.51	2.74	0.12
33	0.791	0.829	5.34	2.42	0.090
34	0.868	0.910	5.04	2.08	0.064
35	0.953	0.999	4.63	1.74	0.045
36	1.047	1.097	4.05	1.39	0.030
37	1.149	1.204	3.34	1.04	0.018
38	1.261	1.321	2.54	0.72	0.011
39	1.385	1.451	1.68	0.43	0.0053
40	1.520	1.592	0.93	0.22	0.0022
41	1.668	1.748	0.41	0.089	0.00074
42	1.832	1.919	0.11	0.022	0.00015
43	2.011	2.107	0.021	0.0037	0.000021
44	2.207	2.313	0.0015	0.00024	0.000001
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

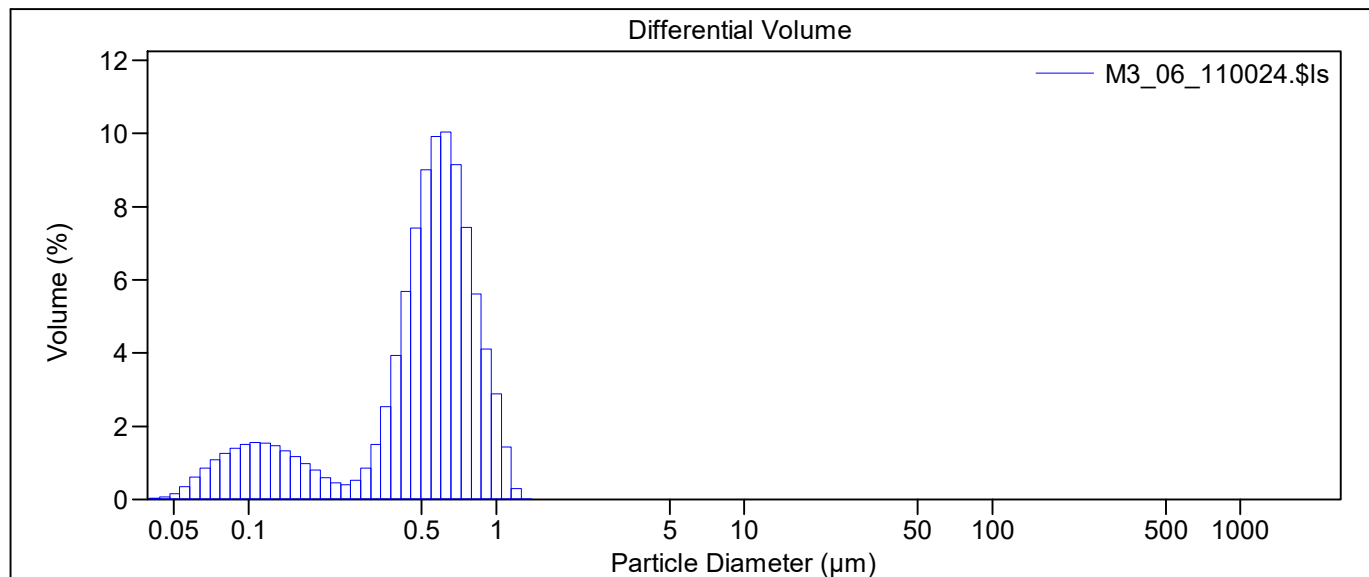
M3.\$av

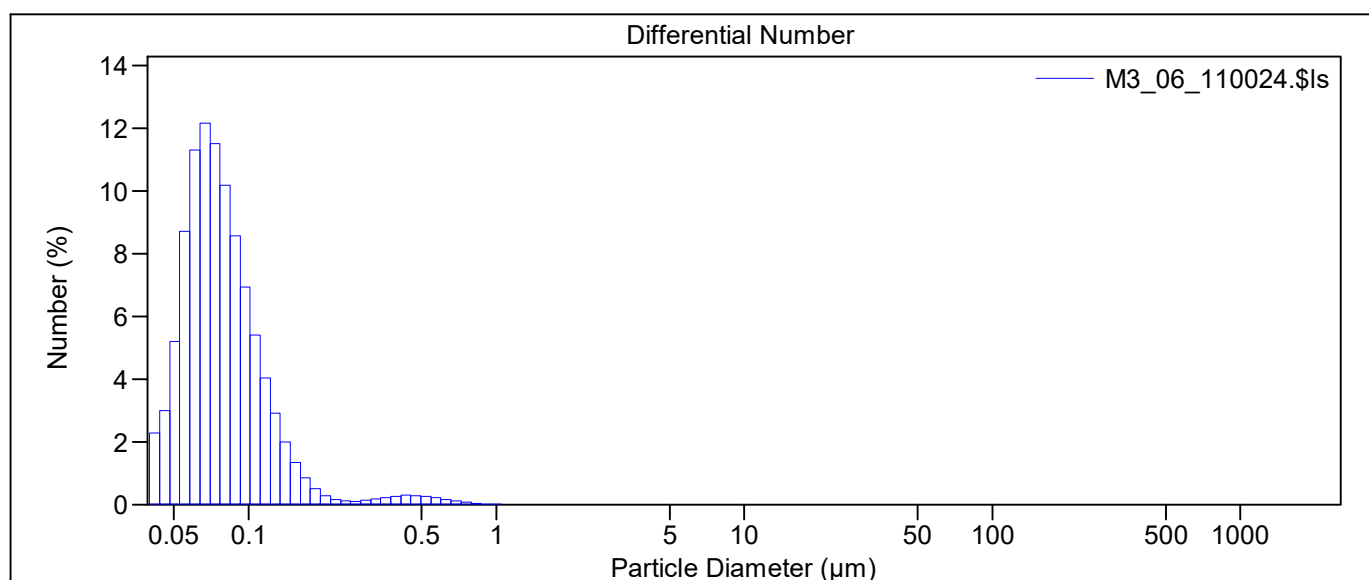
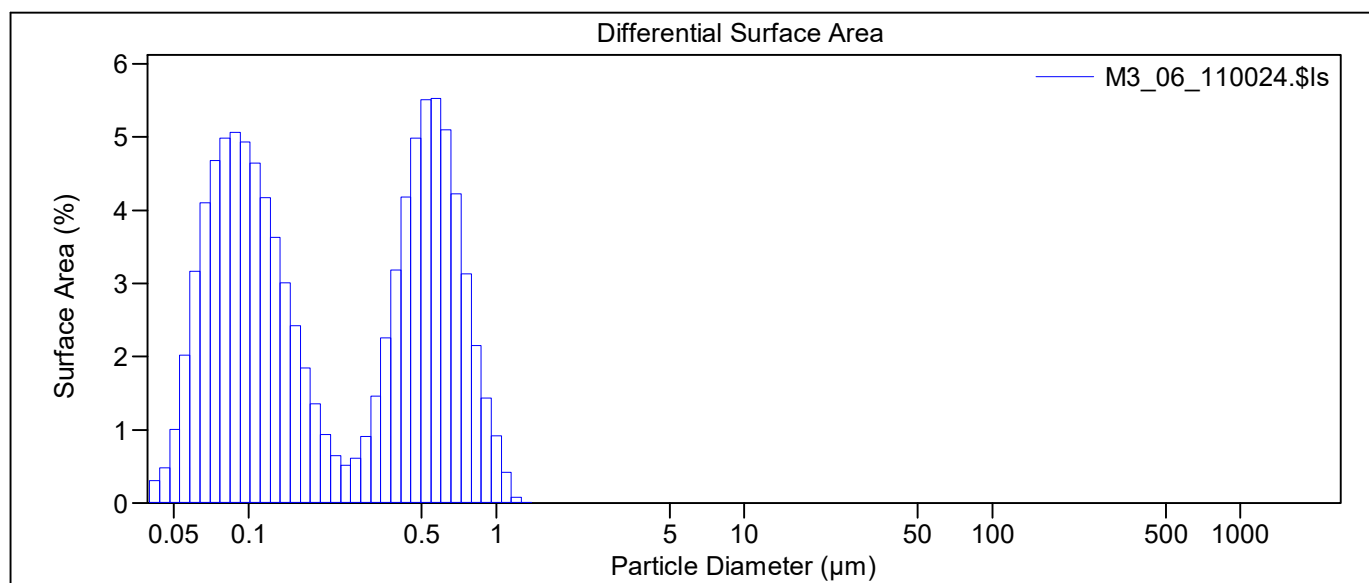
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_06_110024.\$ls		
	M3_06_110024.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.48%		
LS 13 320	Universal Liquid Module		
Start time:	10:58	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_06_110024.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.254 μm
Mean:	0.532 μm		Variance:	0.064 μm ²
Median:	0.550 μm		C.V.:	47.6%
Mean/Median ratio:	0.968		Skewness:	-0.120 Left skewed
Mode:	0.627 μm		Kurtosis:	-0.433 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.119 μm	0.393 μm	0.550 μm	0.698 μm	0.851 μm





M3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.040	0.30	2.29
2	0.044	0.046	0.069	0.48	2.99
3	0.048	0.050	0.16	1.00	5.21
4	0.053	0.055	0.35	2.02	8.71
5	0.058	0.061	0.61	3.17	11.3
6	0.064	0.067	0.86	4.10	12.2
7	0.070	0.073	1.08	4.68	11.5
8	0.077	0.080	1.26	4.99	10.2
9	0.084	0.088	1.41	5.06	8.58
10	0.093	0.097	1.51	4.94	6.94
11	0.102	0.106	1.55	4.64	5.42
12	0.112	0.117	1.53	4.17	4.03
13	0.122	0.128	1.46	3.63	2.91
14	0.134	0.141	1.33	3.01	2.01
15	0.148	0.155	1.18	2.42	1.34
16	0.162	0.170	0.99	1.85	0.85
17	0.178	0.186	0.80	1.36	0.52

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.60	0.93	0.29
19	0.214	0.225	0.46	0.65	0.17
20	0.235	0.247	0.40	0.52	0.11
21	0.258	0.271	0.52	0.61	0.11
22	0.284	0.297	0.85	0.91	0.14
23	0.311	0.326	1.50	1.46	0.18
24	0.342	0.358	2.54	2.26	0.23
25	0.375	0.393	3.93	3.18	0.27
26	0.412	0.431	5.68	4.18	0.30
27	0.452	0.474	7.42	4.98	0.29
28	0.496	0.520	9.01	5.51	0.27
29	0.545	0.571	9.92	5.53	0.22
30	0.598	0.627	10.0	5.10	0.17
31	0.656	0.688	9.14	4.23	0.12
32	0.721	0.755	7.44	3.13	0.073
33	0.791	0.829	5.61	2.15	0.041
34	0.868	0.910	4.11	1.44	0.023
35	0.953	0.999	2.89	0.92	0.012
36	1.047	1.097	1.44	0.42	0.0046
37	1.149	1.204	0.30	0.078	0.00072
38	1.261	1.321	0.021	0.0050	0.000038
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

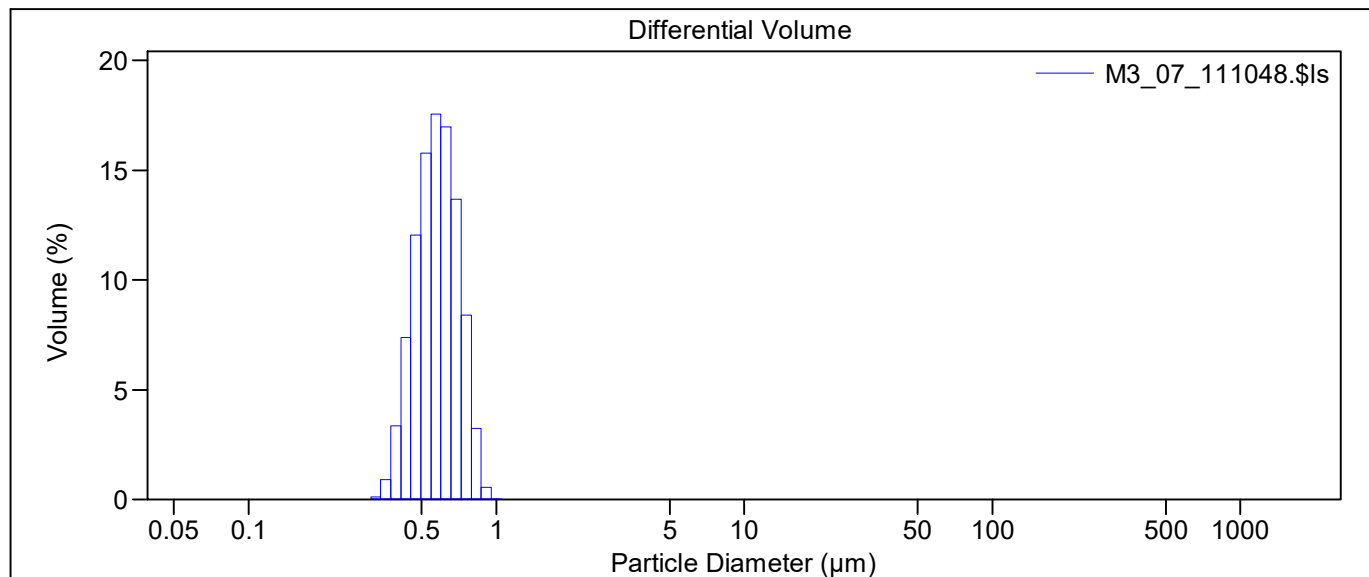
M3.\$av

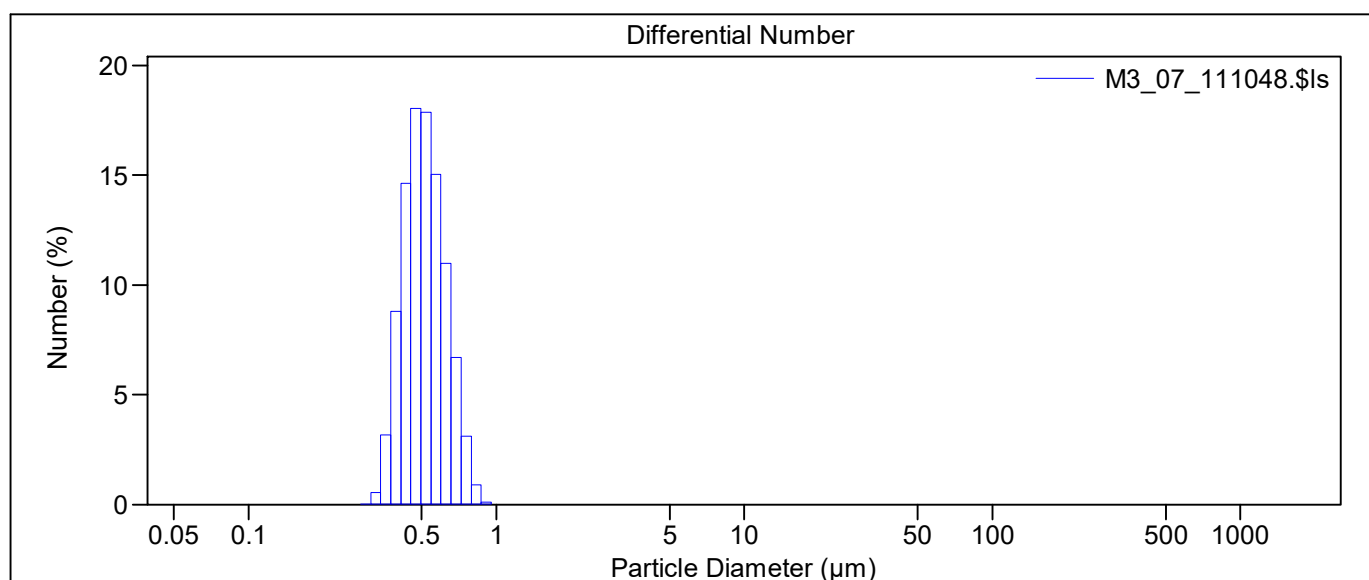
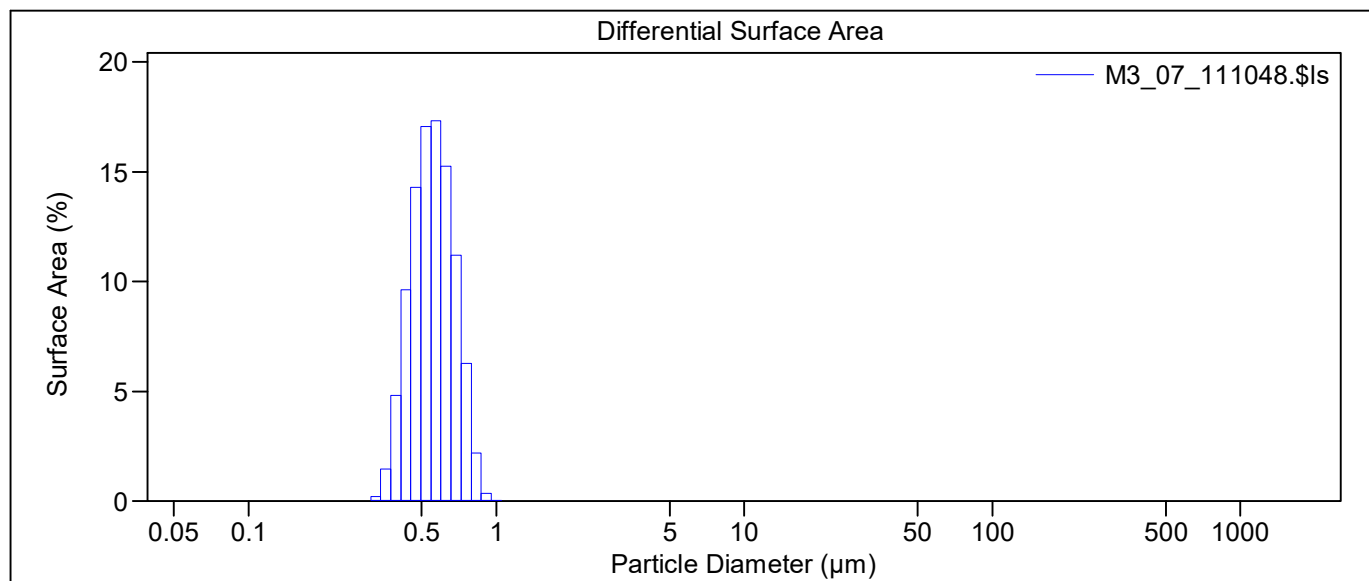
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_07_111048.\$ls		
	M3_07_111048.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.17%		
LS 13 320	Universal Liquid Module		
Start time:	11:09	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_07_111048.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.112 μm
Mean:	0.584 μm		Variance:	0.012 μm ²
Median:	0.576 μm		C.V.:	19.1%
Mean/Median ratio:	1.013		Skewness:	0.328 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.345 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.442 μm	0.500 μm	0.576 μm	0.661 μm	0.739 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0045	0.0085	0.027
23	0.311	0.326	0.12	0.21	0.56
24	0.342	0.358	0.92	1.44	3.19
25	0.375	0.393	3.36	4.81	8.82
26	0.412	0.431	7.38	9.62	14.6
27	0.452	0.474	12.0	14.3	18.0
28	0.496	0.520	15.8	17.1	17.9
29	0.545	0.571	17.6	17.3	15.0
30	0.598	0.627	17.0	15.2	11.0
31	0.656	0.688	13.7	11.2	6.69
32	0.721	0.755	8.40	6.26	3.11
33	0.791	0.829	3.22	2.19	0.90
34	0.868	0.910	0.56	0.35	0.12
35	0.953	0.999	0.033	0.019	0.0053
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

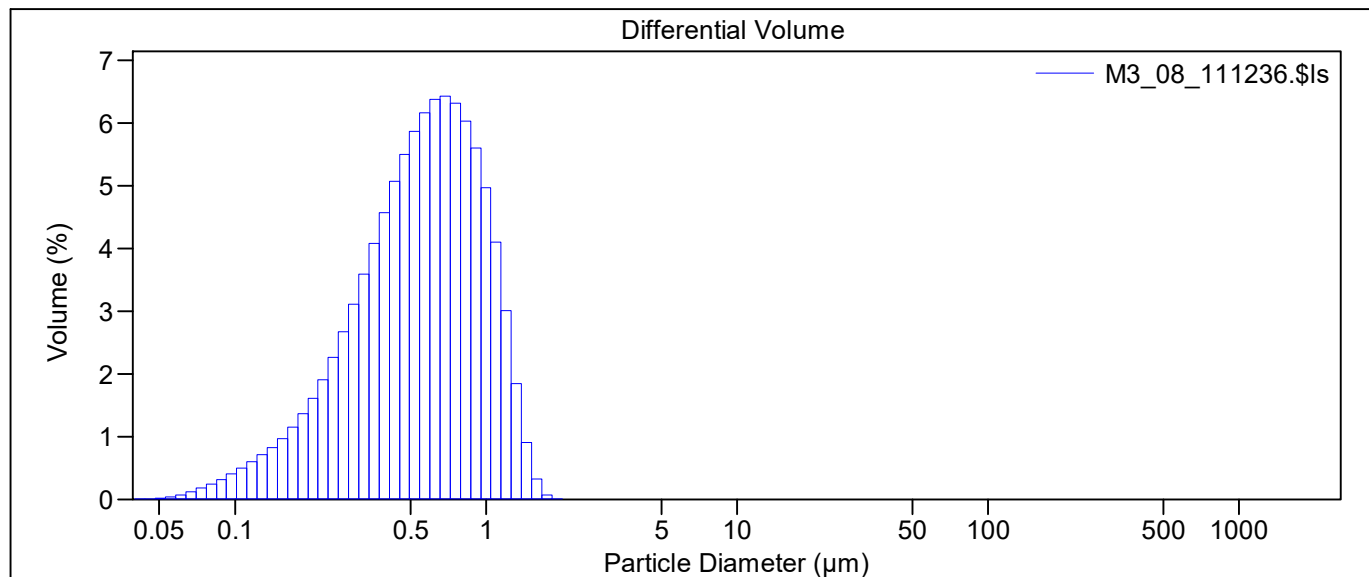
M3.\$av

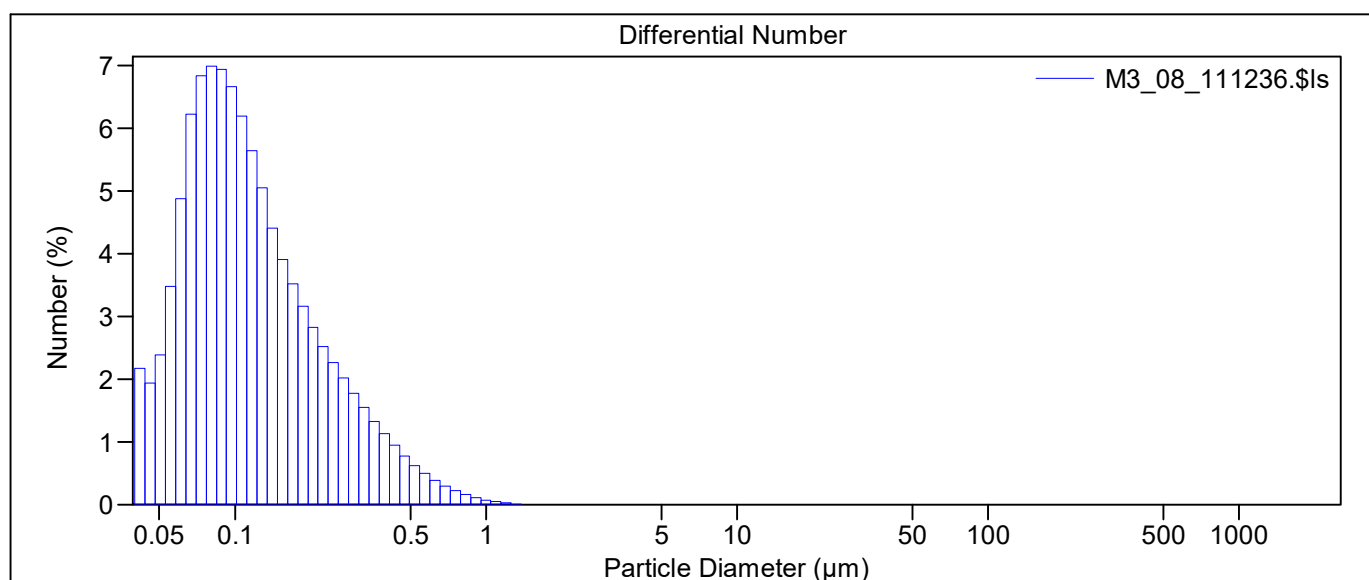
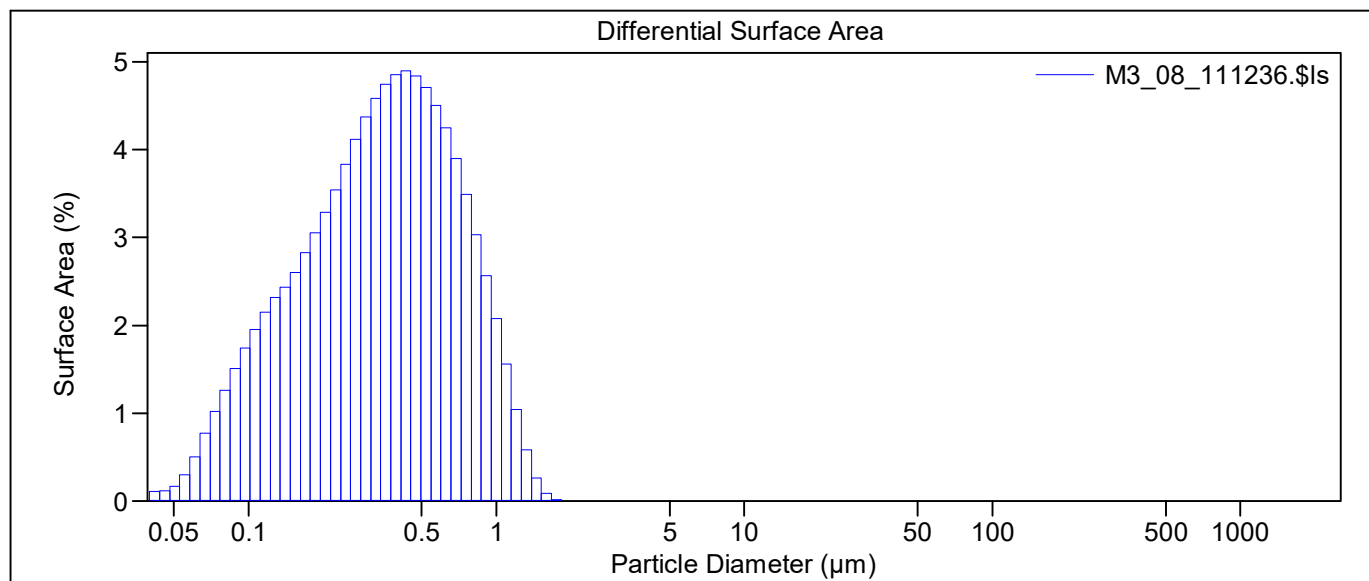
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_08_111236.\$ls		
	M3_08_111236.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.10%		
LS 13 320	Universal Liquid Module		
Start time:	11:10	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_08_111236.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.316 μm
Mean:	0.606 μm		Variance:	0.100 μm ²
Median:	0.564 μm		C.V.:	52.1%
Mean/Median ratio:	1.076		Skewness:	0.578 Right skewed
Mode:	0.688 μm		Kurtosis:	-0.162 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.224 μm	0.360 μm	0.564 μm	0.815 μm	1.054 μm





M3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.011	0.11	2.17
2	0.044	0.046	0.013	0.11	1.94
3	0.048	0.050	0.021	0.17	2.39
4	0.053	0.055	0.040	0.30	3.48
5	0.058	0.061	0.073	0.50	4.88
6	0.064	0.067	0.12	0.77	6.22
7	0.070	0.073	0.18	1.02	6.84
8	0.077	0.080	0.24	1.26	6.99
9	0.084	0.088	0.32	1.51	6.93
10	0.093	0.097	0.41	1.75	6.66
11	0.102	0.106	0.50	1.96	6.19
12	0.112	0.117	0.60	2.15	5.64
13	0.122	0.128	0.71	2.32	5.05
14	0.134	0.141	0.82	2.44	4.41
15	0.148	0.155	0.97	2.60	3.91
16	0.162	0.170	1.15	2.82	3.52
17	0.178	0.186	1.37	3.06	3.16

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.61	3.29	2.82
19	0.214	0.225	1.91	3.55	2.53
20	0.235	0.247	2.27	3.83	2.26
21	0.258	0.271	2.67	4.12	2.02
22	0.284	0.297	3.12	4.37	1.78
23	0.311	0.326	3.59	4.59	1.55
24	0.342	0.358	4.08	4.75	1.33
25	0.375	0.393	4.58	4.85	1.13
26	0.412	0.431	5.07	4.90	0.95
27	0.452	0.474	5.50	4.84	0.78
28	0.496	0.520	5.87	4.71	0.63
29	0.545	0.571	6.17	4.50	0.50
30	0.598	0.627	6.38	4.25	0.39
31	0.656	0.688	6.43	3.90	0.30
32	0.721	0.755	6.32	3.49	0.22
33	0.791	0.829	6.03	3.03	0.16
34	0.868	0.910	5.60	2.57	0.11
35	0.953	0.999	4.97	2.07	0.075
36	1.047	1.097	4.10	1.56	0.047
37	1.149	1.204	3.01	1.04	0.026
38	1.261	1.321	1.84	0.58	0.012
39	1.385	1.451	0.91	0.26	0.0045
40	1.520	1.592	0.33	0.085	0.0012
41	1.668	1.748	0.076	0.018	0.00021
42	1.832	1.919	0.011	0.0023	0.000023
43	2.011	2.107	0.00049	0.000098	0.000001
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

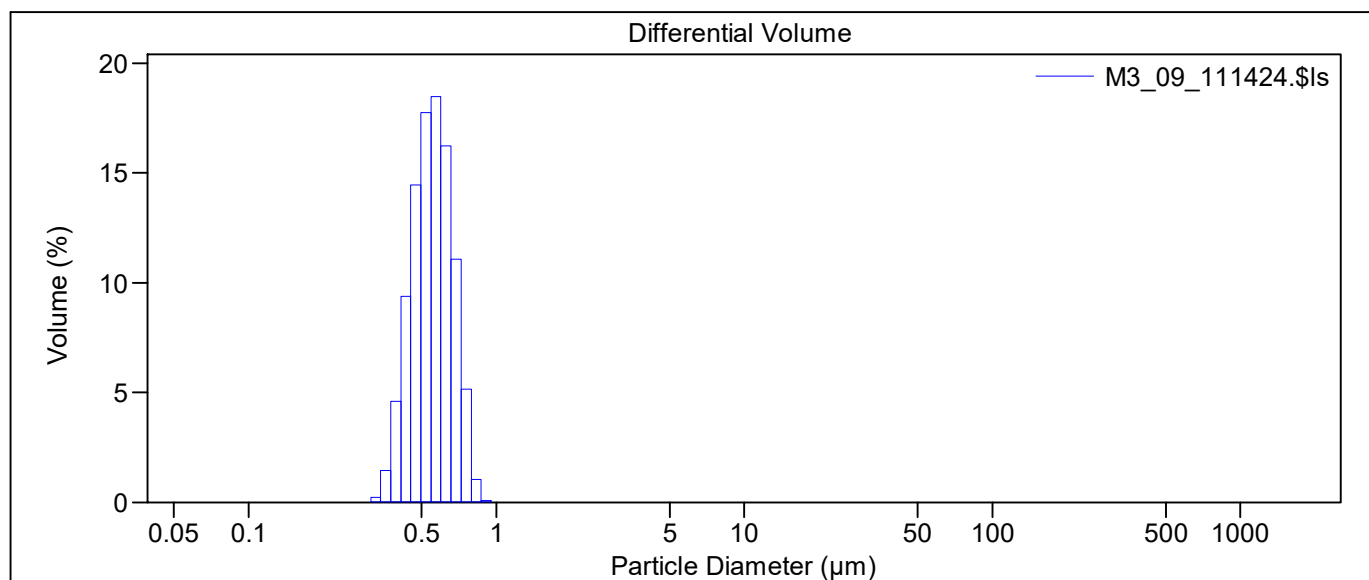
M3.\$av

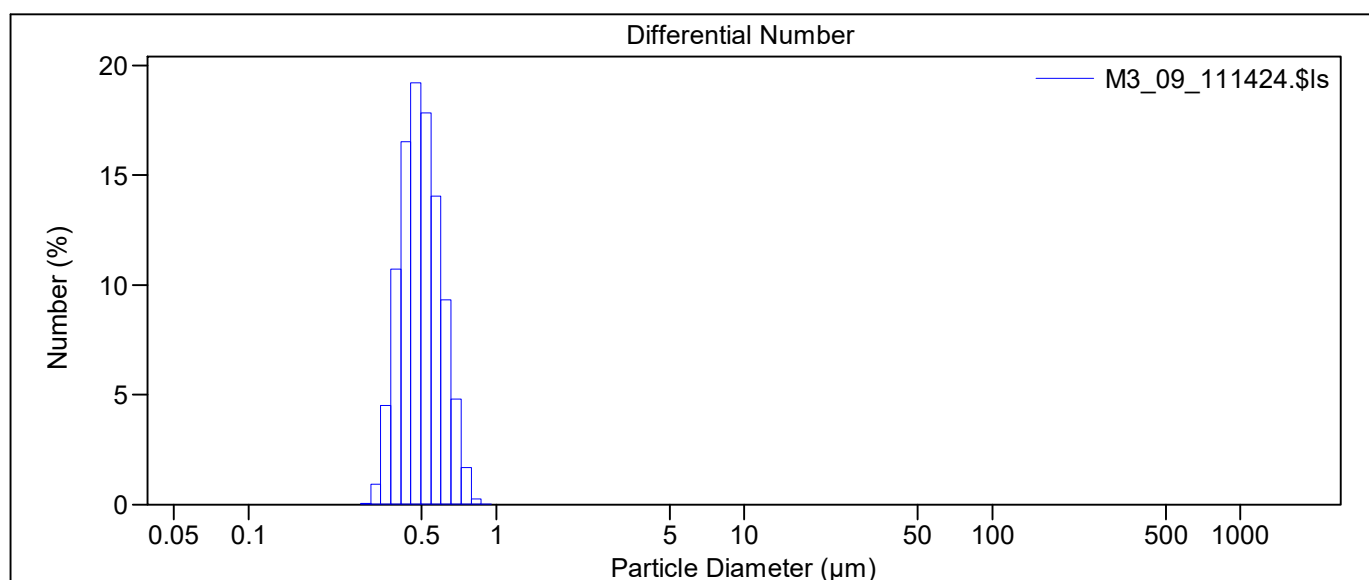
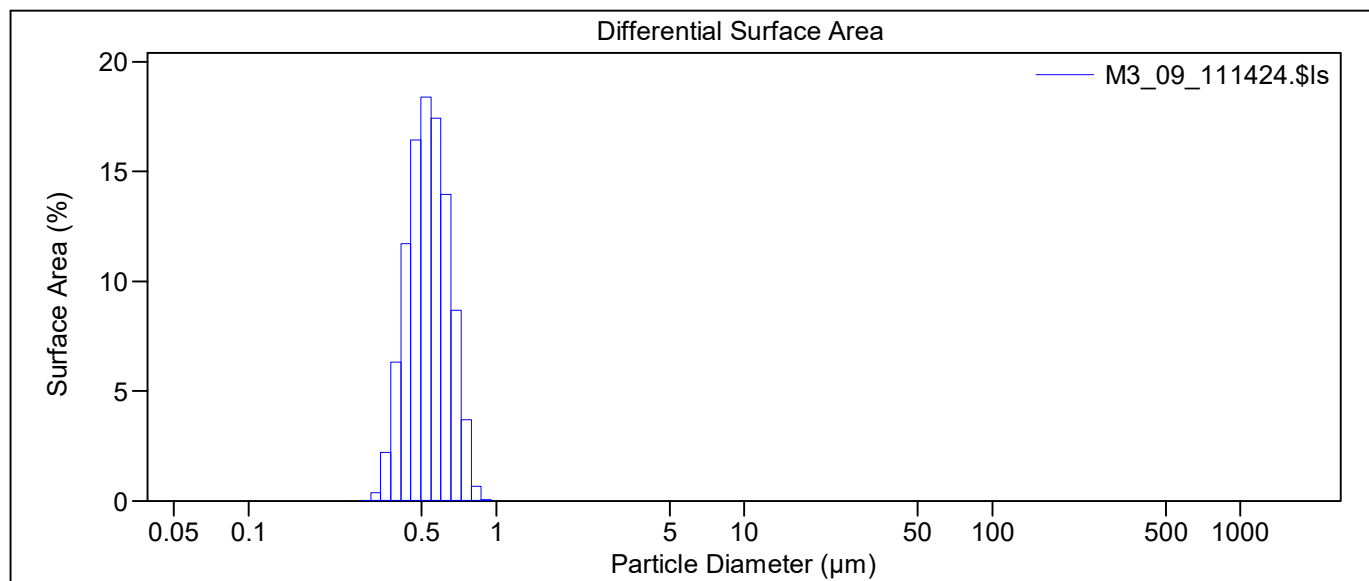
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_09_111424.\$ls		
	M3_09_111424.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.83%		
LS 13 320	Universal Liquid Module		
Start time:	11:12	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_09_111424.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.102 μm
Mean:	0.557 μm		Variance:	0.010 μm ²
Median:	0.551 μm		C.V.:	18.2%
Mean/Median ratio:	1.012		Skewness:	0.303 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.364 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.428 μm	0.480 μm	0.551 μm	0.629 μm	0.699 μm





M3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.013	0.023	0.068
23	0.311	0.326	0.23	0.37	0.92
24	0.342	0.358	1.47	2.21	4.53
25	0.375	0.393	4.61	6.32	10.7
26	0.412	0.431	9.39	11.7	16.5
27	0.452	0.474	14.5	16.4	19.2
28	0.496	0.520	17.7	18.4	17.8
29	0.545	0.571	18.5	17.4	14.0
30	0.598	0.627	16.2	14.0	9.33
31	0.656	0.688	11.1	8.69	4.82
32	0.721	0.755	5.17	3.69	1.70
33	0.791	0.829	1.05	0.68	0.26
34	0.868	0.910	0.084	0.050	0.016
35	0.953	0.999	0	0	0
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

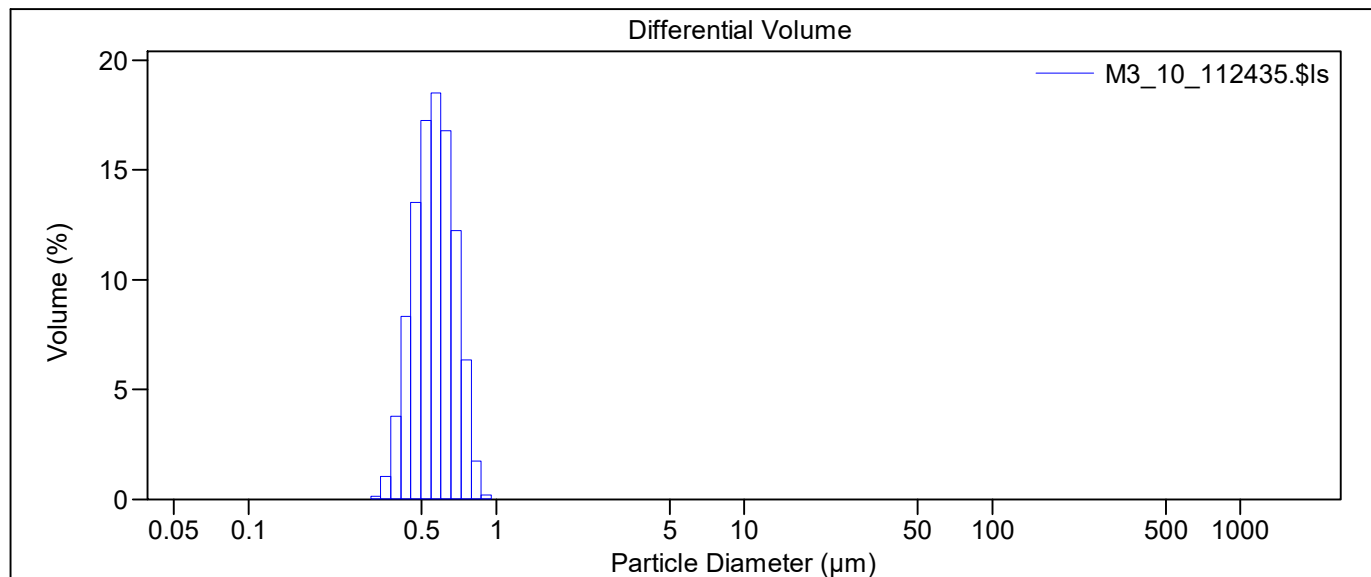
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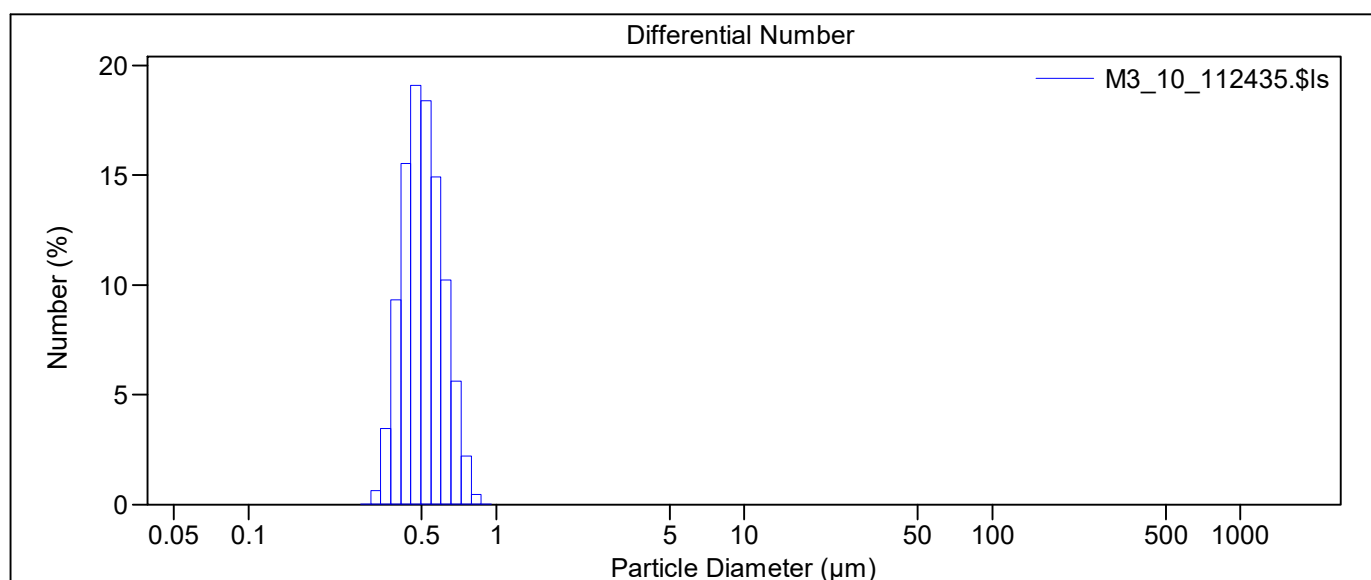
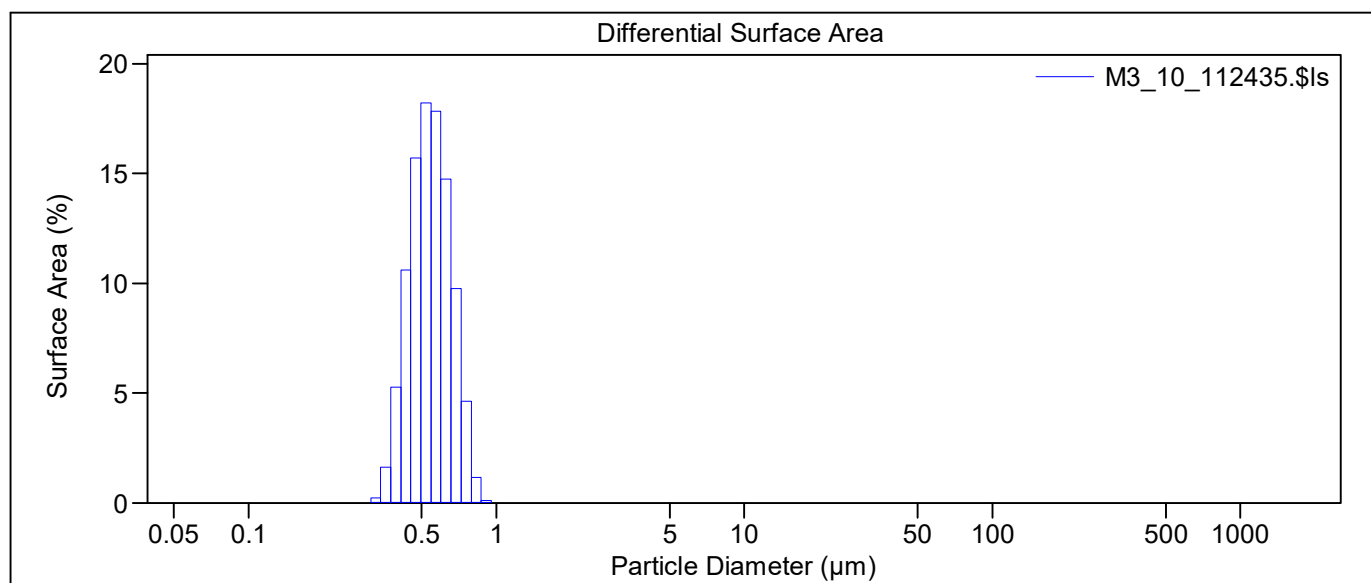
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_10_112435.\$ls		
	M3_10_112435.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.66%		
LS 13 320	Universal Liquid Module		
Start time:	11:22	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_10_112435.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.104 μm
Mean:	0.569 μm		Variance:	0.011 μm ²
Median:	0.562 μm		C.V.:	18.3%
Mean/Median ratio:	1.012		Skewness:	0.330 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.312 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.436 μm	0.490 μm	0.562 μm	0.641 μm	0.712 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0066	0.012	0.037
23	0.311	0.326	0.15	0.25	0.63
24	0.342	0.358	1.06	1.63	3.47
25	0.375	0.393	3.78	5.28	9.33
26	0.412	0.431	8.33	10.6	15.5
27	0.452	0.474	13.5	15.7	19.1
28	0.496	0.520	17.2	18.2	18.4
29	0.545	0.571	18.5	17.8	14.9
30	0.598	0.627	16.8	14.7	10.2
31	0.656	0.688	12.2	9.78	5.63
32	0.721	0.755	6.36	4.63	2.21
33	0.791	0.829	1.75	1.16	0.46
34	0.868	0.910	0.22	0.13	0.043
35	0.953	0.999	0.0049	0.0027	0.00073
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

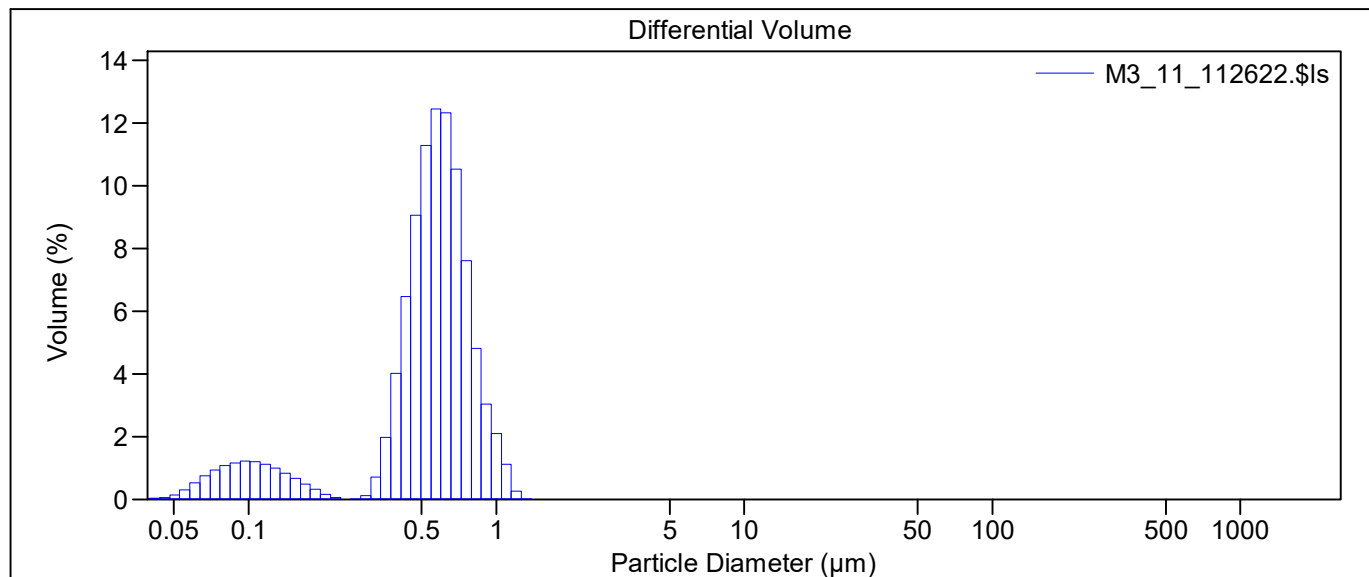
M3.\$av

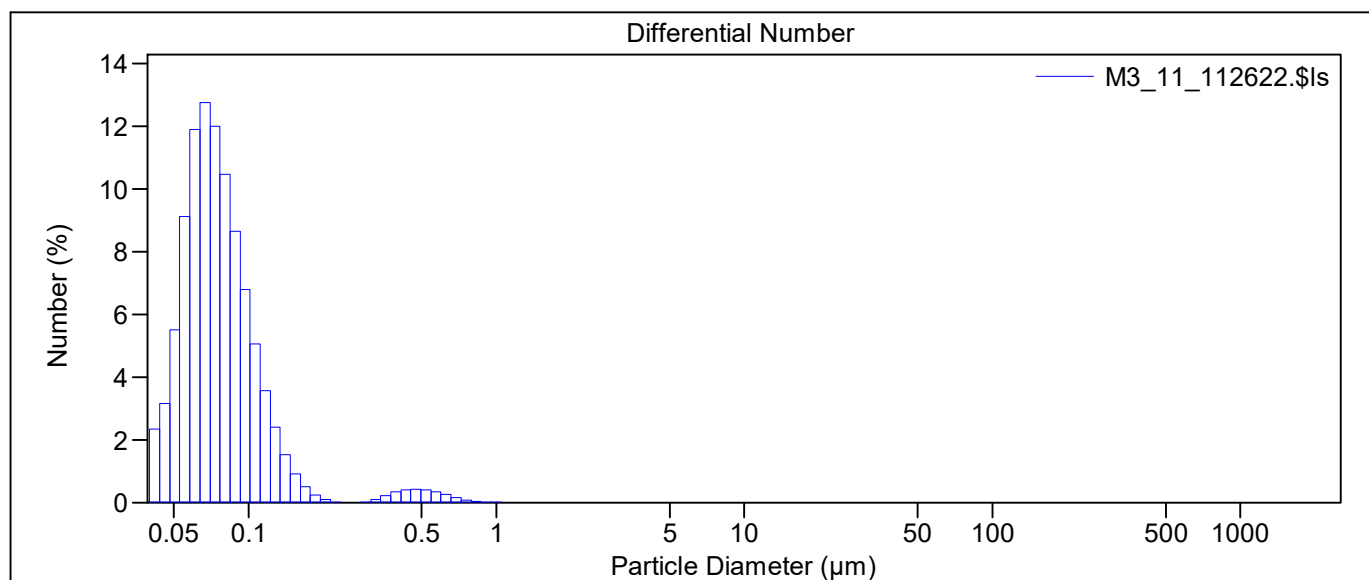
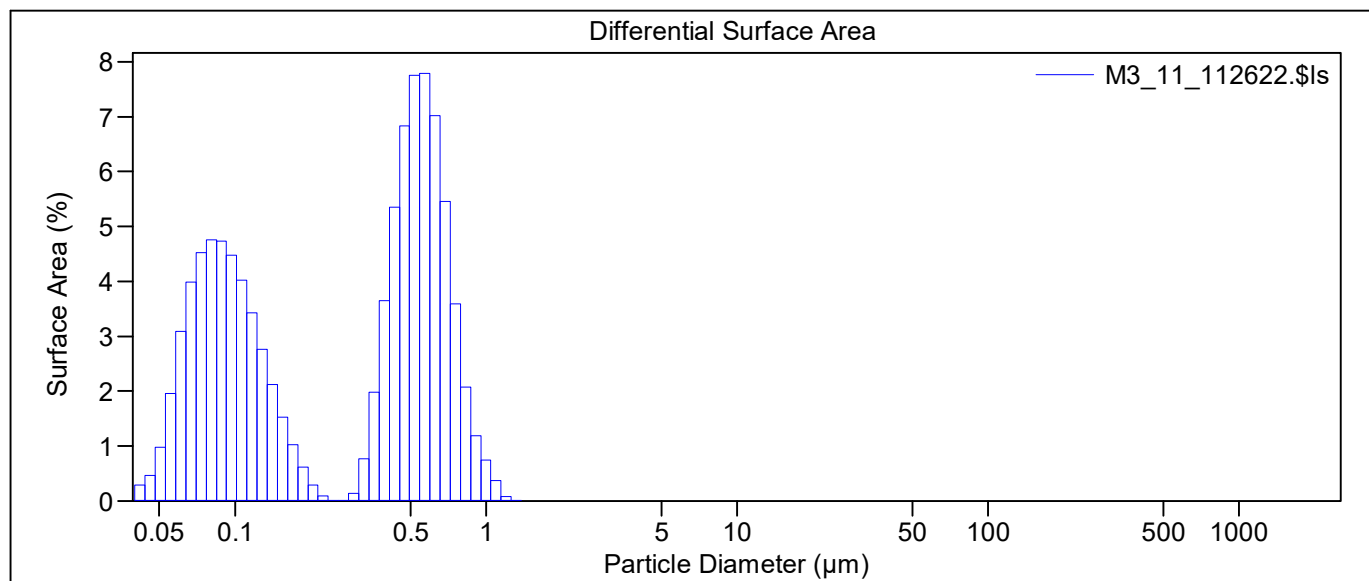
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_11_112622.\$ls		
	M3_11_112622.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.74%		
LS 13 320	Universal Liquid Module		
Start time:	11:24	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_11_112622.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.224 μm
Mean:	0.551 μm		Variance:	0.050 μm ²
Median:	0.563 μm		C.V.:	40.7%
Mean/Median ratio:	0.978		Skewness:	-0.293 Left skewed
Mode:	0.571 μm		Kurtosis:	0.326 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.142 μm	0.450 μm	0.563 μm	0.684 μm	0.813 μm





M3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.034	0.29	2.35
2	0.044	0.046	0.061	0.47	3.17
3	0.048	0.050	0.14	0.99	5.52
4	0.053	0.055	0.30	1.96	9.13
5	0.058	0.061	0.53	3.09	11.9
6	0.064	0.067	0.75	3.99	12.8
7	0.070	0.073	0.93	4.52	12.0
8	0.077	0.080	1.07	4.75	10.5
9	0.084	0.088	1.17	4.73	8.65
10	0.093	0.097	1.22	4.47	6.79
11	0.102	0.106	1.20	4.02	5.06
12	0.112	0.117	1.12	3.43	3.58
13	0.122	0.128	0.99	2.77	2.40
14	0.134	0.141	0.84	2.12	1.52
15	0.148	0.155	0.66	1.53	0.91
16	0.162	0.170	0.49	1.03	0.51
17	0.178	0.186	0.32	0.62	0.25

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.17	0.29	0.099
19	0.214	0.225	0.056	0.090	0.025
20	0.235	0.247	0.0090	0.013	0.0031
21	0.258	0.271	0.013	0.017	0.0033
22	0.284	0.297	0.12	0.14	0.023
23	0.311	0.326	0.71	0.77	0.10
24	0.342	0.358	1.99	1.98	0.22
25	0.375	0.393	4.02	3.65	0.34
26	0.412	0.431	6.47	5.35	0.41
27	0.452	0.474	9.06	6.83	0.43
28	0.496	0.520	11.3	7.75	0.41
29	0.545	0.571	12.5	7.79	0.34
30	0.598	0.627	12.3	7.02	0.26
31	0.656	0.688	10.5	5.46	0.16
32	0.721	0.755	7.61	3.60	0.090
33	0.791	0.829	4.81	2.07	0.043
34	0.868	0.910	3.04	1.19	0.021
35	0.953	0.999	2.09	0.75	0.011
36	1.047	1.097	1.13	0.37	0.0044
37	1.149	1.204	0.27	0.081	0.00080
38	1.261	1.321	0.024	0.0064	0.000052
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

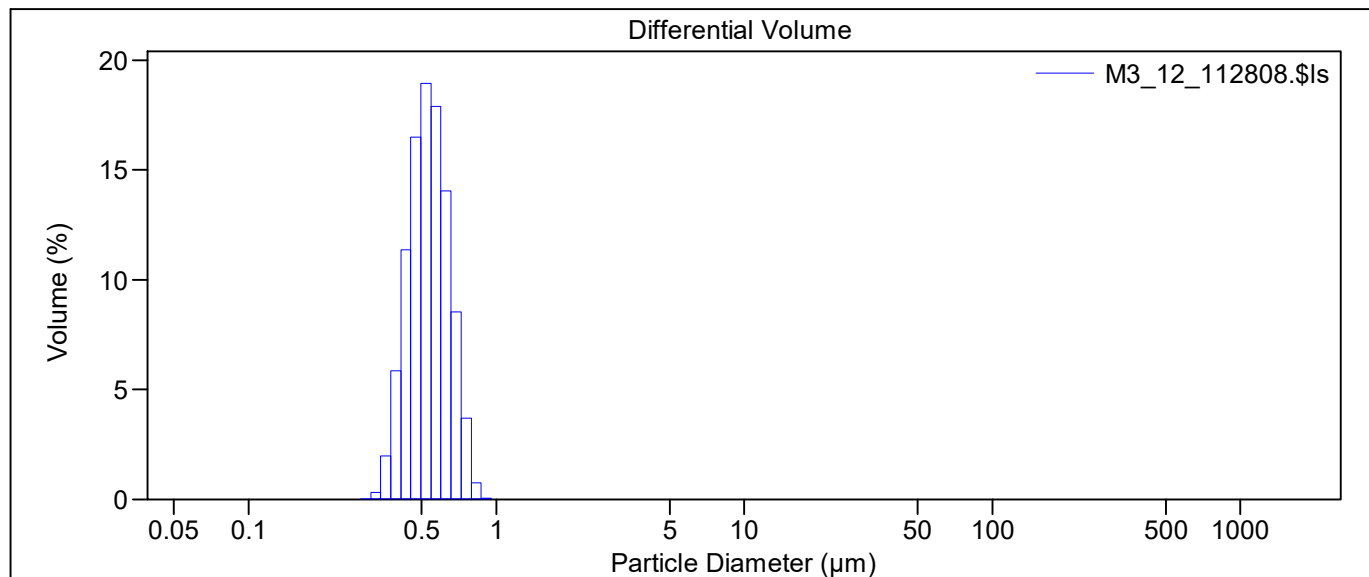
M3.\$av

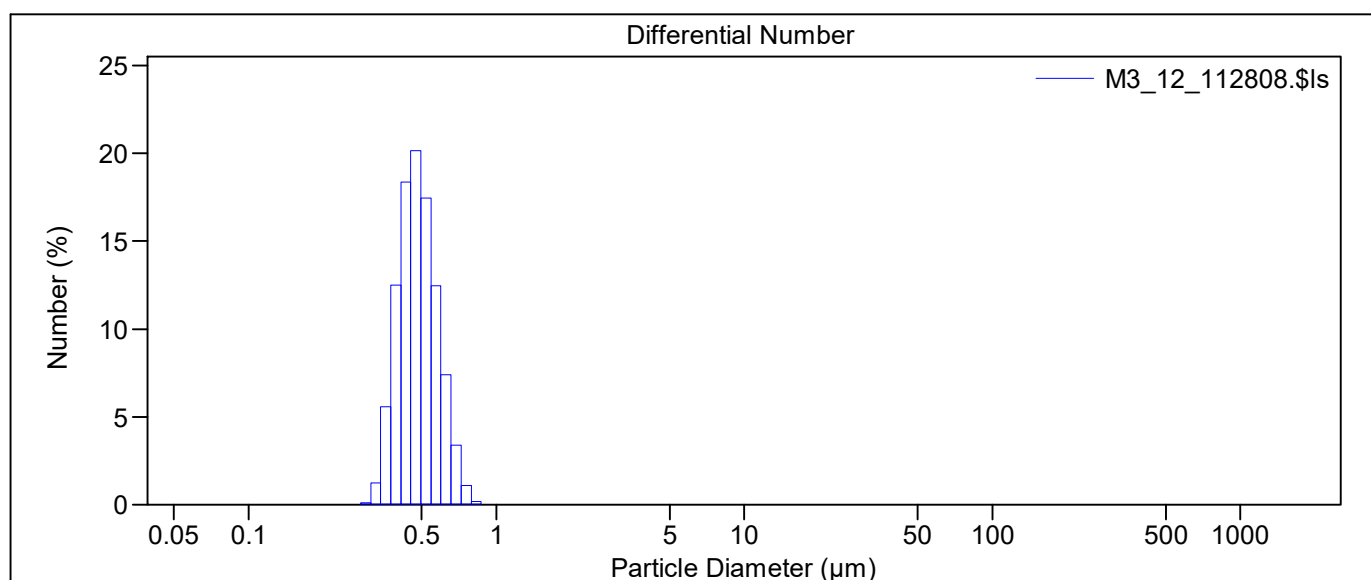
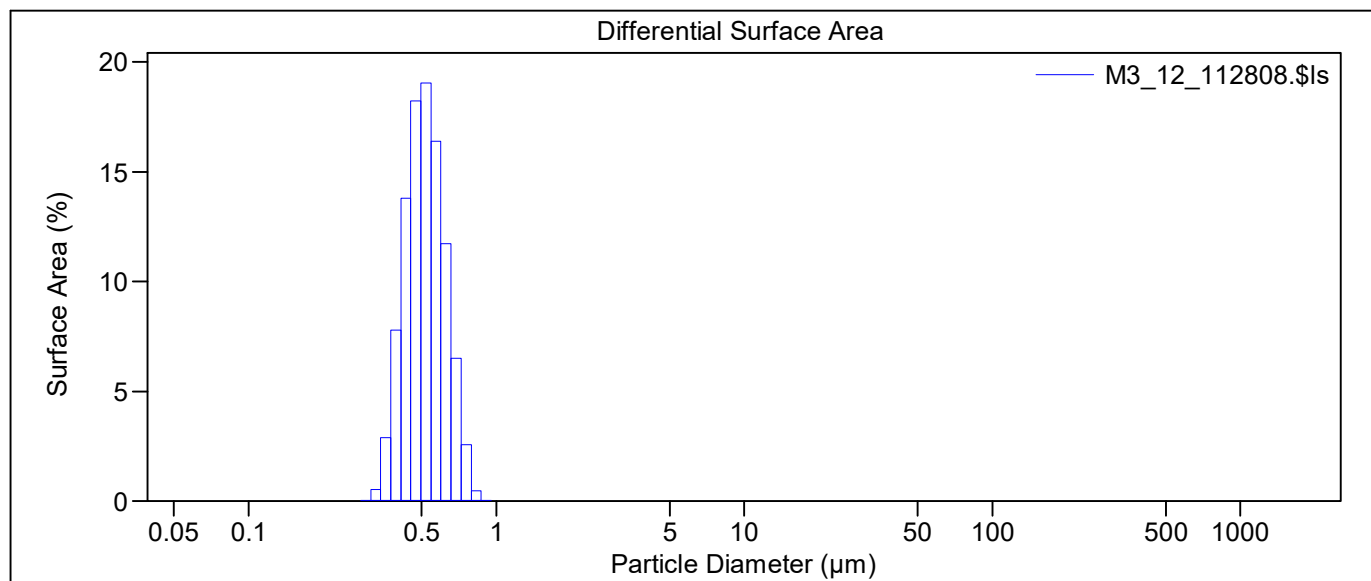
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_12_112808.\$ls		
	M3_12_112808.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	3.92%		
LS 13 320	Universal Liquid Module		
Start time:	11:26	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	4%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_12_112808.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.099 μm
Mean:	0.541 μm		Variance:	0.0097 μm ²
Median:	0.532 μm		C.V.:	18.3%
Mean/Median ratio:	1.016		Skewness:	0.418 Right skewed
Mode:	0.520 μm		Kurtosis:	-0.184 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.418 μm	0.467 μm	0.532 μm	0.607 μm	0.679 μm





M3.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.021	0.036	0.10
23	0.311	0.326	0.33	0.53	1.23
24	0.342	0.358	1.98	2.89	5.58
25	0.375	0.393	5.85	7.79	12.5
26	0.412	0.431	11.4	13.8	18.4
27	0.452	0.474	16.5	18.2	20.1
28	0.496	0.520	18.9	19.1	17.5
29	0.545	0.571	17.9	16.4	12.5
30	0.598	0.627	14.0	11.7	7.41
31	0.656	0.688	8.55	6.50	3.41
32	0.721	0.755	3.69	2.55	1.11
33	0.791	0.829	0.75	0.47	0.17
34	0.868	0.910	0.065	0.038	0.011
35	0.953	0.999	0	0	0
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

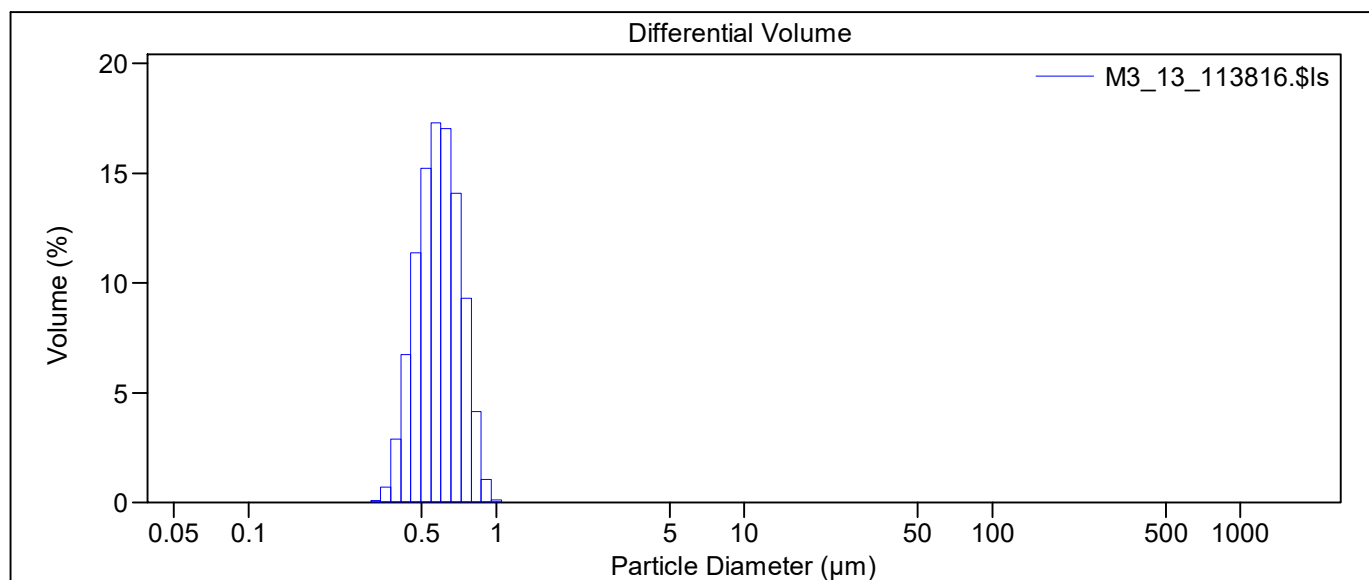
M3.\$av

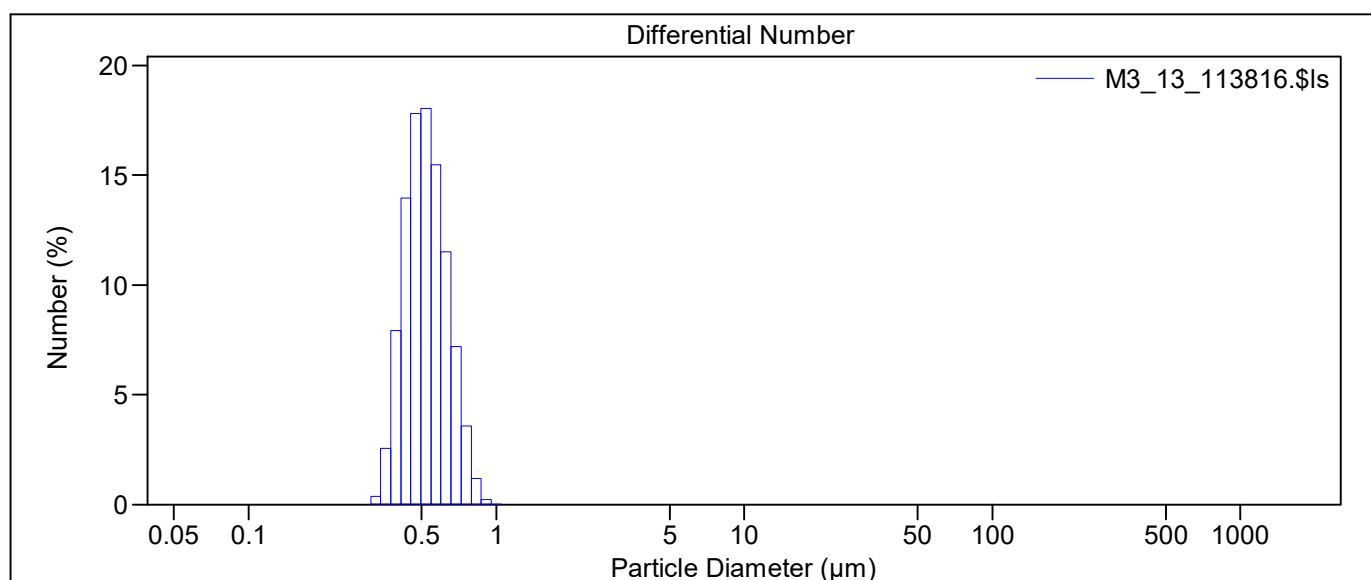
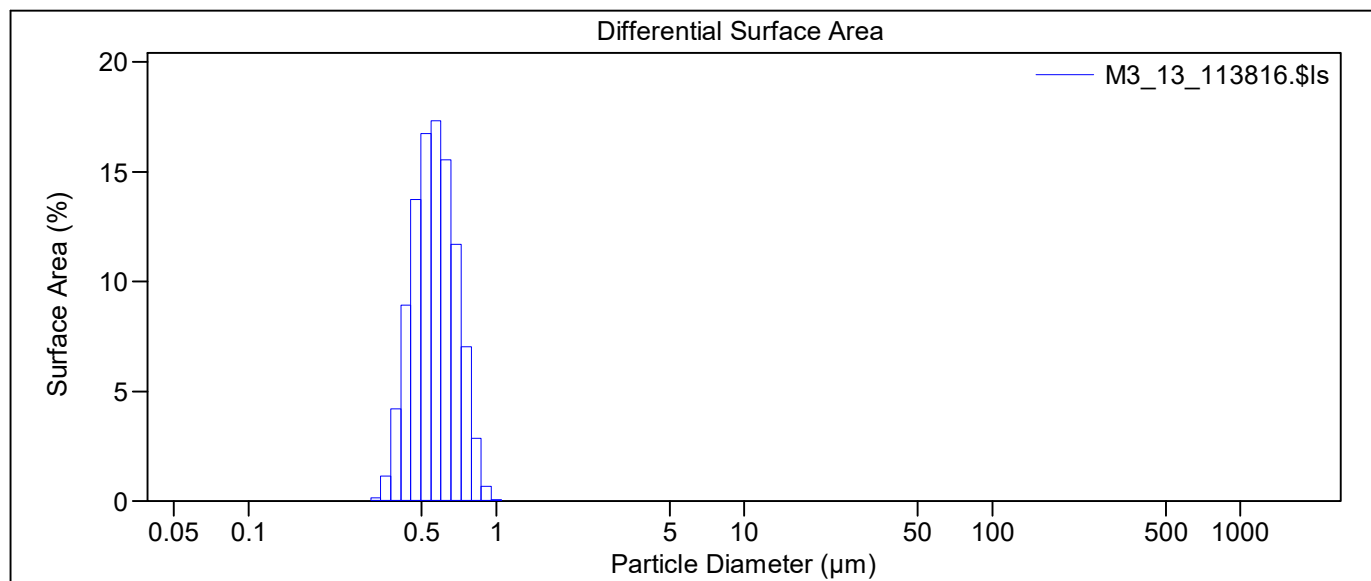
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_13_113816.\$ls		
	M3_13_113816.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.00%		
LS 13 320	Universal Liquid Module		
Start time:	11:36	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_13_113816.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.115 μm
Mean:	0.594 μm		Variance:	0.013 μm ²
Median:	0.585 μm		C.V.:	19.4%
Mean/Median ratio:	1.015		Skewness:	0.376 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.261 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.450 μm	0.506 μm	0.585 μm	0.673 μm	0.755 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0021	0.0041	0.013
23	0.311	0.326	0.078	0.14	0.37
24	0.342	0.358	0.70	1.12	2.56
25	0.375	0.393	2.89	4.21	7.94
26	0.412	0.431	6.74	8.93	14.0
27	0.452	0.474	11.4	13.7	17.8
28	0.496	0.520	15.2	16.7	18.0
29	0.545	0.571	17.3	17.3	15.5
30	0.598	0.627	17.0	15.5	11.5
31	0.656	0.688	14.1	11.7	7.21
32	0.721	0.755	9.29	7.03	3.59
33	0.791	0.829	4.13	2.84	1.21
34	0.868	0.910	1.04	0.66	0.23
35	0.953	0.999	0.11	0.065	0.019
36	1.047	1.097	0.0036	0.0019	0.00046
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

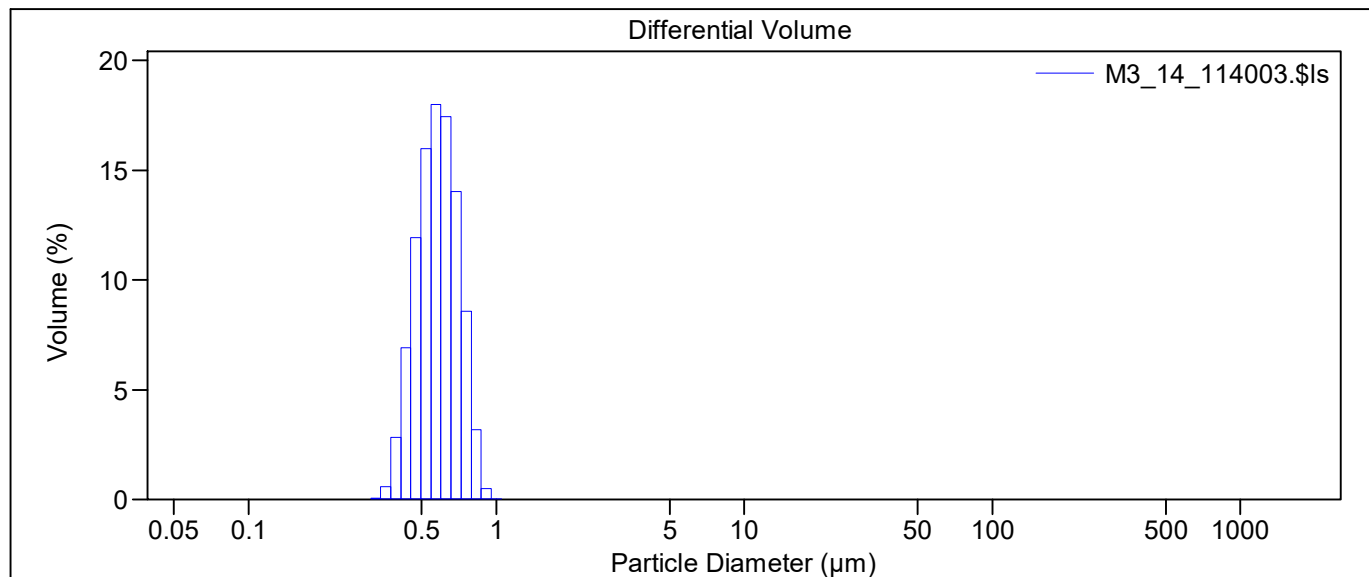
M3.\$av

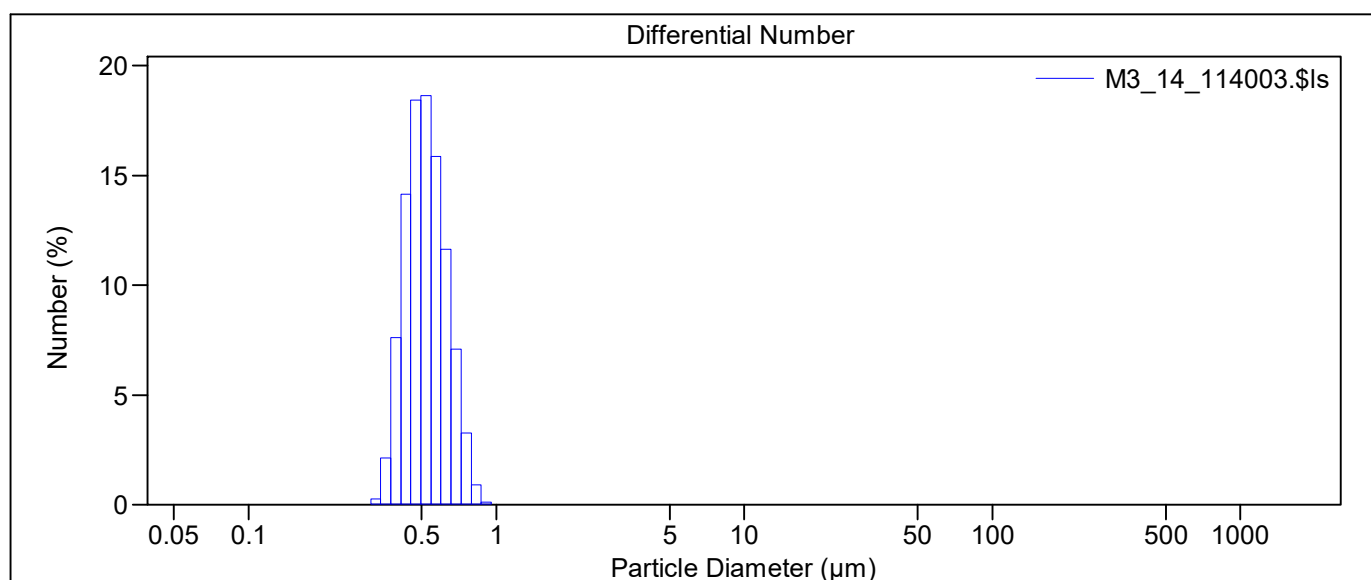
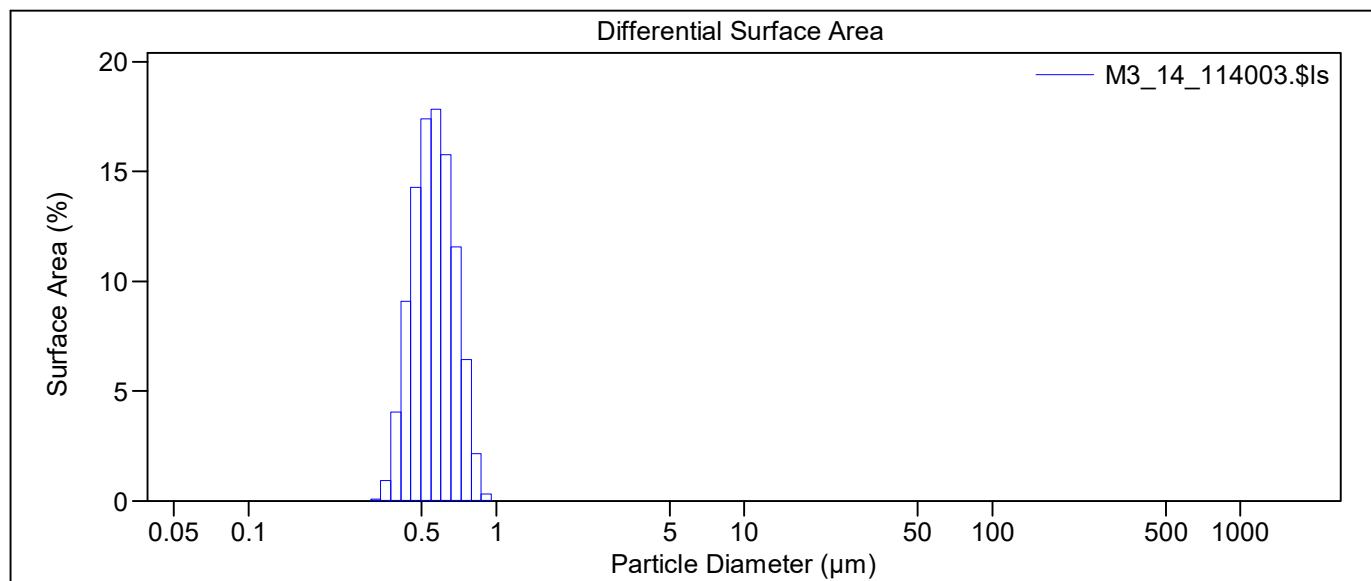
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_14_114003.\$ls		
	M3_14_114003.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.09%		
LS 13 320	Universal Liquid Module		
Start time:	11:38	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_14_114003.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.587 μm	S.D.:	0.109 μm	
Median:	0.579 μm	Variance:	0.012 μm ²	
Mean/Median ratio:	1.013	C.V.:	18.6%	
Mode:	0.571 μm	Skewness:	0.329 Right skewed	
		Kurtosis:	-0.354 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.450 μm	0.504 μm	0.579 μm	0.662 μm	0.739 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.00080	0.0015	0.0050
23	0.311	0.326	0.055	0.095	0.26
24	0.342	0.358	0.59	0.94	2.12
25	0.375	0.393	2.82	4.06	7.60
26	0.412	0.431	6.92	9.09	14.1
27	0.452	0.474	11.9	14.3	18.4
28	0.496	0.520	16.0	17.4	18.6
29	0.545	0.571	18.0	17.9	15.9
30	0.598	0.627	17.4	15.8	11.6
31	0.656	0.688	14.0	11.6	7.07
32	0.721	0.755	8.58	6.44	3.27
33	0.791	0.829	3.17	2.17	0.91
34	0.868	0.910	0.51	0.32	0.11
35	0.953	0.999	0.025	0.014	0.0042
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

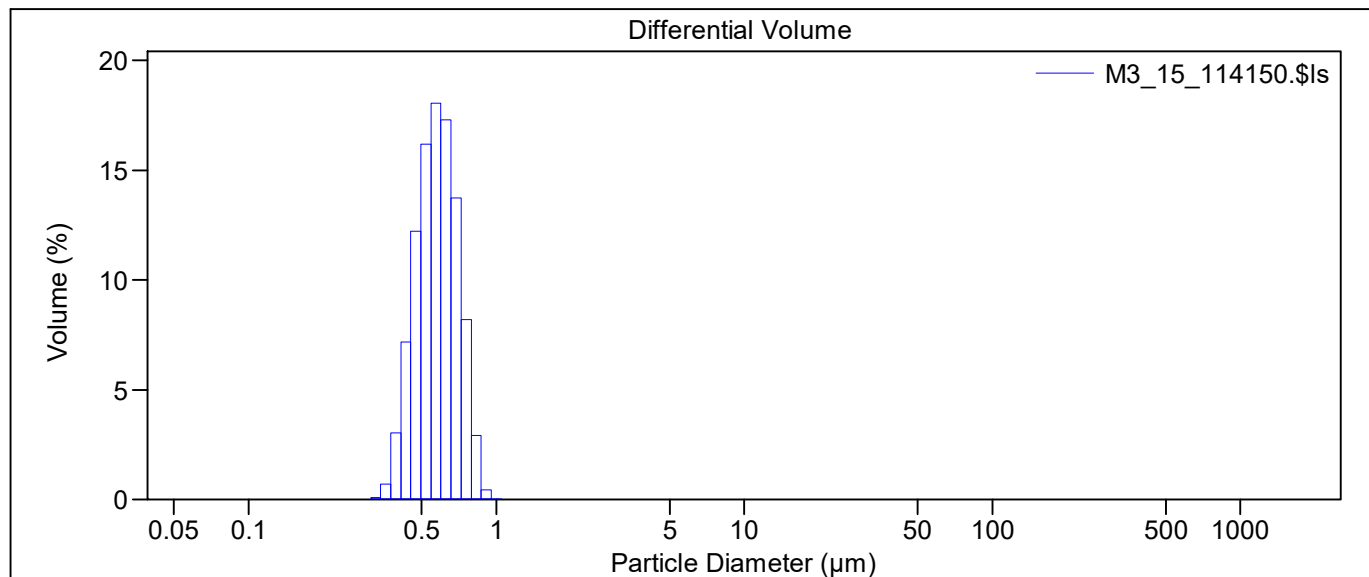
M3.\$av

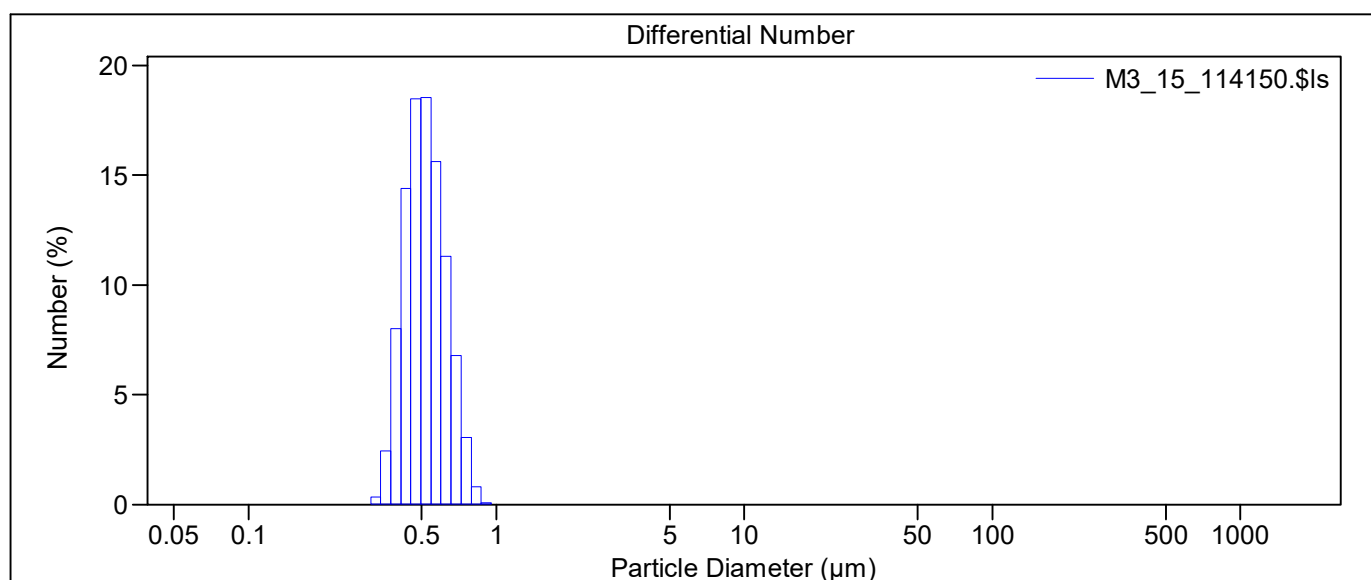
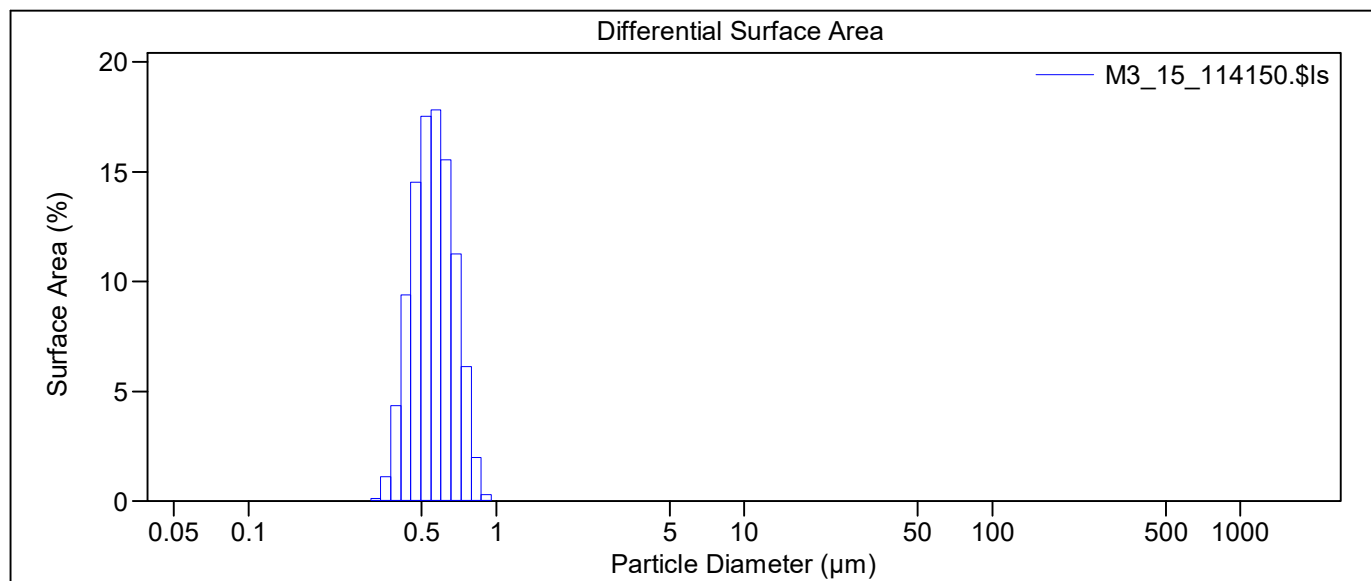
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M3\M3_15_114150.\$ls		
	M3_15_114150.\$ls		
File ID:	M3		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.11%		
LS 13 320	Universal Liquid Module		
Start time:	11:40	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M3_15_114150.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.109 μm
Mean:	0.584 μm		Variance:	0.012 μm ²
Median:	0.576 μm		C.V.:	18.6%
Mean/Median ratio:	1.013		Skewness:	0.330 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.345 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.447 μm	0.502 μm	0.576 μm	0.658 μm	0.734 μm





M3.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0017	0.0033	0.011
23	0.311	0.326	0.073	0.13	0.34
24	0.342	0.358	0.70	1.10	2.46
25	0.375	0.393	3.02	4.33	8.01
26	0.412	0.431	7.18	9.38	14.4
27	0.452	0.474	12.2	14.5	18.5
28	0.496	0.520	16.2	17.5	18.5
29	0.545	0.571	18.1	17.8	15.6
30	0.598	0.627	17.3	15.6	11.3
31	0.656	0.688	13.7	11.2	6.79
32	0.721	0.755	8.20	6.12	3.07
33	0.791	0.829	2.91	1.98	0.82
34	0.868	0.910	0.45	0.28	0.096
35	0.953	0.999	0.021	0.012	0.0034
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M3.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M4\M4.\$av M4.\$av

File ID: M4

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_01_115224.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M4\M4_11_123244.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M4\M4_12_123432.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M4\M4_13_124434.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M4\M4_14_124622.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M4\M4_15_124809.\$ls

Volume Statistics (Arithmetic) M4.\$av

Calculations from 0.040 μm to 2000 μm

Volume: 100%

Mean: 0.580 μm

S.D.: 0.126 μm

Median: 0.571 μm

Variance: 0.016 μm^2

Mean/Median ratio: 1.015

C.V.: 21.7%

Mode: 0.571 μm

Skewness: 0.290 Right skewed

Kurtosis: 0.918 Leptokurtic

<10%

<25%

<50%

<75%

<90%

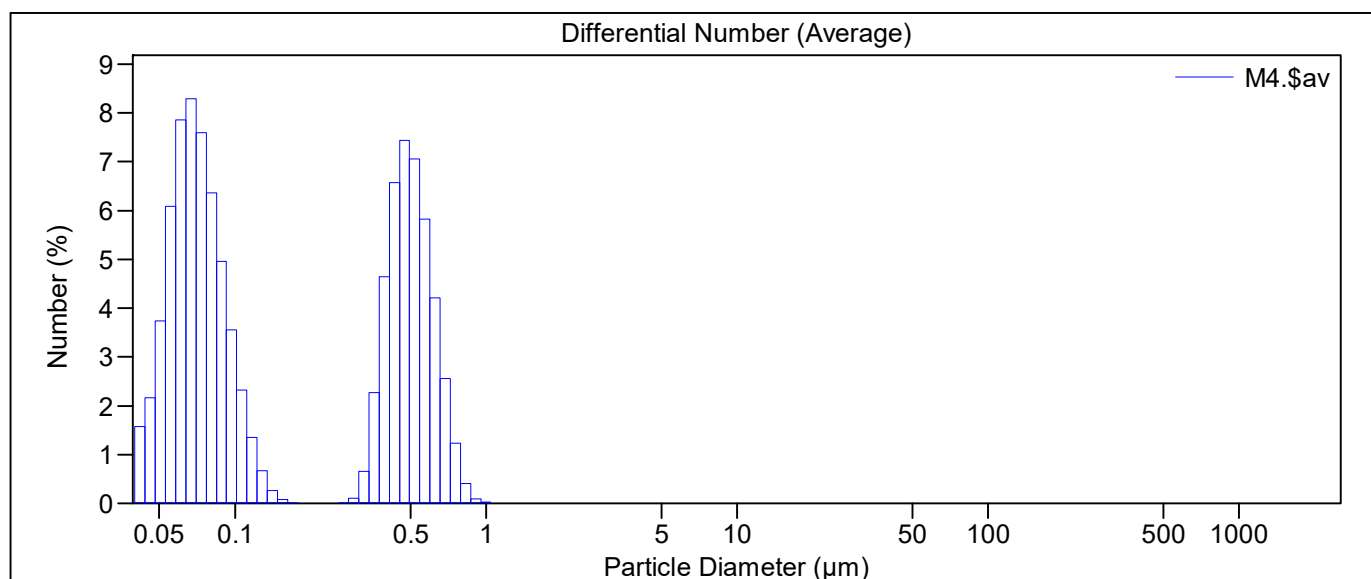
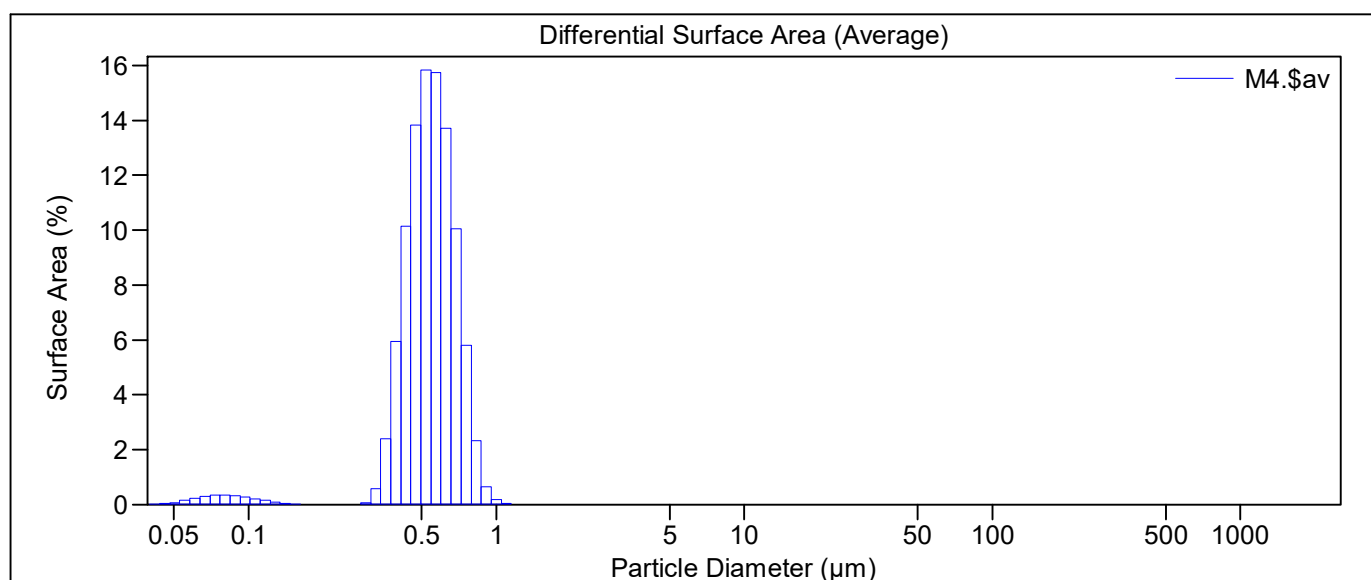
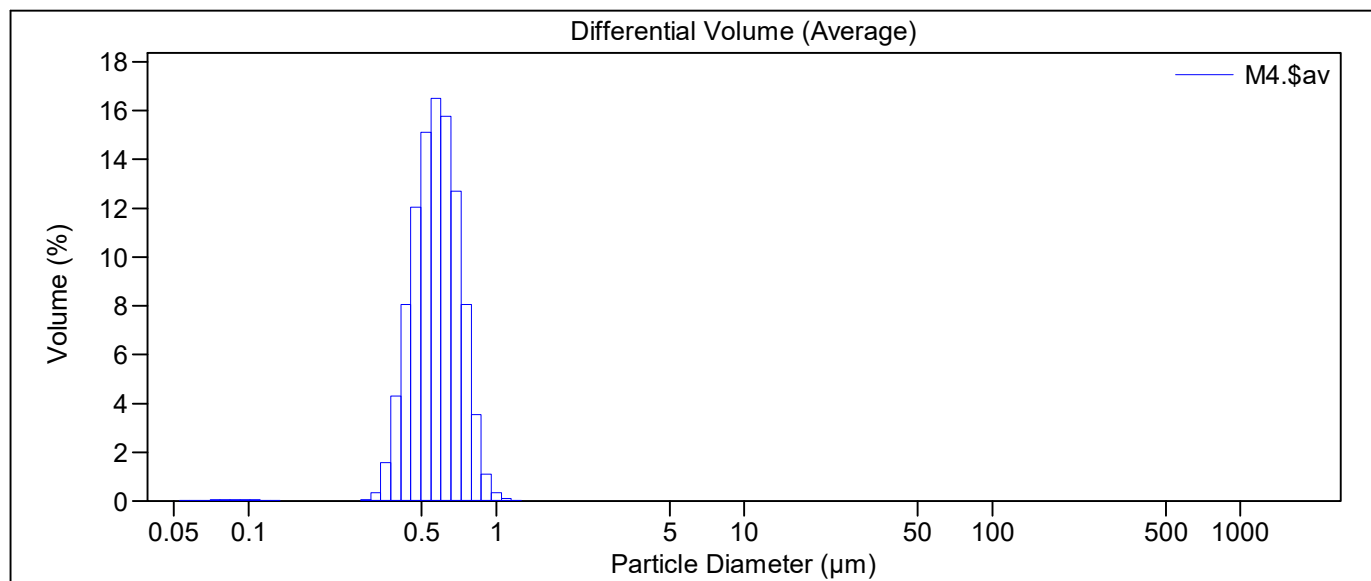
0.428 μm

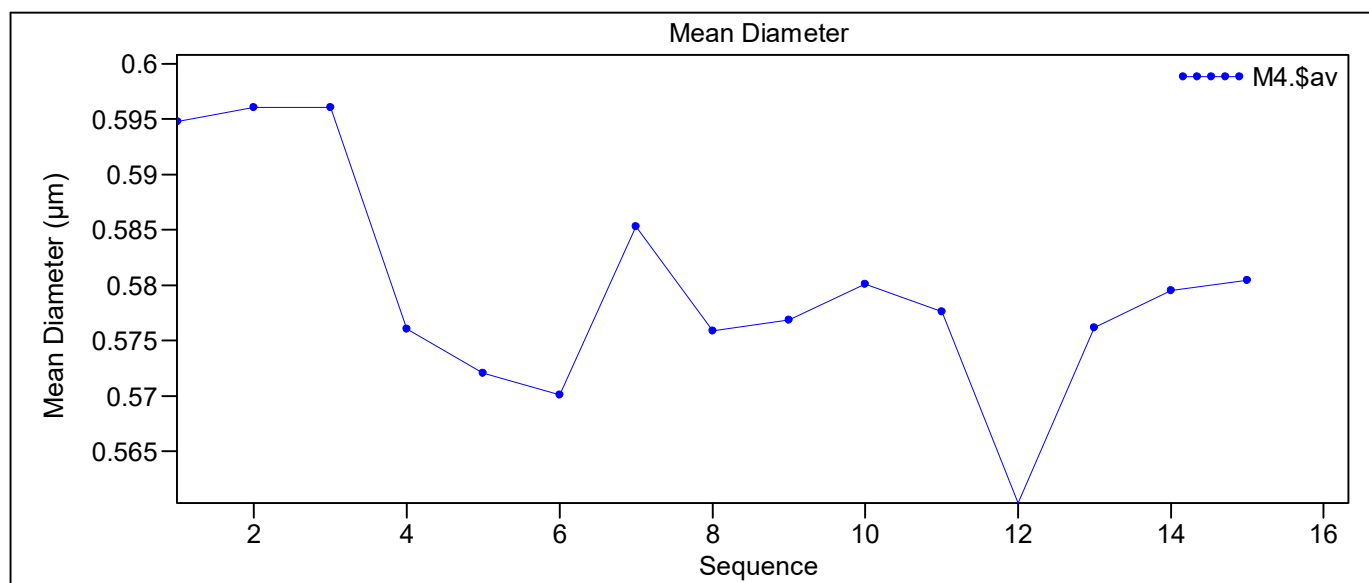
0.490 μm

0.571 μm

0.661 μm

0.748 μm





M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.0018	0.023	1.57
2	0.044	0.046	0.0032	0.038	2.17
3	0.048	0.050	0.0073	0.079	3.74
4	0.053	0.055	0.016	0.15	6.08
5	0.058	0.061	0.027	0.24	7.86
6	0.064	0.067	0.038	0.31	8.29
7	0.070	0.073	0.046	0.34	7.60
8	0.077	0.080	0.051	0.34	6.37
9	0.084	0.088	0.052	0.32	4.95
10	0.093	0.097	0.049	0.28	3.56
11	0.102	0.106	0.043	0.22	2.32
12	0.112	0.117	0.033	0.15	1.35
13	0.122	0.128	0.022	0.092	0.67
14	0.134	0.141	0.011	0.044	0.27
15	0.148	0.155	0.0042	0.015	0.074
16	0.162	0.170	0.00076	0.0024	0.010
17	0.178	0.186	0.000058	0.00017	0.00058
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0021	0.0043	0.0071
22	0.284	0.297	0.040	0.073	0.10
23	0.311	0.326	0.35	0.58	0.66
24	0.342	0.358	1.58	2.41	2.27
25	0.375	0.393	4.29	5.94	4.64
26	0.412	0.431	8.04	10.1	6.58
27	0.452	0.474	12.0	13.8	7.44
28	0.496	0.520	15.1	15.8	7.06
29	0.545	0.571	16.5	15.7	5.83
30	0.598	0.627	15.8	13.7	4.21
31	0.656	0.688	12.7	10.0	2.56
32	0.721	0.755	8.05	5.81	1.23
33	0.791	0.829	3.54	2.32	0.41
34	0.868	0.910	1.10	0.66	0.096
35	0.953	0.999	0.33	0.18	0.022
36	1.047	1.097	0.11	0.056	0.0056
37	1.149	1.204	0.023	0.011	0.00088
38	1.261	1.321	0.0021	0.00088	0.000060
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

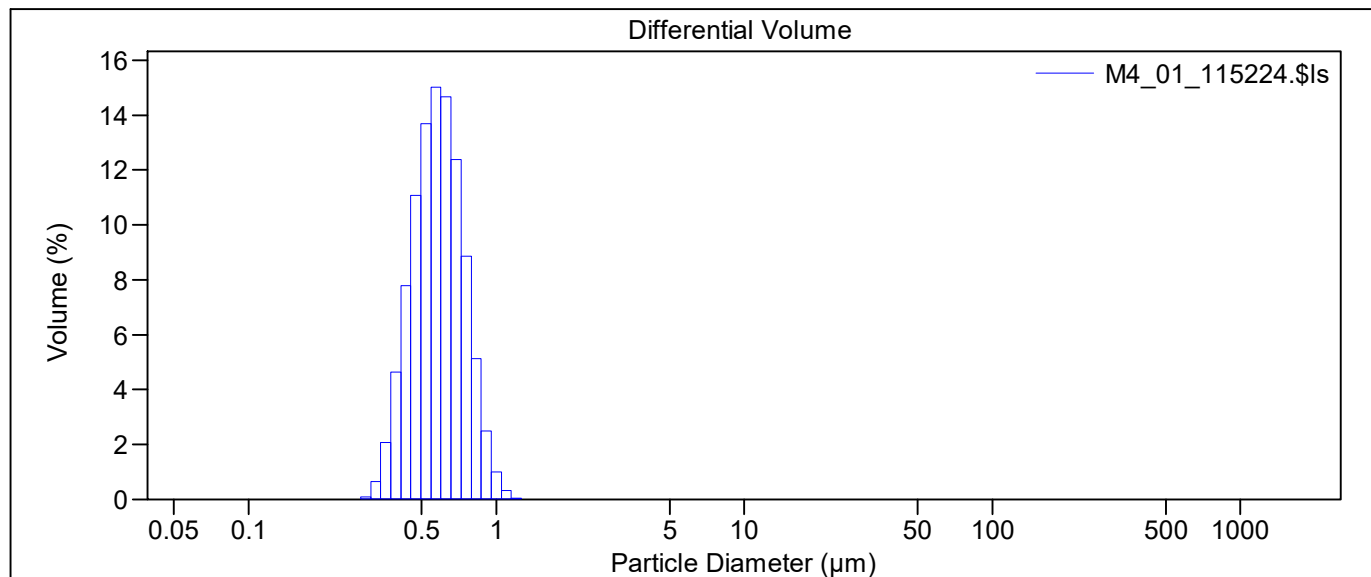
M4.\$av

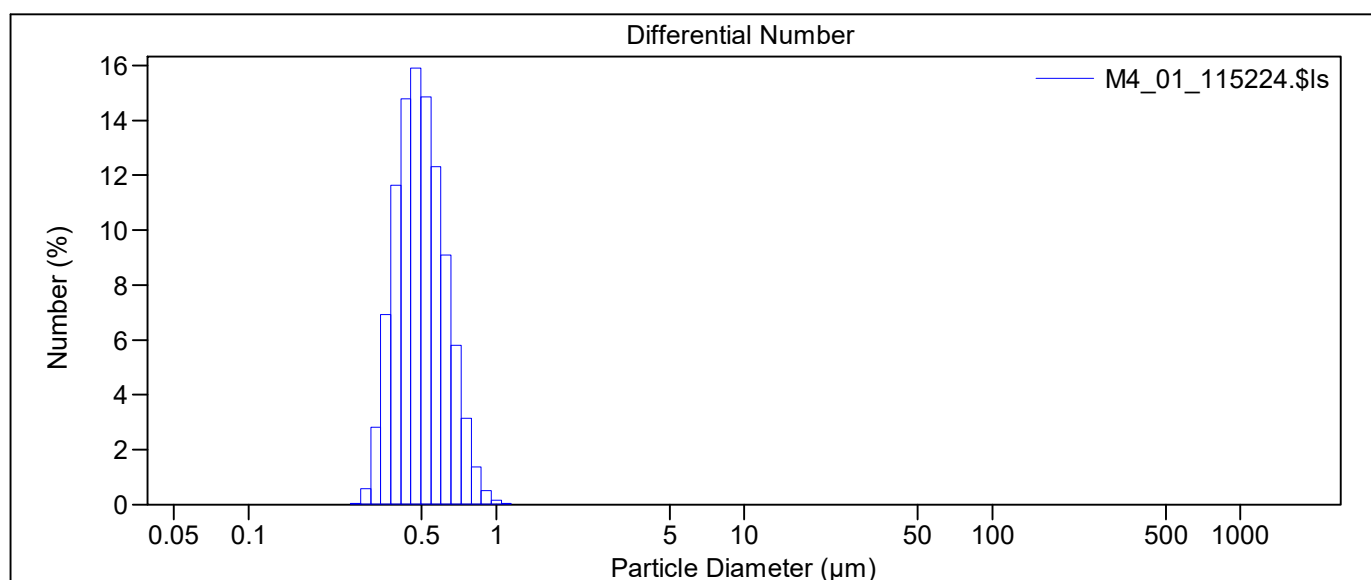
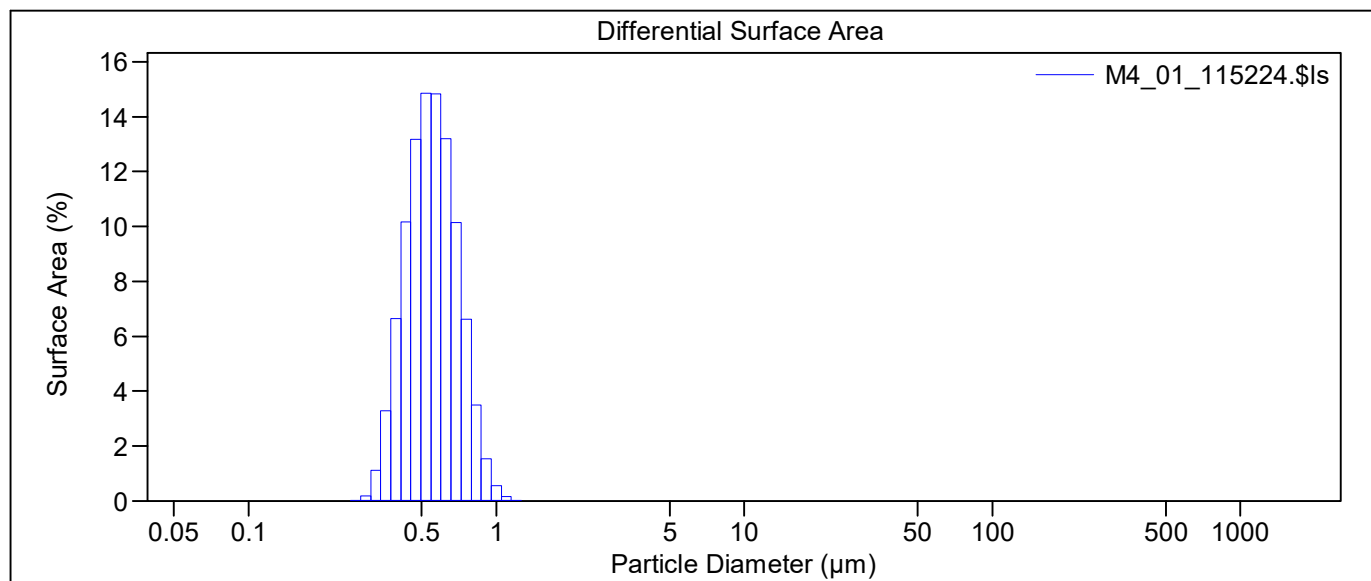
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_01_115224.\$ls		
	M4_01_115224.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.86%		
LS 13 320	Universal Liquid Module		
Start time:	11:50	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_01_115224.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.140 μm
Mean:	0.595 μm		Variance:	0.020 μm ²
Median:	0.580 μm		C.V.:	23.6%
Mean/Median ratio:	1.025		Skewness:	0.623 Right skewed
Mode:	0.571 μm		Kurtosis:	0.361 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.425 μm	0.491 μm	0.580 μm	0.684 μm	0.783 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0060	0.012	0.046
22	0.284	0.297	0.099	0.19	0.58
23	0.311	0.326	0.64	1.11	2.82
24	0.342	0.358	2.08	3.28	6.92
25	0.375	0.393	4.63	6.64	11.6
26	0.412	0.431	7.79	10.2	14.8
27	0.452	0.474	11.1	13.2	15.9
28	0.496	0.520	13.7	14.8	14.9
29	0.545	0.571	15.0	14.8	12.3
30	0.598	0.627	14.7	13.2	9.09
31	0.656	0.688	12.4	10.1	5.81
32	0.721	0.755	8.86	6.61	3.14
33	0.791	0.829	5.14	3.49	1.38
34	0.868	0.910	2.50	1.55	0.51
35	0.953	0.999	0.99	0.56	0.15
36	1.047	1.097	0.32	0.16	0.037
37	1.149	1.204	0.058	0.027	0.0050
38	1.261	1.321	0.0046	0.0020	0.00030
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0

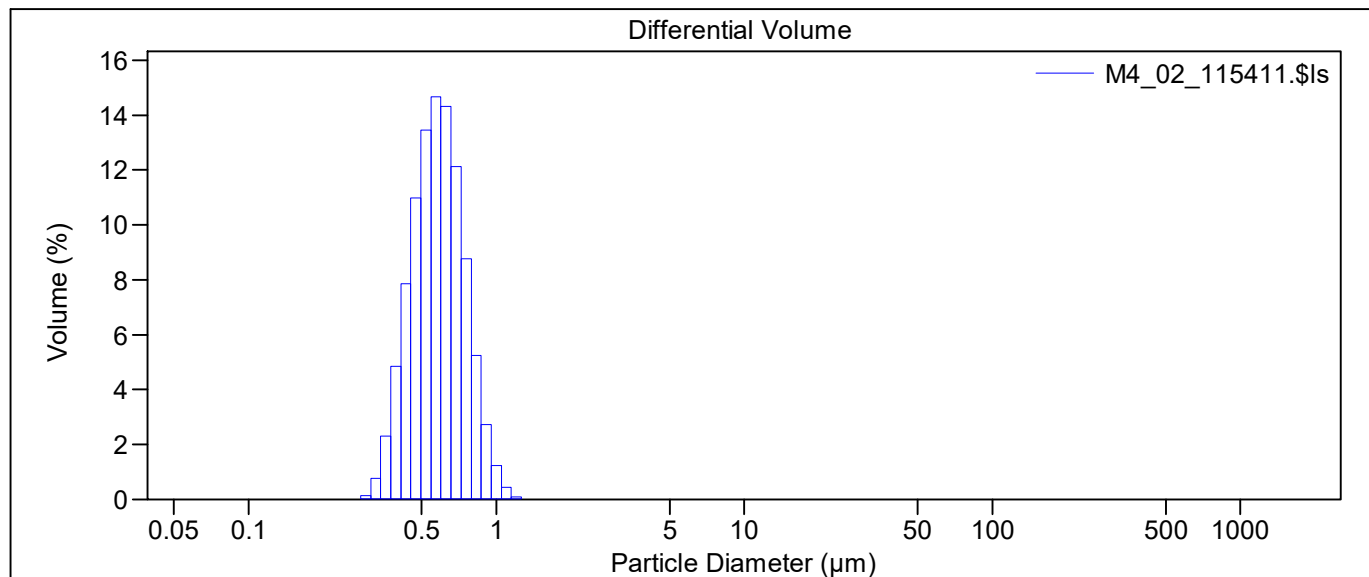
M4.\$av

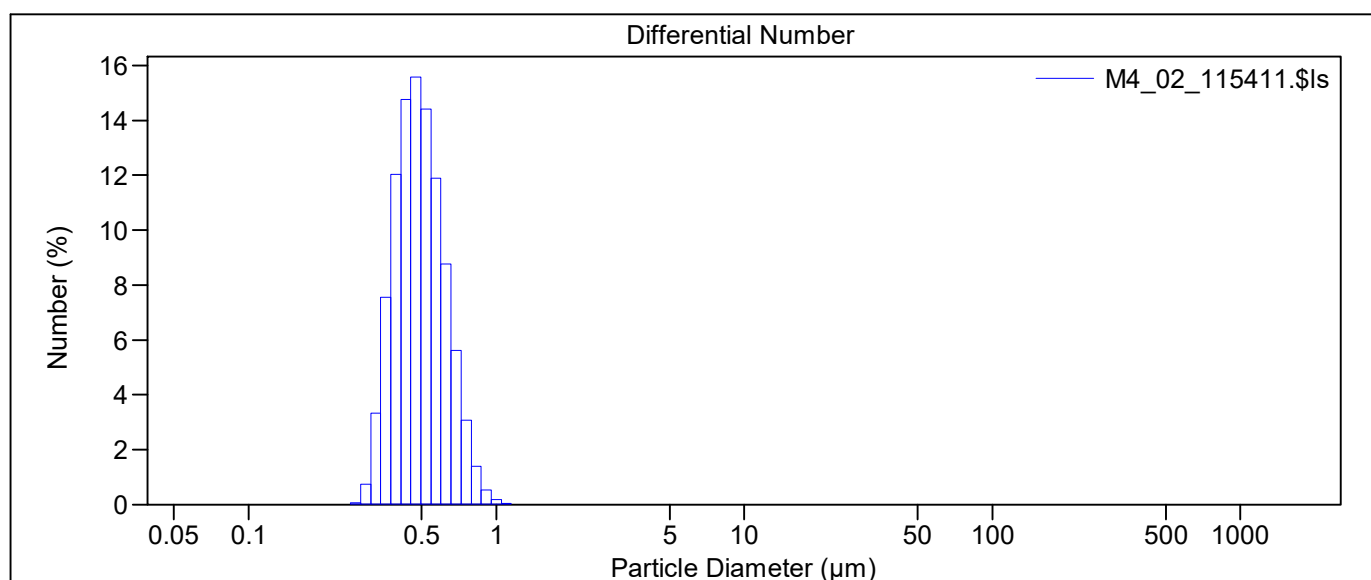
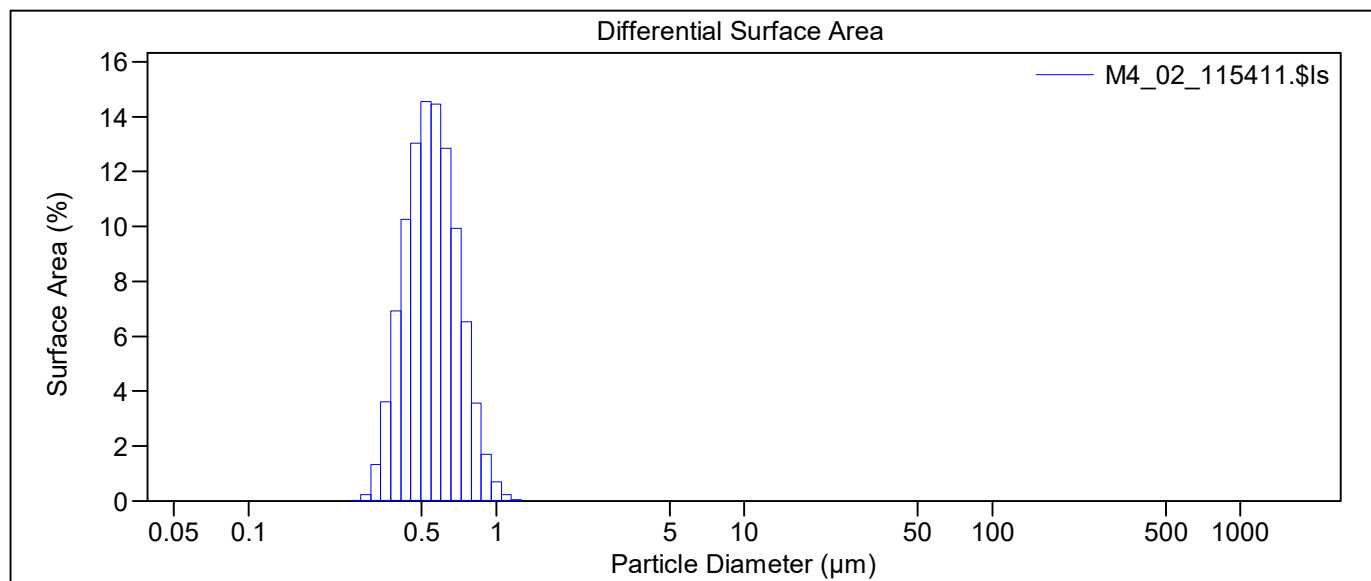
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_02_115411.\$ls		
	M4_02_115411.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.85%		
LS 13 320	Universal Liquid Module		
Start time:	11:52	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_02_115411.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.145 μm
Mean:	0.596 μm		Variance:	0.021 μm ²
Median:	0.580 μm		C.V.:	24.3%
Mean/Median ratio:	1.028		Skewness:	0.672 Right skewed
Mode:	0.571 μm		Kurtosis:	0.465 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.422 μm	0.489 μm	0.580 μm	0.686 μm	0.789 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0090	0.019	0.068
22	0.284	0.297	0.13	0.24	0.74
23	0.311	0.326	0.77	1.32	3.33
24	0.342	0.358	2.30	3.61	7.55
25	0.375	0.393	4.84	6.94	12.0
26	0.412	0.431	7.86	10.3	14.8
27	0.452	0.474	11.0	13.0	15.6
28	0.496	0.520	13.5	14.6	14.4
29	0.545	0.571	14.7	14.5	11.9
30	0.598	0.627	14.3	12.9	8.77
31	0.656	0.688	12.1	9.93	5.62
32	0.721	0.755	8.76	6.53	3.07
33	0.791	0.829	5.25	3.56	1.39
34	0.868	0.910	2.74	1.69	0.55
35	0.953	0.999	1.23	0.69	0.19
36	1.047	1.097	0.45	0.23	0.052
37	1.149	1.204	0.093	0.043	0.0080
38	1.261	1.321	0.0082	0.0035	0.00054
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

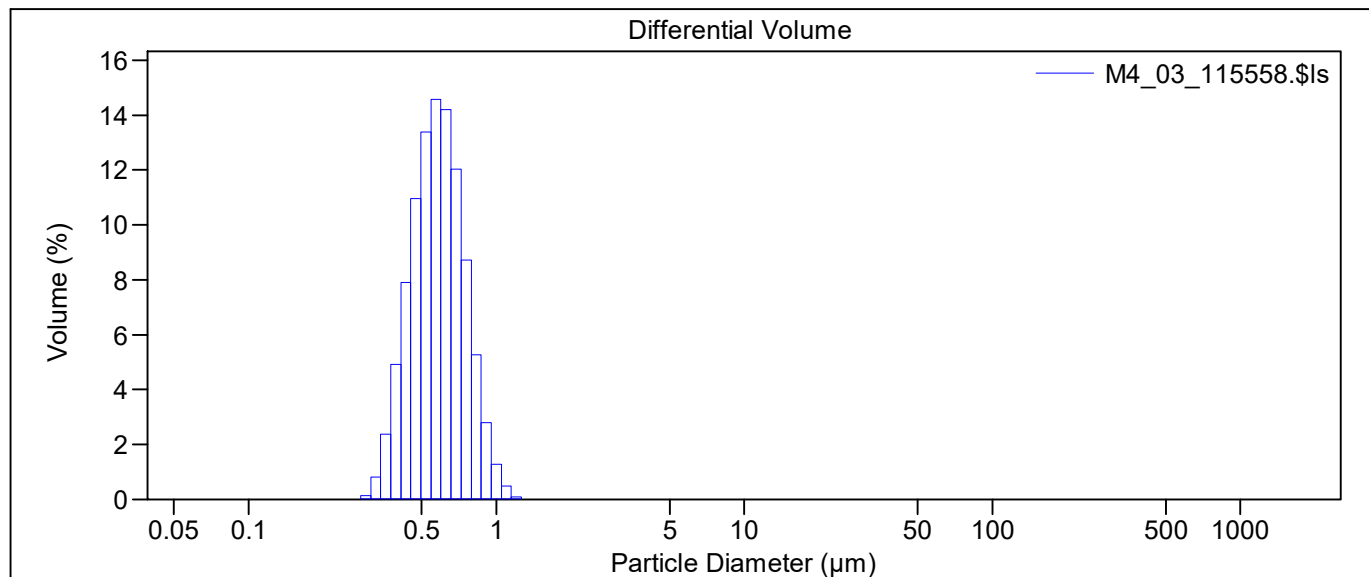
M4.\$av

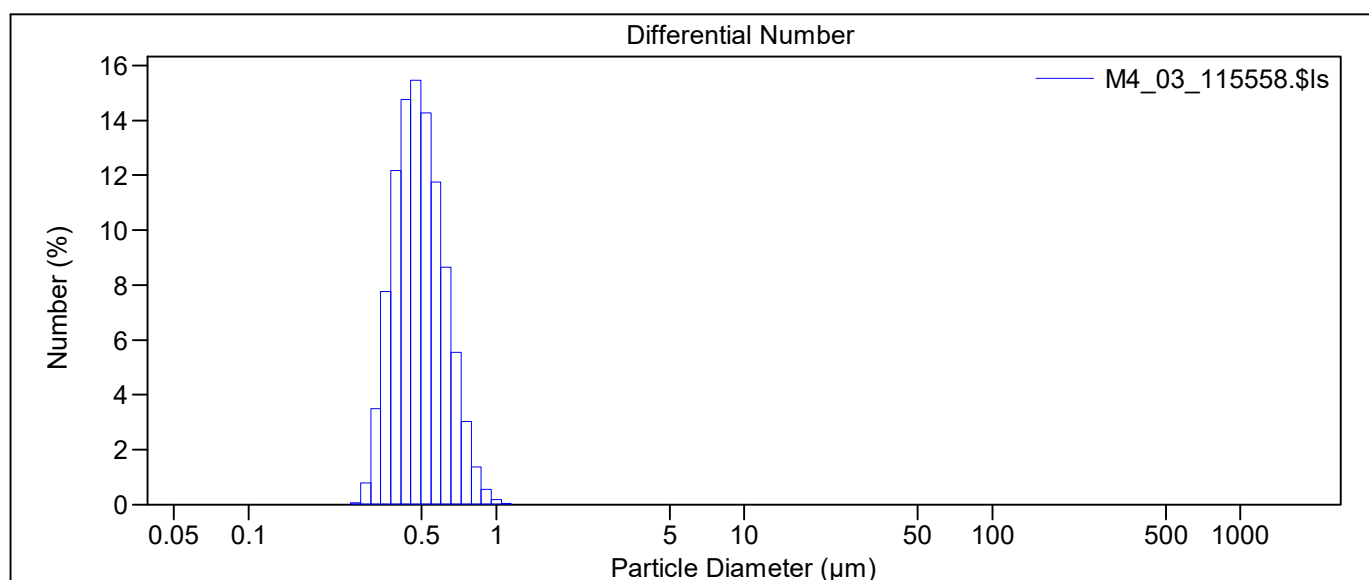
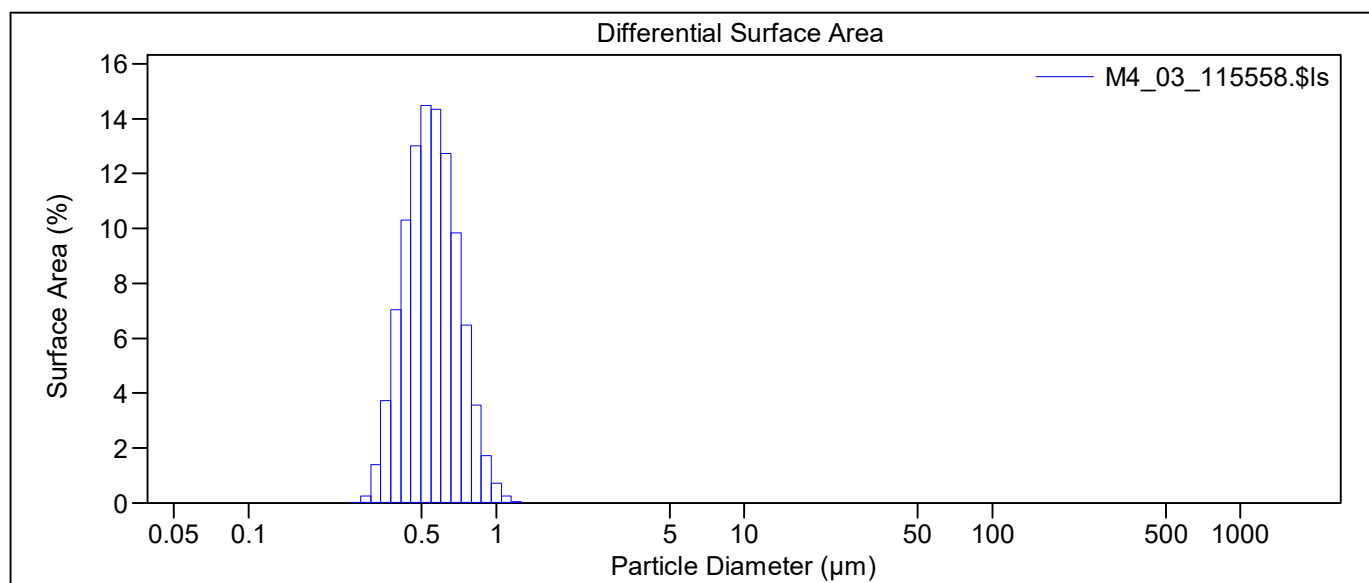
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_03_115558.\$ls		
	M4_03_115558.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.81%		
LS 13 320	Universal Liquid Module		
Start time:	11:54	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_03_115558.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.147 μm
Mean:	0.596 μm		Variance:	0.021 μm ²
Median:	0.579 μm		C.V.:	24.6%
Mean/Median ratio:	1.029		Skewness:	0.685 Right skewed
Mode:	0.571 μm		Kurtosis:	0.487 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.421 μm	0.488 μm	0.579 μm	0.687 μm	0.791 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.010	0.021	0.076
22	0.284	0.297	0.14	0.26	0.80
23	0.311	0.326	0.81	1.40	3.50
24	0.342	0.358	2.38	3.73	7.76
25	0.375	0.393	4.93	7.05	12.2
26	0.412	0.431	7.90	10.3	14.8
27	0.452	0.474	11.0	13.0	15.5
28	0.496	0.520	13.4	14.5	14.3
29	0.545	0.571	14.6	14.4	11.8
30	0.598	0.627	14.2	12.7	8.66
31	0.656	0.688	12.0	9.85	5.55
32	0.721	0.755	8.71	6.49	3.04
33	0.791	0.829	5.26	3.57	1.38
34	0.868	0.910	2.80	1.73	0.56
35	0.953	0.999	1.29	0.73	0.19
36	1.047	1.097	0.49	0.25	0.056
37	1.149	1.204	0.10	0.048	0.0089
38	1.261	1.321	0.0093	0.0040	0.00061
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0

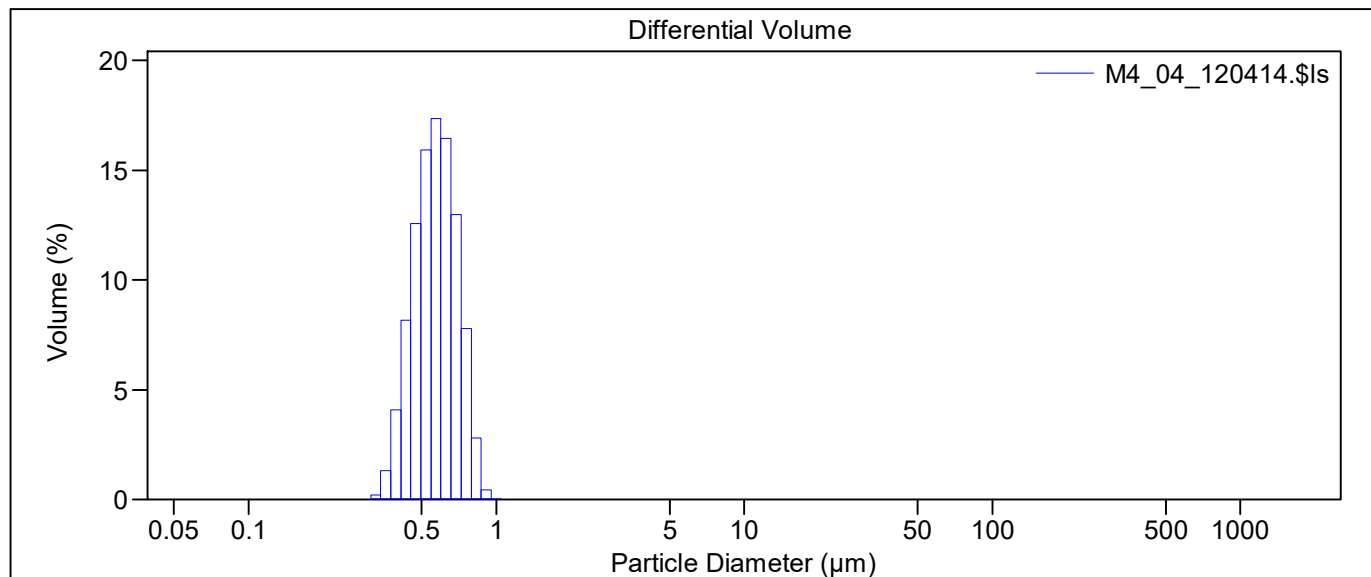
M4.\$av

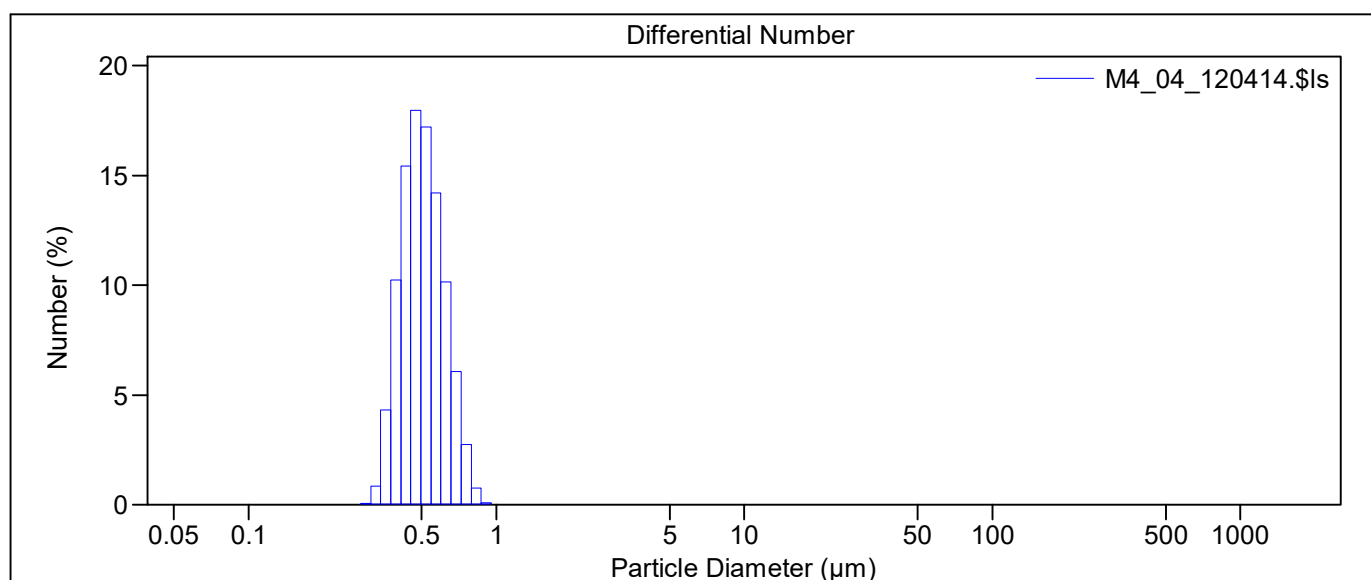
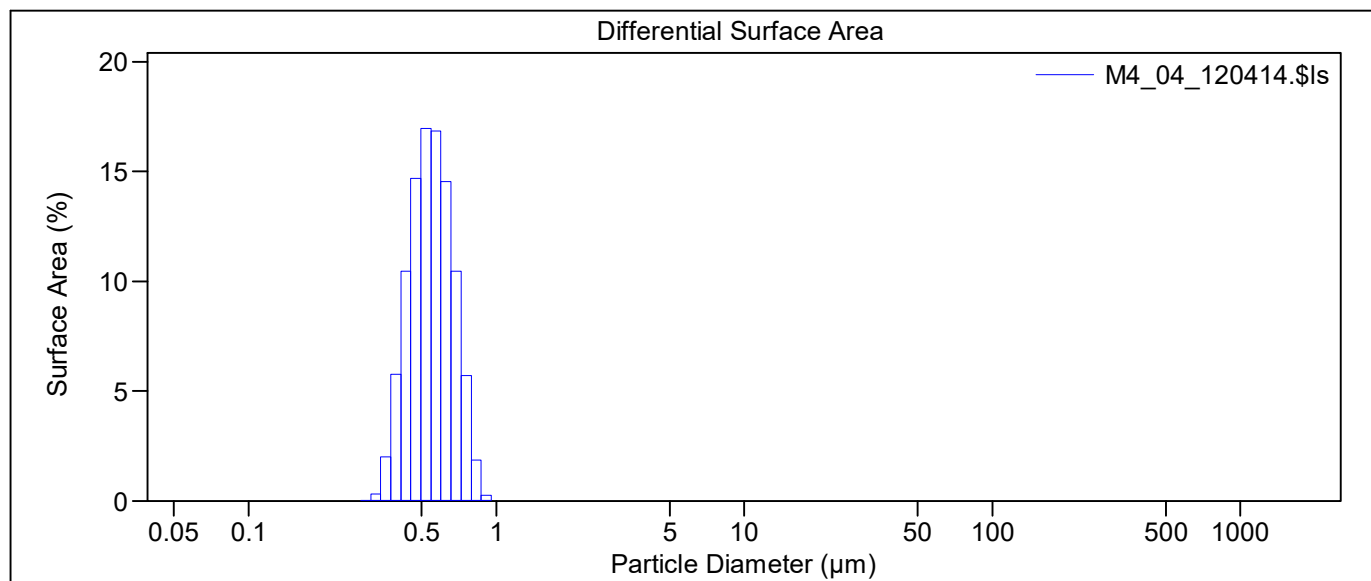
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_04_120414.\$ls		
	M4_04_120414.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.01%		
LS 13 320	Universal Liquid Module		
Start time:	12:02	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	50%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_04_120414.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.112 μm
Mean:	0.576 μm		Variance:	0.012 μm ²
Median:	0.569 μm		C.V.:	19.4%
Mean/Median ratio:	1.013		Skewness:	0.323 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.367 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.434 μm	0.492 μm	0.569 μm	0.653 μm	0.730 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0089	0.017	0.052
23	0.311	0.326	0.19	0.32	0.83
24	0.342	0.358	1.30	2.01	4.31
25	0.375	0.393	4.09	5.77	10.2
26	0.412	0.431	8.15	10.5	15.4
27	0.452	0.474	12.6	14.7	18.0
28	0.496	0.520	15.9	17.0	17.2
29	0.545	0.571	17.4	16.9	14.2
30	0.598	0.627	16.4	14.6	10.2
31	0.656	0.688	13.0	10.5	6.06
32	0.721	0.755	7.78	5.71	2.75
33	0.791	0.829	2.79	1.87	0.74
34	0.868	0.910	0.43	0.27	0.088
35	0.953	0.999	0.021	0.012	0.0032
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

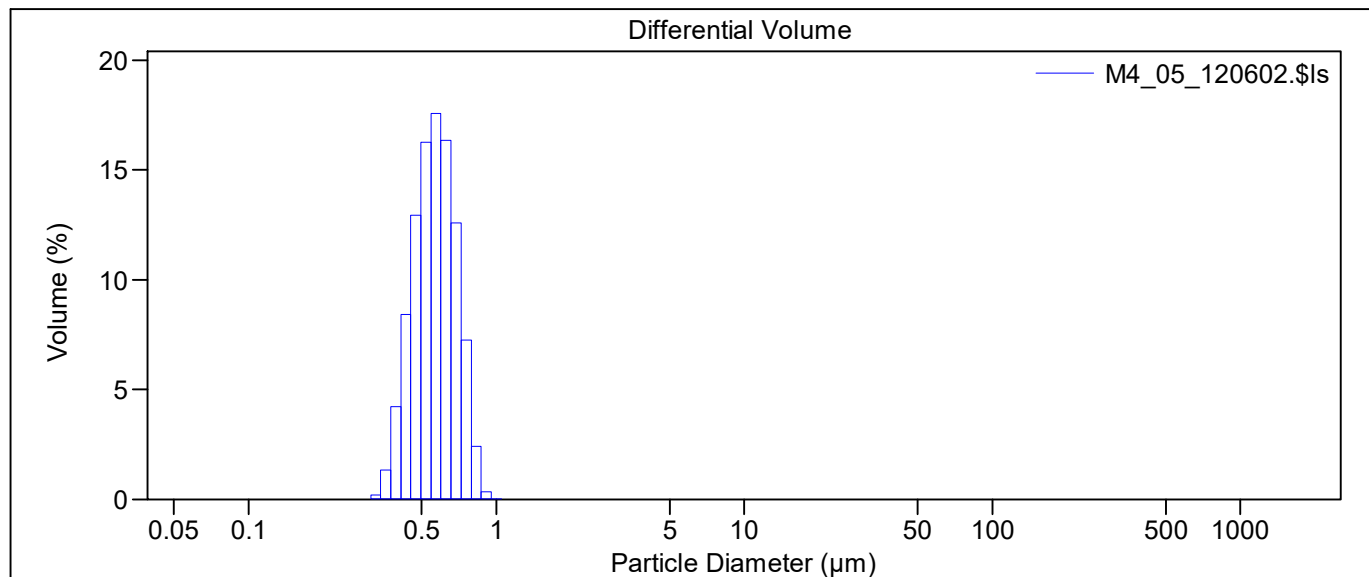
M4.\$av

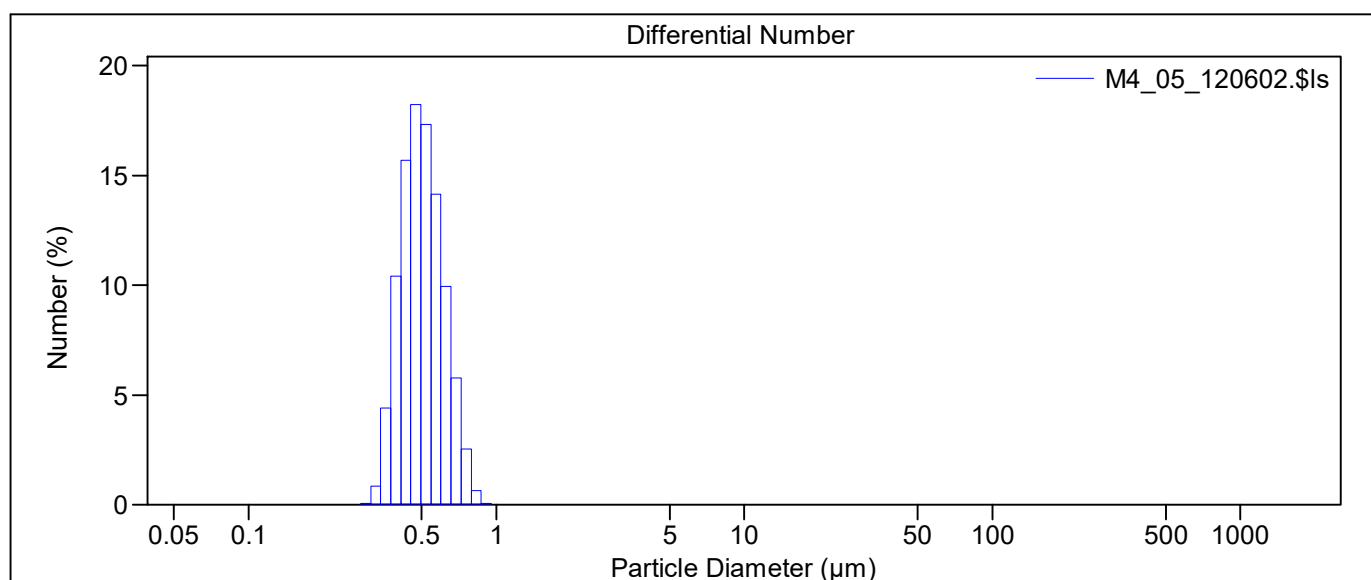
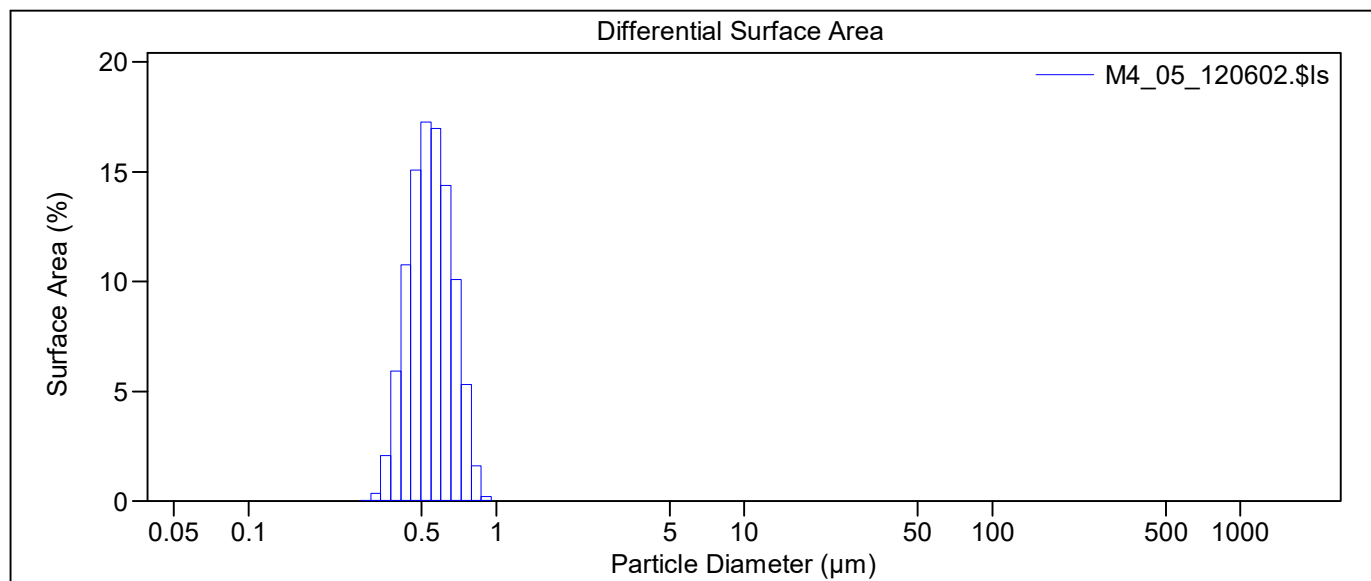
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_05_120602.\$ls		
	M4_05_120602.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.09%		
LS 13 320	Universal Liquid Module		
Start time:	12:04	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	51%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_05_120602.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.110 μm
Mean:	0.572 μm		Variance:	0.012 μm ²
Median:	0.565 μm		C.V.:	19.2%
Mean/Median ratio:	1.013		Skewness:	0.329 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.351 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.432 μm	0.489 μm	0.565 μm	0.648 μm	0.721 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0096	0.018	0.055
23	0.311	0.326	0.20	0.34	0.86
24	0.342	0.358	1.35	2.08	4.40
25	0.375	0.393	4.22	5.92	10.4
26	0.412	0.431	8.43	10.8	15.7
27	0.452	0.474	13.0	15.1	18.2
28	0.496	0.520	16.3	17.2	17.3
29	0.545	0.571	17.6	17.0	14.1
30	0.598	0.627	16.3	14.4	9.93
31	0.656	0.688	12.6	10.1	5.79
32	0.721	0.755	7.26	5.30	2.52
33	0.791	0.829	2.42	1.61	0.64
34	0.868	0.910	0.35	0.21	0.070
35	0.953	0.999	0.015	0.0081	0.0022
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

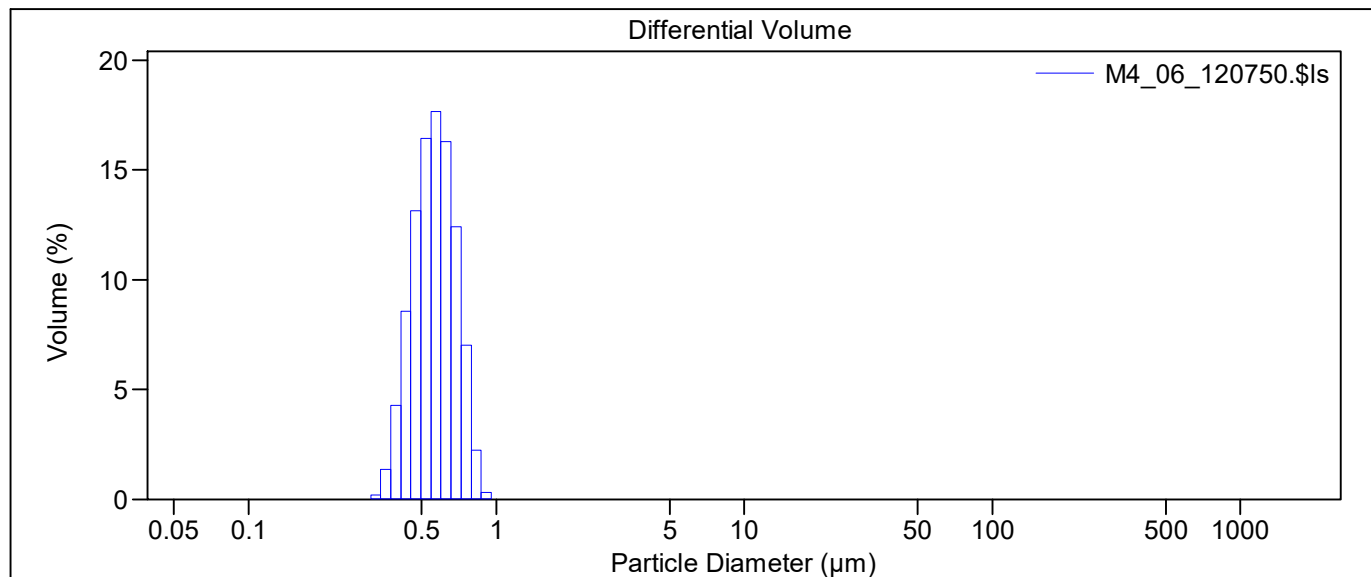
M4.\$av

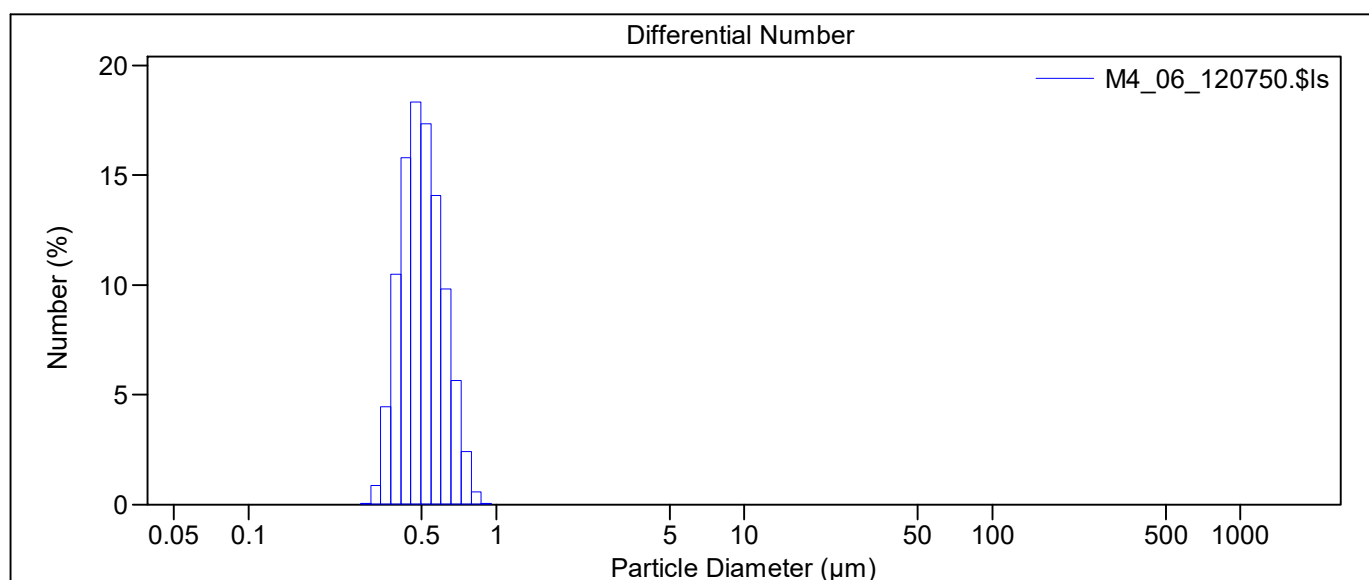
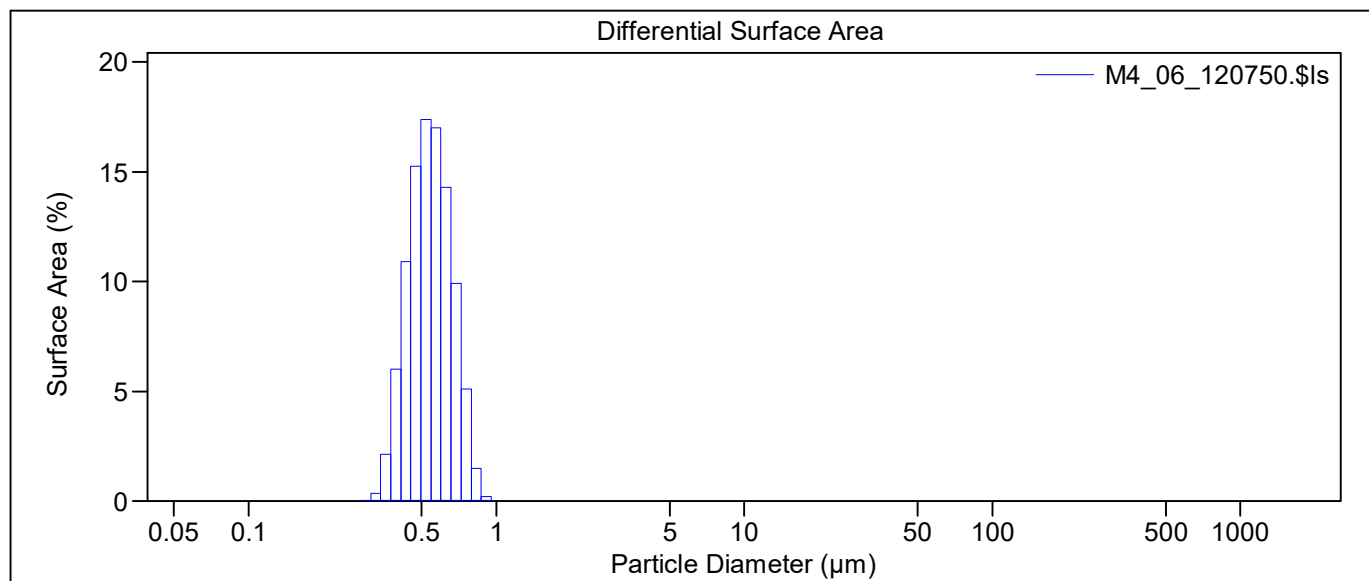
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_06_120750.\$ls		
	M4_06_120750.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.14%		
LS 13 320	Universal Liquid Module		
Start time:	12:06	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	50%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_06_120750.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.109 μm
Mean:	0.570 μm		Variance:	0.012 μm ²
Median:	0.563 μm		C.V.:	19.2%
Mean/Median ratio:	1.013		Skewness:	0.331 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.346 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.431 μm	0.487 μm	0.563 μm	0.646 μm	0.719 μm





M4.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.010	0.019	0.057
23	0.311	0.326	0.20	0.34	0.87
24	0.342	0.358	1.38	2.12	4.47
25	0.375	0.393	4.30	6.01	10.5
26	0.412	0.431	8.57	10.9	15.8
27	0.452	0.474	13.1	15.2	18.3
28	0.496	0.520	16.4	17.4	17.3
29	0.545	0.571	17.7	17.0	14.1
30	0.598	0.627	16.3	14.3	9.82
31	0.656	0.688	12.4	9.91	5.65
32	0.721	0.755	7.02	5.11	2.42
33	0.791	0.829	2.25	1.49	0.59
34	0.868	0.910	0.32	0.19	0.062
35	0.953	0.999	0.012	0.0067	0.0018
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

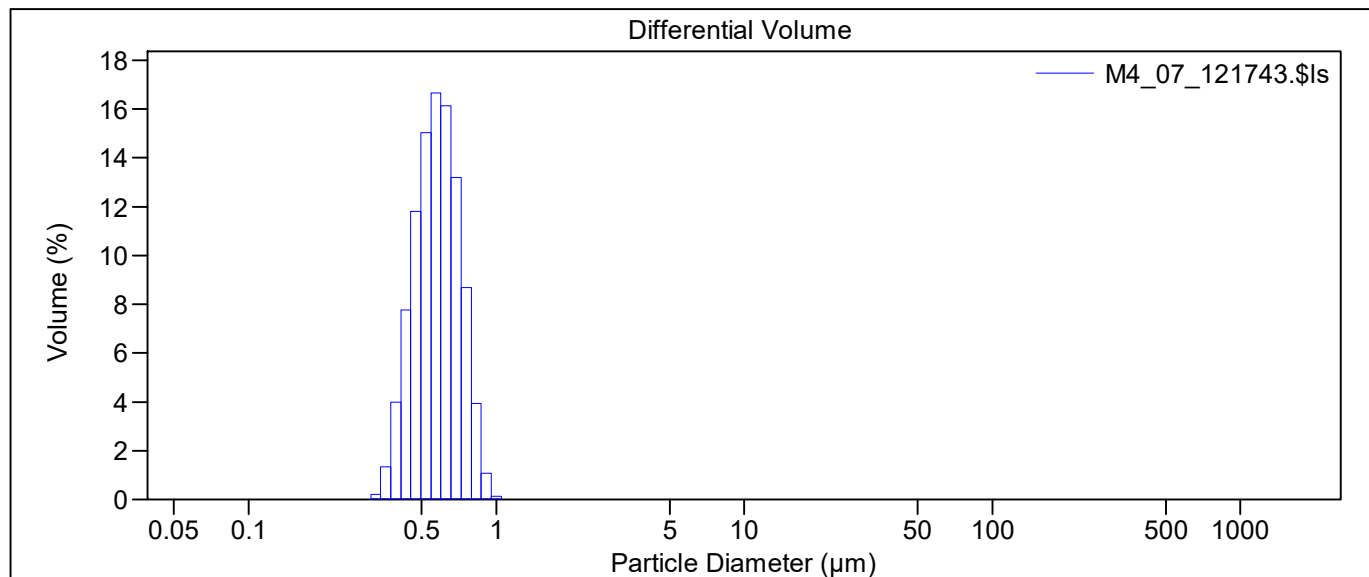
M4.\$av

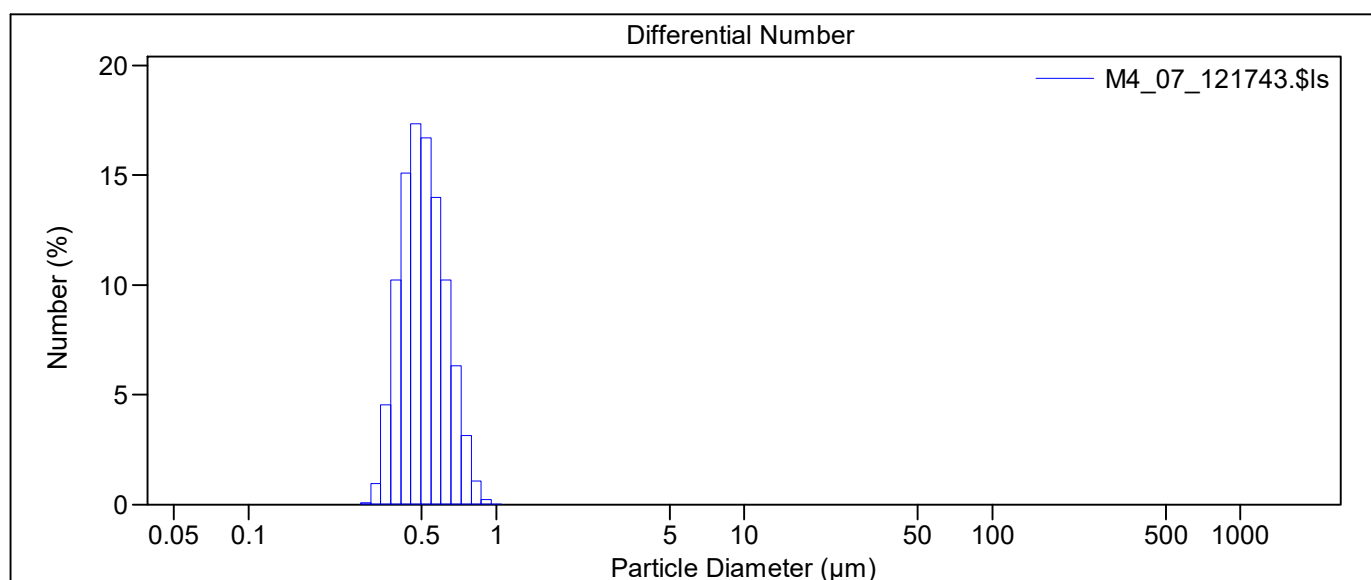
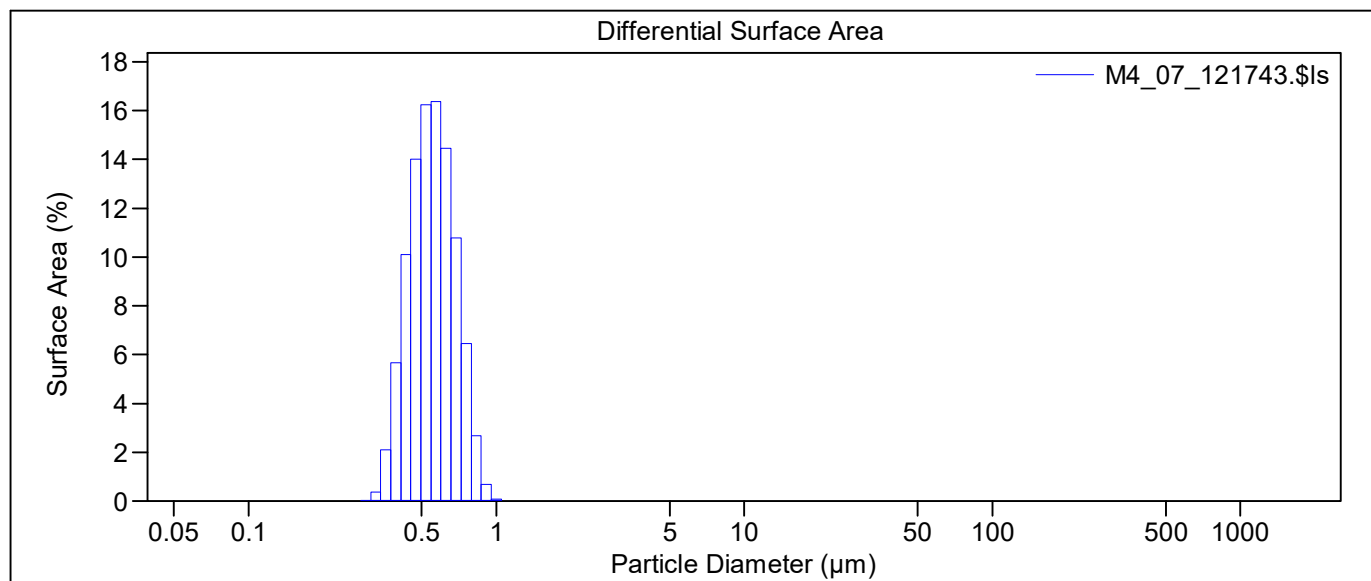
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_07_121743.\$ls		
	M4_07_121743.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.94%		
LS 13 320	Universal Liquid Module		
Start time:	12:16	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_07_121743.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.119 μm
Mean:	0.585 μm		Variance:	0.014 μm ²
Median:	0.576 μm		C.V.:	20.4%
Mean/Median ratio:	1.016		Skewness:	0.386 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.247 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.435 μm	0.496 μm	0.576 μm	0.666 μm	0.752 μm





M4.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.012	0.023	0.073
23	0.311	0.326	0.22	0.37	0.97
24	0.342	0.358	1.34	2.10	4.55
25	0.375	0.393	3.98	5.68	10.2
26	0.412	0.431	7.76	10.1	15.1
27	0.452	0.474	11.8	14.0	17.4
28	0.496	0.520	15.0	16.2	16.7
29	0.545	0.571	16.7	16.4	14.0
30	0.598	0.627	16.1	14.5	10.2
31	0.656	0.688	13.2	10.8	6.33
32	0.721	0.755	8.69	6.46	3.15
33	0.791	0.829	3.94	2.67	1.08
34	0.868	0.910	1.08	0.67	0.22
35	0.953	0.999	0.13	0.076	0.021
36	1.047	1.097	0.0056	0.0029	0.00067
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

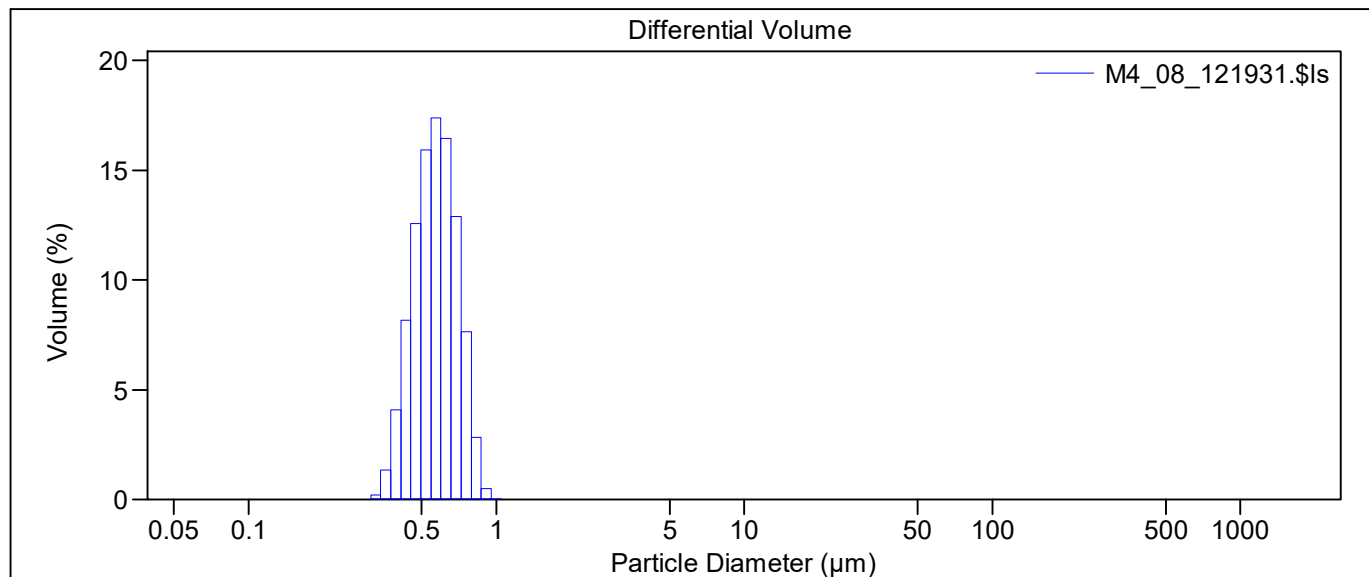
M4.\$av

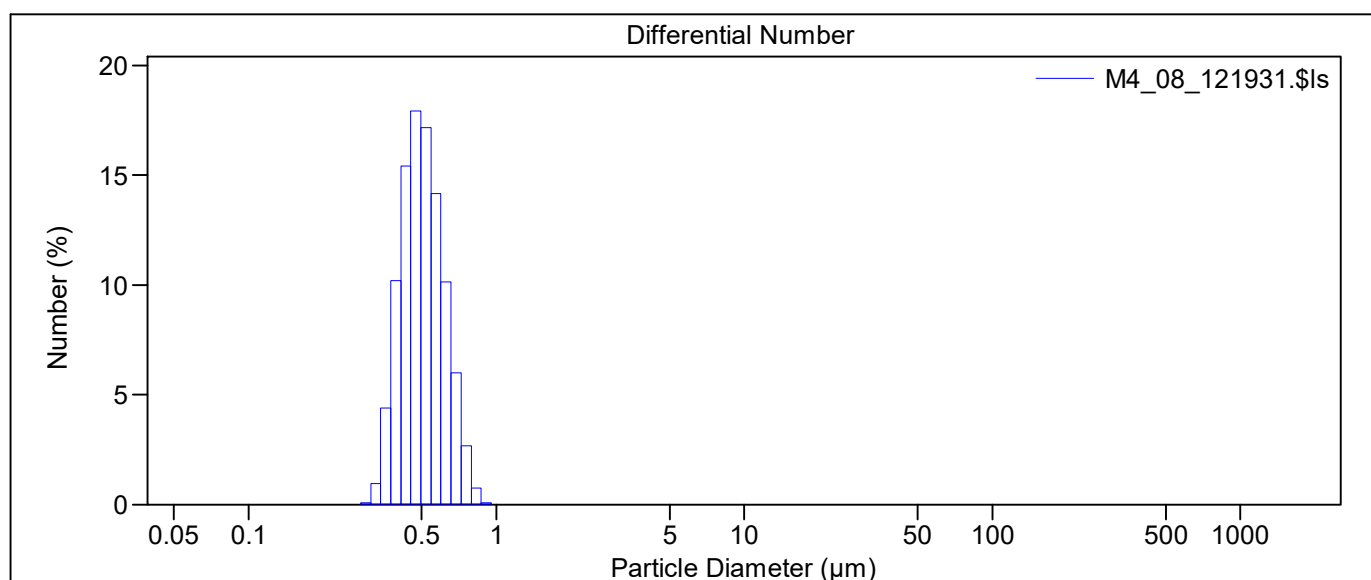
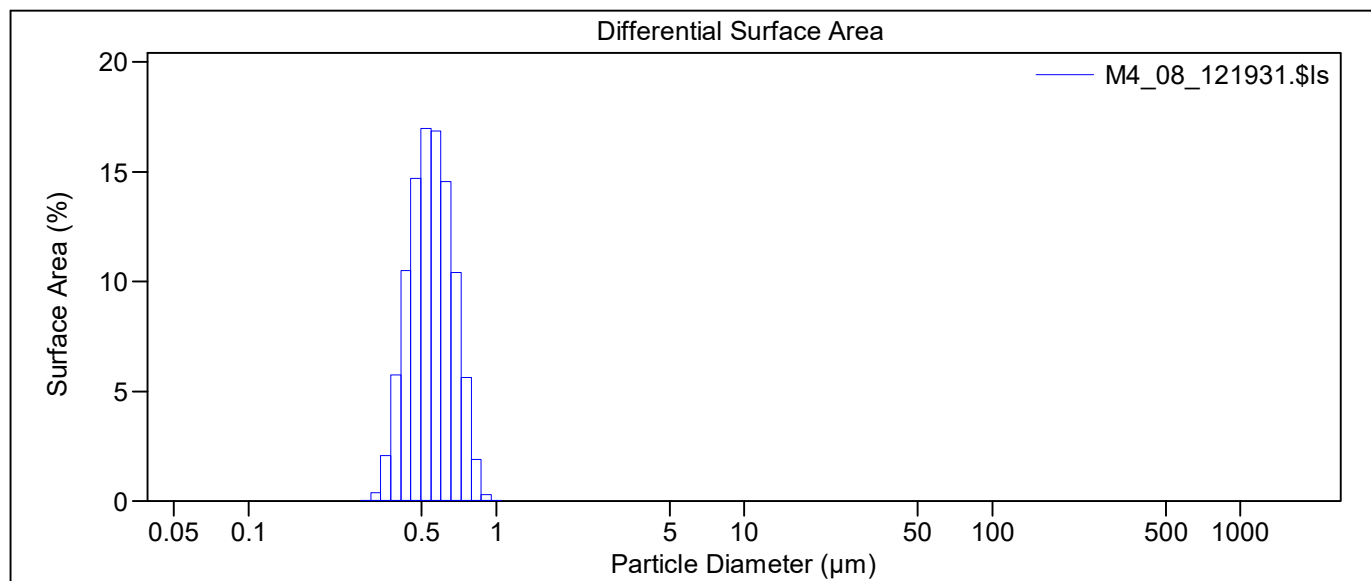
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_08_121931.\$ls		
	M4_08_121931.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.11%		
LS 13 320	Universal Liquid Module		
Start time:	12:17	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_08_121931.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.112 μm
Mean:	0.576 μm		Variance:	0.013 μm ²
Median:	0.568 μm		C.V.:	19.5%
Mean/Median ratio:	1.013		Skewness:	0.337 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.324 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.433 μm	0.491 μm	0.568 μm	0.653 μm	0.730 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.013	0.024	0.073
23	0.311	0.326	0.22	0.37	0.96
24	0.342	0.358	1.33	2.06	4.40
25	0.375	0.393	4.08	5.75	10.2
26	0.412	0.431	8.17	10.5	15.4
27	0.452	0.474	12.6	14.7	17.9
28	0.496	0.520	15.9	17.0	17.2
29	0.545	0.571	17.4	16.9	14.2
30	0.598	0.627	16.4	14.5	10.1
31	0.656	0.688	12.9	10.4	6.01
32	0.721	0.755	7.65	5.61	2.69
33	0.791	0.829	2.82	1.89	0.75
34	0.868	0.910	0.50	0.30	0.10
35	0.953	0.999	0.029	0.016	0.0045
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

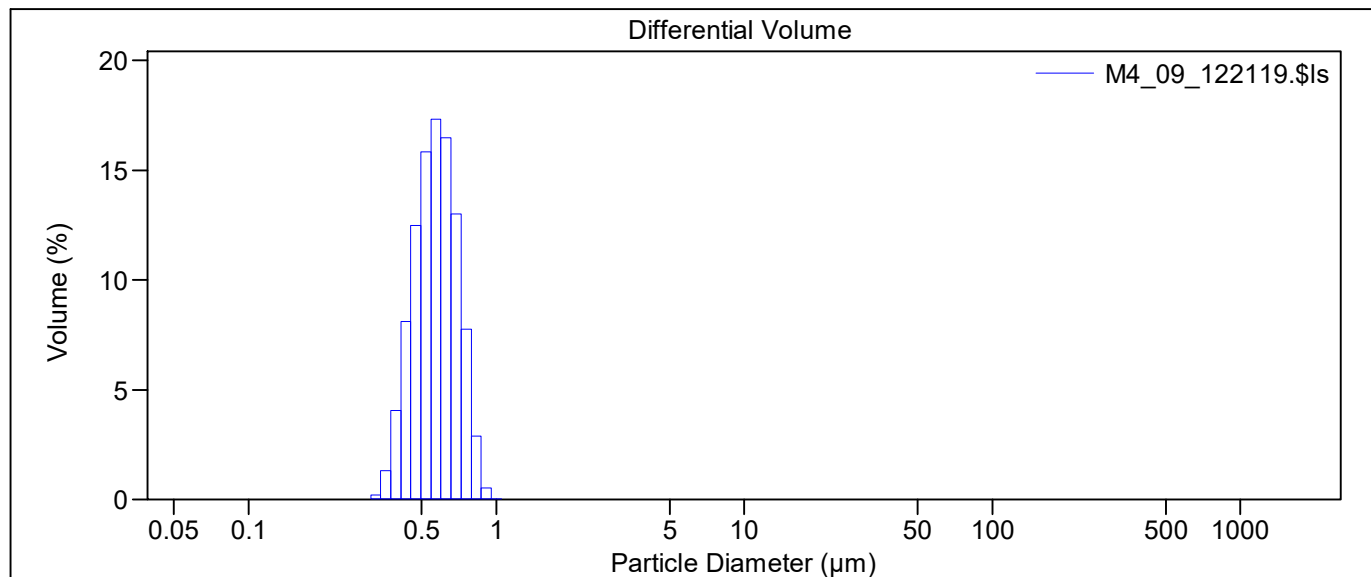
M4.\$av

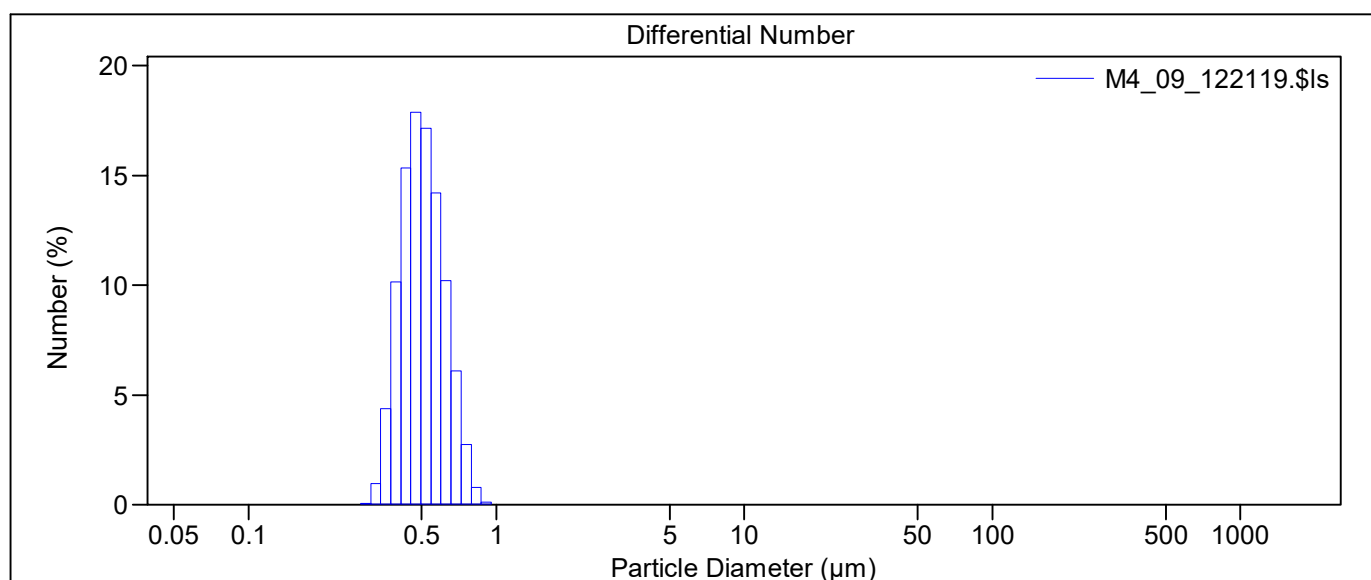
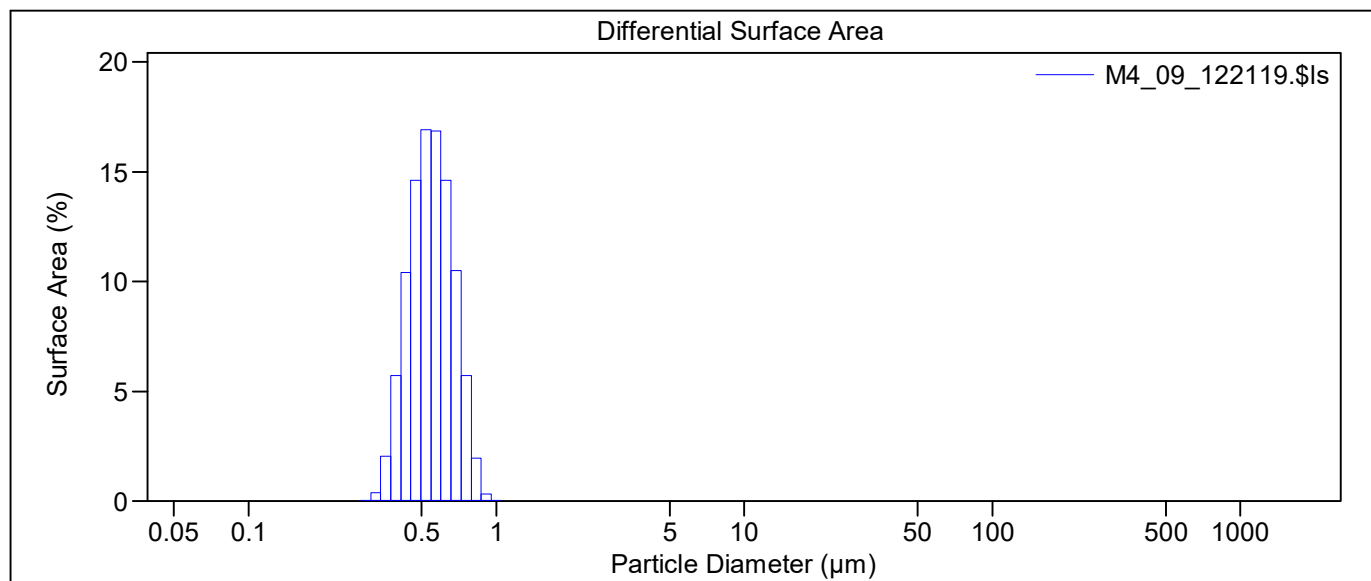
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_09_122119.\$ls		
	M4_09_122119.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.08%		
LS 13 320	Universal Liquid Module		
Start time:	12:19	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_09_122119.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.112 μm
Mean:	0.577 μm		Variance:	0.013 μm ²
Median:	0.569 μm		C.V.:	19.5%
Mean/Median ratio:	1.013		Skewness:	0.333 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.329 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.434 μm	0.492 μm	0.569 μm	0.654 μm	0.732 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.013	0.023	0.073
23	0.311	0.326	0.22	0.37	0.95
24	0.342	0.358	1.32	2.05	4.38
25	0.375	0.393	4.05	5.71	10.1
26	0.412	0.431	8.09	10.4	15.3
27	0.452	0.474	12.5	14.6	17.9
28	0.496	0.520	15.8	16.9	17.1
29	0.545	0.571	17.3	16.8	14.2
30	0.598	0.627	16.5	14.6	10.2
31	0.656	0.688	13.0	10.5	6.08
32	0.721	0.755	7.76	5.71	2.75
33	0.791	0.829	2.90	1.94	0.77
34	0.868	0.910	0.52	0.32	0.10
35	0.953	0.999	0.031	0.017	0.0048
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

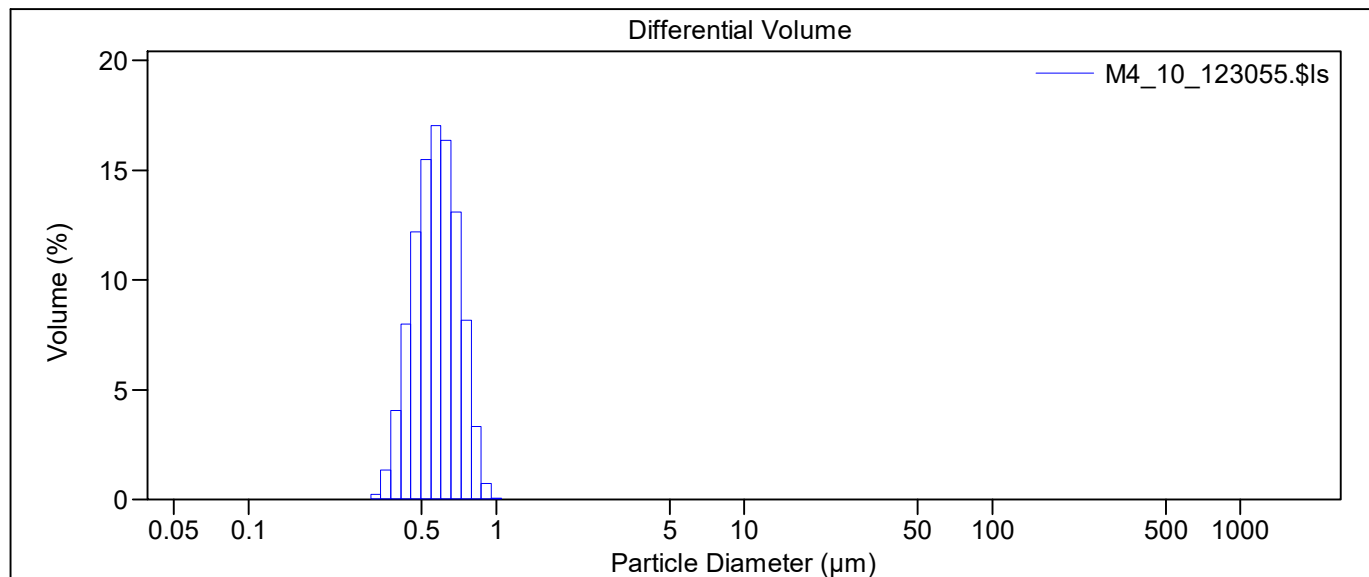
M4.\$av

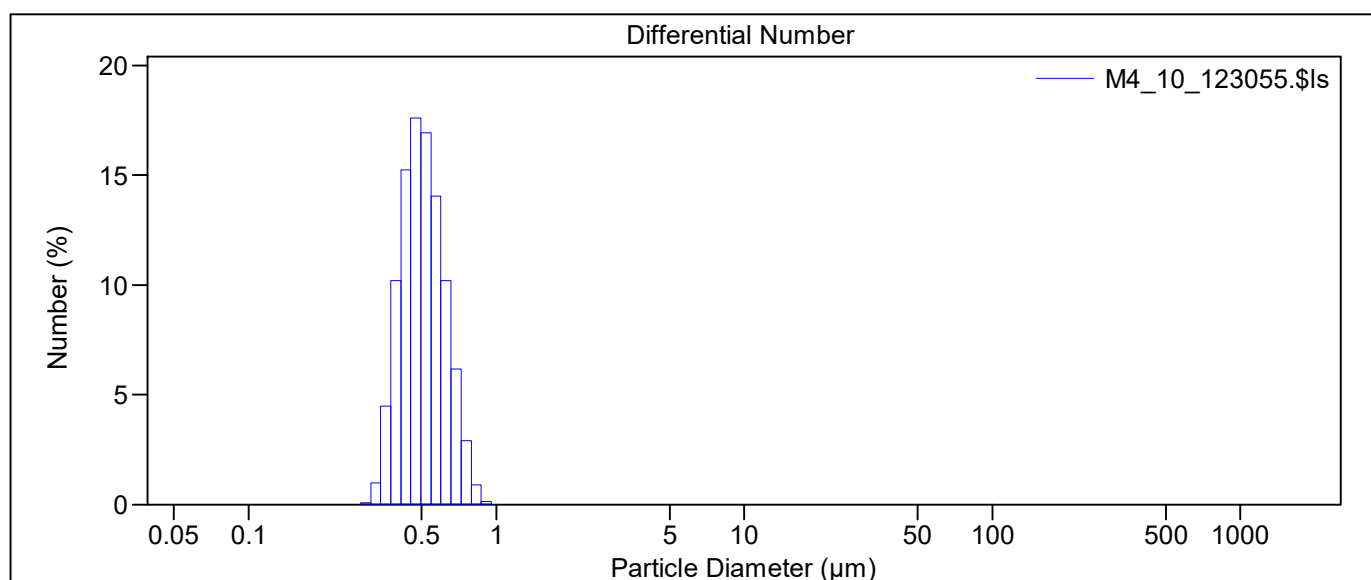
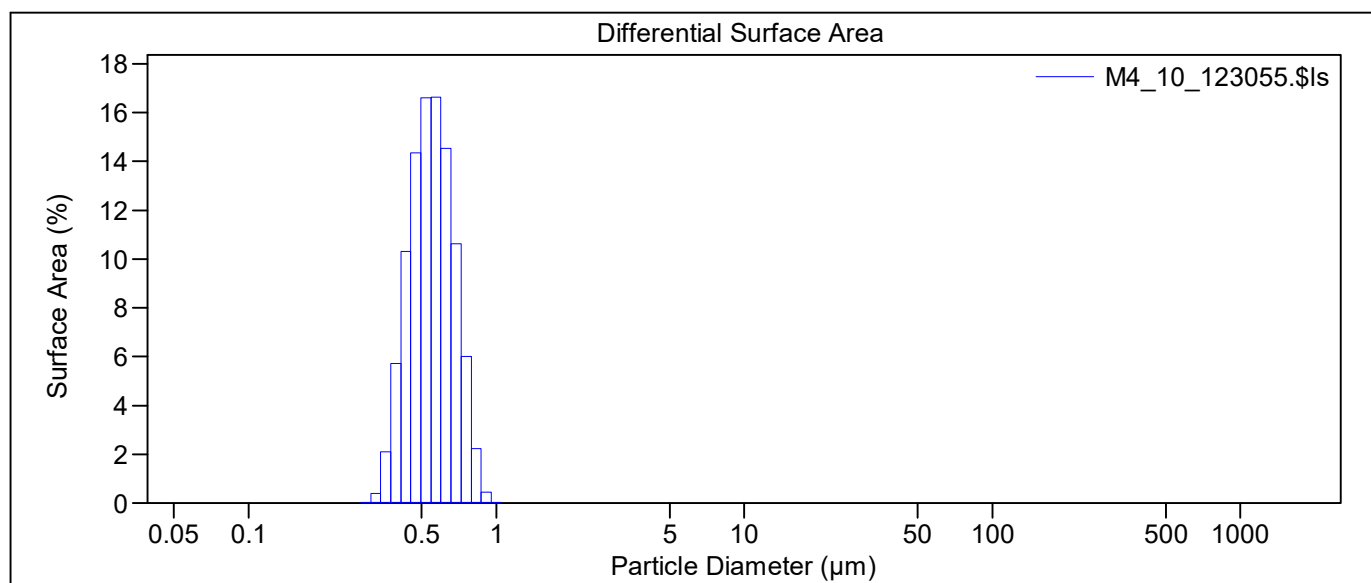
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_10_123055.\$ls		
	M4_10_123055.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.02%		
LS 13 320	Universal Liquid Module		
Start time:	12:29	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_10_123055.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.115 μm
Mean:	0.580 μm		Variance:	0.013 μm ²
Median:	0.572 μm		C.V.:	19.9%
Mean/Median ratio:	1.014		Skewness:	0.355 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.291 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.434 μm	0.493 μm	0.572 μm	0.658 μm	0.740 μm





M4.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.013	0.025	0.077
23	0.311	0.326	0.22	0.38	0.99
24	0.342	0.358	1.34	2.09	4.49
25	0.375	0.393	4.04	5.73	10.2
26	0.412	0.431	7.98	10.3	15.3
27	0.452	0.474	12.2	14.3	17.6
28	0.496	0.520	15.5	16.6	16.9
29	0.545	0.571	17.0	16.6	14.1
30	0.598	0.627	16.3	14.5	10.2
31	0.656	0.688	13.1	10.6	6.18
32	0.721	0.755	8.16	6.02	2.91
33	0.791	0.829	3.31	2.23	0.89
34	0.868	0.910	0.73	0.45	0.15
35	0.953	0.999	0.066	0.037	0.010
36	1.047	1.097	0.00091	0.00046	0.00011
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

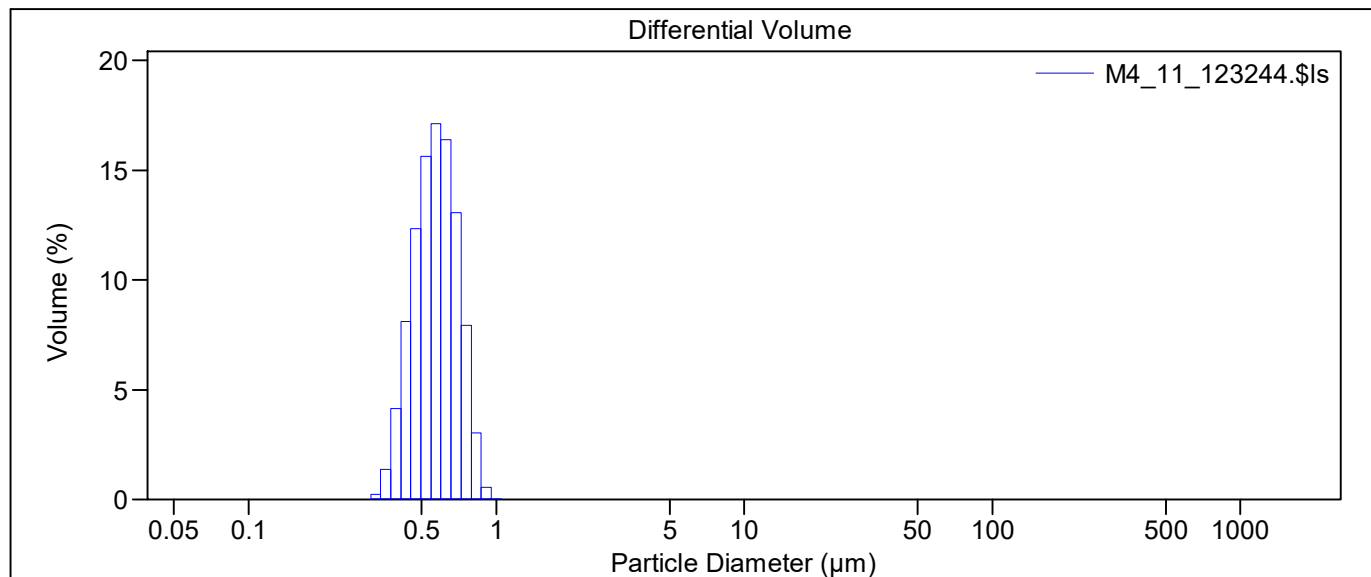
M4.\$av

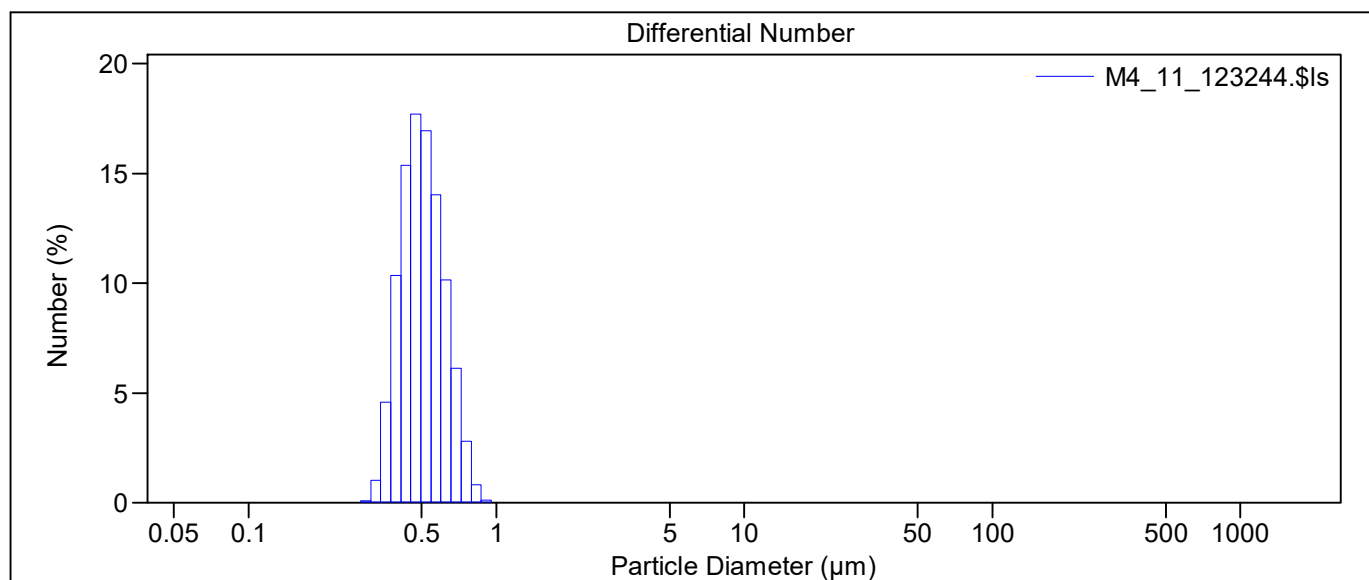
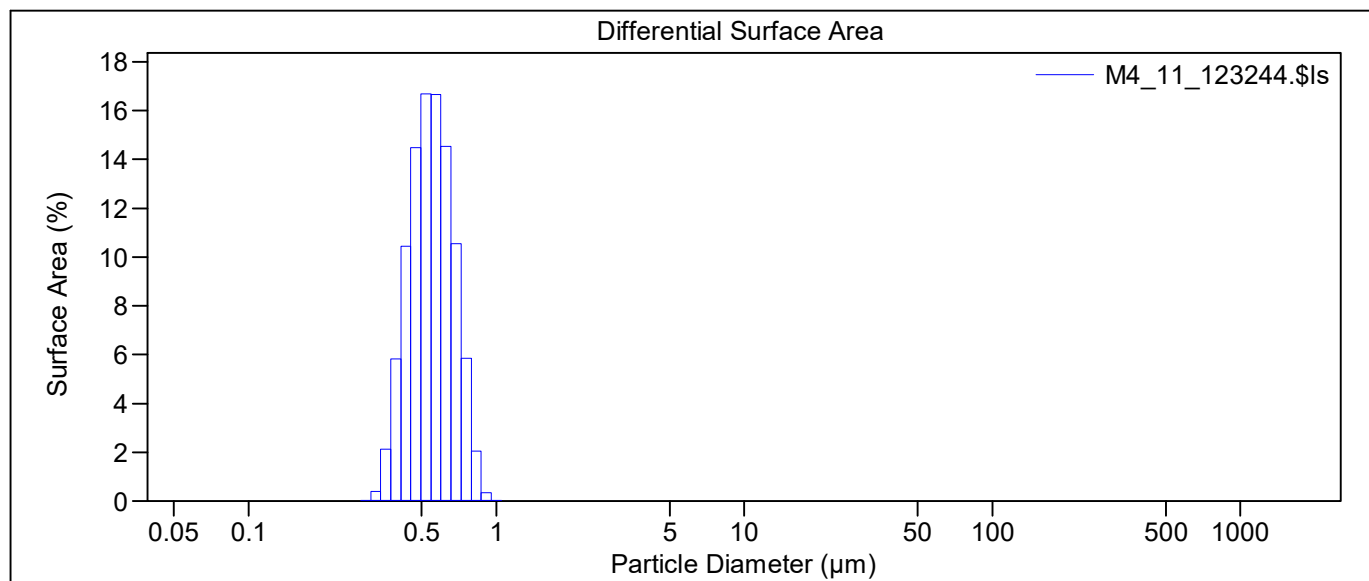
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_11_123244.\$ls		
	M4_11_123244.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.04%		
LS 13 320	Universal Liquid Module		
Start time:	12:31	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_11_123244.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.114 µm
Mean:	0.578 µm		Variance:	0.013 µm ²
Median:	0.570 µm		C.V.:	19.7%
Mean/Median ratio:	1.013		Skewness:	0.330 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.341 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.433 µm	0.492 µm	0.570 µm	0.655 µm	0.735 µm





M4.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.014	0.025	0.079
23	0.311	0.326	0.23	0.39	1.01
24	0.342	0.358	1.38	2.14	4.57
25	0.375	0.393	4.13	5.84	10.4
26	0.412	0.431	8.11	10.4	15.4
27	0.452	0.474	12.3	14.5	17.7
28	0.496	0.520	15.6	16.7	16.9
29	0.545	0.571	17.1	16.7	14.0
30	0.598	0.627	16.4	14.5	10.1
31	0.656	0.688	13.1	10.6	6.11
32	0.721	0.755	7.94	5.84	2.81
33	0.791	0.829	3.05	2.04	0.81
34	0.868	0.910	0.56	0.34	0.11
35	0.953	0.999	0.036	0.020	0.0054
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

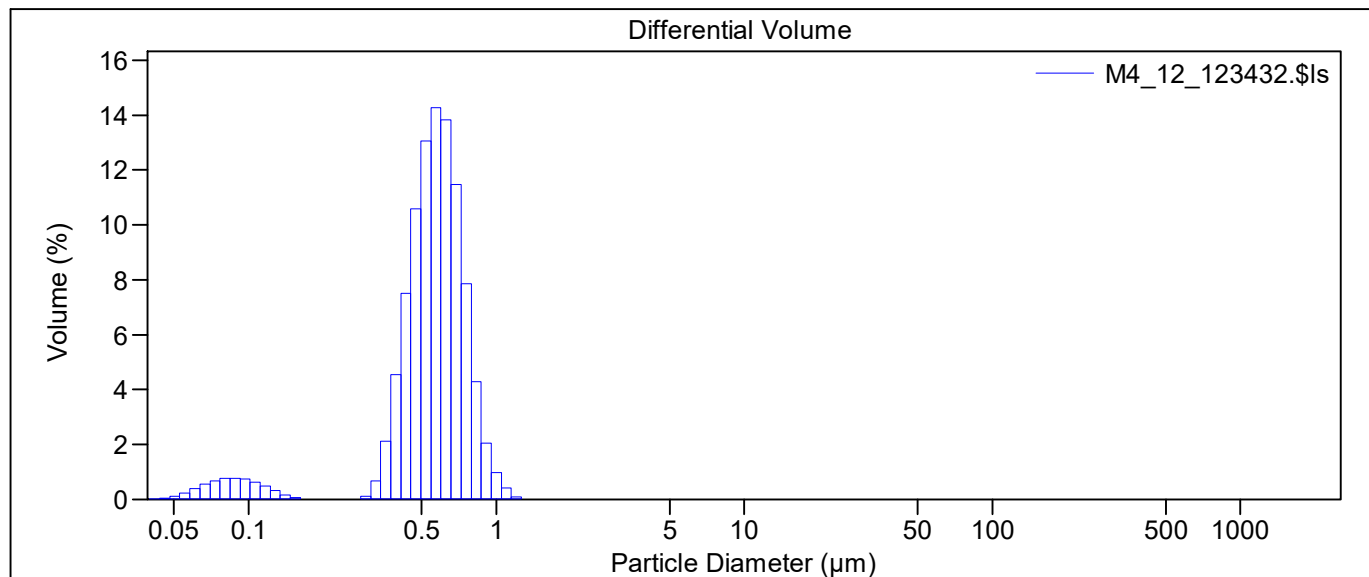
M4.\$av

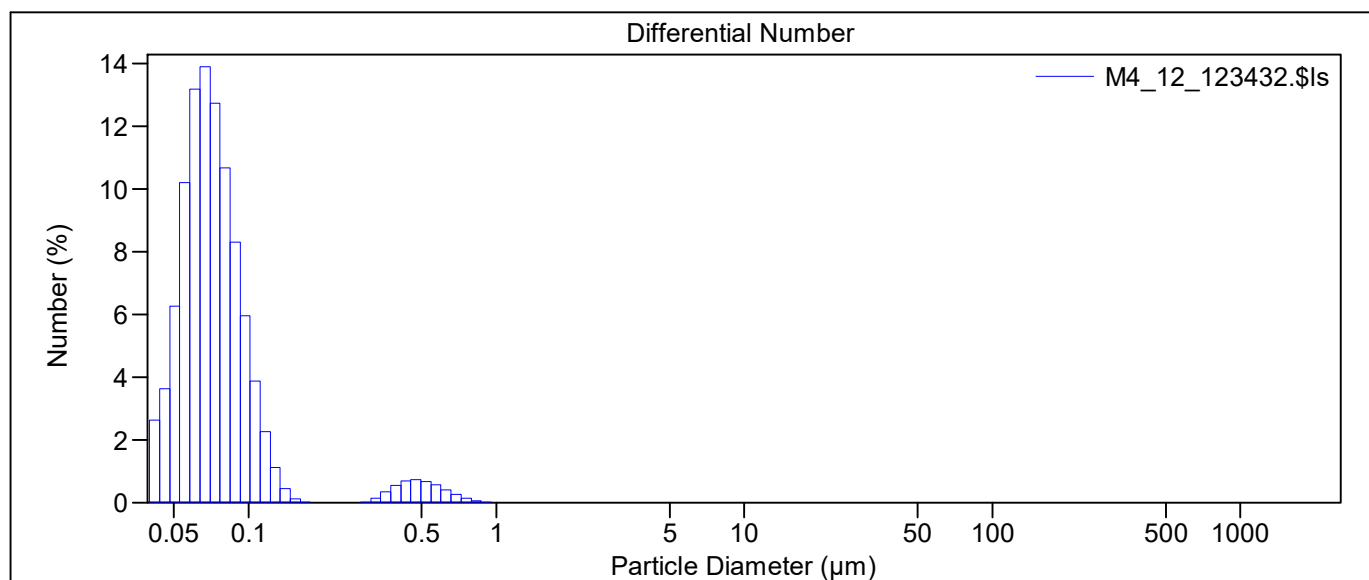
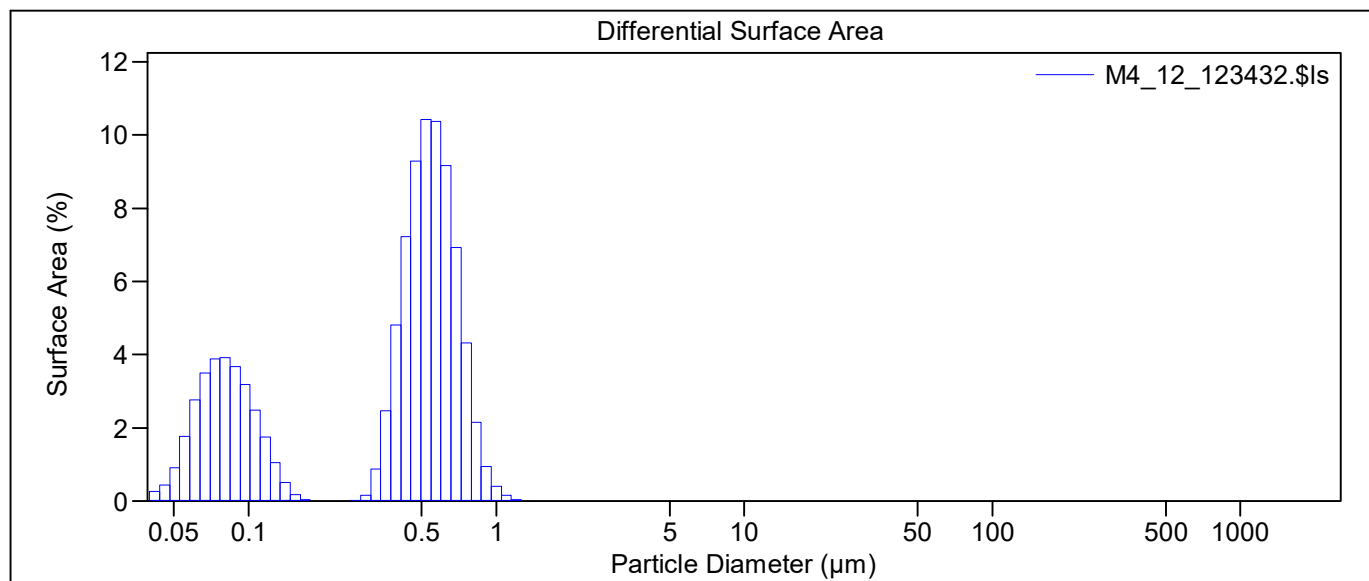
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_12_123432.\$ls		
	M4_12_123432.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.79%		
LS 13 320	Universal Liquid Module		
Start time:	12:32	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_12_123432.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.182 μm
Mean:	0.560 μm		Variance:	0.033 μm ²
Median:	0.564 μm		C.V.:	32.4%
Mean/Median ratio:	0.993		Skewness:	-0.464 Left skewed
Mode:	0.571 μm		Kurtosis:	1.363 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.383 μm	0.469 μm	0.564 μm	0.669 μm	0.772 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.026	0.26	2.64
2	0.044	0.046	0.048	0.44	3.64
3	0.048	0.050	0.11	0.90	6.27
4	0.053	0.055	0.24	1.77	10.2
5	0.058	0.061	0.40	2.76	13.2
6	0.064	0.067	0.56	3.51	13.9
7	0.070	0.073	0.68	3.87	12.7
8	0.077	0.080	0.76	3.91	10.7
9	0.084	0.088	0.78	3.67	8.31
10	0.093	0.097	0.74	3.18	5.97
11	0.102	0.106	0.64	2.49	3.88
12	0.112	0.117	0.49	1.74	2.26
13	0.122	0.128	0.32	1.05	1.13
14	0.134	0.141	0.17	0.50	0.44
15	0.148	0.155	0.062	0.17	0.12
16	0.162	0.170	0.011	0.028	0.017
17	0.178	0.186	0.00086	0.0019	0.00098

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0069	0.011	0.0025
22	0.284	0.297	0.11	0.15	0.031
23	0.311	0.326	0.69	0.87	0.15
24	0.342	0.358	2.13	2.47	0.34
25	0.375	0.393	4.56	4.82	0.55
26	0.412	0.431	7.51	7.23	0.69
27	0.452	0.474	10.6	9.29	0.73
28	0.496	0.520	13.1	10.4	0.68
29	0.545	0.571	14.3	10.4	0.56
30	0.598	0.627	13.8	9.16	0.41
31	0.656	0.688	11.5	6.93	0.26
32	0.721	0.755	7.85	4.32	0.13
33	0.791	0.829	4.29	2.15	0.055
34	0.868	0.910	2.06	0.94	0.020
35	0.953	0.999	0.97	0.40	0.0072
36	1.047	1.097	0.42	0.16	0.0023
37	1.149	1.204	0.099	0.034	0.00042
38	1.261	1.321	0.0097	0.0031	0.000031
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

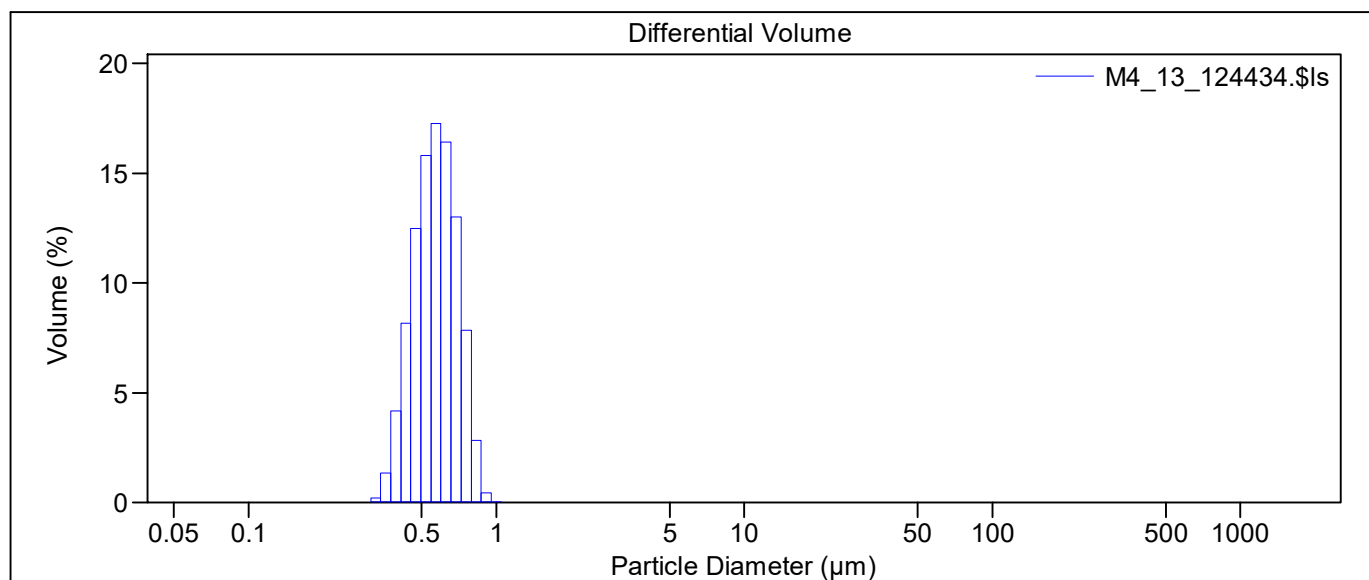
M4.\$av

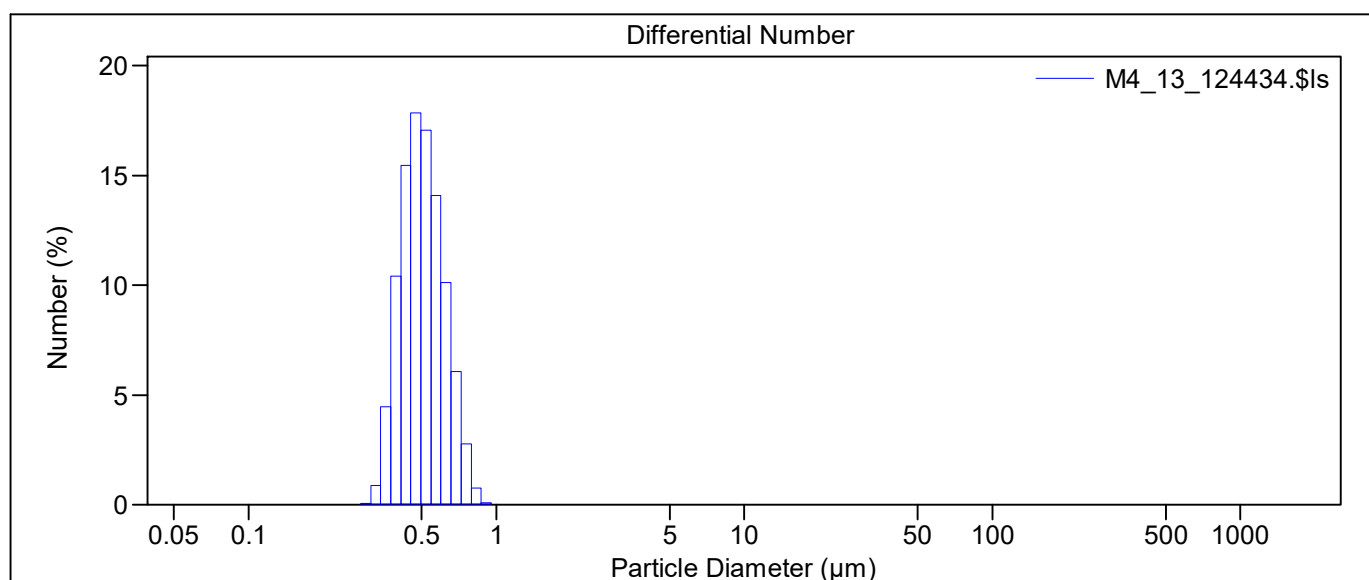
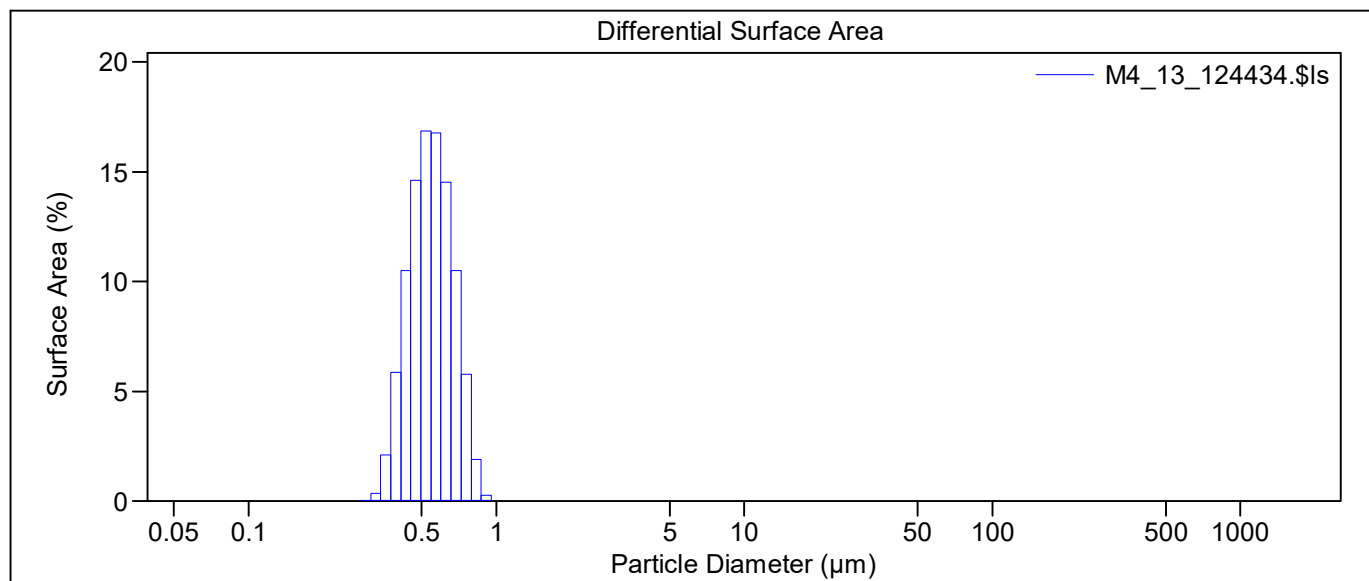
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_13_124434.\$ls		
	M4_13_124434.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.00%		
LS 13 320	Universal Liquid Module		
Start time:	12:42	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	49%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_13_124434.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.112 μm
Mean:	0.576 μm		Variance:	0.013 μm ²
Median:	0.569 μm		C.V.:	19.5%
Mean/Median ratio:	1.013		Skewness:	0.318 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.375 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.433 μm	0.491 μm	0.569 μm	0.653 μm	0.731 μm





M4.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0097	0.018	0.056
23	0.311	0.326	0.20	0.34	0.88
24	0.342	0.358	1.35	2.09	4.47
25	0.375	0.393	4.16	5.87	10.4
26	0.412	0.431	8.17	10.5	15.4
27	0.452	0.474	12.5	14.6	17.8
28	0.496	0.520	15.8	16.8	17.0
29	0.545	0.571	17.3	16.8	14.1
30	0.598	0.627	16.4	14.5	10.1
31	0.656	0.688	13.0	10.5	6.06
32	0.721	0.755	7.84	5.76	2.76
33	0.791	0.829	2.83	1.90	0.76
34	0.868	0.910	0.45	0.27	0.090
35	0.953	0.999	0.022	0.012	0.0033
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

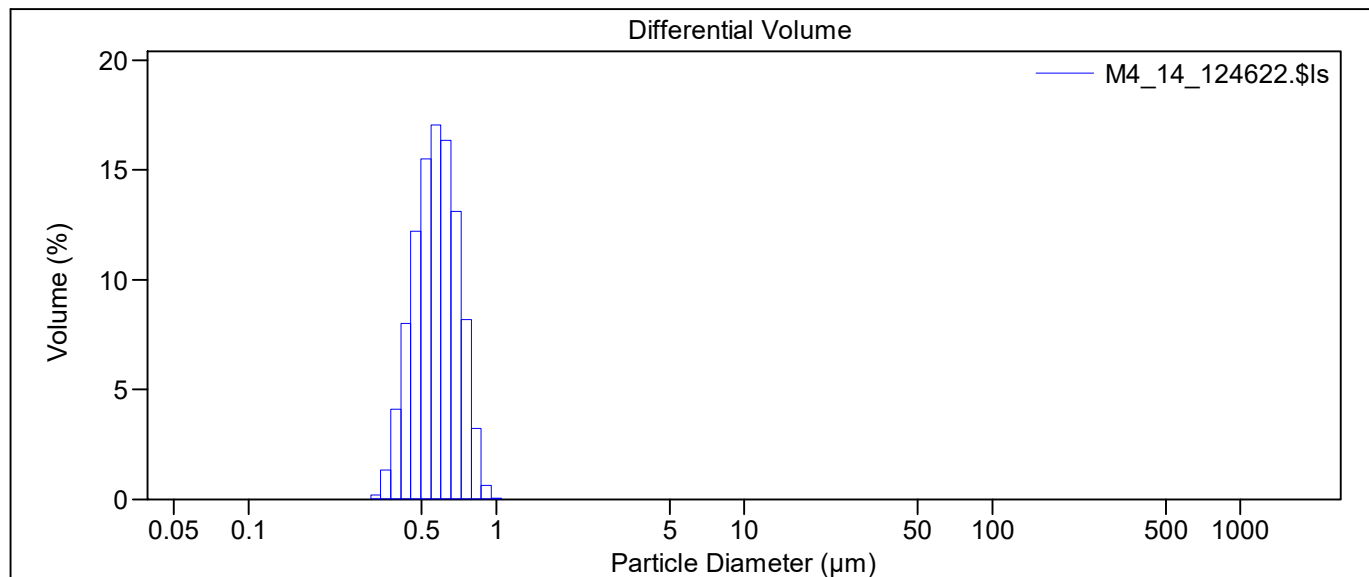
M4.\$av

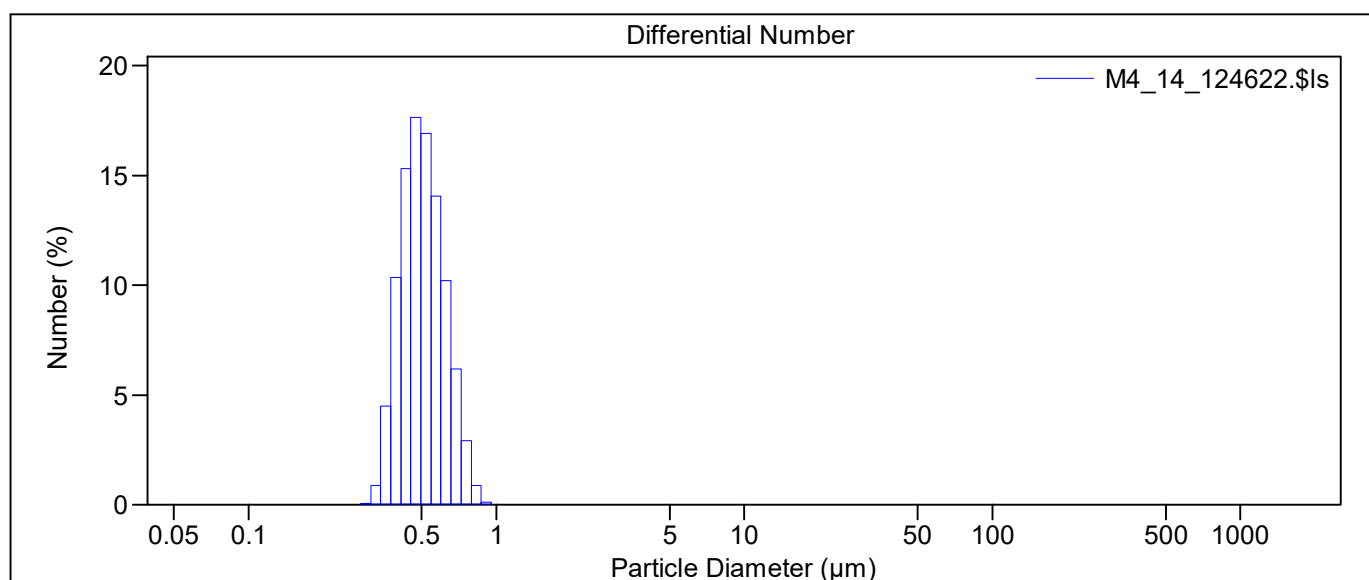
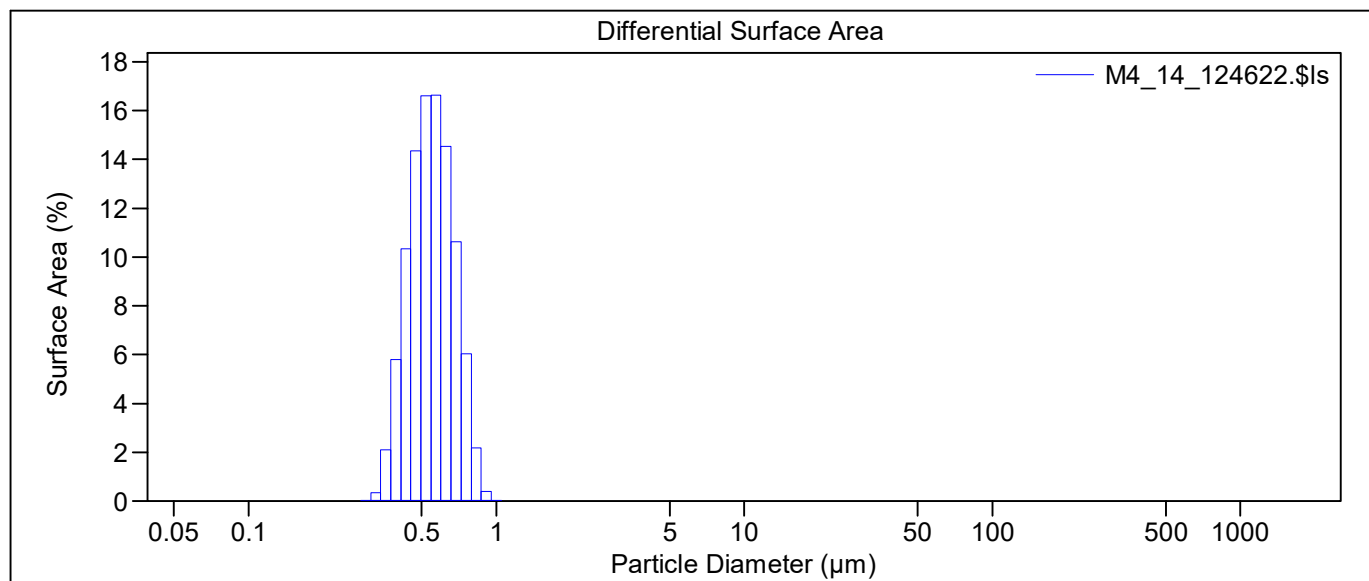
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_14_124622.\$ls		
	M4_14_124622.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.92%		
LS 13 320	Universal Liquid Module		
Start time:	12:44	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	49%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_14_124622.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.115 μm
Mean:	0.580 μm		Variance:	0.013 μm ²
Median:	0.572 μm		C.V.:	19.8%
Mean/Median ratio:	1.014		Skewness:	0.339 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.332 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.434 μm	0.493 μm	0.572 μm	0.658 μm	0.739 μm





M4.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.0098	0.018	0.057
23	0.311	0.326	0.20	0.34	0.89
24	0.342	0.358	1.34	2.09	4.49
25	0.375	0.393	4.10	5.81	10.4
26	0.412	0.431	8.01	10.3	15.3
27	0.452	0.474	12.2	14.4	17.6
28	0.496	0.520	15.5	16.6	16.9
29	0.545	0.571	17.0	16.6	14.1
30	0.598	0.627	16.4	14.5	10.2
31	0.656	0.688	13.1	10.6	6.19
32	0.721	0.755	8.19	6.04	2.92
33	0.791	0.829	3.22	2.17	0.87
34	0.868	0.910	0.64	0.39	0.13
35	0.953	0.999	0.049	0.027	0.0075
36	1.047	1.097	0.00062	0.00031	0.000072
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

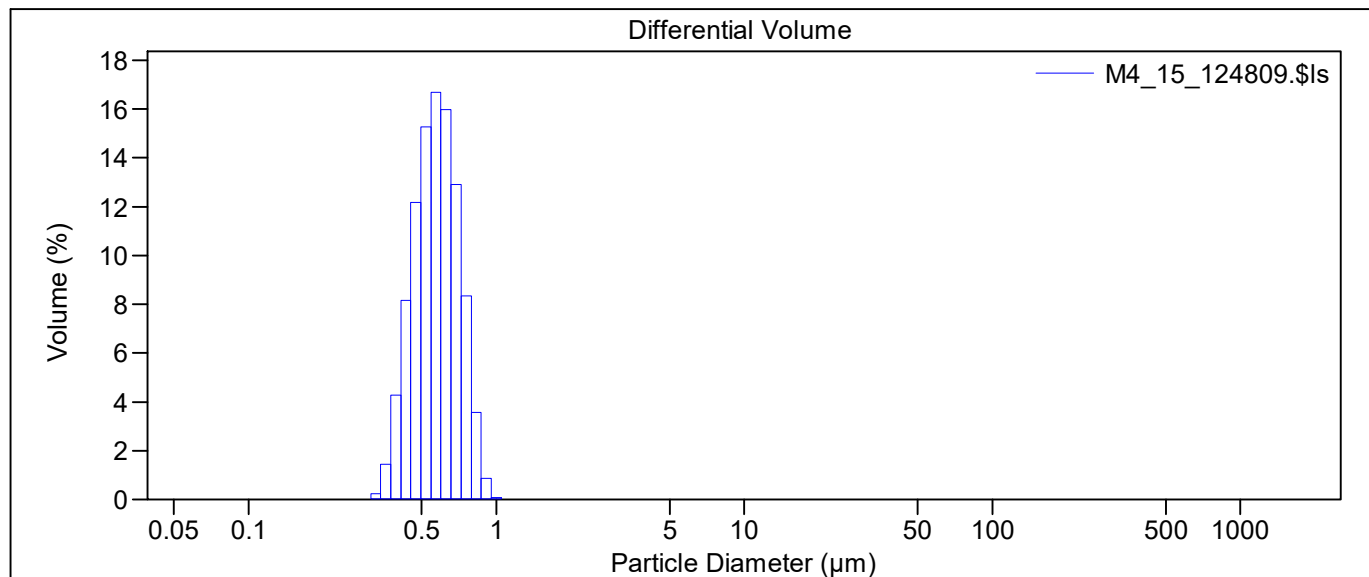
M4.\$av

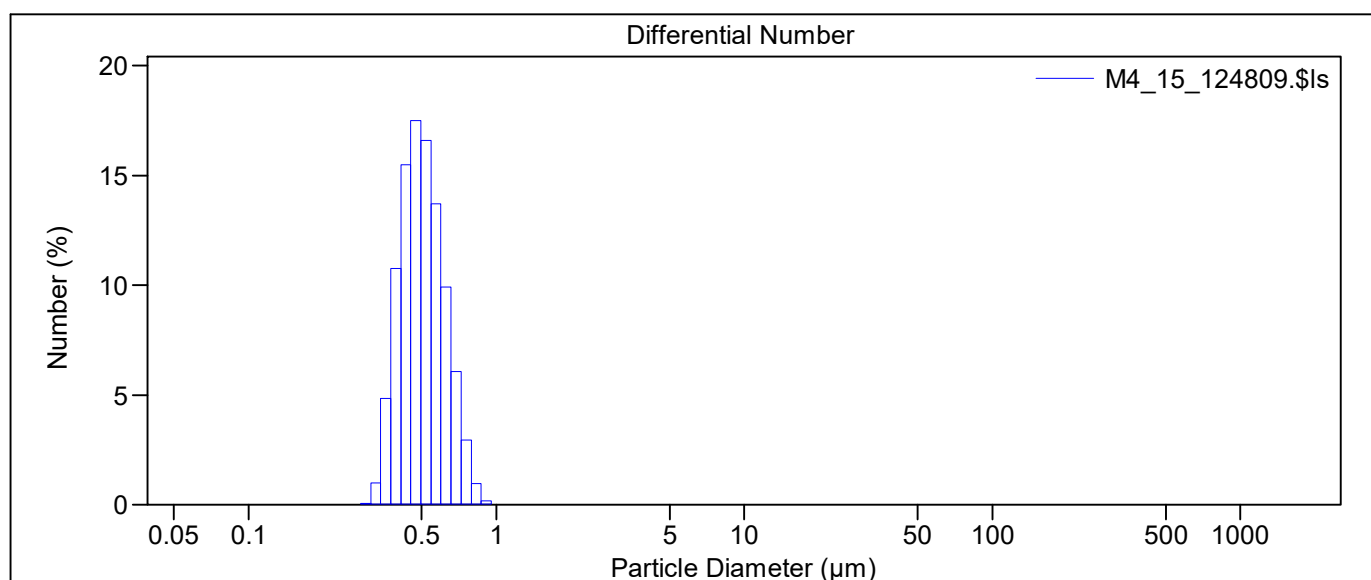
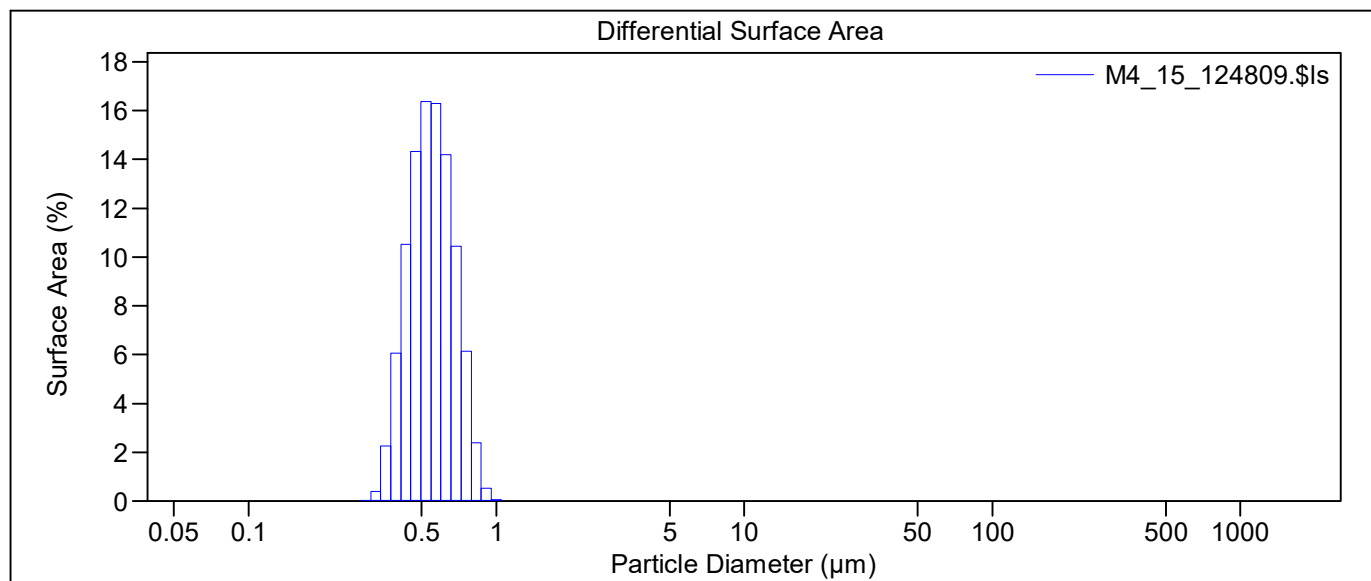
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M4\M4_15_124809.\$ls		
	M4_15_124809.\$ls		
File ID:	M4		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.95%		
LS 13 320	Universal Liquid Module		
Start time:	12:46	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	49%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M4_15_124809.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.118 µm
Mean:	0.580 µm		Variance:	0.014 µm ²
Median:	0.572 µm		C.V.:	20.3%
Mean/Median ratio:	1.015		Skewness:	0.375 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.286 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.432 µm	0.492 µm	0.572 µm	0.660 µm	0.745 µm





M4.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0	0	0
22	0.284	0.297	0.011	0.021	0.066
23	0.311	0.326	0.22	0.38	0.98
24	0.342	0.358	1.45	2.26	4.83
25	0.375	0.393	4.28	6.06	10.8
26	0.412	0.431	8.15	10.5	15.5
27	0.452	0.474	12.2	14.3	17.5
28	0.496	0.520	15.3	16.4	16.6
29	0.545	0.571	16.7	16.3	13.7
30	0.598	0.627	16.0	14.2	9.91
31	0.656	0.688	12.9	10.5	6.06
32	0.721	0.755	8.33	6.15	2.95
33	0.791	0.829	3.57	2.40	0.96
34	0.868	0.910	0.86	0.53	0.17
35	0.953	0.999	0.088	0.049	0.013
36	1.047	1.097	0.0026	0.0013	0.00030
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M4.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M5\M5.\$av M5.\$av

File ID: M5

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_01_125859.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M5\M5_02_130046.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M5\M5_03_130234.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M5\M5_04_131323.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M5\M5_05_131510.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M5\M5_14_140150.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M5\M5_15_140337.\$ls

Volume Statistics (Arithmetic) M5.\$av

Calculations from 0.040 μm to 2000 μm

Volume: 100%

Mean: 0.551 μm

S.D.: 0.221 μm

Median: 0.545 μm

Variance: 0.049 μm^2

Mean/Median ratio: 1.012

C.V.: 40.1%

Mode: 0.571 μm

Skewness: 0.675 Right skewed

Kurtosis: 2.875 Leptokurtic

<10%

<25%

<50%

<75%

<90%

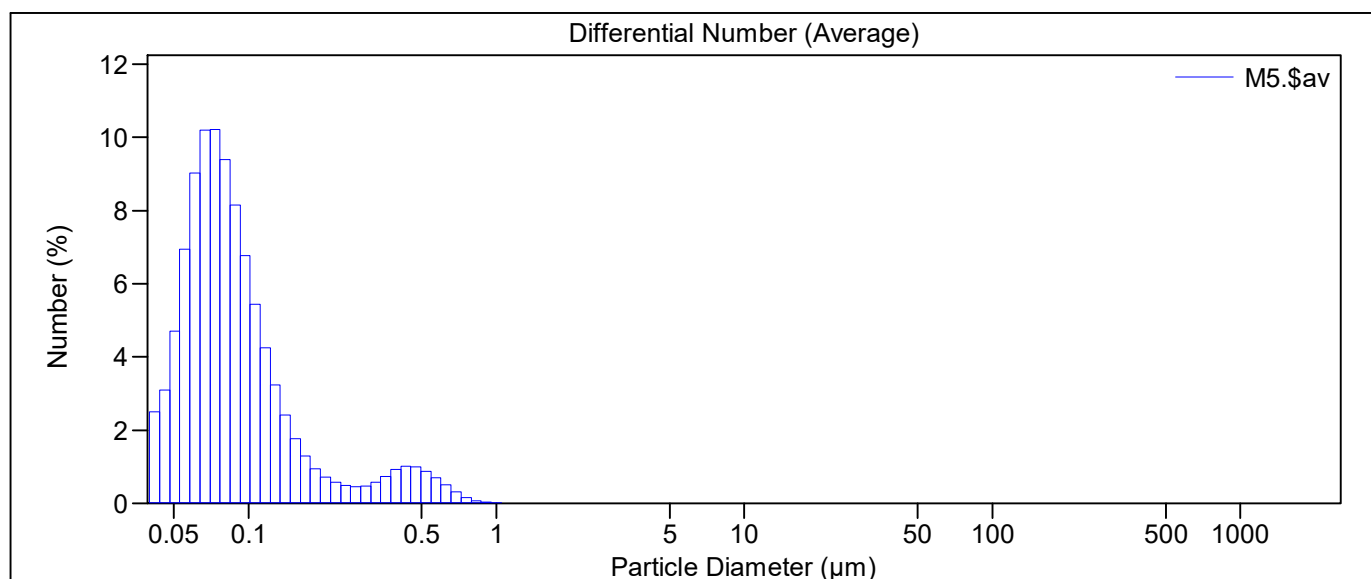
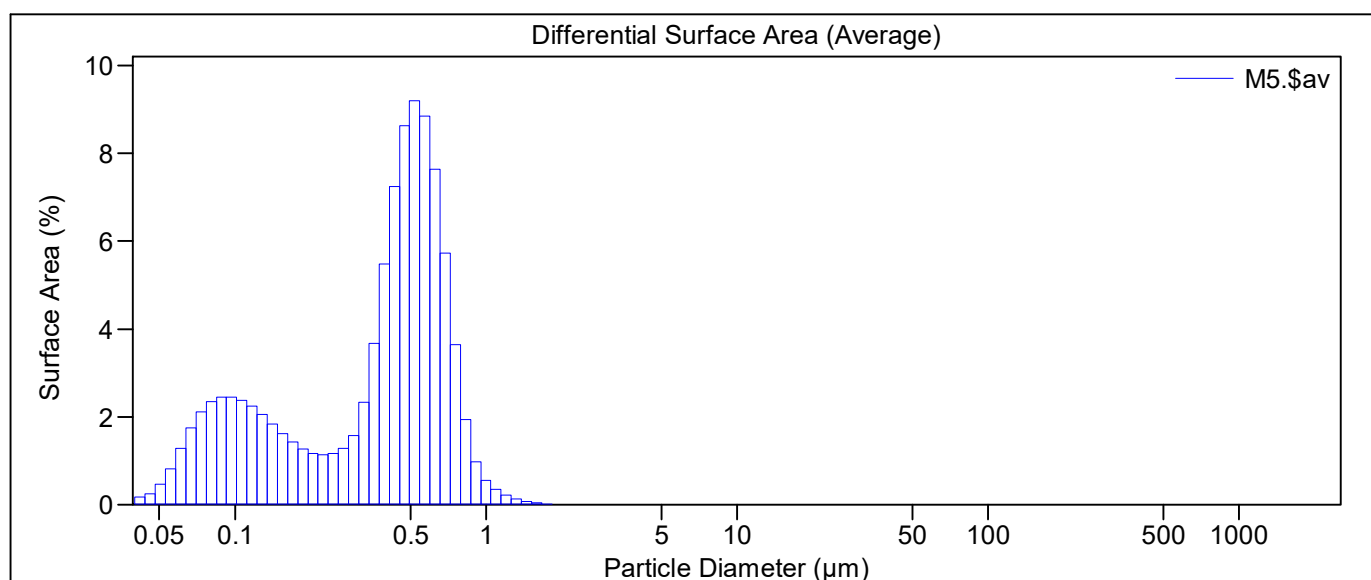
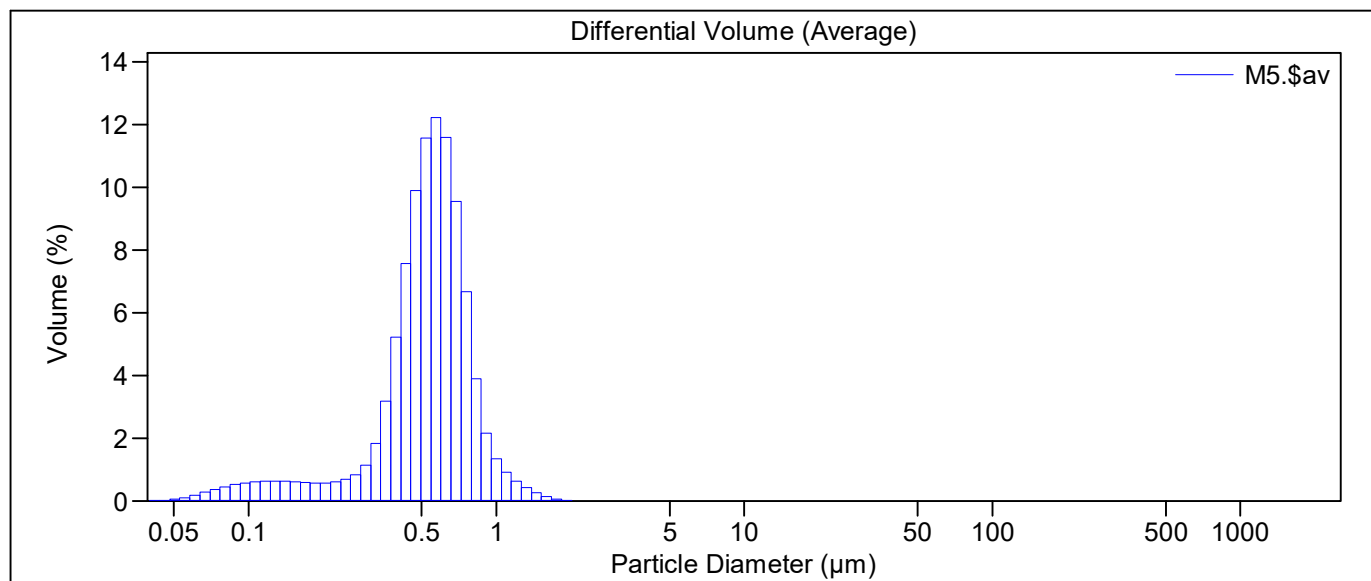
0.292 μm

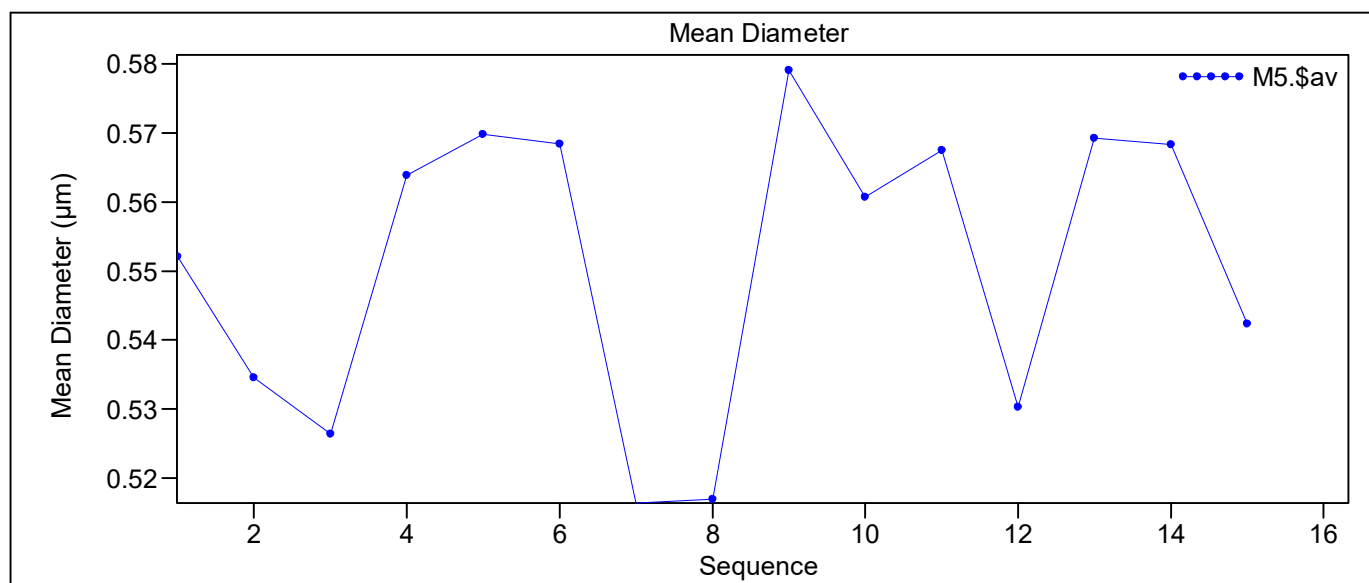
0.433 μm

0.545 μm

0.664 μm

0.790 μm





M5.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.017	0.17	2.51
2	0.044	0.046	0.028	0.25	3.10
3	0.048	0.050	0.057	0.46	4.71
4	0.053	0.055	0.11	0.82	6.94
5	0.058	0.061	0.19	1.29	9.02
6	0.064	0.067	0.28	1.75	10.2
7	0.070	0.073	0.38	2.12	10.2
8	0.077	0.080	0.46	2.35	9.39
9	0.084	0.088	0.52	2.45	8.15
10	0.093	0.097	0.58	2.46	6.77
11	0.102	0.106	0.61	2.38	5.44
12	0.112	0.117	0.63	2.24	4.25
13	0.122	0.128	0.64	2.05	3.24
14	0.134	0.141	0.63	1.84	2.41
15	0.148	0.155	0.61	1.62	1.76
16	0.162	0.170	0.59	1.43	1.29
17	0.178	0.186	0.57	1.27	0.95
18	0.195	0.205	0.58	1.17	0.72
19	0.214	0.225	0.62	1.14	0.58
20	0.235	0.247	0.70	1.17	0.50
21	0.258	0.271	0.84	1.28	0.45
22	0.284	0.297	1.14	1.58	0.46
23	0.311	0.326	1.84	2.33	0.57
24	0.342	0.358	3.18	3.67	0.74
25	0.375	0.393	5.22	5.48	0.92
26	0.412	0.431	7.57	7.24	1.01
27	0.452	0.474	9.89	8.62	1.00
28	0.496	0.520	11.6	9.20	0.88
29	0.545	0.571	12.2	8.84	0.70
30	0.598	0.627	11.6	7.64	0.51
31	0.656	0.688	9.54	5.73	0.31
32	0.721	0.755	6.67	3.65	0.17
33	0.791	0.829	3.90	1.94	0.073
34	0.868	0.910	2.16	0.98	0.031
35	0.953	0.999	1.35	0.56	0.014
36	1.047	1.097	0.92	0.35	0.0075
37	1.149	1.204	0.63	0.22	0.0039
38	1.261	1.321	0.43	0.13	0.0020
39	1.385	1.451	0.27	0.077	0.00095
40	1.520	1.592	0.15	0.039	0.00040
41	1.668	1.748	0.068	0.016	0.00014

M5.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.024	0.0052	0.000037
43	2.011	2.107	0.0061	0.0012	0.000007
44	2.207	2.313	0.0010	0.00019	0.000001
45	2.423	2.539	0.000077	0.000013	5.05E-8
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

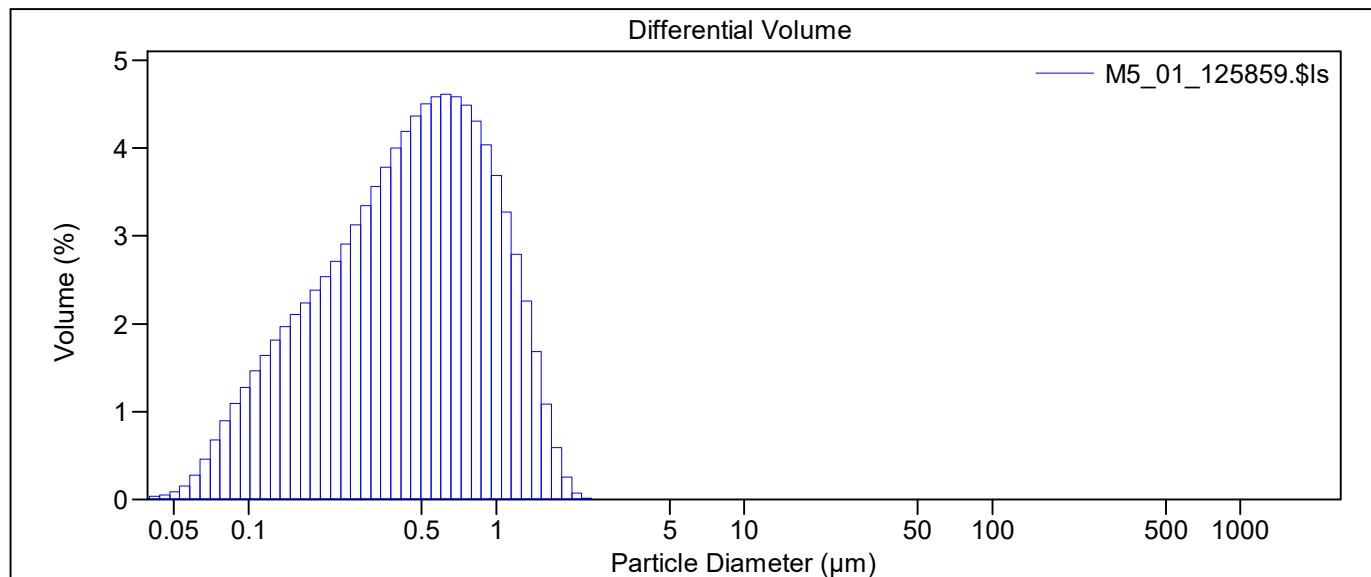
M5.\$av

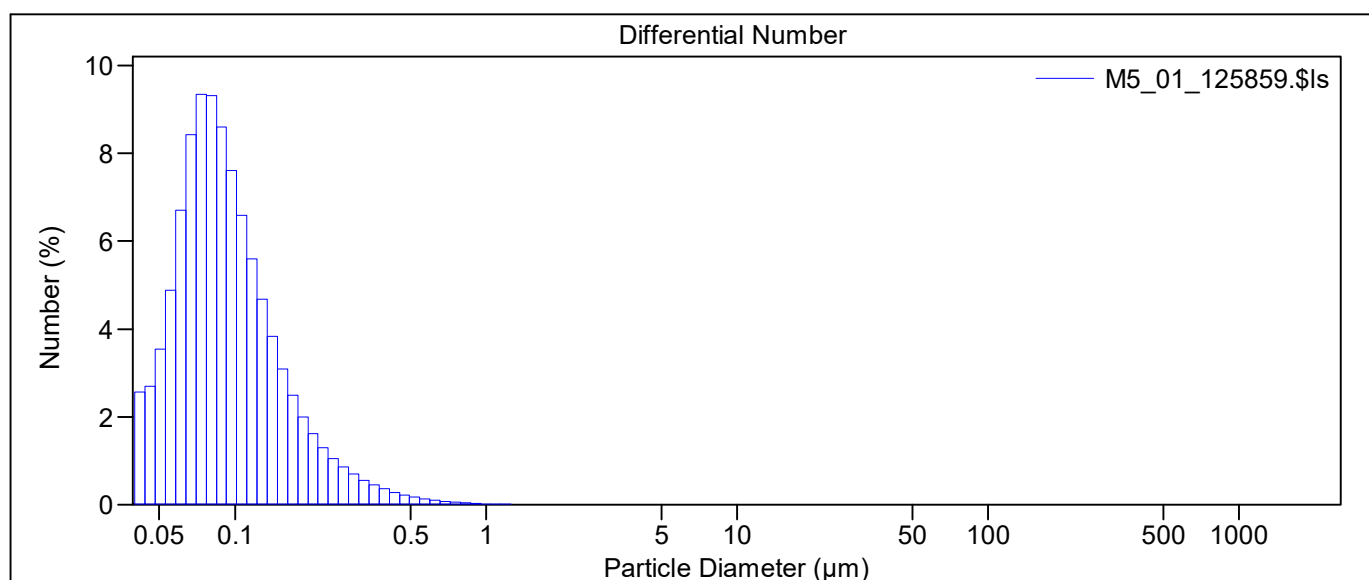
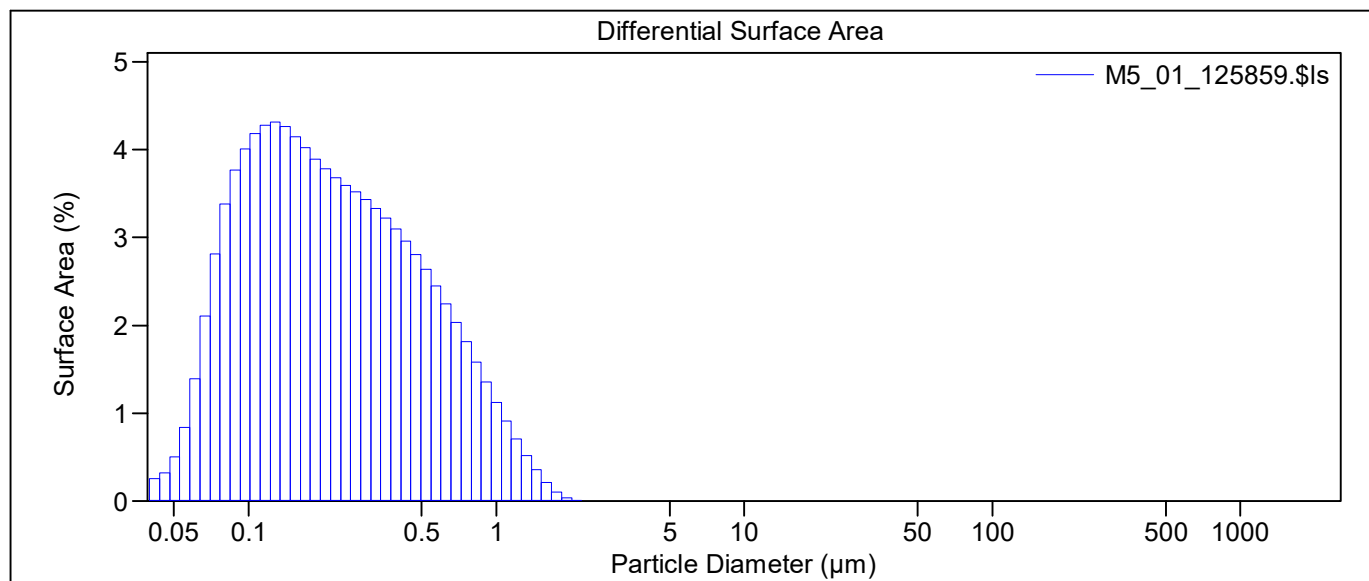
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_01_125859.\$ls		
	M5_01_125859.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.61%		
LS 13 320	Universal Liquid Module		
Start time:	12:57	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_01_125859.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.383 μm
Mean:	0.552 μm		Variance:	0.147 μm ²
Median:	0.464 μm		C.V.:	69.3%
Mean/Median ratio:	1.189		Skewness:	0.982 Right skewed
Mode:	0.627 μm		Kurtosis:	0.558 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.135 μm	0.244 μm	0.464 μm	0.776 μm	1.110 μm





M5.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.035	0.25	2.56
2	0.044	0.046	0.048	0.32	2.69
3	0.048	0.050	0.084	0.51	3.54
4	0.053	0.055	0.15	0.84	4.88
5	0.058	0.061	0.28	1.39	6.71
6	0.064	0.067	0.46	2.11	8.43
7	0.070	0.073	0.68	2.81	9.34
8	0.077	0.080	0.89	3.38	9.32
9	0.084	0.088	1.09	3.76	8.60
10	0.093	0.097	1.28	4.01	7.60
11	0.102	0.106	1.46	4.18	6.58
12	0.112	0.117	1.64	4.28	5.59
13	0.122	0.128	1.82	4.32	4.68
14	0.134	0.141	1.97	4.26	3.83
15	0.148	0.155	2.11	4.15	3.10
16	0.162	0.170	2.24	4.02	2.49
17	0.178	0.186	2.38	3.89	2.00

M5.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.54	3.78	1.61
19	0.214	0.225	2.71	3.68	1.30
20	0.235	0.247	2.91	3.59	1.06
21	0.258	0.271	3.13	3.52	0.86
22	0.284	0.297	3.34	3.43	0.69
23	0.311	0.326	3.56	3.33	0.56
24	0.342	0.358	3.79	3.22	0.45
25	0.375	0.393	4.00	3.10	0.36
26	0.412	0.431	4.19	2.96	0.28
27	0.452	0.474	4.37	2.81	0.22
28	0.496	0.520	4.50	2.64	0.17
29	0.545	0.571	4.59	2.45	0.13
30	0.598	0.627	4.61	2.24	0.10
31	0.656	0.688	4.59	2.03	0.077
32	0.721	0.755	4.49	1.81	0.057
33	0.791	0.829	4.31	1.58	0.041
34	0.868	0.910	4.04	1.35	0.029
35	0.953	0.999	3.69	1.13	0.020
36	1.047	1.097	3.27	0.91	0.013
37	1.149	1.204	2.79	0.71	0.0087
38	1.261	1.321	2.26	0.52	0.0053
39	1.385	1.451	1.69	0.35	0.0030
40	1.520	1.592	1.09	0.21	0.0015
41	1.668	1.748	0.59	0.10	0.00060
42	1.832	1.919	0.25	0.040	0.00019
43	2.011	2.107	0.073	0.011	0.000042
44	2.207	2.313	0.014	0.0019	0.000006
45	2.423	2.539	0.0012	0.00014	3.85E-7
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

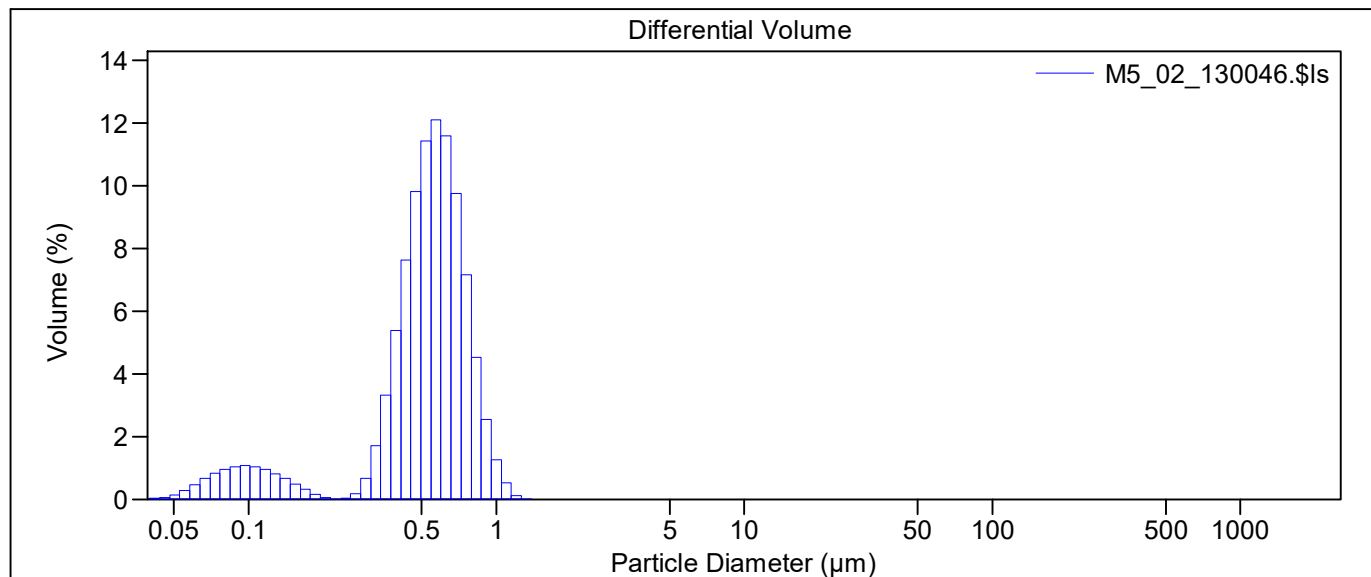
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_02_130046.\$ls		
	M5_02_130046.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.80%		
LS 13 320	Universal Liquid Module		
Start time:	12:59	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

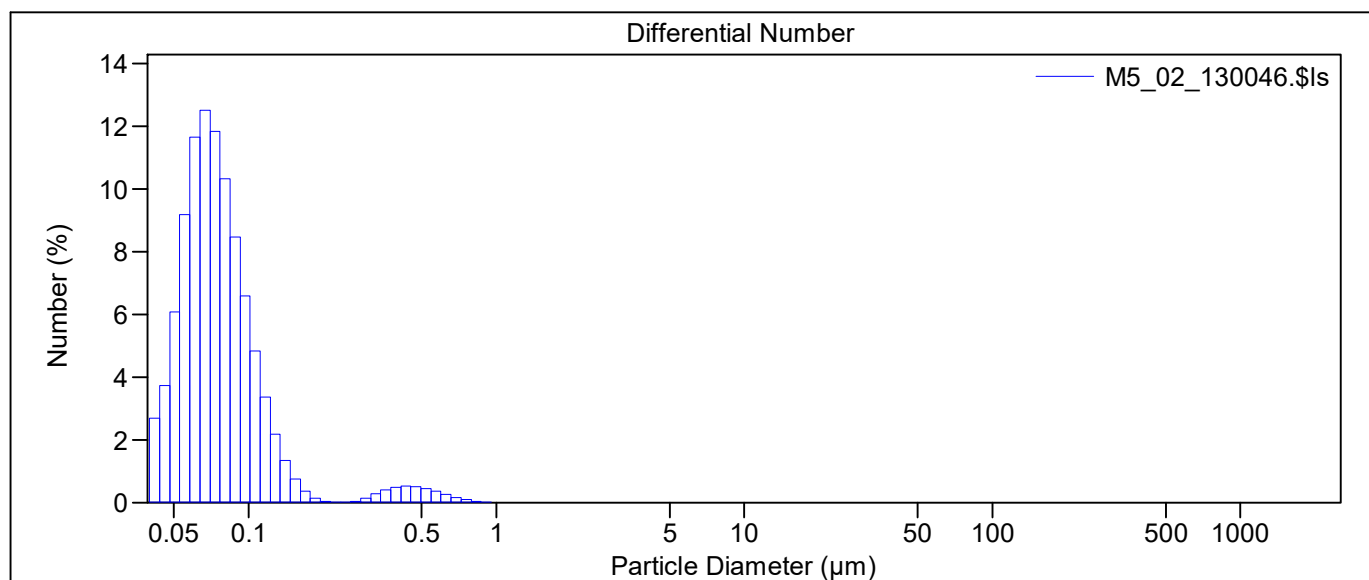
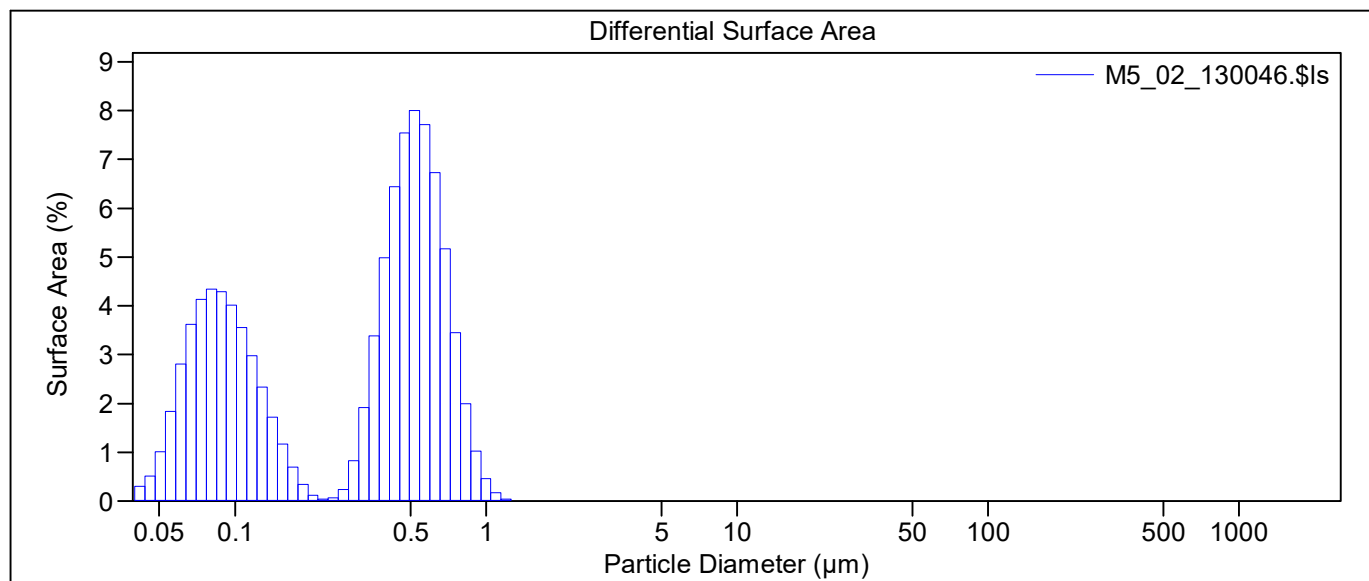
Volume Statistics (Arithmetic) M5_02_130046.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.208 µm
Mean:	0.535 µm	Variance:	0.043 µm ²
Median:	0.543 µm	C.V.:	38.9%
Mean/Median ratio:	0.984	Skewness:	-0.294 Left skewed
Mode:	0.571 µm	Kurtosis:	0.385 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.191 µm	0.430 µm	0.543 µm	0.663 µm	0.782 µm





M5.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.035	0.31	2.69
2	0.044	0.046	0.065	0.51	3.73
3	0.048	0.050	0.14	1.01	6.09
4	0.053	0.055	0.28	1.83	9.18
5	0.058	0.061	0.47	2.80	11.7
6	0.064	0.067	0.67	3.62	12.5
7	0.070	0.073	0.83	4.13	11.8
8	0.077	0.080	0.96	4.34	10.3
9	0.084	0.088	1.04	4.29	8.47
10	0.093	0.097	1.07	4.02	6.58
11	0.102	0.106	1.04	3.56	4.84
12	0.112	0.117	0.96	2.98	3.36
13	0.122	0.128	0.83	2.34	2.19
14	0.134	0.141	0.67	1.72	1.34
15	0.148	0.155	0.50	1.17	0.75
16	0.162	0.170	0.33	0.70	0.37
17	0.178	0.186	0.17	0.34	0.15

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.068	0.12	0.045
19	0.214	0.225	0.025	0.040	0.012
20	0.235	0.247	0.040	0.059	0.015
21	0.258	0.271	0.18	0.24	0.050
22	0.284	0.297	0.68	0.83	0.14
23	0.311	0.326	1.72	1.92	0.28
24	0.342	0.358	3.33	3.38	0.41
25	0.375	0.393	5.39	4.99	0.50
26	0.412	0.431	7.64	6.44	0.53
27	0.452	0.474	9.82	7.54	0.52
28	0.496	0.520	11.4	8.01	0.46
29	0.545	0.571	12.1	7.72	0.36
30	0.598	0.627	11.6	6.73	0.26
31	0.656	0.688	9.76	5.16	0.17
32	0.721	0.755	7.16	3.45	0.093
33	0.791	0.829	4.53	1.99	0.045
34	0.868	0.910	2.54	1.02	0.019
35	0.953	0.999	1.27	0.46	0.0072
36	1.047	1.097	0.53	0.17	0.0022
37	1.149	1.204	0.13	0.039	0.00042
38	1.261	1.321	0.018	0.0050	0.000044
39	1.385	1.451	0.00047	0.00012	0.000001
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

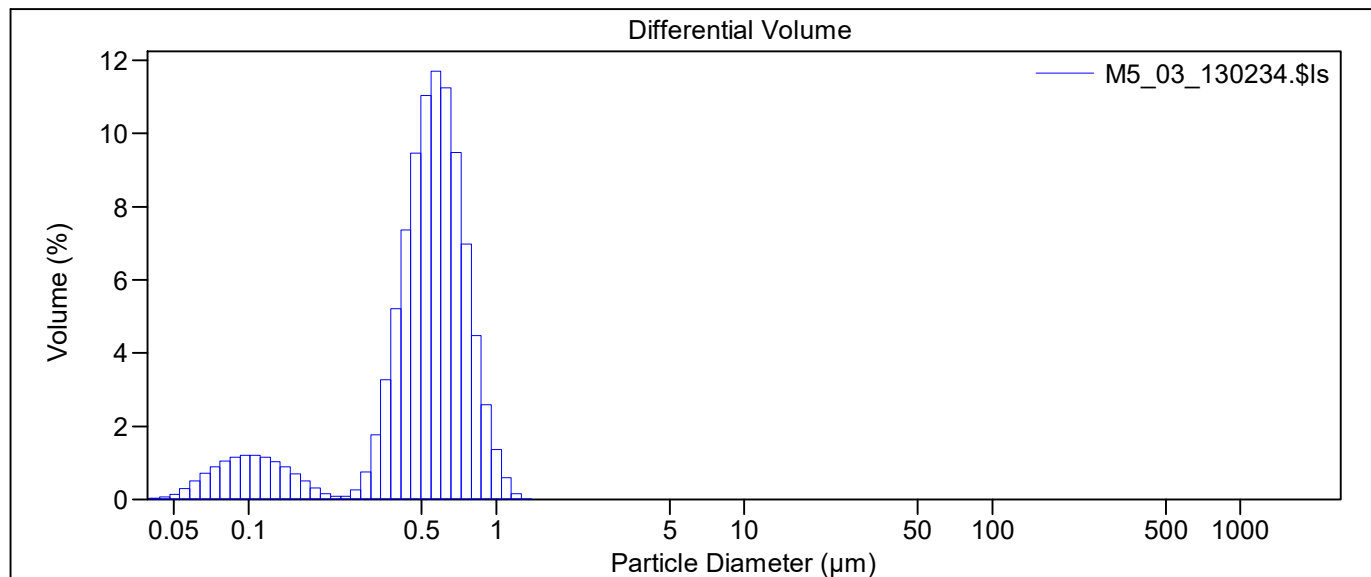
M5.\$av

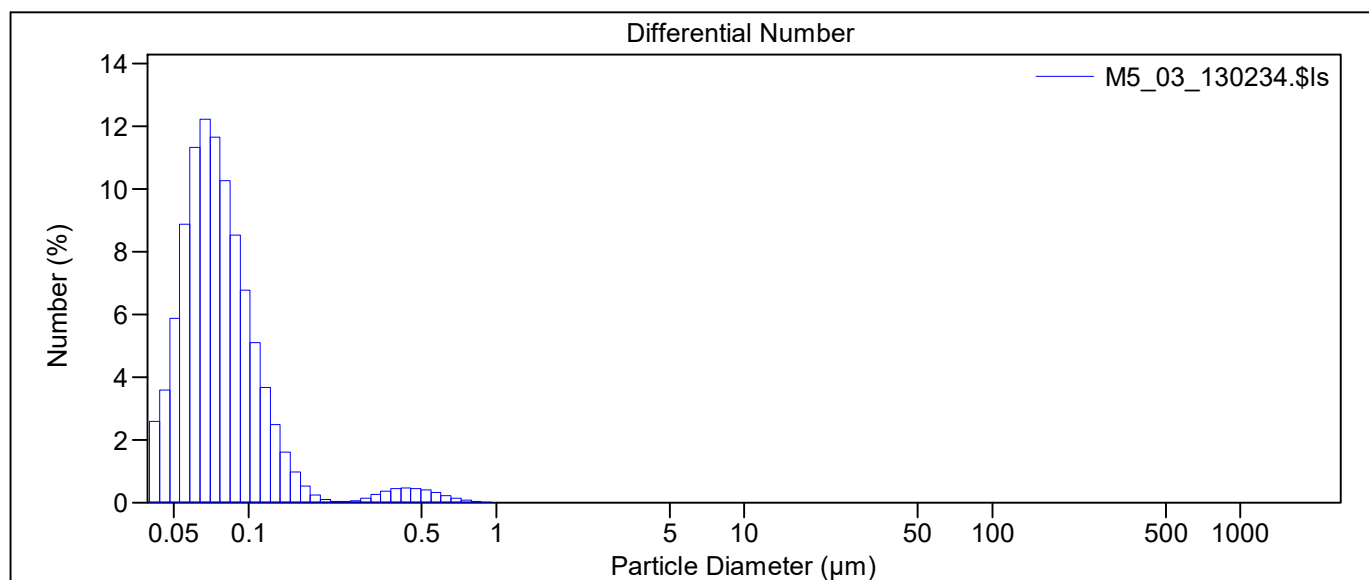
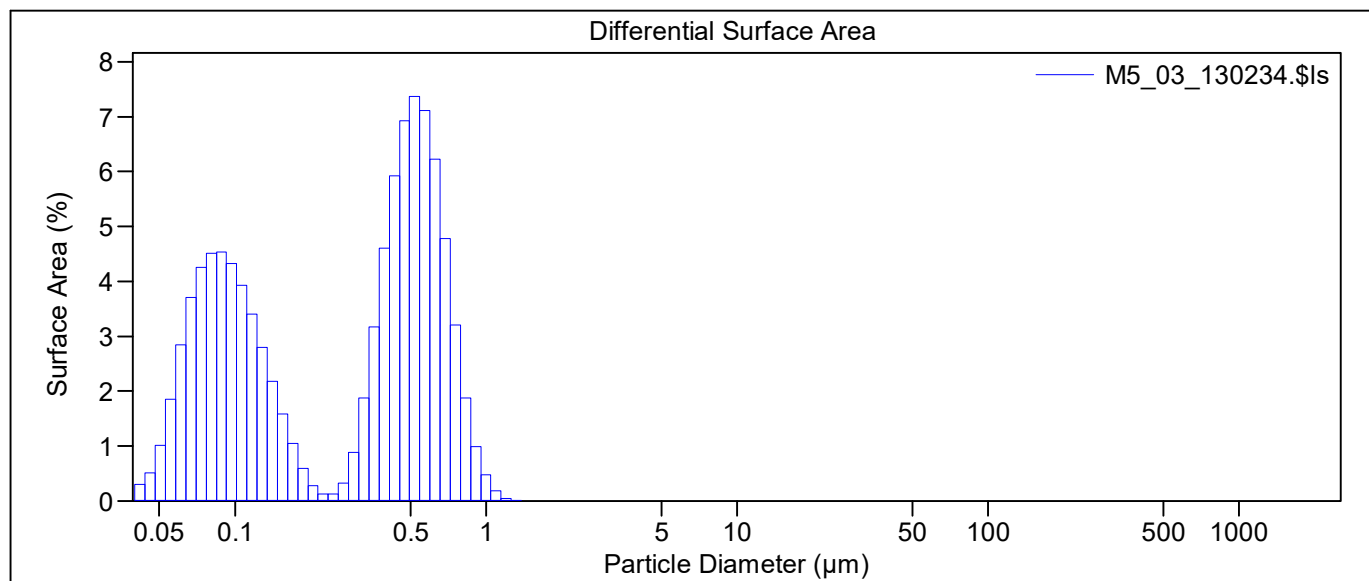
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_03_130234.\$ls		
	M5_03_130234.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.75%		
LS 13 320	Universal Liquid Module		
Start time:	13:00	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_03_130234.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.216 μm
Mean:	0.526 μm		Variance:	0.047 μm ²
Median:	0.539 μm		C.V.:	41.1%
Mean/Median ratio:	0.977		Skewness:	-0.256 Left skewed
Mode:	0.571 μm		Kurtosis:	0.168 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.142 μm	0.420 μm	0.539 μm	0.661 μm	0.783 μm





M5.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.037	0.31	2.59
2	0.044	0.046	0.068	0.52	3.59
3	0.048	0.050	0.15	1.02	5.88
4	0.053	0.055	0.30	1.86	8.89
5	0.058	0.061	0.50	2.85	11.3
6	0.064	0.067	0.71	3.71	12.2
7	0.070	0.073	0.90	4.26	11.7
8	0.077	0.080	1.05	4.52	10.3
9	0.084	0.088	1.15	4.53	8.54
10	0.093	0.097	1.21	4.33	6.77
11	0.102	0.106	1.21	3.93	5.11
12	0.112	0.117	1.15	3.41	3.67
13	0.122	0.128	1.03	2.80	2.50
14	0.134	0.141	0.88	2.18	1.61
15	0.148	0.155	0.71	1.58	0.97
16	0.162	0.170	0.51	1.05	0.54
17	0.178	0.186	0.32	0.60	0.25

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.16	0.28	0.098
19	0.214	0.225	0.085	0.13	0.039
20	0.235	0.247	0.092	0.13	0.031
21	0.258	0.271	0.26	0.33	0.066
22	0.284	0.297	0.76	0.88	0.15
23	0.311	0.326	1.77	1.88	0.26
24	0.342	0.358	3.28	3.17	0.36
25	0.375	0.393	5.22	4.61	0.44
26	0.412	0.431	7.37	5.93	0.47
27	0.452	0.474	9.46	6.93	0.45
28	0.496	0.520	11.0	7.37	0.40
29	0.545	0.571	11.7	7.12	0.32
30	0.598	0.627	11.2	6.23	0.23
31	0.656	0.688	9.48	4.78	0.15
32	0.721	0.755	6.98	3.21	0.083
33	0.791	0.829	4.48	1.87	0.040
34	0.868	0.910	2.58	0.99	0.018
35	0.953	0.999	1.36	0.47	0.0070
36	1.047	1.097	0.59	0.19	0.0023
37	1.149	1.204	0.15	0.044	0.00045
38	1.261	1.321	0.022	0.0059	0.000049
39	1.385	1.451	0.00058	0.00014	0.000001
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

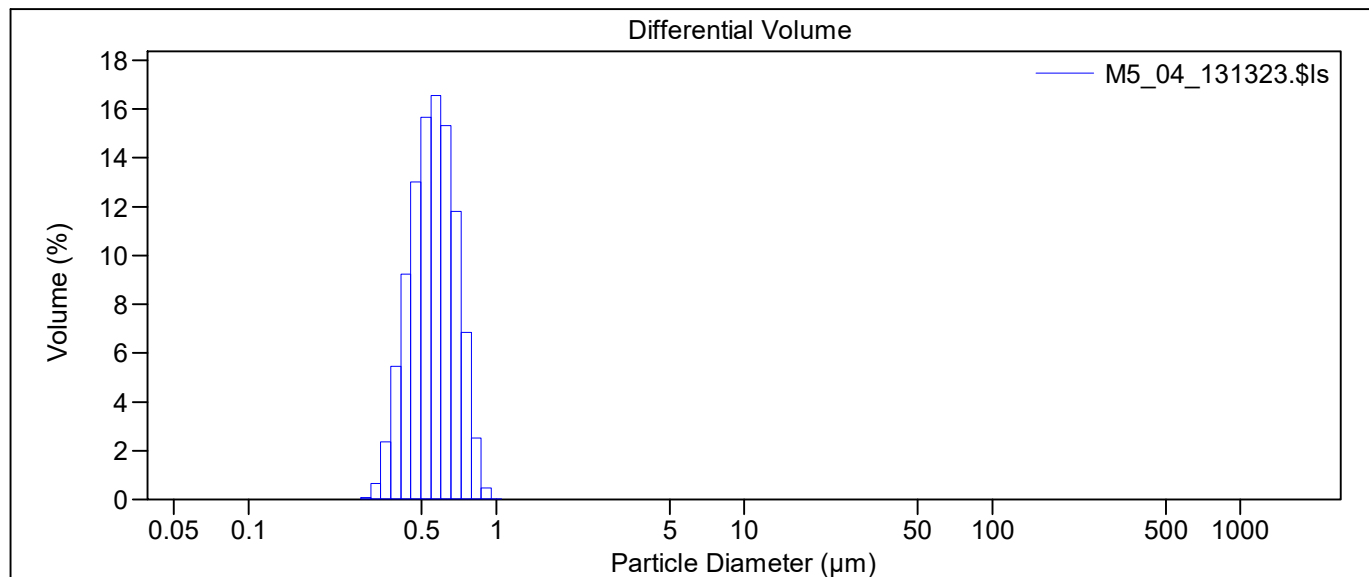
M5.\$av

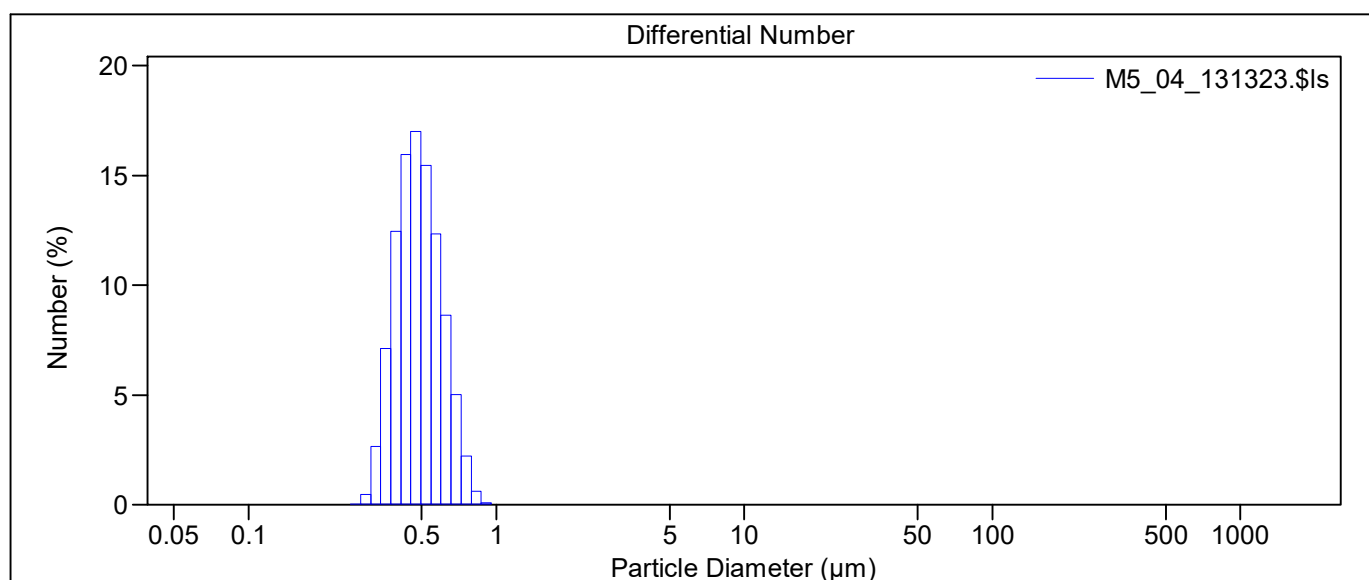
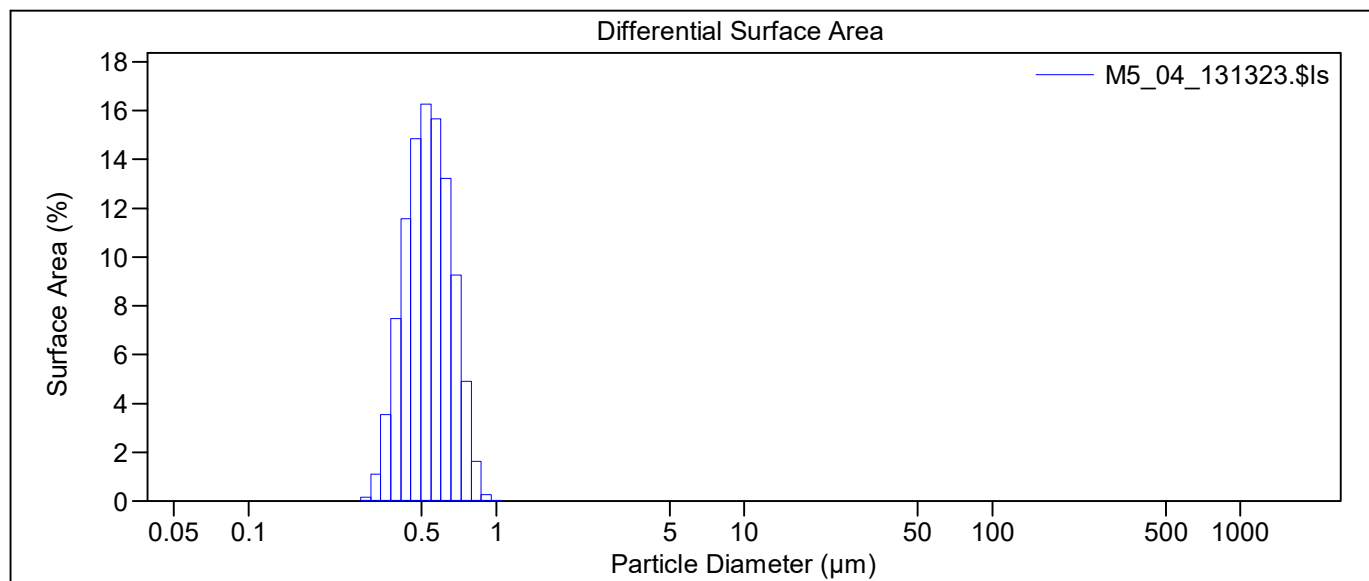
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_04_131323.\$ls		
	M5_04_131323.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.94%		
LS 13 320	Universal Liquid Module		
Start time:	13:11	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_04_131323.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.115 µm
Mean:	0.564 µm		Variance:	0.013 µm ²
Median:	0.556 µm		C.V.:	20.5%
Mean/Median ratio:	1.014		Skewness:	0.335 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.324 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.418 µm	0.477 µm	0.556 µm	0.644 µm	0.720 µm





M5.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0041	0.0083	0.029
22	0.284	0.297	0.091	0.17	0.48
23	0.311	0.326	0.66	1.09	2.64
24	0.342	0.358	2.35	3.55	7.10
25	0.375	0.393	5.45	7.49	12.4
26	0.412	0.431	9.24	11.6	16.0
27	0.452	0.474	13.0	14.9	17.0
28	0.496	0.520	15.7	16.3	15.4
29	0.545	0.571	16.5	15.7	12.3
30	0.598	0.627	15.3	13.2	8.64
31	0.656	0.688	11.8	9.27	5.03
32	0.721	0.755	6.86	4.91	2.21
33	0.791	0.829	2.51	1.64	0.61
34	0.868	0.910	0.46	0.27	0.085
35	0.953	0.999	0.028	0.015	0.0038
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

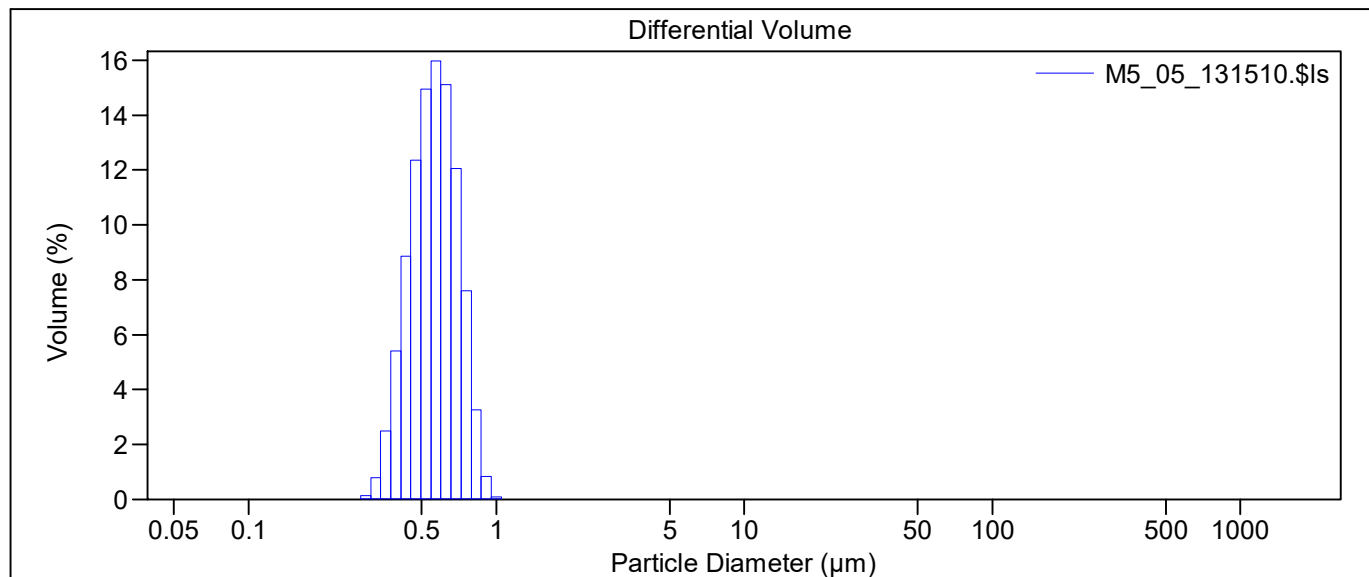
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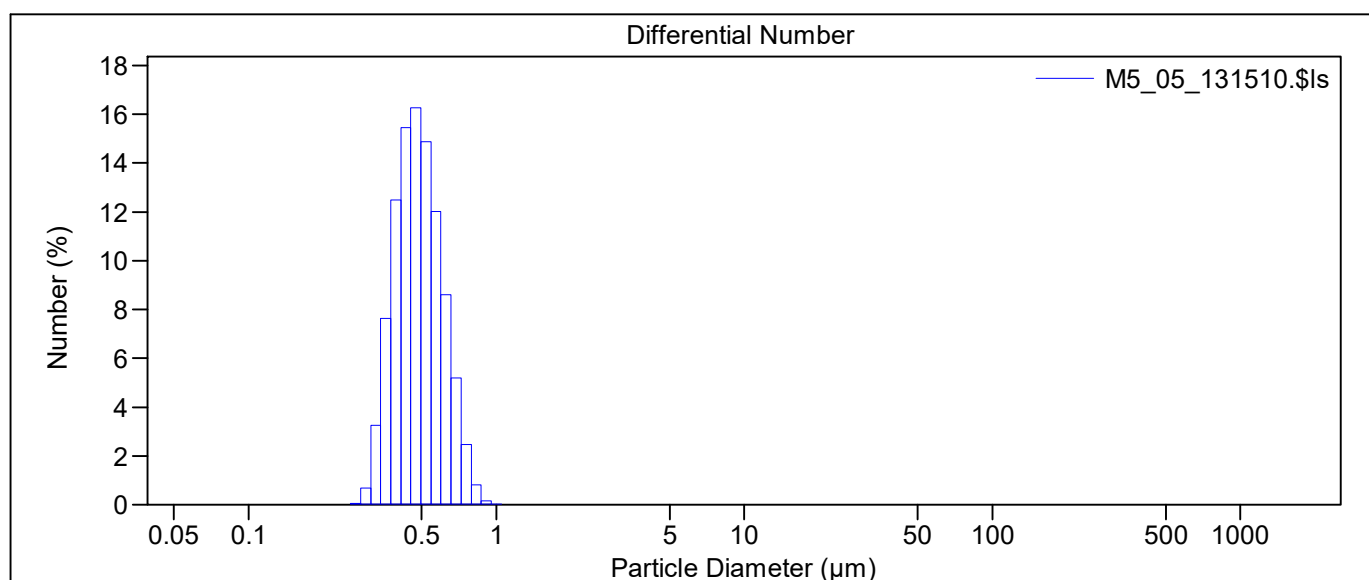
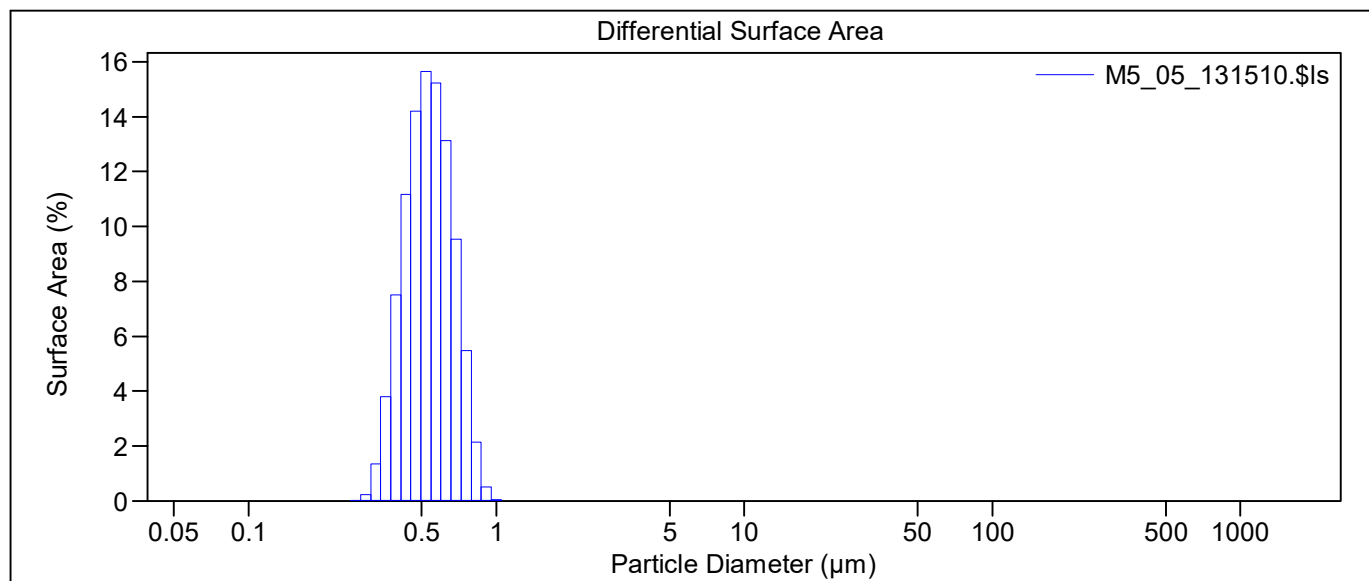
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_05_131510.\$ls		
	M5_05_131510.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.87%		
LS 13 320	Universal Liquid Module		
Start time:	13:13	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_05_131510.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.121 μm
Mean:	0.570 μm		Variance:	0.015 μm ²
Median:	0.561 μm		C.V.:	21.3%
Mean/Median ratio:	1.015		Skewness:	0.360 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.271 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.417 μm	0.478 μm	0.561 μm	0.652 μm	0.738 μm





M5.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0084	0.017	0.059
22	0.284	0.297	0.13	0.24	0.69
23	0.311	0.326	0.80	1.34	3.25
24	0.342	0.358	2.50	3.81	7.64
25	0.375	0.393	5.42	7.50	12.5
26	0.412	0.431	8.86	11.2	15.4
27	0.452	0.474	12.4	14.2	16.3
28	0.496	0.520	15.0	15.6	14.9
29	0.545	0.571	16.0	15.2	12.0
30	0.598	0.627	15.1	13.1	8.60
31	0.656	0.688	12.0	9.53	5.18
32	0.721	0.755	7.61	5.49	2.48
33	0.791	0.829	3.27	2.15	0.80
34	0.868	0.910	0.84	0.50	0.16
35	0.953	0.999	0.096	0.053	0.014
36	1.047	1.097	0.0030	0.0015	0.00032
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

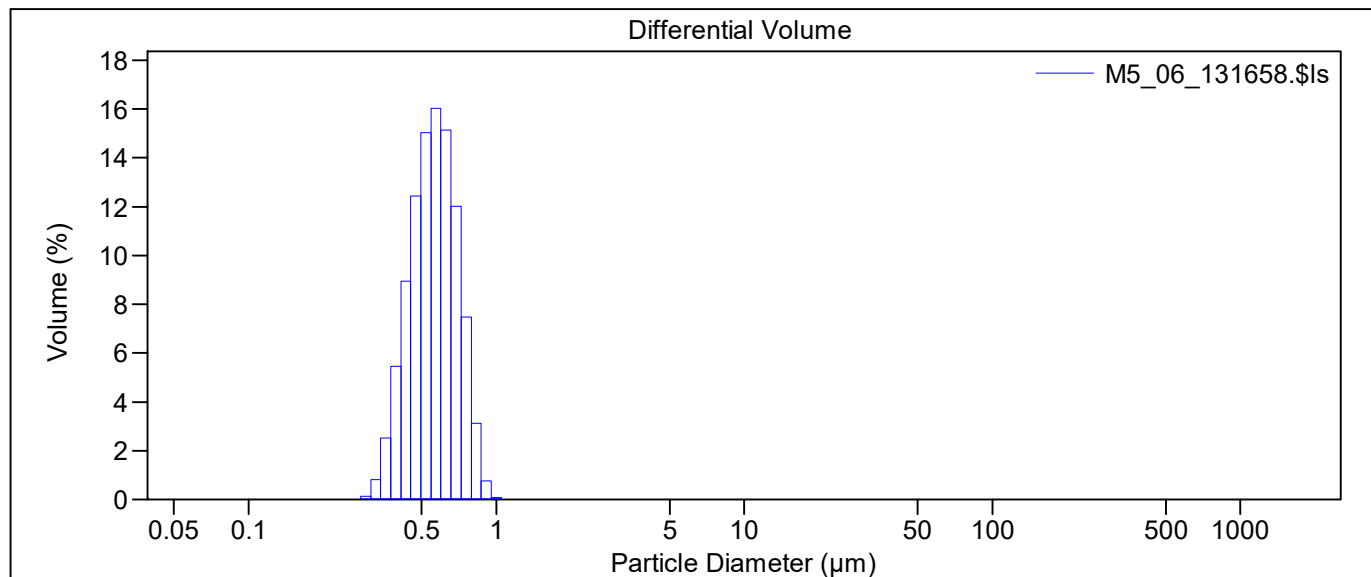
M5.\$av

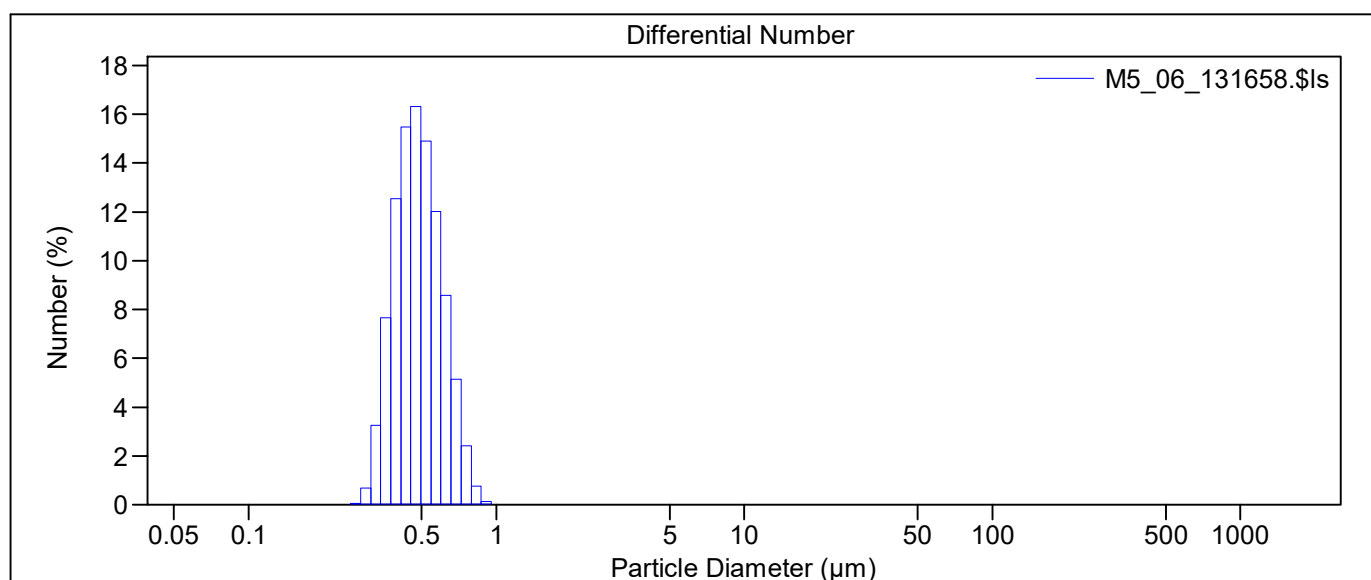
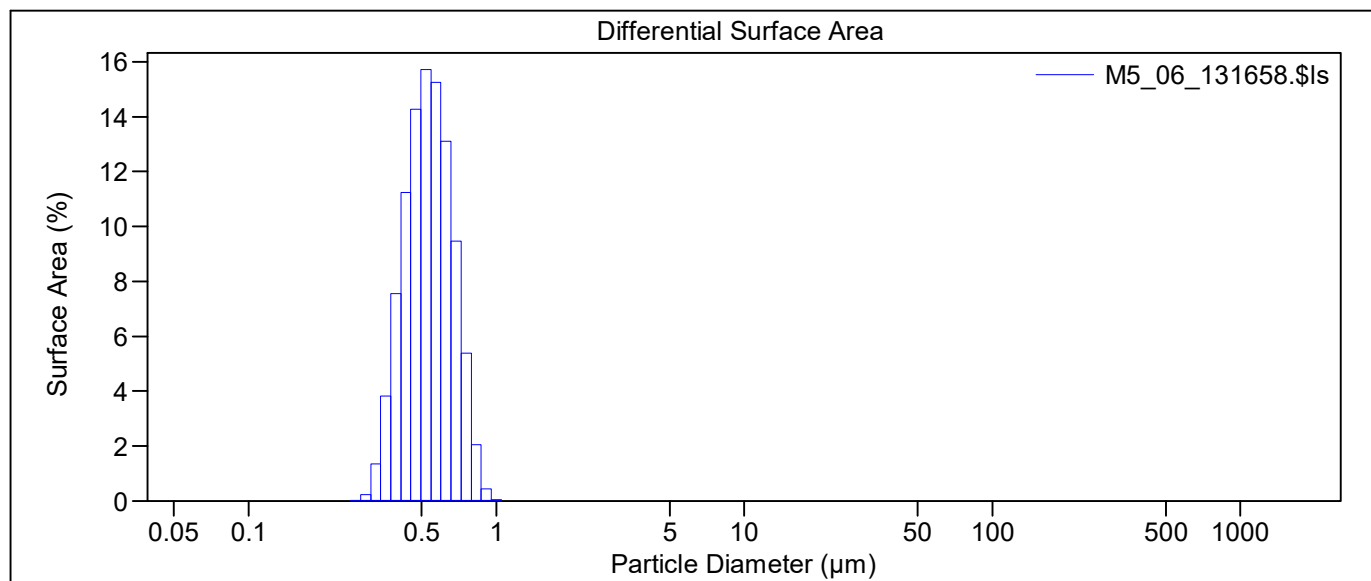
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_06_131658.\$ls		
	M5_06_131658.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.88%		
LS 13 320	Universal Liquid Module		
Start time:	13:15	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_06_131658.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.120 µm
Mean:	0.568 µm		Variance:	0.015 µm ²
Median:	0.560 µm		C.V.:	21.2%
Mean/Median ratio:	1.015		Skewness:	0.351 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.288 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.417 µm	0.477 µm	0.560 µm	0.651 µm	0.734 µm





M5.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0085	0.017	0.060
22	0.284	0.297	0.13	0.24	0.69
23	0.311	0.326	0.81	1.35	3.26
24	0.342	0.358	2.53	3.83	7.67
25	0.375	0.393	5.47	7.55	12.5
26	0.412	0.431	8.94	11.2	15.5
27	0.452	0.474	12.4	14.3	16.3
28	0.496	0.520	15.0	15.7	14.9
29	0.545	0.571	16.0	15.3	12.0
30	0.598	0.627	15.1	13.1	8.57
31	0.656	0.688	12.0	9.48	5.14
32	0.721	0.755	7.48	5.38	2.42
33	0.791	0.829	3.13	2.05	0.76
34	0.868	0.910	0.75	0.45	0.14
35	0.953	0.999	0.078	0.043	0.011
36	1.047	1.097	0.0017	0.00086	0.00018
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

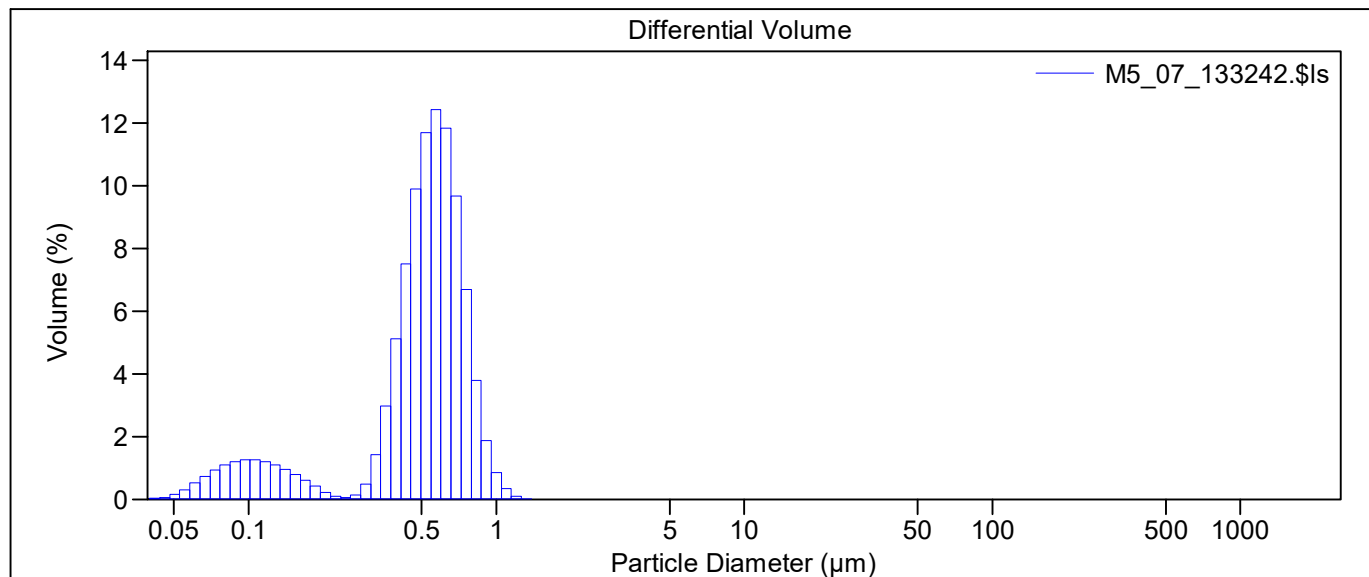
M5.\$av

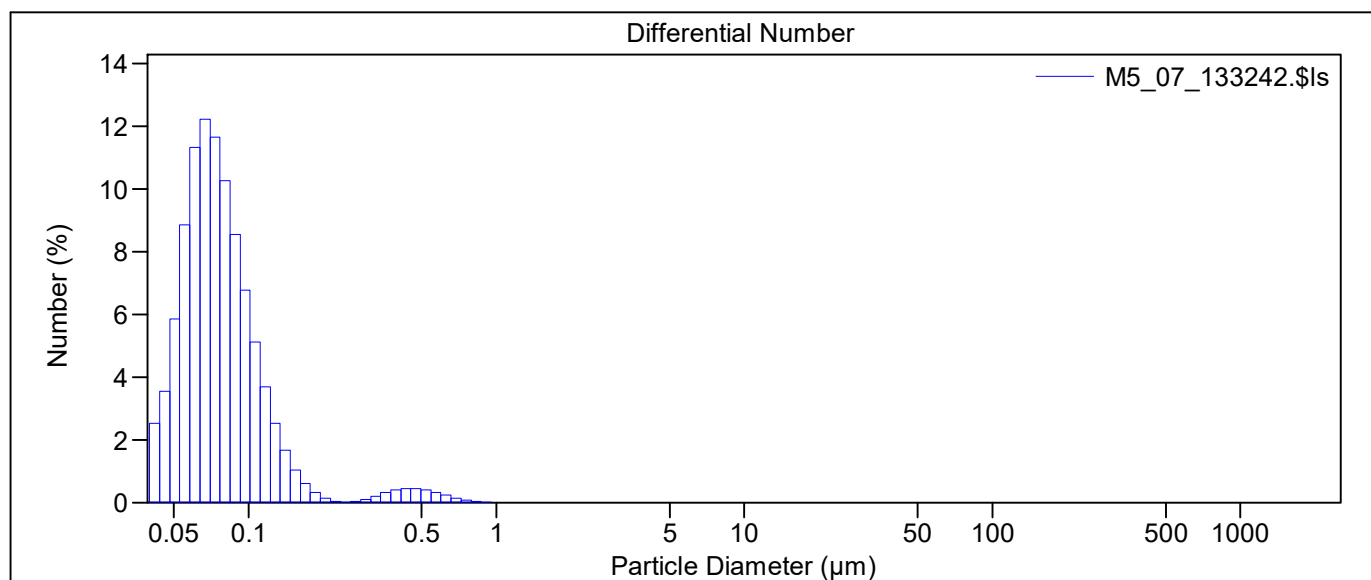
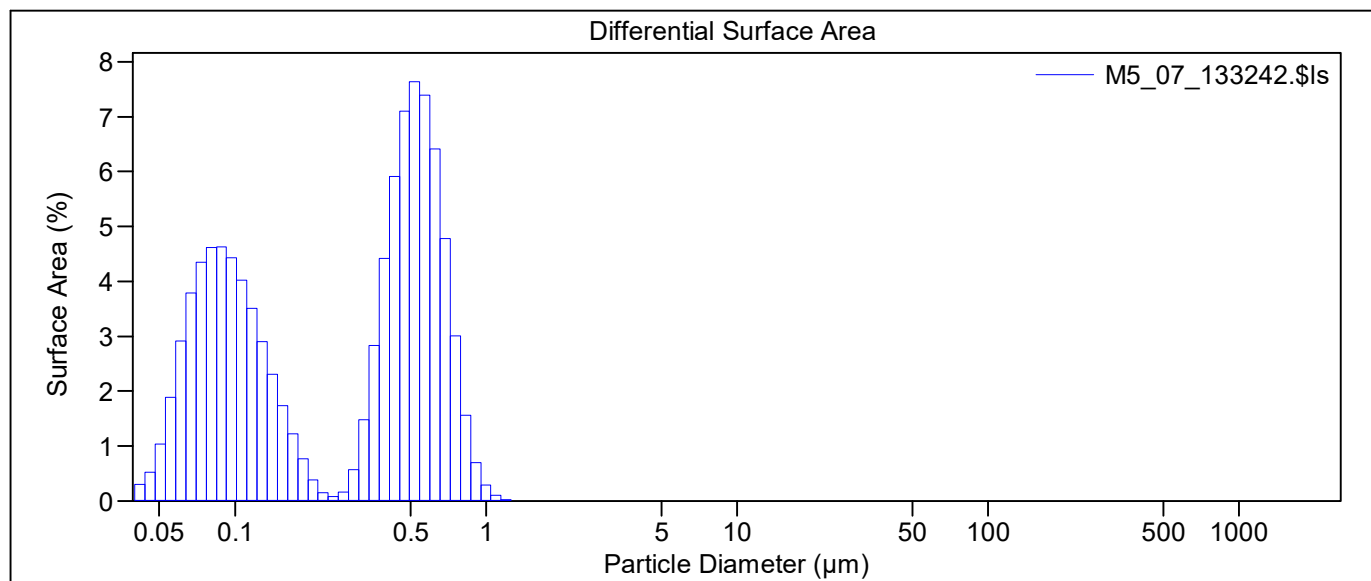
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_07_133242.\$ls		
	M5_07_133242.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.79%		
LS 13 320	Universal Liquid Module		
Start time:	13:31	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_07_133242.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.209 µm
Mean:	0.516 µm		Variance:	0.044 µm ²
Median:	0.535 µm		C.V.:	40.5%
Mean/Median ratio:	0.965		Skewness:	-0.388 Left skewed
Mode:	0.571 µm		Kurtosis:	0.191 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.136 µm	0.421 µm	0.535 µm	0.648 µm	0.760 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.038	0.31	2.53
2	0.044	0.046	0.071	0.52	3.55
3	0.048	0.050	0.15	1.04	5.85
4	0.053	0.055	0.31	1.89	8.86
5	0.058	0.061	0.52	2.91	11.3
6	0.064	0.067	0.74	3.79	12.2
7	0.070	0.073	0.94	4.35	11.7
8	0.077	0.080	1.09	4.61	10.3
9	0.084	0.088	1.20	4.63	8.54
10	0.093	0.097	1.26	4.43	6.77
11	0.102	0.106	1.26	4.03	5.11
12	0.112	0.117	1.21	3.51	3.70
13	0.122	0.128	1.10	2.90	2.54
14	0.134	0.141	0.96	2.31	1.68
15	0.148	0.155	0.79	1.74	1.05
16	0.162	0.170	0.61	1.23	0.61
17	0.178	0.186	0.42	0.77	0.32

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.23	0.39	0.13
19	0.214	0.225	0.10	0.16	0.044
20	0.235	0.247	0.061	0.084	0.020
21	0.258	0.271	0.13	0.17	0.033
22	0.284	0.297	0.50	0.57	0.093
23	0.311	0.326	1.42	1.48	0.20
24	0.342	0.358	2.99	2.84	0.32
25	0.375	0.393	5.12	4.42	0.41
26	0.412	0.431	7.51	5.91	0.46
27	0.452	0.474	9.90	7.10	0.46
28	0.496	0.520	11.7	7.64	0.41
29	0.545	0.571	12.4	7.40	0.33
30	0.598	0.627	11.8	6.41	0.24
31	0.656	0.688	9.68	4.78	0.15
32	0.721	0.755	6.69	3.01	0.076
33	0.791	0.829	3.80	1.56	0.033
34	0.868	0.910	1.87	0.70	0.012
35	0.953	0.999	0.86	0.29	0.0042
36	1.047	1.097	0.36	0.11	0.0013
37	1.149	1.204	0.093	0.026	0.00026
38	1.261	1.321	0.014	0.0037	0.000031
39	1.385	1.451	0.00039	0.000092	0.000001
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

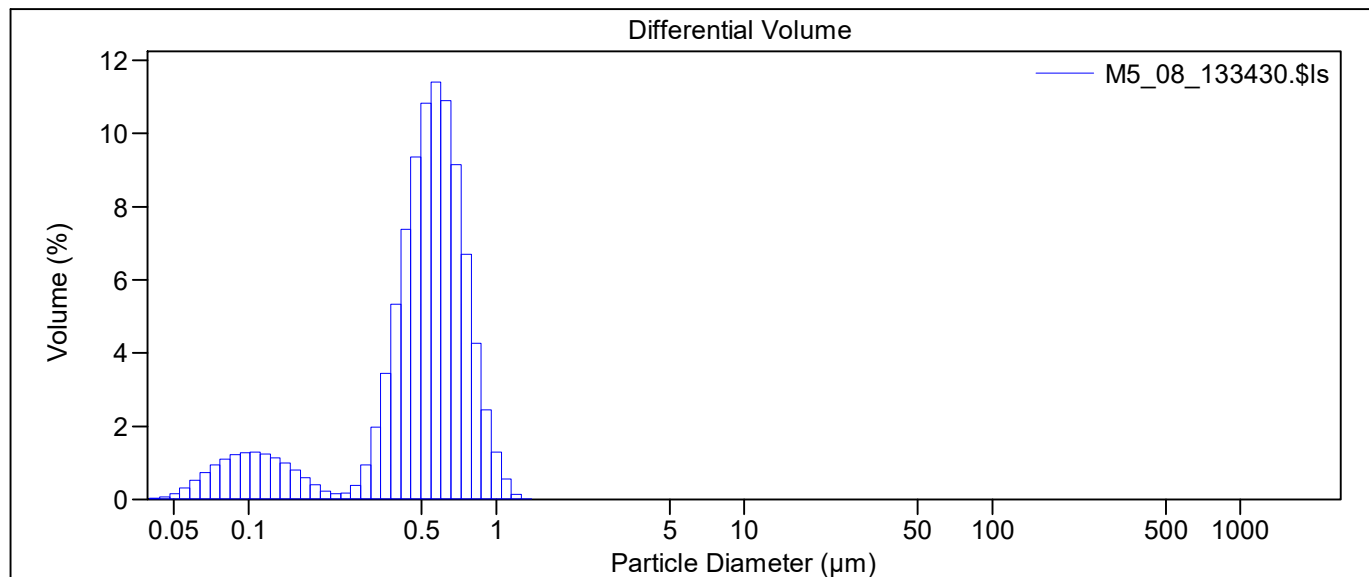
M5.\$av

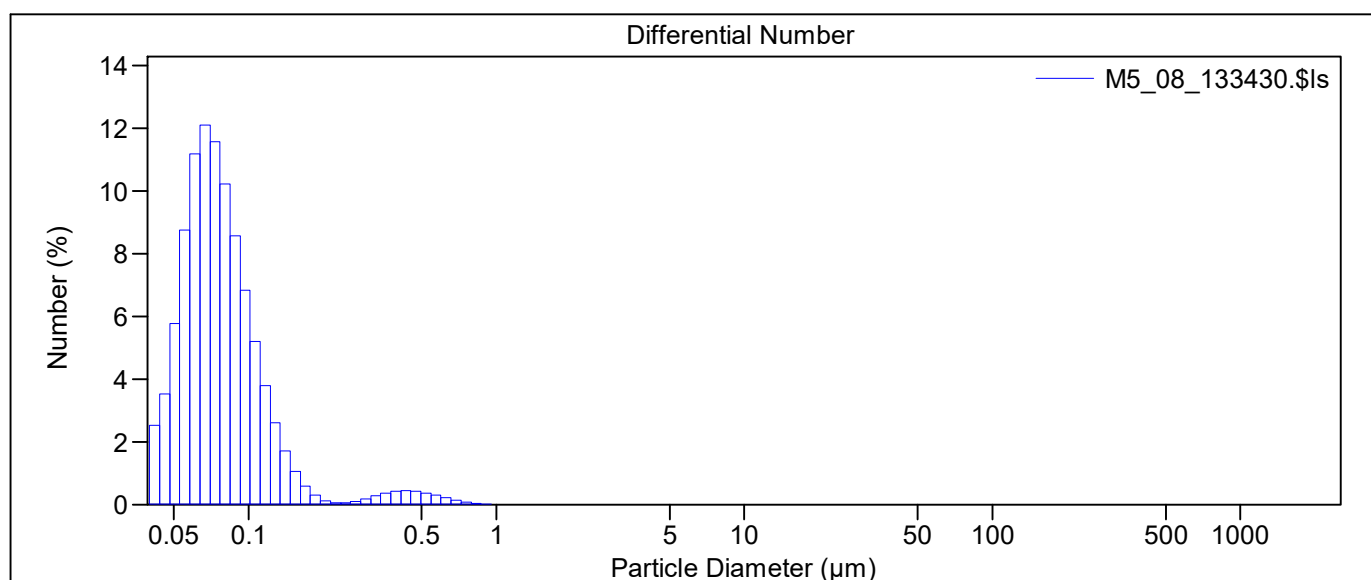
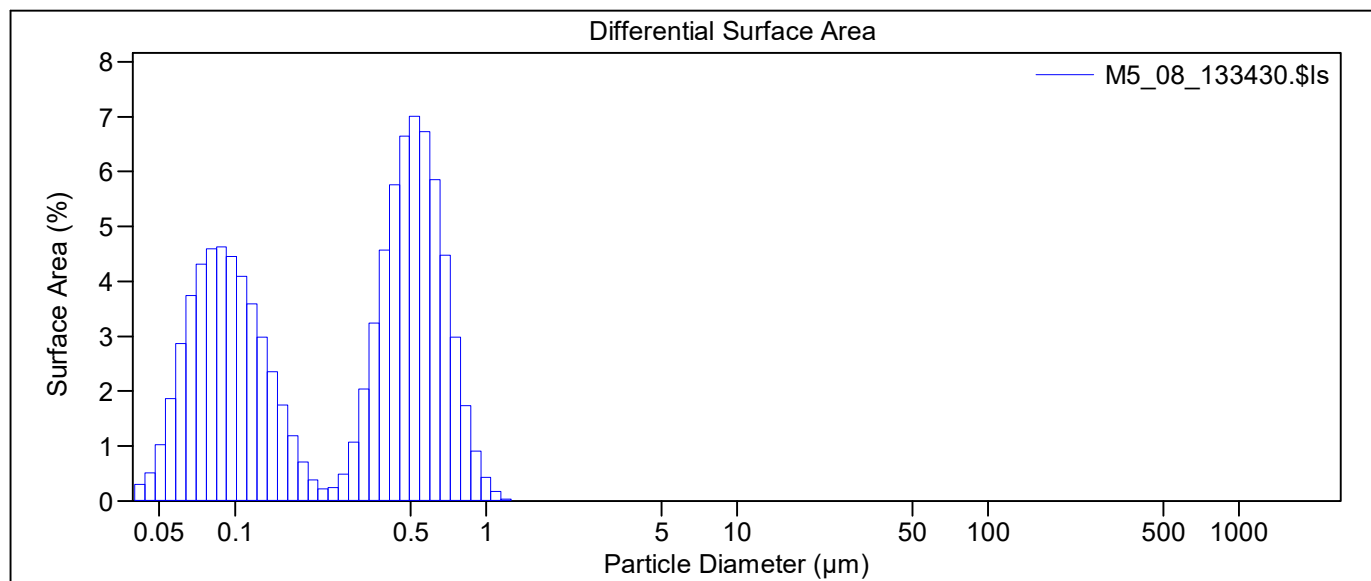
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_08_133430.\$ls		
	M5_08_133430.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.75%		
LS 13 320	Universal Liquid Module		
Start time:	13:32	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_08_133430.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.219 μm
Mean:	0.517 μm		Variance:	0.048 μm ²
Median:	0.531 μm		C.V.:	42.3%
Mean/Median ratio:	0.974		Skewness:	-0.225 Left skewed
Mode:	0.571 μm		Kurtosis:	0.049 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.134 μm	0.408 μm	0.531 μm	0.654 μm	0.778 μm





M5.\$av					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.038	0.31	2.53
2	0.044	0.046	0.071	0.52	3.52
3	0.048	0.050	0.15	1.02	5.79
4	0.053	0.055	0.31	1.86	8.76
5	0.058	0.061	0.52	2.87	11.2
6	0.064	0.067	0.74	3.74	12.1
7	0.070	0.073	0.94	4.31	11.6
8	0.077	0.080	1.10	4.59	10.2
9	0.084	0.088	1.22	4.63	8.56
10	0.093	0.097	1.29	4.46	6.84
11	0.102	0.106	1.29	4.09	5.21
12	0.112	0.117	1.25	3.59	3.79
13	0.122	0.128	1.14	2.98	2.62
14	0.134	0.141	0.99	2.36	1.72
15	0.148	0.155	0.80	1.75	1.06
16	0.162	0.170	0.60	1.19	0.60
17	0.178	0.186	0.40	0.71	0.30

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.23	0.38	0.13
19	0.214	0.225	0.15	0.22	0.064
20	0.235	0.247	0.18	0.24	0.057
21	0.258	0.271	0.39	0.49	0.096
22	0.284	0.297	0.95	1.07	0.18
23	0.311	0.326	1.98	2.04	0.28
24	0.342	0.358	3.45	3.25	0.37
25	0.375	0.393	5.34	4.57	0.43
26	0.412	0.431	7.39	5.76	0.45
27	0.452	0.474	9.36	6.65	0.43
28	0.496	0.520	10.8	7.01	0.37
29	0.545	0.571	11.4	6.73	0.30
30	0.598	0.627	10.9	5.86	0.22
31	0.656	0.688	9.16	4.48	0.14
32	0.721	0.755	6.70	2.99	0.076
33	0.791	0.829	4.27	1.73	0.036
34	0.868	0.910	2.45	0.91	0.016
35	0.953	0.999	1.29	0.43	0.0063
36	1.047	1.097	0.56	0.17	0.0021
37	1.149	1.204	0.15	0.041	0.00041
38	1.261	1.321	0.021	0.0055	0.000045
39	1.385	1.451	0.00056	0.00013	0.000001
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

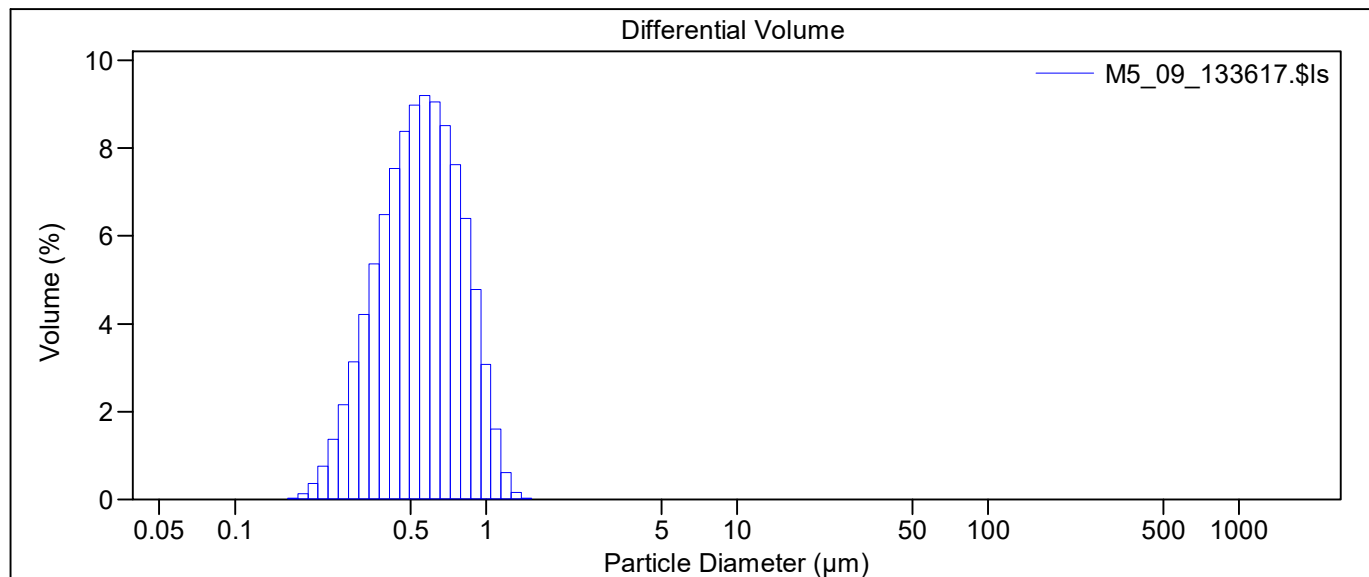
M5.\$av

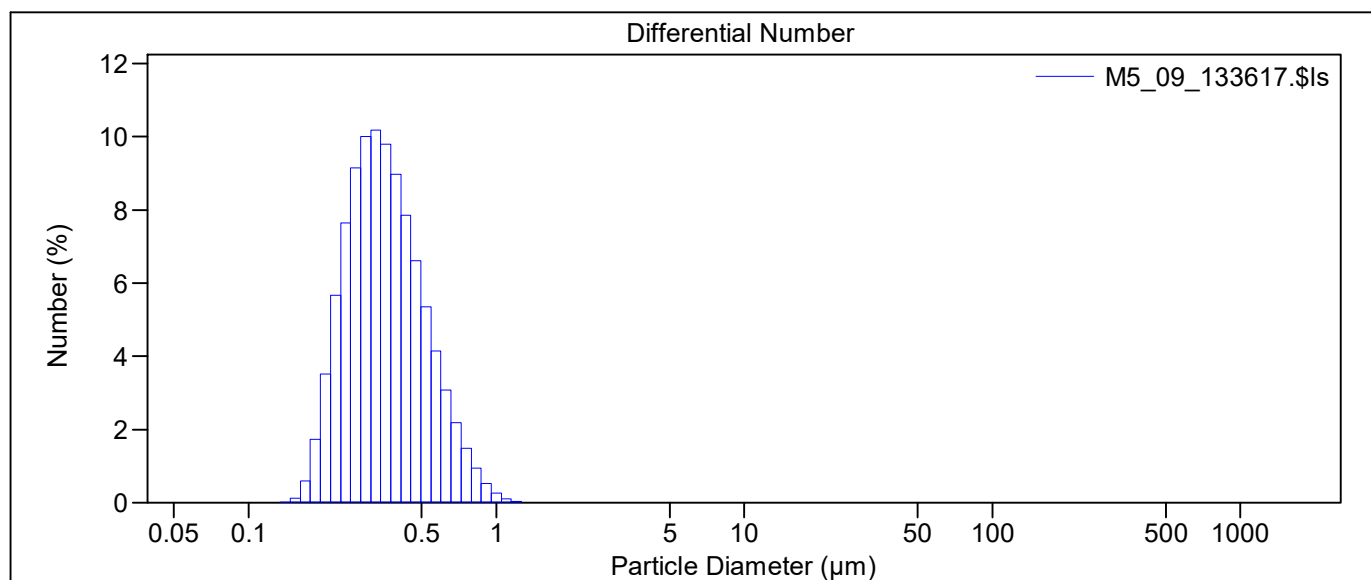
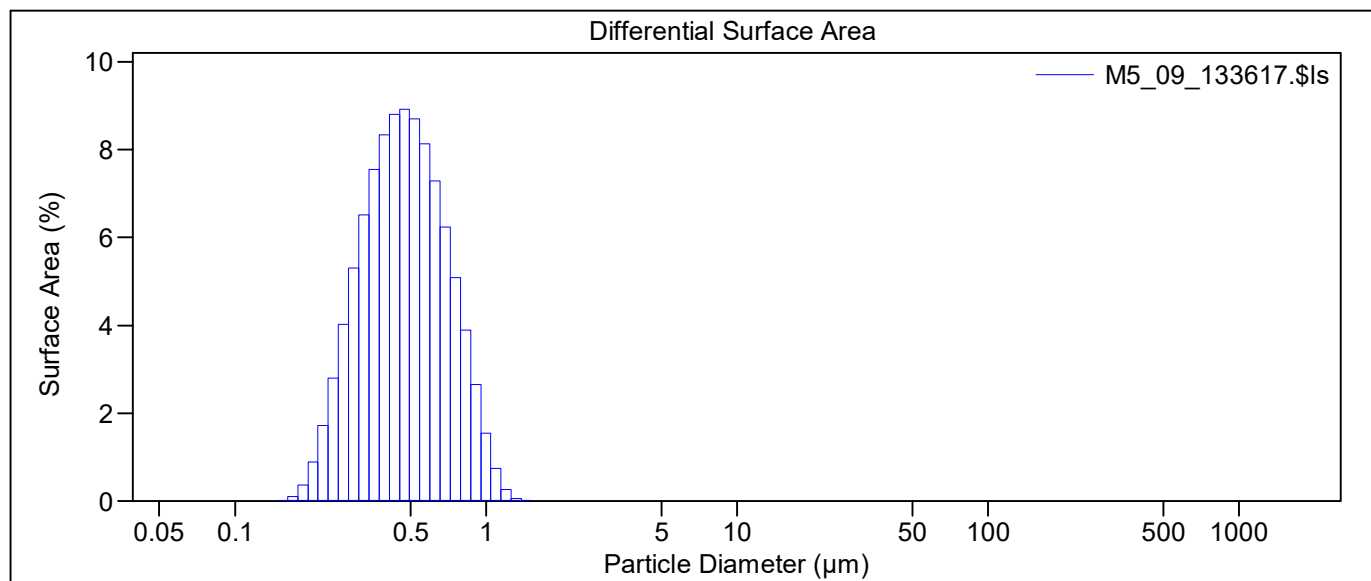
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_09_133617.\$ls		
	M5_09_133617.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.72%		
LS 13 320	Universal Liquid Module		
Start time:	13:34	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_09_133617.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.211 μm
Mean:	0.579 μm		Variance:	0.044 μm ²
Median:	0.551 μm		C.V.:	36.4%
Mean/Median ratio:	1.051		Skewness:	0.603 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.023 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.326 μm	0.417 μm	0.551 μm	0.715 μm	0.873 μm





M5.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0.00034	0.0012	0.010
15	0.148	0.155	0.0056	0.018	0.13
16	0.162	0.170	0.035	0.10	0.60
17	0.178	0.186	0.13	0.36	1.74

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.36	0.89	3.52
19	0.214	0.225	0.77	1.72	5.66
20	0.235	0.247	1.37	2.79	7.64
21	0.258	0.271	2.16	4.03	9.14
22	0.284	0.297	3.13	5.31	10.0
23	0.311	0.326	4.21	6.51	10.2
24	0.342	0.358	5.36	7.55	9.79
25	0.375	0.393	6.49	8.33	8.97
26	0.412	0.431	7.53	8.81	7.86
27	0.452	0.474	8.38	8.93	6.62
28	0.496	0.520	8.98	8.71	5.35
29	0.545	0.571	9.21	8.13	4.15
30	0.598	0.627	9.06	7.29	3.09
31	0.656	0.688	8.52	6.25	2.19
32	0.721	0.755	7.63	5.09	1.49
33	0.791	0.829	6.40	3.90	0.94
34	0.868	0.910	4.79	2.65	0.53
35	0.953	0.999	3.07	1.55	0.26
36	1.047	1.097	1.61	0.74	0.10
37	1.149	1.204	0.62	0.26	0.030
38	1.261	1.321	0.17	0.063	0.0060
39	1.385	1.451	0.026	0.0092	0.00072
40	1.520	1.592	0.0013	0.00040	0.000026
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

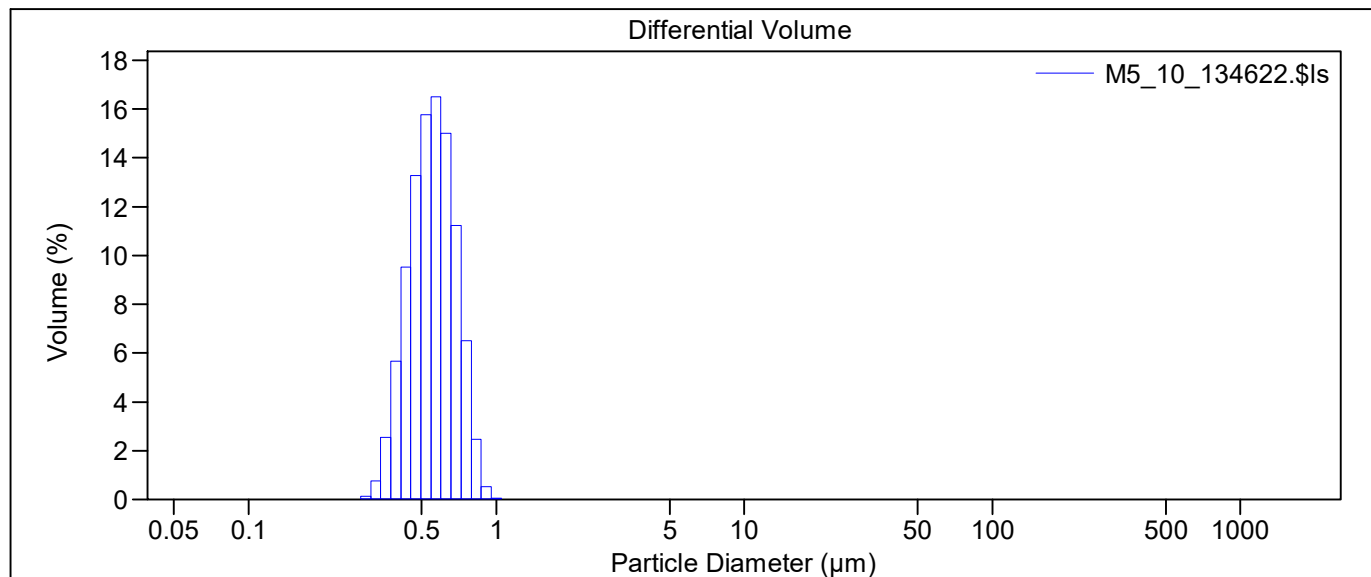
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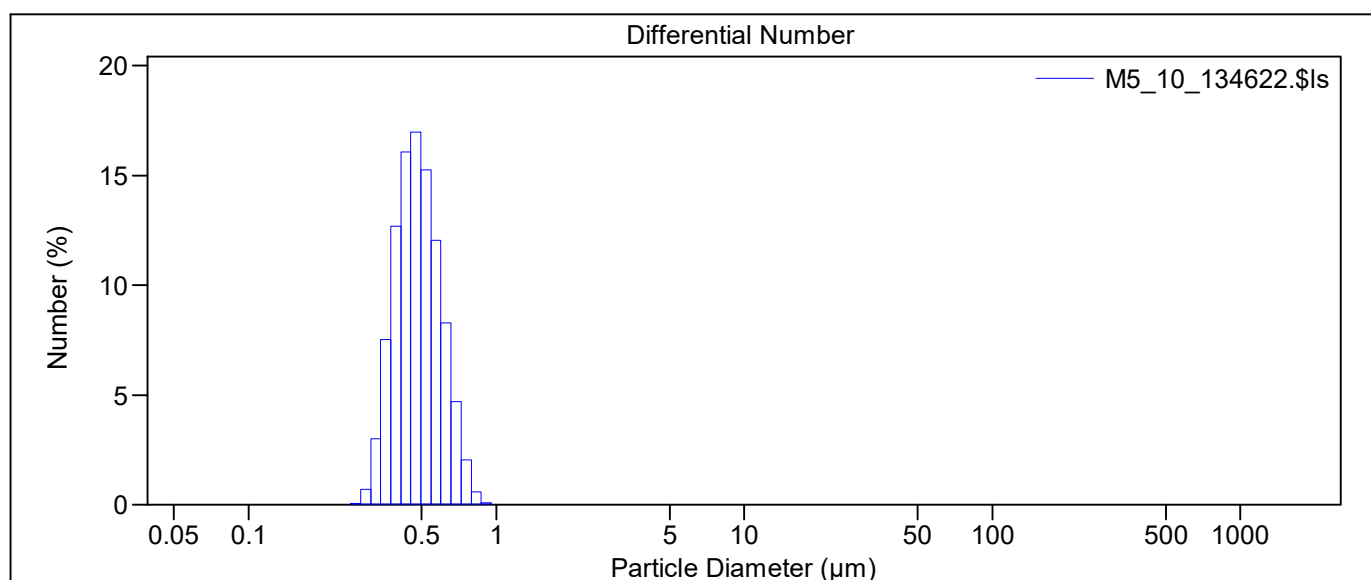
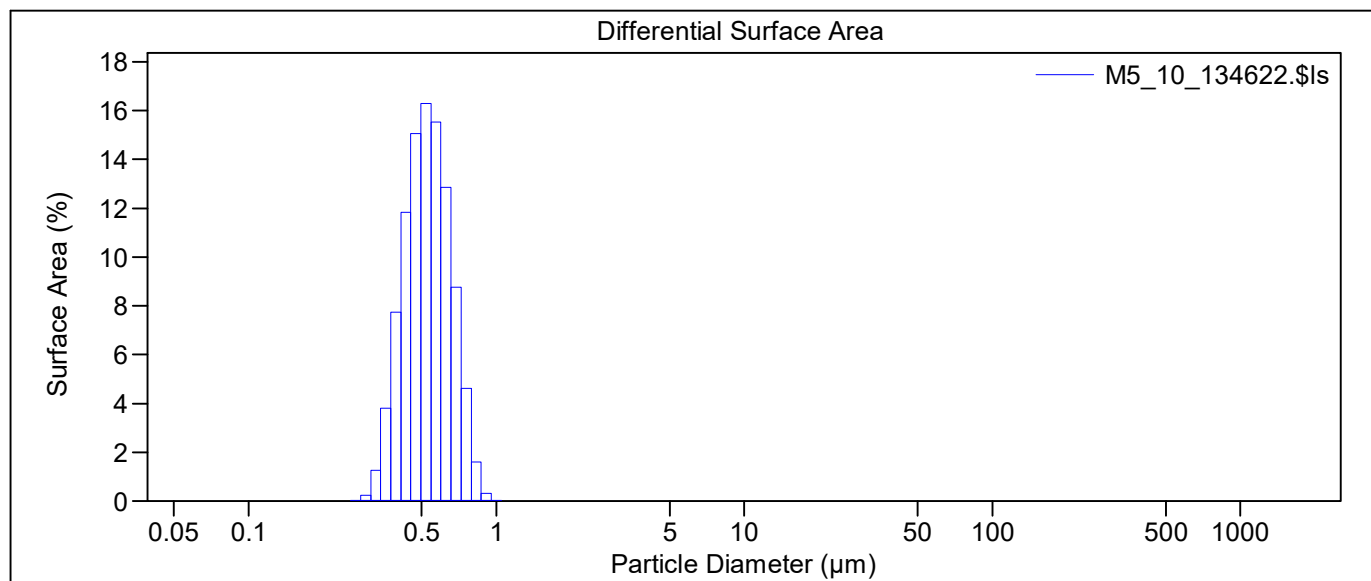
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_10_134622.\$ls		
	M5_10_134622.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.14%		
LS 13 320	Universal Liquid Module		
Start time:	13:44	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_10_134622.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.116 μm
Mean:	0.561 μm		Variance:	0.013 μm ²
Median:	0.552 μm		C.V.:	20.7%
Mean/Median ratio:	1.016		Skewness:	0.377 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.225 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.416 μm	0.473 μm	0.552 μm	0.640 μm	0.718 μm





M5.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0.00017	0.00037	0.0015
21	0.258	0.271	0.011	0.021	0.072
22	0.284	0.297	0.13	0.24	0.69
23	0.311	0.326	0.77	1.27	3.01
24	0.342	0.358	2.54	3.81	7.51
25	0.375	0.393	5.67	7.74	12.7
26	0.412	0.431	9.51	11.8	16.1
27	0.452	0.474	13.3	15.1	17.0
28	0.496	0.520	15.8	16.3	15.2
29	0.545	0.571	16.5	15.5	12.1
30	0.598	0.627	15.0	12.9	8.27
31	0.656	0.688	11.2	8.77	4.68
32	0.721	0.755	6.50	4.63	2.05
33	0.791	0.829	2.47	1.60	0.59
34	0.868	0.910	0.53	0.31	0.096
35	0.953	0.999	0.053	0.029	0.0073
36	1.047	1.097	0.0010	0.00049	0.00010
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

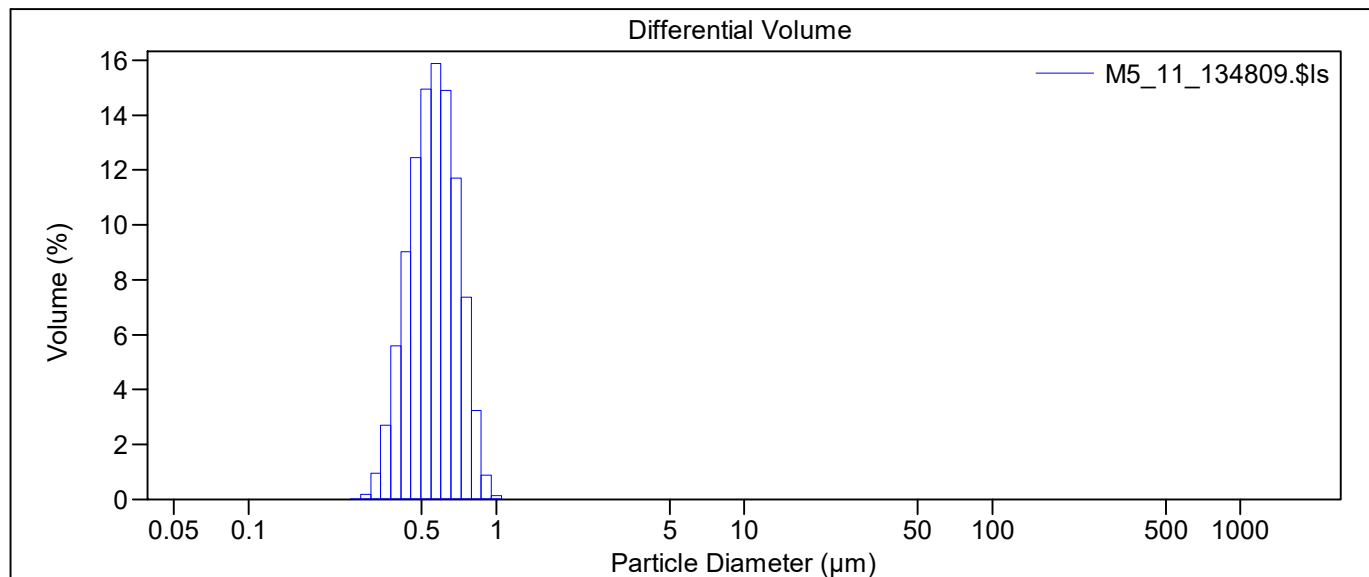
M5.\$av

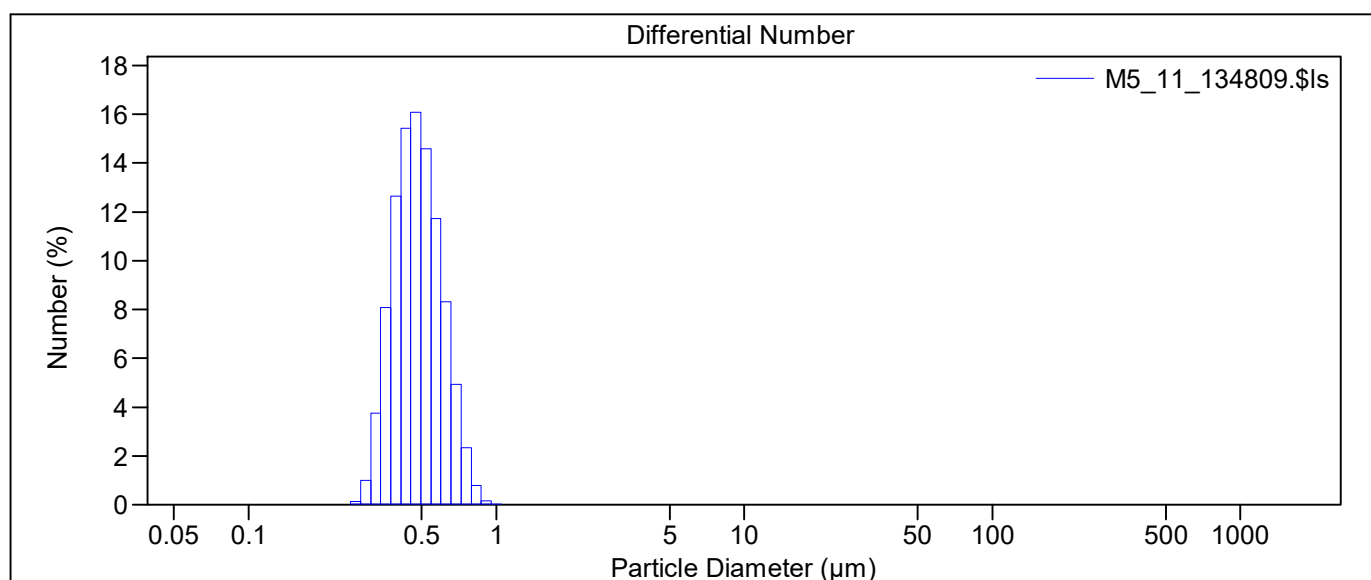
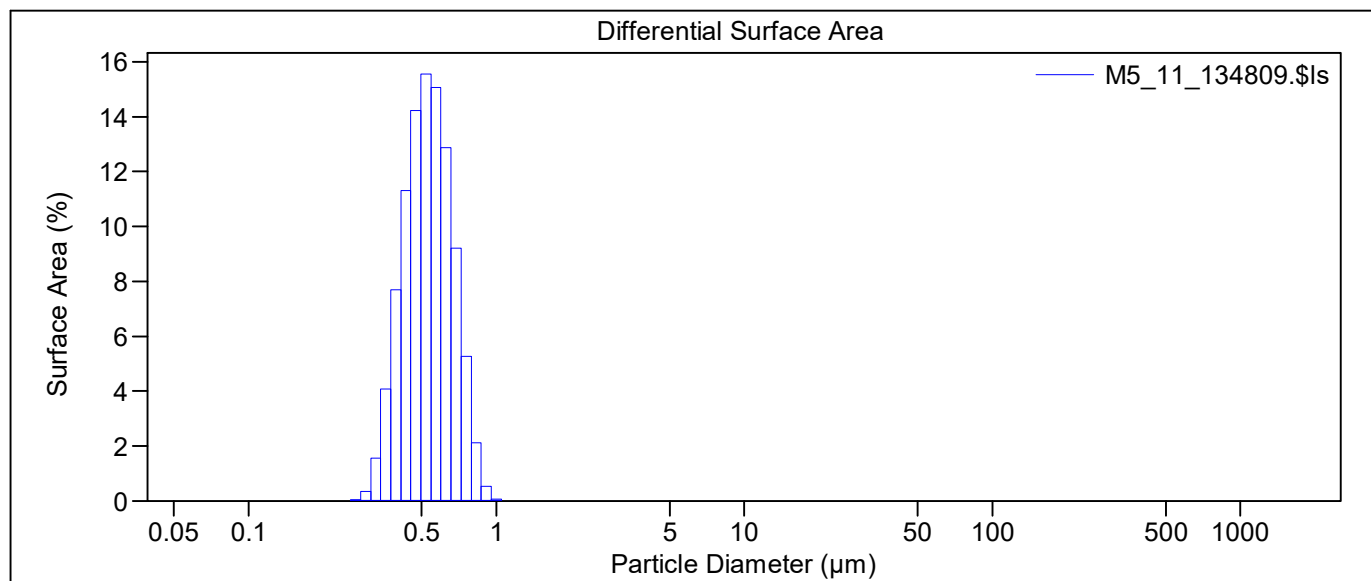
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_11_134809.\$ls		
	M5_11_134809.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.98%		
LS 13 320	Universal Liquid Module		
Start time:	13:46	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_11_134809.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.123 μm
Mean:	0.567 μm		Variance:	0.015 μm ²
Median:	0.559 μm		C.V.:	21.6%
Mean/Median ratio:	1.016		Skewness:	0.382 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.205 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.414 μm	0.475 μm	0.559 μm	0.650 μm	0.736 μm





M5.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0.00044	0.00096	0.0040
21	0.258	0.271	0.020	0.041	0.14
22	0.284	0.297	0.19	0.35	1.00
23	0.311	0.326	0.95	1.57	3.75
24	0.342	0.358	2.70	4.09	8.08
25	0.375	0.393	5.59	7.70	12.6
26	0.412	0.431	9.02	11.3	15.4
27	0.452	0.474	12.5	14.2	16.1
28	0.496	0.520	14.9	15.6	14.6
29	0.545	0.571	15.9	15.1	11.7
30	0.598	0.627	14.9	12.9	8.31
31	0.656	0.688	11.7	9.22	4.94
32	0.721	0.755	7.36	5.28	2.35
33	0.791	0.829	3.24	2.12	0.78
34	0.868	0.910	0.89	0.53	0.16
35	0.953	0.999	0.13	0.071	0.018
36	1.047	1.097	0.0074	0.0036	0.00077
37	1.149	1.204	0.000078	0.000035	0.000006
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

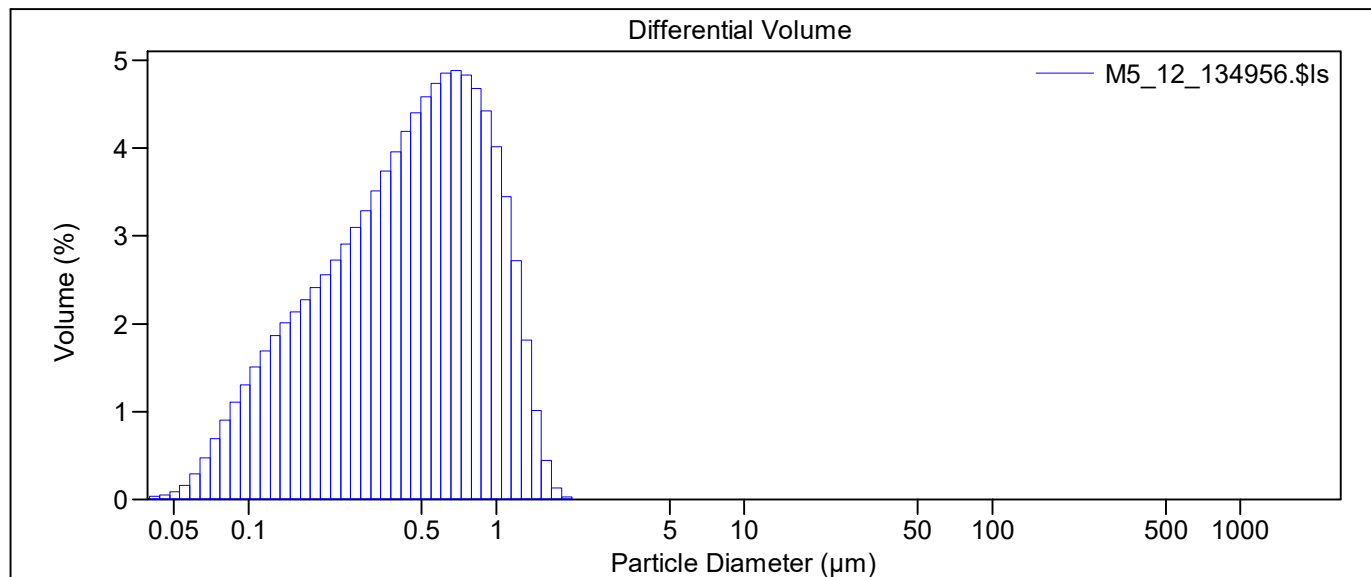
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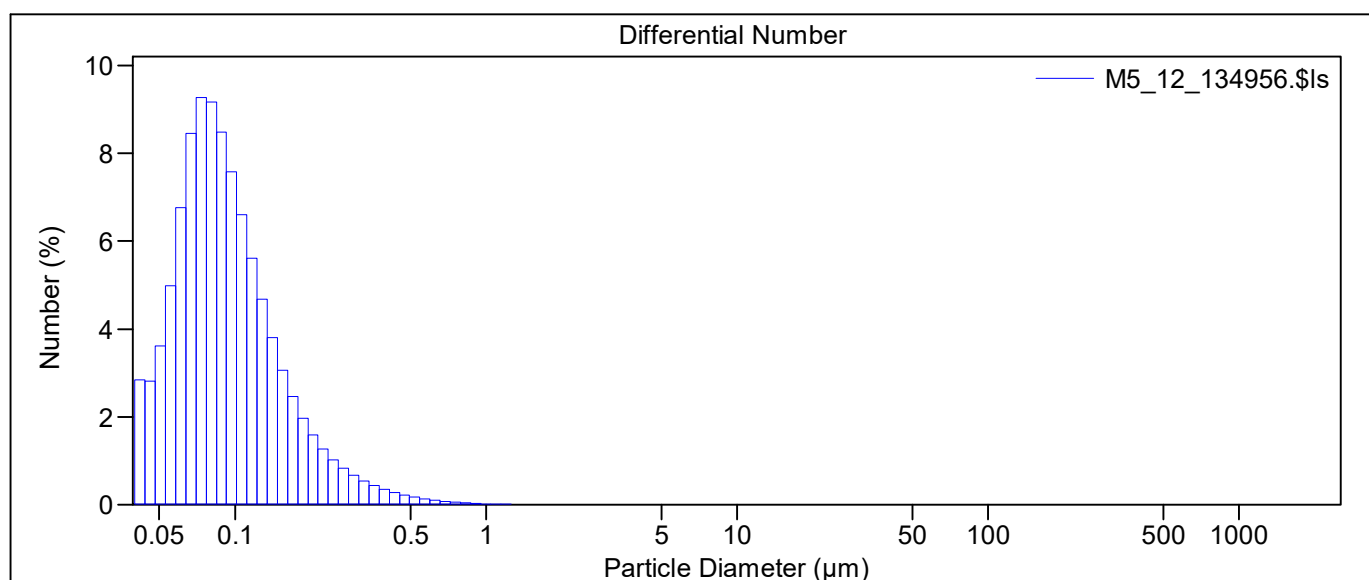
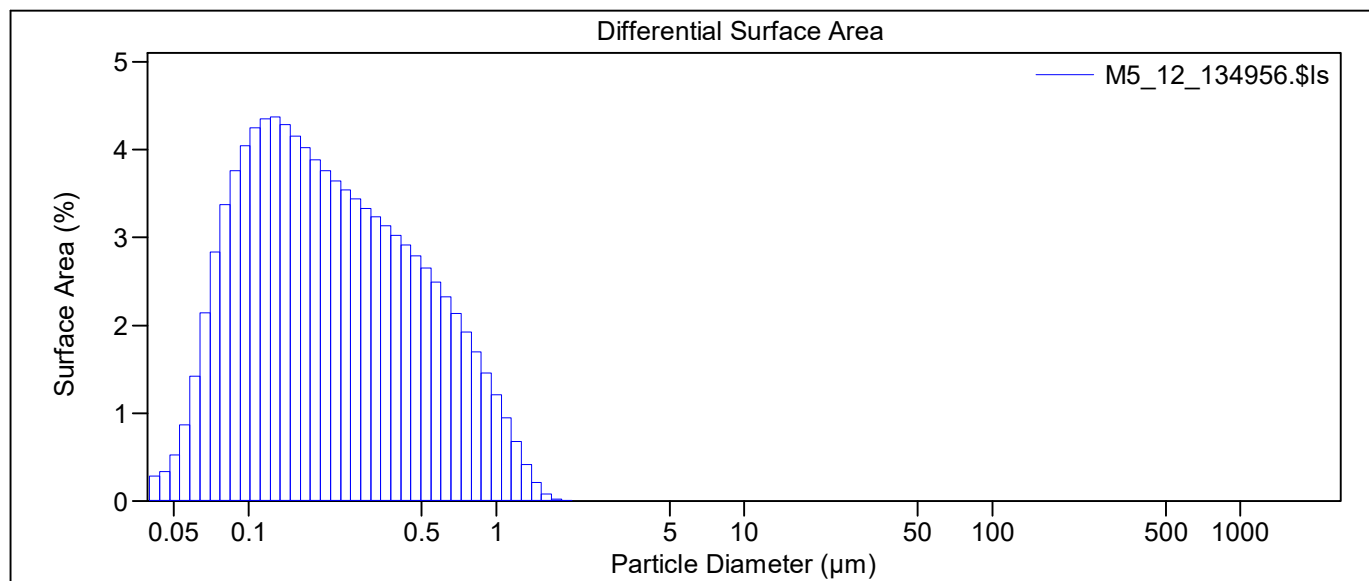
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_12_134956.\$ls		
	M5_12_134956.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.73%		
LS 13 320	Universal Liquid Module		
Start time:	13:48	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_12_134956.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.347 μm
Mean:	0.530 μm		Variance:	0.121 μm ²
Median:	0.462 μm		C.V.:	65.5%
Mean/Median ratio:	1.147		Skewness:	0.764 Right skewed
Mode:	0.688 μm		Kurtosis:	-0.060 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.133 μm	0.241 μm	0.462 μm	0.758 μm	1.037 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.039	0.28	2.84
2	0.044	0.046	0.052	0.34	2.81
3	0.048	0.050	0.088	0.52	3.61
4	0.053	0.055	0.16	0.87	4.98
5	0.058	0.061	0.29	1.42	6.77
6	0.064	0.067	0.48	2.14	8.45
7	0.070	0.073	0.69	2.83	9.28
8	0.077	0.080	0.90	3.38	9.18
9	0.084	0.088	1.11	3.76	8.48
10	0.093	0.097	1.31	4.05	7.57
11	0.102	0.106	1.51	4.25	6.60
12	0.112	0.117	1.69	4.35	5.61
13	0.122	0.128	1.87	4.38	4.68
14	0.134	0.141	2.01	4.29	3.80
15	0.148	0.155	2.14	4.15	3.06
16	0.162	0.170	2.27	4.02	2.46
17	0.178	0.186	2.41	3.89	1.97

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.56	3.76	1.58
19	0.214	0.225	2.72	3.65	1.27
20	0.235	0.247	2.91	3.54	1.03
21	0.258	0.271	3.10	3.44	0.83
22	0.284	0.297	3.29	3.33	0.66
23	0.311	0.326	3.51	3.24	0.54
24	0.342	0.358	3.74	3.14	0.43
25	0.375	0.393	3.96	3.03	0.35
26	0.412	0.431	4.19	2.92	0.28
27	0.452	0.474	4.40	2.79	0.22
28	0.496	0.520	4.59	2.65	0.17
29	0.545	0.571	4.74	2.49	0.13
30	0.598	0.627	4.85	2.33	0.10
31	0.656	0.688	4.89	2.14	0.079
32	0.721	0.755	4.83	1.92	0.059
33	0.791	0.829	4.68	1.70	0.043
34	0.868	0.910	4.42	1.46	0.031
35	0.953	0.999	4.02	1.21	0.021
36	1.047	1.097	3.45	0.94	0.014
37	1.149	1.204	2.72	0.68	0.0083
38	1.261	1.321	1.82	0.41	0.0042
39	1.385	1.451	1.02	0.21	0.0018
40	1.520	1.592	0.44	0.083	0.00058
41	1.668	1.748	0.13	0.022	0.00013
42	1.832	1.919	0.026	0.0040	0.000019
43	2.011	2.107	0.0022	0.00032	0.000001
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

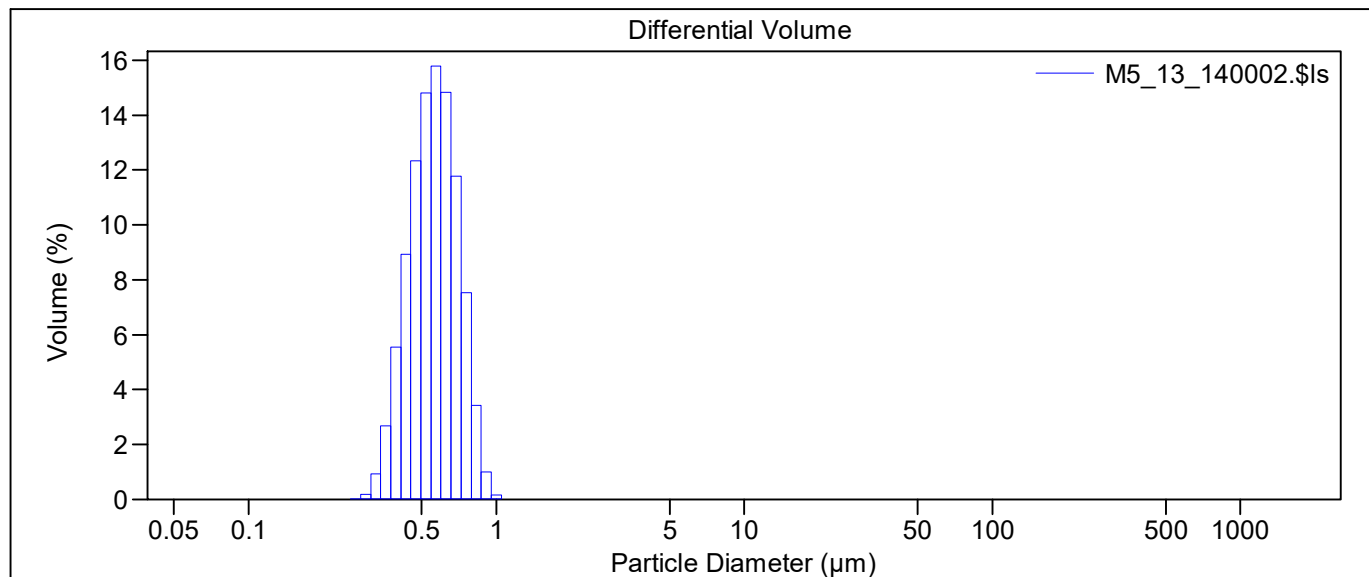
M5.\$av

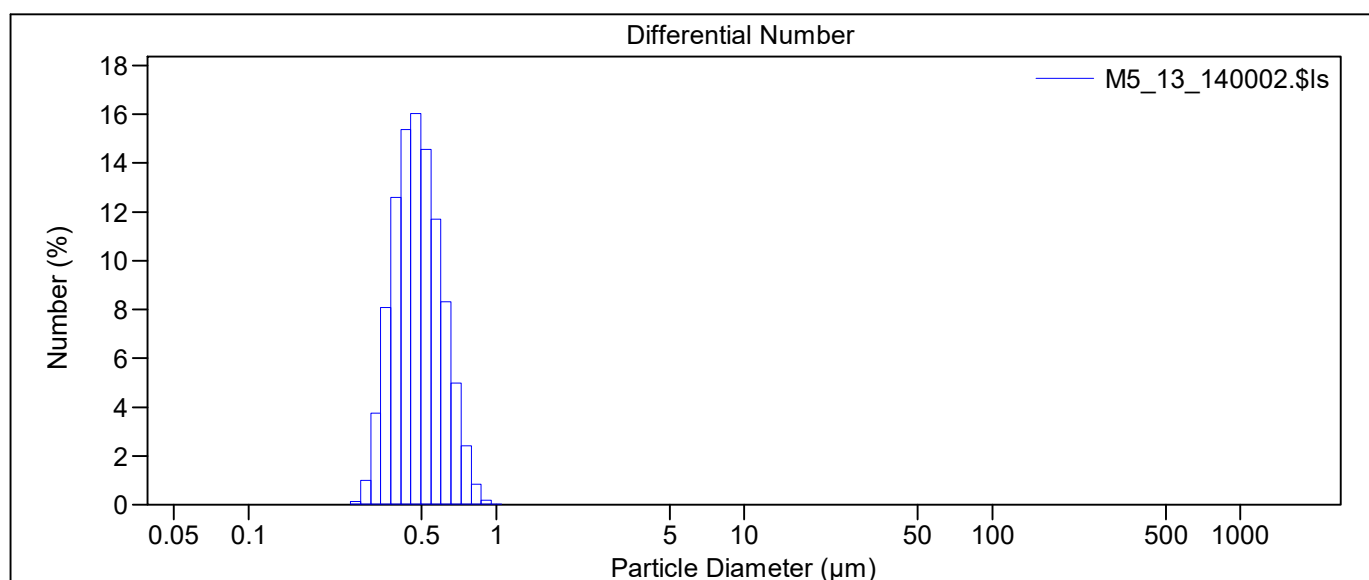
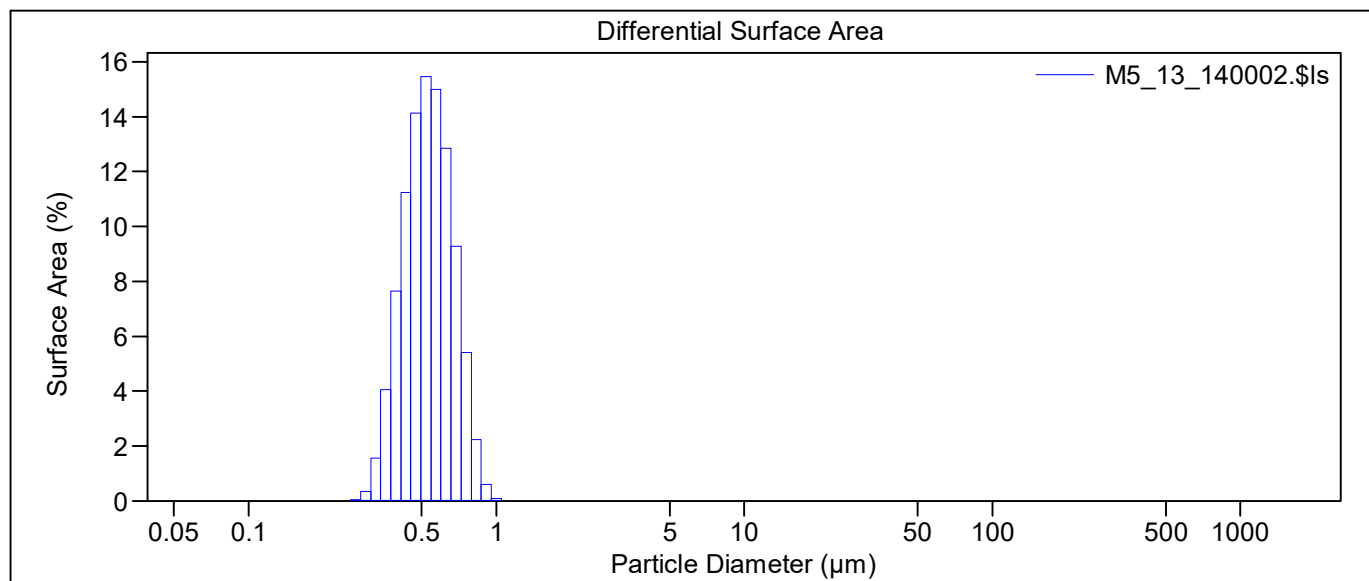
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_13_140002.\$ls		
	M5_13_140002.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.04%		
LS 13 320	Universal Liquid Module		
Start time:	13:58	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_13_140002.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.124 μm
Mean:	0.569 μm		Variance:	0.015 μm ²
Median:	0.560 μm		C.V.:	21.8%
Mean/Median ratio:	1.017		Skewness:	0.395 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.186 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.415 μm	0.476 μm	0.560 μm	0.652 μm	0.741 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0.00044	0.00096	0.0040
21	0.258	0.271	0.020	0.041	0.14
22	0.284	0.297	0.19	0.35	1.00
23	0.311	0.326	0.94	1.57	3.76
24	0.342	0.358	2.68	4.07	8.07
25	0.375	0.393	5.55	7.66	12.6
26	0.412	0.431	8.94	11.2	15.4
27	0.452	0.474	12.3	14.1	16.0
28	0.496	0.520	14.8	15.5	14.6
29	0.545	0.571	15.8	15.0	11.7
30	0.598	0.627	14.8	12.9	8.33
31	0.656	0.688	11.8	9.28	4.99
32	0.721	0.755	7.53	5.41	2.41
33	0.791	0.829	3.43	2.24	0.83
34	0.868	0.910	1.00	0.60	0.18
35	0.953	0.999	0.16	0.087	0.022
36	1.047	1.097	0.011	0.0055	0.0012
37	1.149	1.204	0.00016	0.000070	0.000012
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

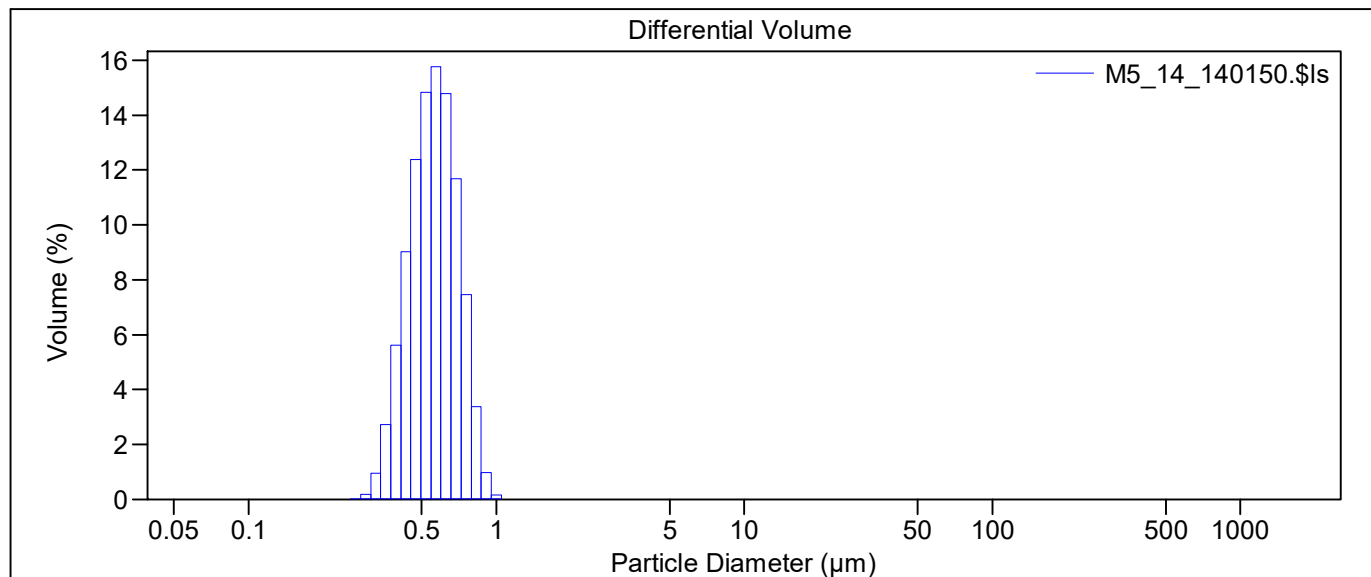
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_14_140150.\$ls		
	M5_14_140150.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.01%		
LS 13 320	Universal Liquid Module		
Start time:	14:00	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

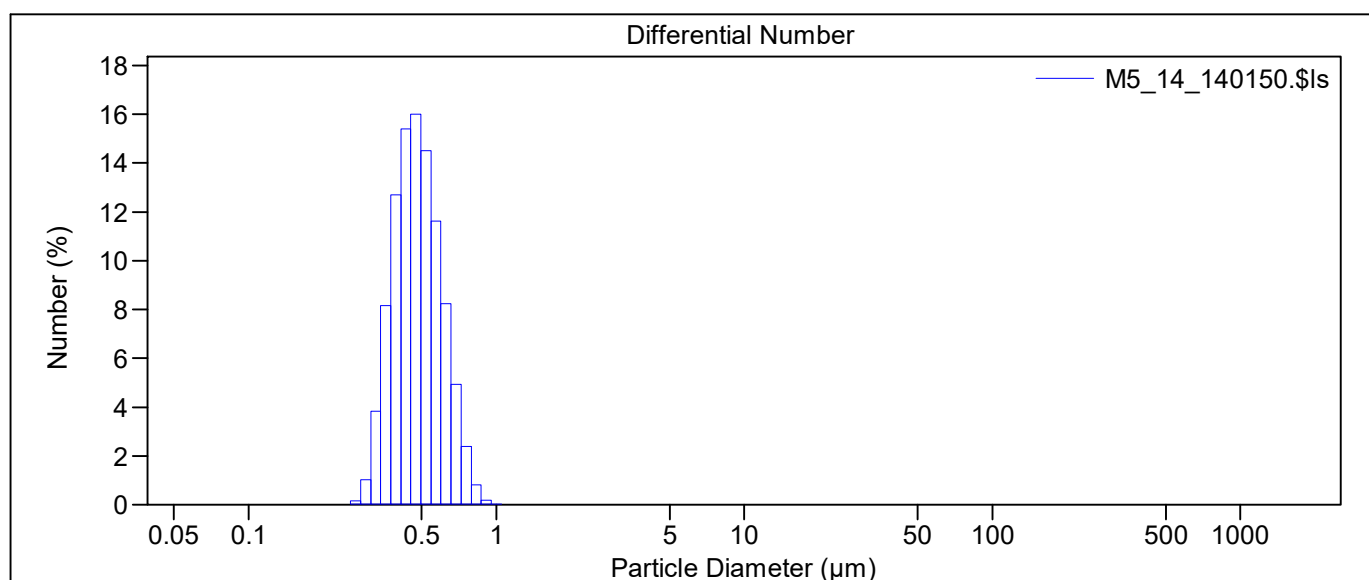
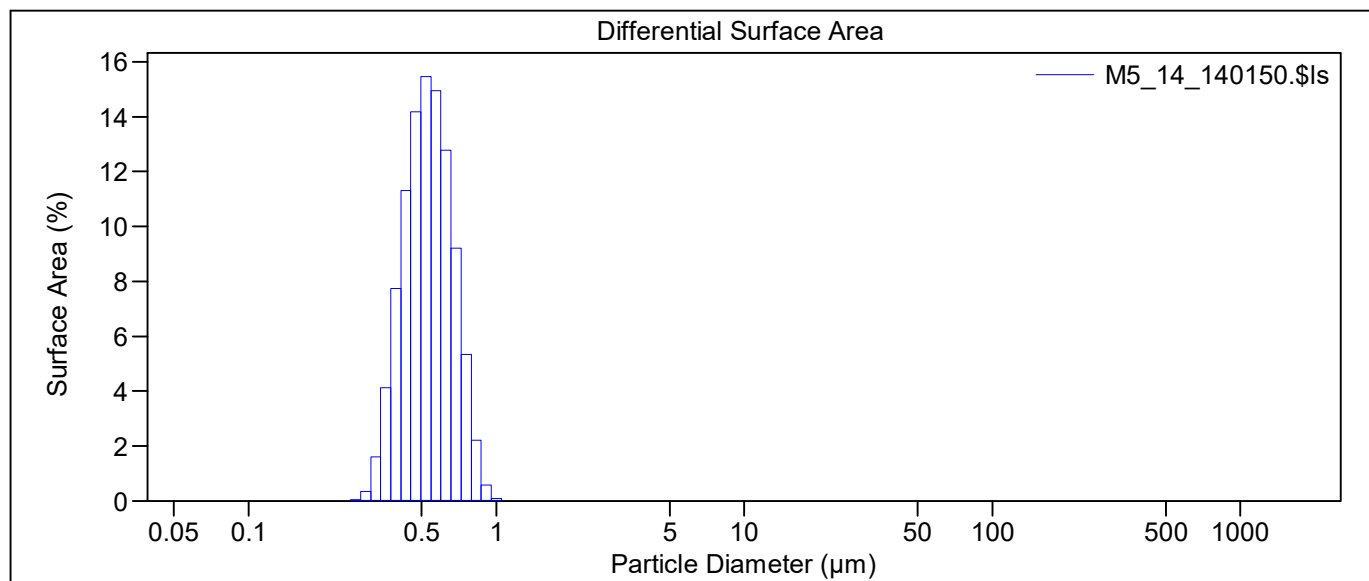
Volume Statistics (Arithmetic) M5_14_140150.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.124 µm
Mean:	0.568 µm	Variance:	0.015 µm ²
Median:	0.559 µm	C.V.:	21.8%
Mean/Median ratio:	1.017	Skewness:	0.395 Right skewed
Mode:	0.571 µm	Kurtosis:	-0.189 Platykurtic

<10%	<25%	<50%	<75%	<90%
0.414 µm	0.475 µm	0.559 µm	0.651 µm	0.739 µm





M5.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0.00046	0.00100	0.0042
21	0.258	0.271	0.021	0.042	0.15
22	0.284	0.297	0.20	0.36	1.02
23	0.311	0.326	0.97	1.60	3.82
24	0.342	0.358	2.73	4.13	8.17
25	0.375	0.393	5.62	7.74	12.7
26	0.412	0.431	9.02	11.3	15.4
27	0.452	0.474	12.4	14.2	16.0
28	0.496	0.520	14.8	15.5	14.5
29	0.545	0.571	15.8	15.0	11.6
30	0.598	0.627	14.8	12.8	8.25
31	0.656	0.688	11.7	9.21	4.93
32	0.721	0.755	7.45	5.35	2.38
33	0.791	0.829	3.38	2.21	0.81
34	0.868	0.910	0.98	0.58	0.18
35	0.953	0.999	0.15	0.084	0.021
36	1.047	1.097	0.010	0.0051	0.0011
37	1.149	1.204	0.00014	0.000062	0.000011
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

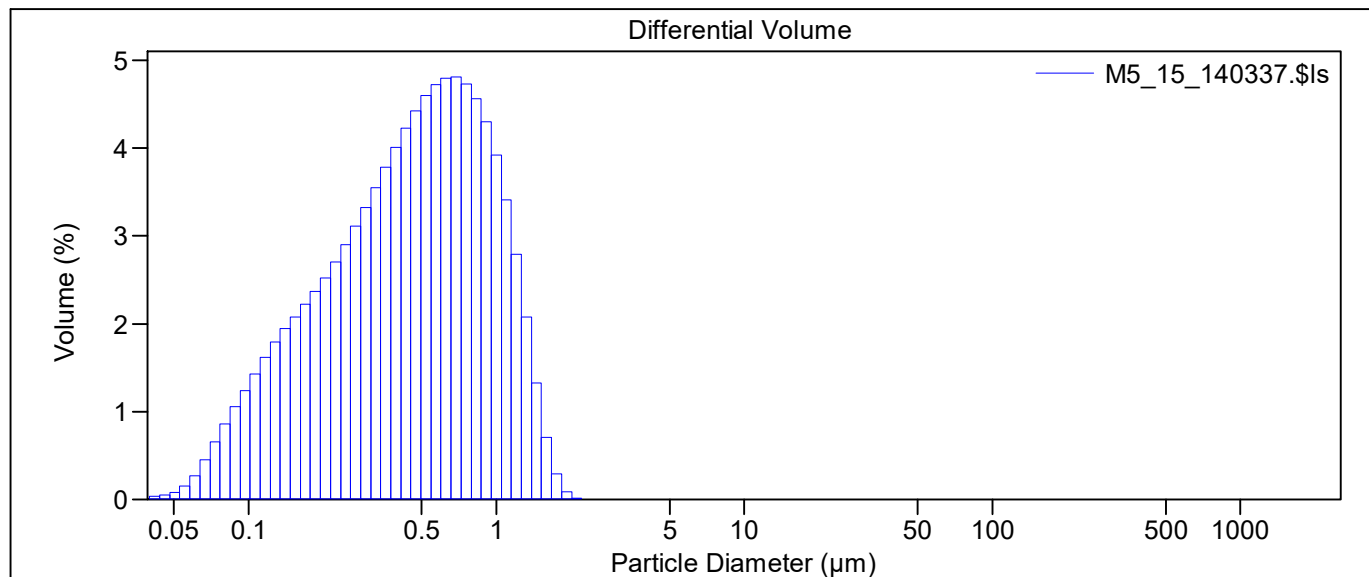
M5.\$av

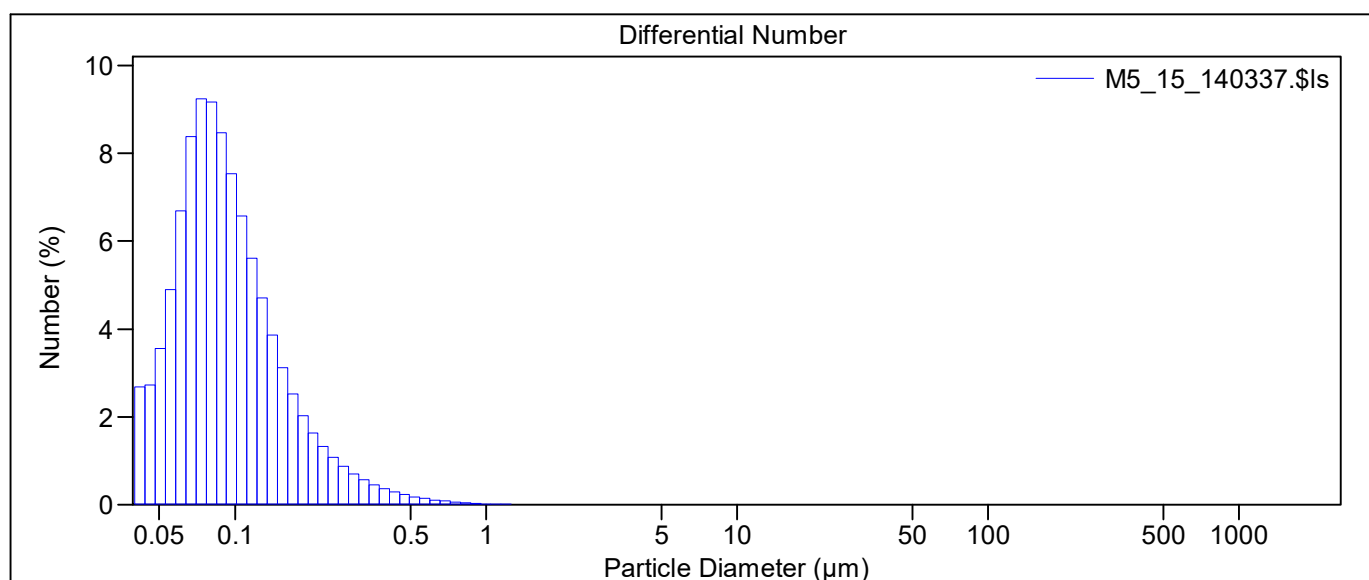
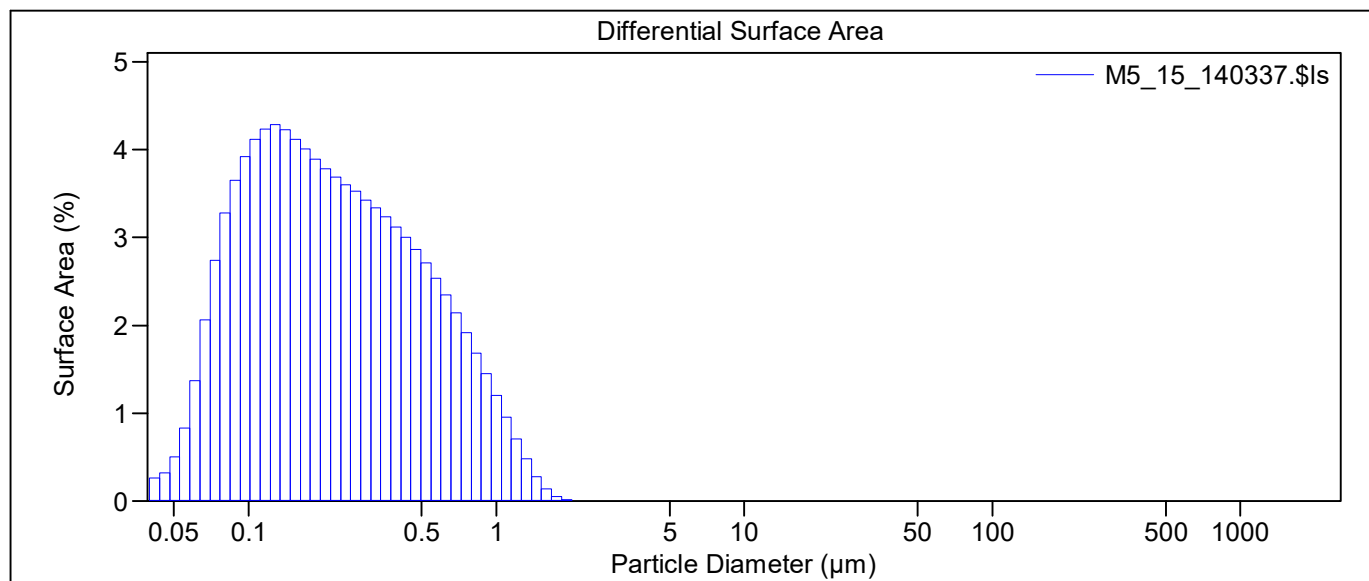
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M5\M5_15_140337.\$ls		
	M5_15_140337.\$ls		
File ID:	M5		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.75%		
LS 13 320	Universal Liquid Module		
Start time:	14:01	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M5_15_140337.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.542 μm	S.D.:	0.361 μm	
Median:	0.468 μm	Variance:	0.130 μm ²	
Mean/Median ratio:	1.160	C.V.:	66.5%	
Mode:	0.688 μm	Skewness:	0.848 Right skewed	
		Kurtosis:	0.190 Leptokurtic	
<10%	<25%	<50%	<75%	<90%
0.137 μm	0.247 μm	0.468 μm	0.769 μm	1.068 μm





M5.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.036	0.26	2.68
2	0.044	0.046	0.048	0.32	2.73
3	0.048	0.050	0.082	0.50	3.55
4	0.053	0.055	0.15	0.83	4.89
5	0.058	0.061	0.27	1.37	6.69
6	0.064	0.067	0.45	2.06	8.38
7	0.070	0.073	0.66	2.74	9.24
8	0.077	0.080	0.86	3.28	9.17
9	0.084	0.088	1.05	3.65	8.47
10	0.093	0.097	1.24	3.92	7.54
11	0.102	0.106	1.43	4.12	6.57
12	0.112	0.117	1.62	4.23	5.61
13	0.122	0.128	1.79	4.28	4.71
14	0.134	0.141	1.94	4.23	3.86
15	0.148	0.155	2.08	4.12	3.12
16	0.162	0.170	2.22	4.01	2.52
17	0.178	0.186	2.37	3.89	2.03

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.53	3.78	1.64
19	0.214	0.225	2.70	3.69	1.32
20	0.235	0.247	2.90	3.60	1.07
21	0.258	0.271	3.11	3.52	0.87
22	0.284	0.297	3.33	3.43	0.70
23	0.311	0.326	3.55	3.33	0.57
24	0.342	0.358	3.78	3.24	0.46
25	0.375	0.393	4.01	3.12	0.37
26	0.412	0.431	4.23	3.00	0.29
27	0.452	0.474	4.43	2.86	0.23
28	0.496	0.520	4.60	2.71	0.18
29	0.545	0.571	4.72	2.53	0.14
30	0.598	0.627	4.80	2.35	0.11
31	0.656	0.688	4.81	2.14	0.082
32	0.721	0.755	4.73	1.92	0.061
33	0.791	0.829	4.57	1.69	0.044
34	0.868	0.910	4.30	1.45	0.032
35	0.953	0.999	3.92	1.20	0.022
36	1.047	1.097	3.41	0.95	0.014
37	1.149	1.204	2.79	0.71	0.0089
38	1.261	1.321	2.07	0.48	0.0050
39	1.385	1.451	1.32	0.28	0.0024
40	1.520	1.592	0.71	0.14	0.00097
41	1.668	1.748	0.29	0.052	0.00031
42	1.832	1.919	0.084	0.013	0.000066
43	2.011	2.107	0.016	0.0024	0.000010
44	2.207	2.313	0.0014	0.00018	0.000001
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M5.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M6\M6.\$sav M6.\$av

File ID: M6

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_01_153050.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M6\M6_02_153237.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M6\M6_03_153425.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M6\M6_04_154354.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M6\M6_08_155905.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M6\M6_15_162617.\$ls

Volume Statistics (Arithmetic) M6.\$av

Calculations from 0.040 µm to 2000 µm

Volume: 100%

Mean: 0.519 µm

S.D.: 0.206 µm

Median: 0.526 µm

Variance: 0.042 µm²

Mean/Median ratio: 0.988

C.V.: 39.6%

Mode: 0.571 µm

Skewness: 0.102 Right skewed

Kurtosis: 1.398 Leptokurtic

<10%

<25%

<50%

<75%

<90%

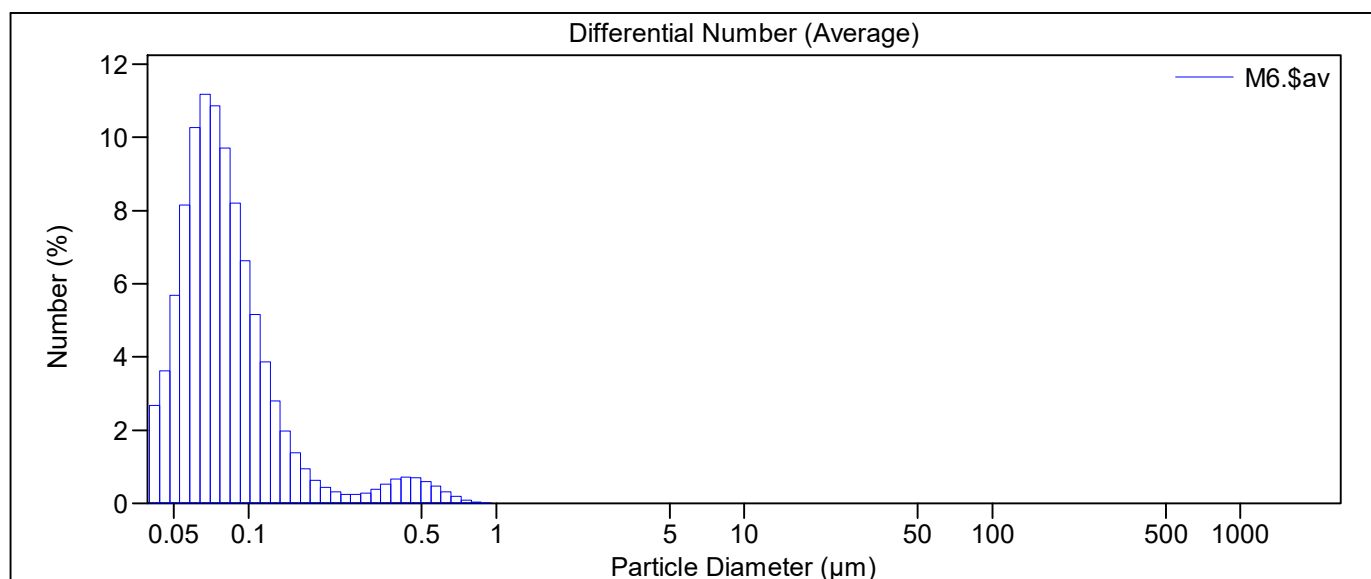
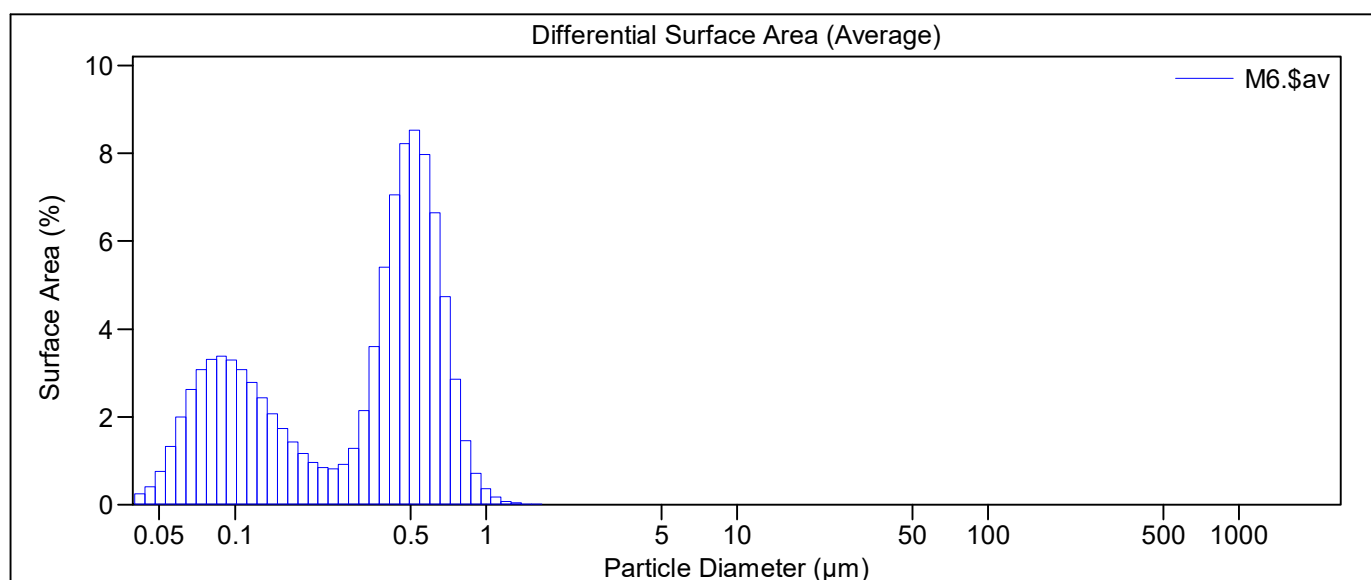
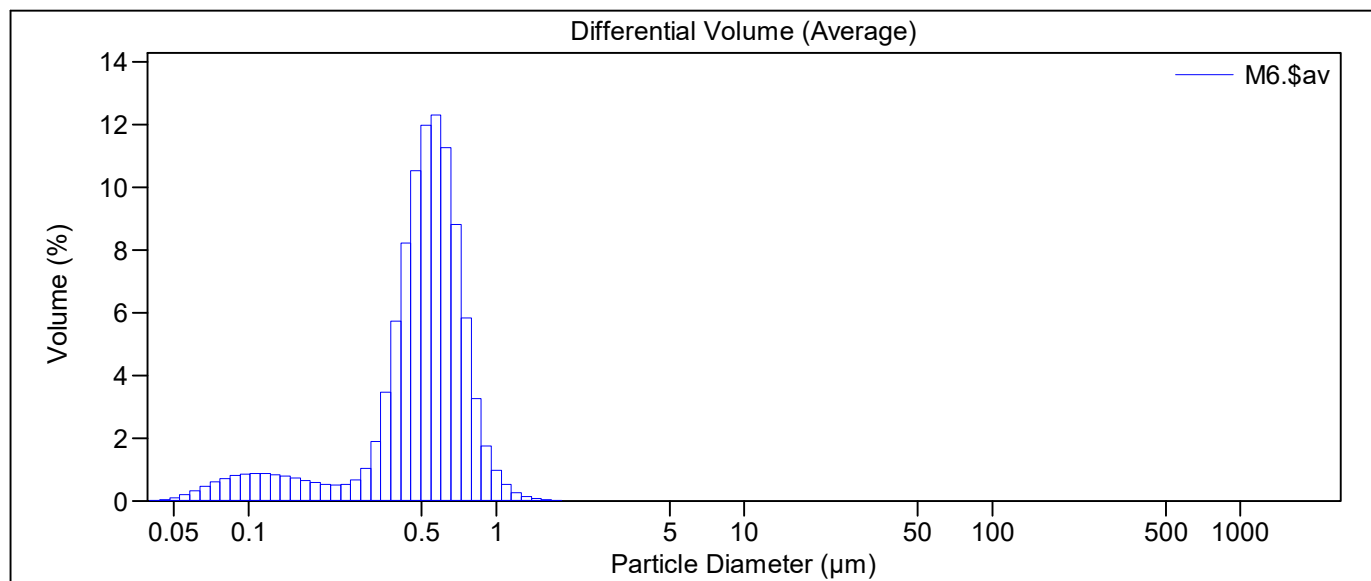
0.211 µm

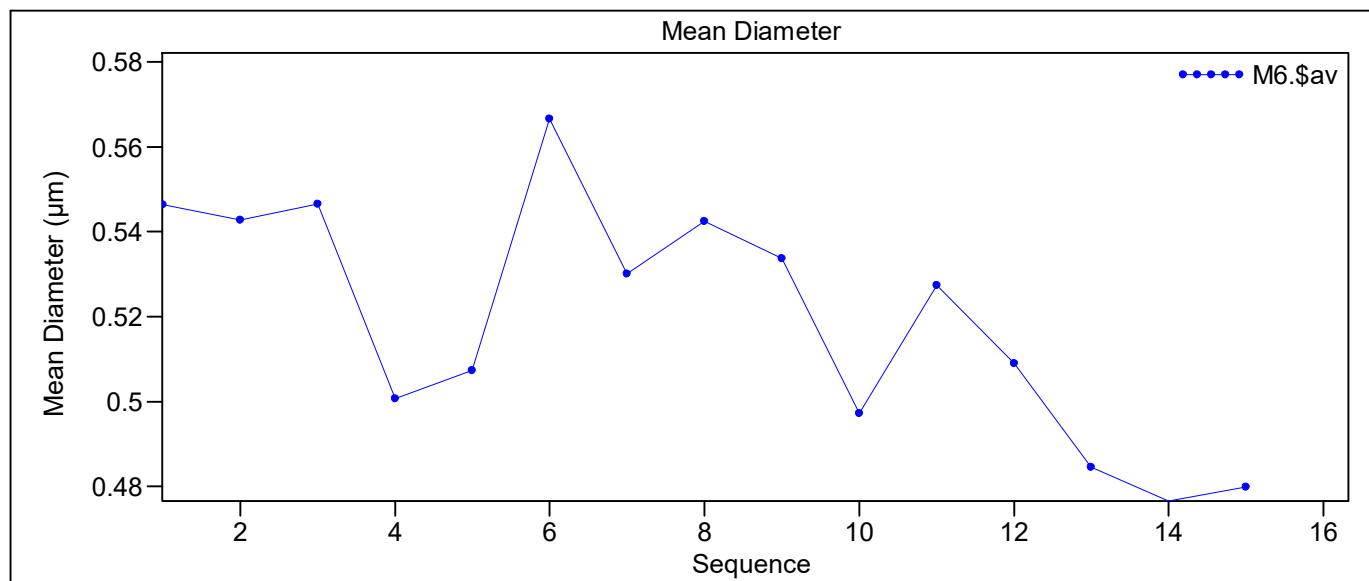
0.417 µm

0.526 µm

0.639 µm

0.756 µm





M6.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.028	0.25	2.67
2	0.044	0.046	0.050	0.40	3.62
3	0.048	0.050	0.10	0.76	5.69
4	0.053	0.055	0.20	1.32	8.15
5	0.058	0.061	0.33	2.00	10.3
6	0.064	0.067	0.48	2.63	11.2
7	0.070	0.073	0.61	3.08	10.9
8	0.077	0.080	0.72	3.32	9.71
9	0.084	0.088	0.81	3.38	8.21
10	0.093	0.097	0.86	3.29	6.64
11	0.102	0.106	0.89	3.08	5.15
12	0.112	0.117	0.88	2.79	3.87
13	0.122	0.128	0.85	2.44	2.81
14	0.134	0.141	0.79	2.08	1.99
15	0.148	0.155	0.72	1.73	1.38
16	0.162	0.170	0.66	1.43	0.94
17	0.178	0.186	0.59	1.17	0.64
18	0.195	0.205	0.53	0.97	0.44
19	0.214	0.225	0.51	0.84	0.32
20	0.235	0.247	0.54	0.81	0.25
21	0.258	0.271	0.67	0.92	0.24
22	0.284	0.297	1.03	1.29	0.28
23	0.311	0.326	1.90	2.15	0.38
24	0.342	0.358	3.48	3.59	0.53
25	0.375	0.393	5.74	5.40	0.66
26	0.412	0.431	8.22	7.05	0.72
27	0.452	0.474	10.5	8.22	0.70
28	0.496	0.520	12.0	8.53	0.60
29	0.545	0.571	12.3	7.98	0.46
30	0.598	0.627	11.3	6.65	0.32
31	0.656	0.688	8.82	4.74	0.19
32	0.721	0.755	5.84	2.86	0.095
33	0.791	0.829	3.26	1.46	0.040
34	0.868	0.910	1.76	0.72	0.016
35	0.953	0.999	0.98	0.36	0.0069
36	1.047	1.097	0.52	0.18	0.0028
37	1.149	1.204	0.26	0.079	0.0010
38	1.261	1.321	0.14	0.039	0.00043
39	1.385	1.451	0.078	0.020	0.00018
40	1.520	1.592	0.039	0.0092	0.000069
41	1.668	1.748	0.016	0.0033	0.000021

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.0044	0.00086	0.000004
43	2.011	2.107	0.00083	0.00015	0.000001
44	2.207	2.313	0.000065	0.000010	3.69E-8
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

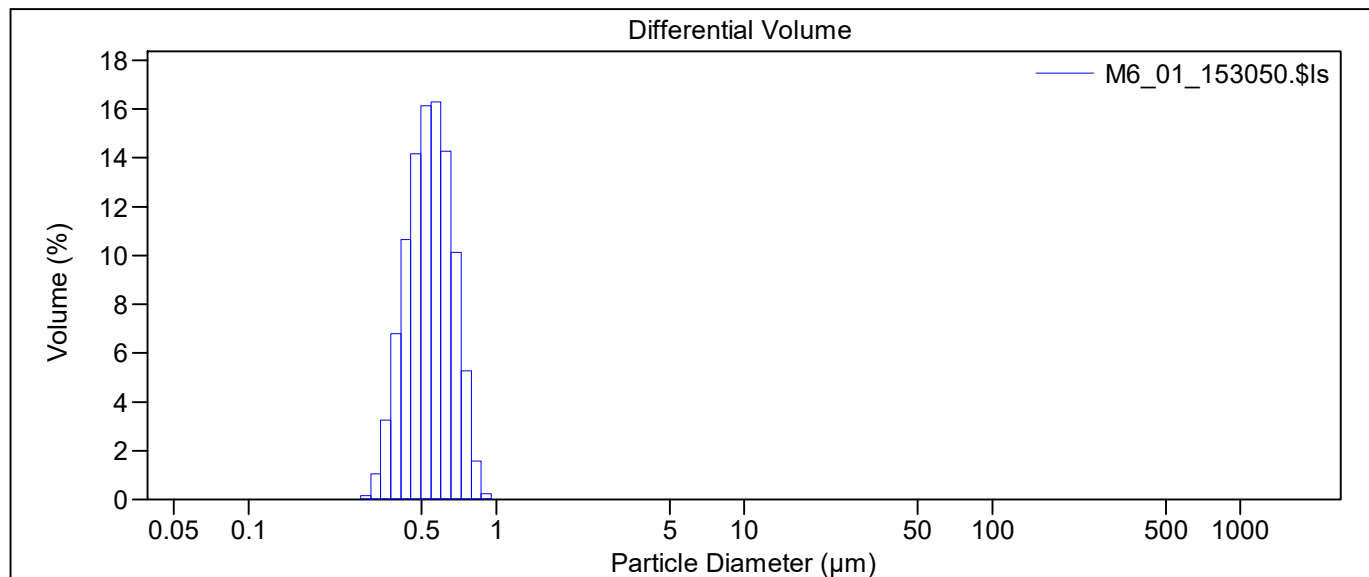
M6.\$av

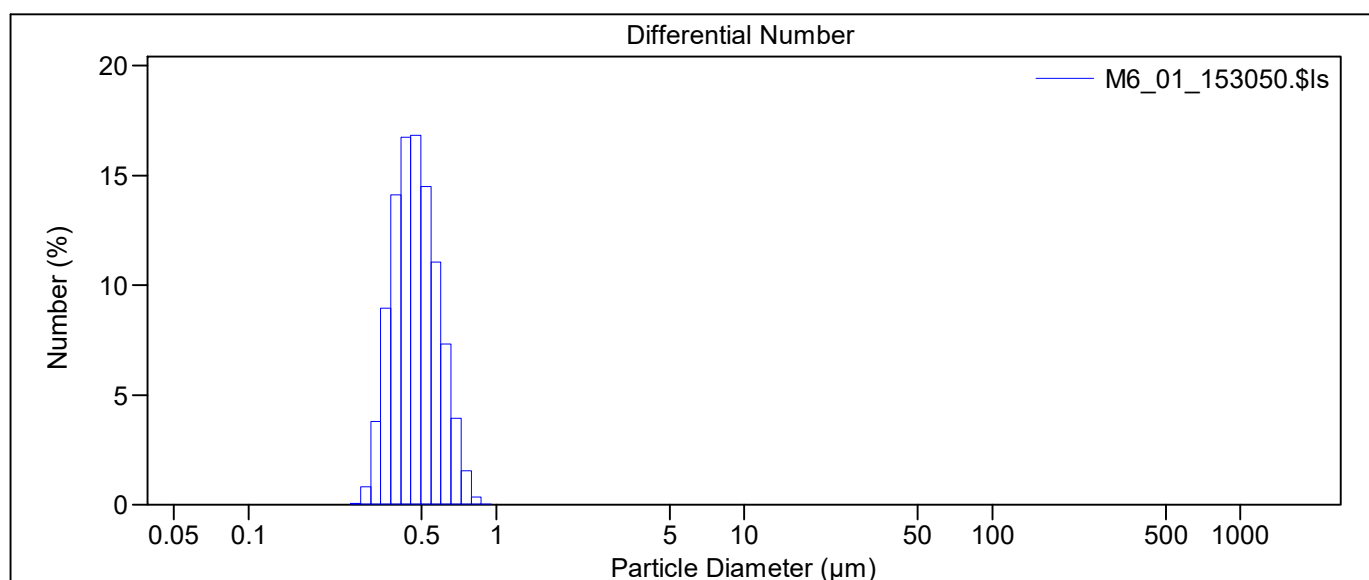
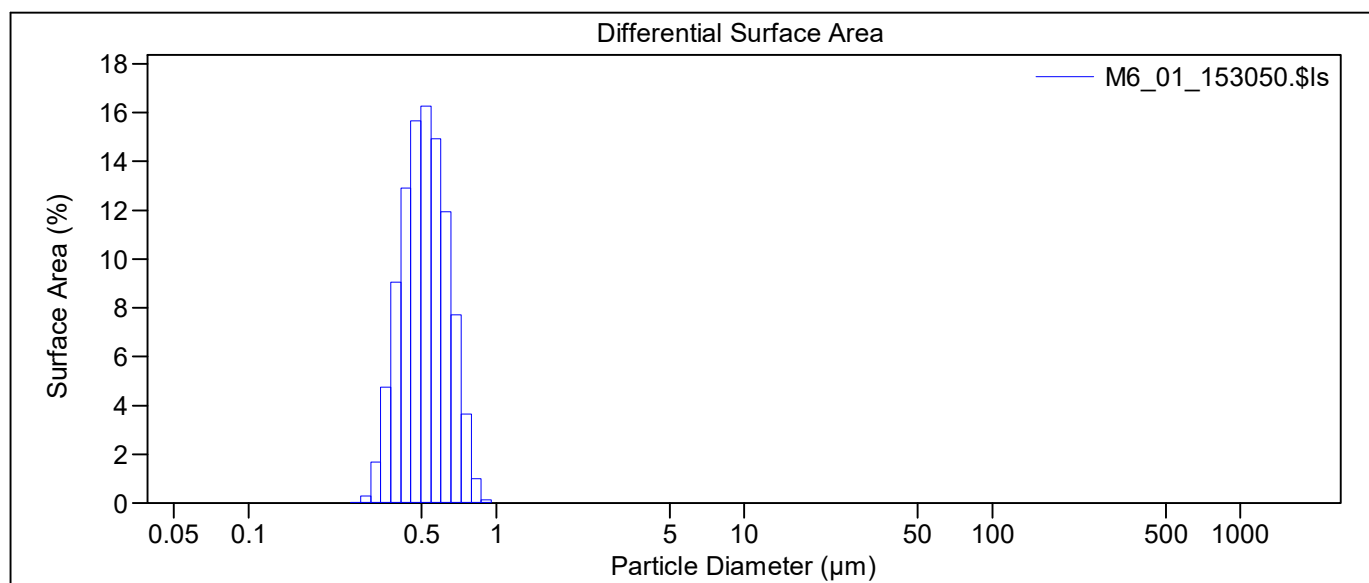
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_01_153050.\$ls		
	M6_01_153050.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.11%		
LS 13 320	Universal Liquid Module		
Start time:	15:29	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_01_153050.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.112 µm
Mean:	0.546 µm		Variance:	0.013 µm ²
Median:	0.538 µm		C.V.:	20.5%
Mean/Median ratio:	1.015		Skewness:	0.351 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.316 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.405 µm	0.462 µm	0.538 µm	0.625 µm	0.702 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0096	0.019	0.061
22	0.284	0.297	0.17	0.29	0.80
23	0.311	0.326	1.04	1.67	3.79
24	0.342	0.358	3.25	4.75	8.94
25	0.375	0.393	6.79	9.05	14.1
26	0.412	0.431	10.6	12.9	16.7
27	0.452	0.474	14.2	15.7	16.8
28	0.496	0.520	16.1	16.3	14.5
29	0.545	0.571	16.3	14.9	11.1
30	0.598	0.627	14.3	11.9	7.33
31	0.656	0.688	10.1	7.71	3.93
32	0.721	0.755	5.28	3.66	1.55
33	0.791	0.829	1.57	0.99	0.35
34	0.868	0.910	0.23	0.13	0.039
35	0.953	0.999	0.0068	0.0036	0.00086
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

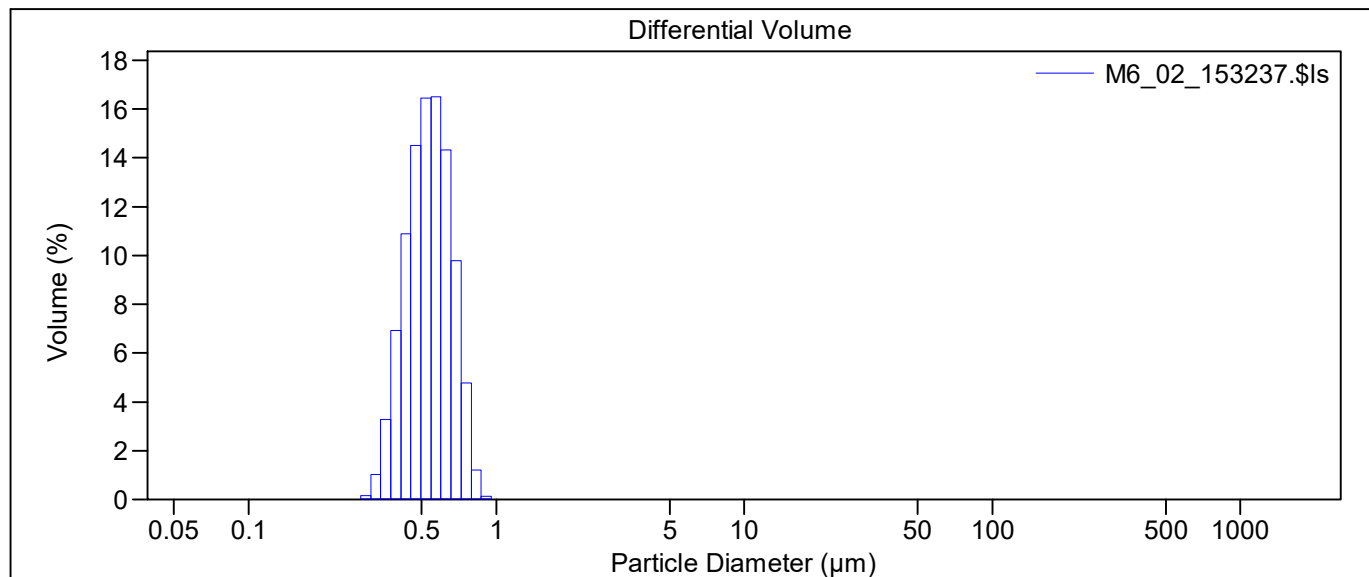
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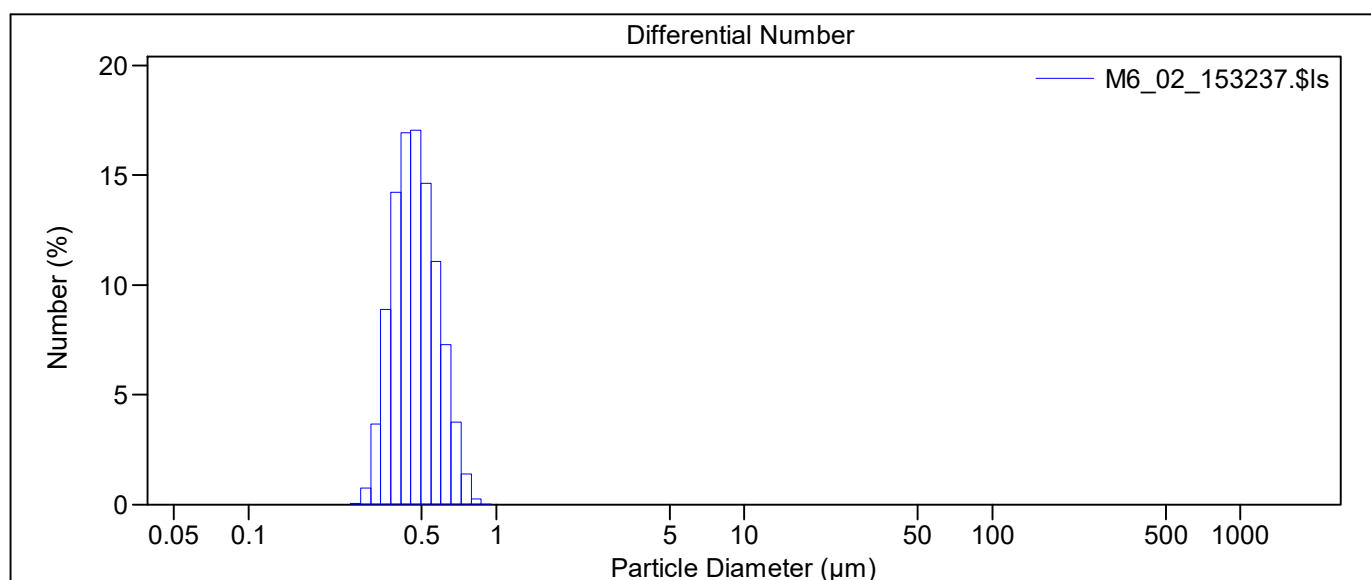
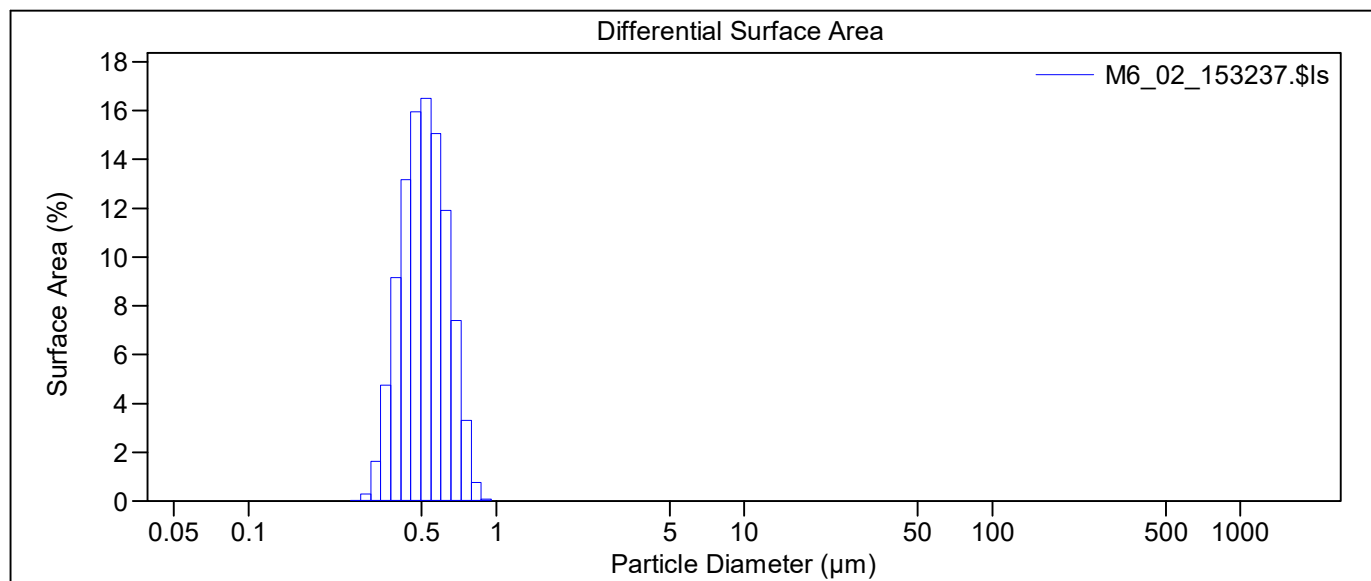
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_02_153237.\$ls		
	M6_02_153237.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.13%		
LS 13 320	Universal Liquid Module		
Start time:	15:30	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_02_153237.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.109 µm
Mean:	0.543 µm		Variance:	0.012 µm ²
Median:	0.535 µm		C.V.:	20.1%
Mean/Median ratio:	1.014		Skewness:	0.331 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.344 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.405 µm	0.460 µm	0.535 µm	0.619 µm	0.695 µm





M6.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0083	0.016	0.052
22	0.284	0.297	0.16	0.28	0.75
23	0.311	0.326	1.02	1.63	3.66
24	0.342	0.358	3.27	4.75	8.89
25	0.375	0.393	6.91	9.17	14.2
26	0.412	0.431	10.9	13.2	16.9
27	0.452	0.474	14.5	16.0	17.1
28	0.496	0.520	16.5	16.5	14.6
29	0.545	0.571	16.5	15.1	11.1
30	0.598	0.627	14.3	11.9	7.28
31	0.656	0.688	9.78	7.41	3.75
32	0.721	0.755	4.78	3.29	1.39
33	0.791	0.829	1.20	0.76	0.26
34	0.868	0.910	0.14	0.082	0.024
35	0.953	0.999	0.0011	0.00055	0.00013
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

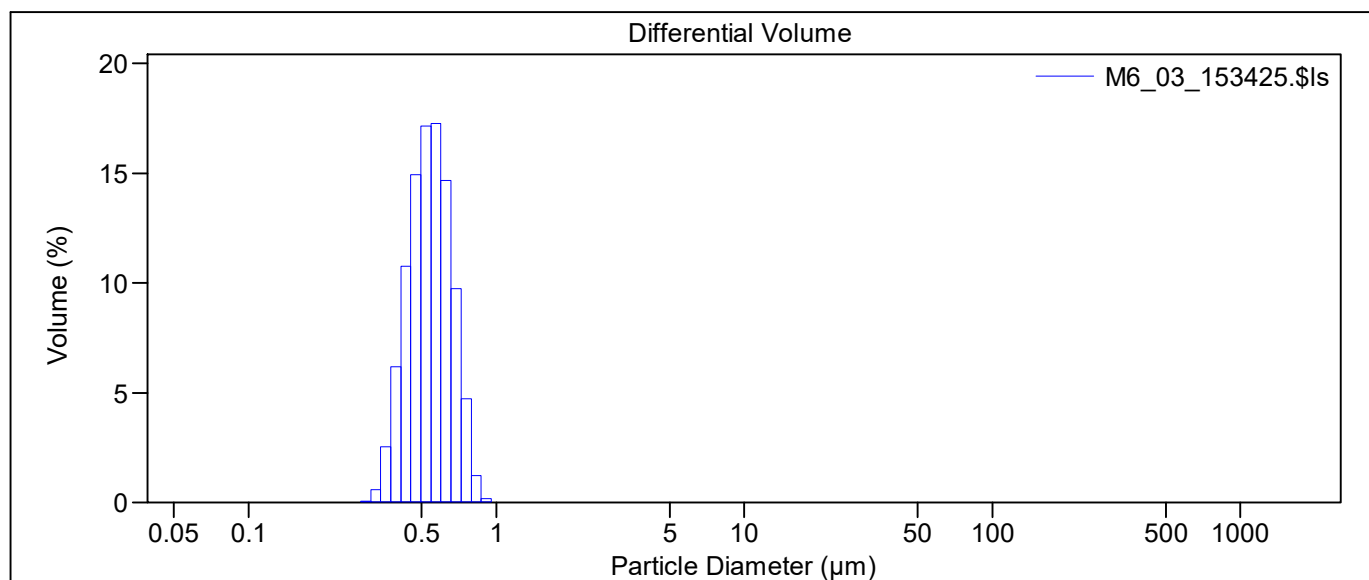
M6.\$av

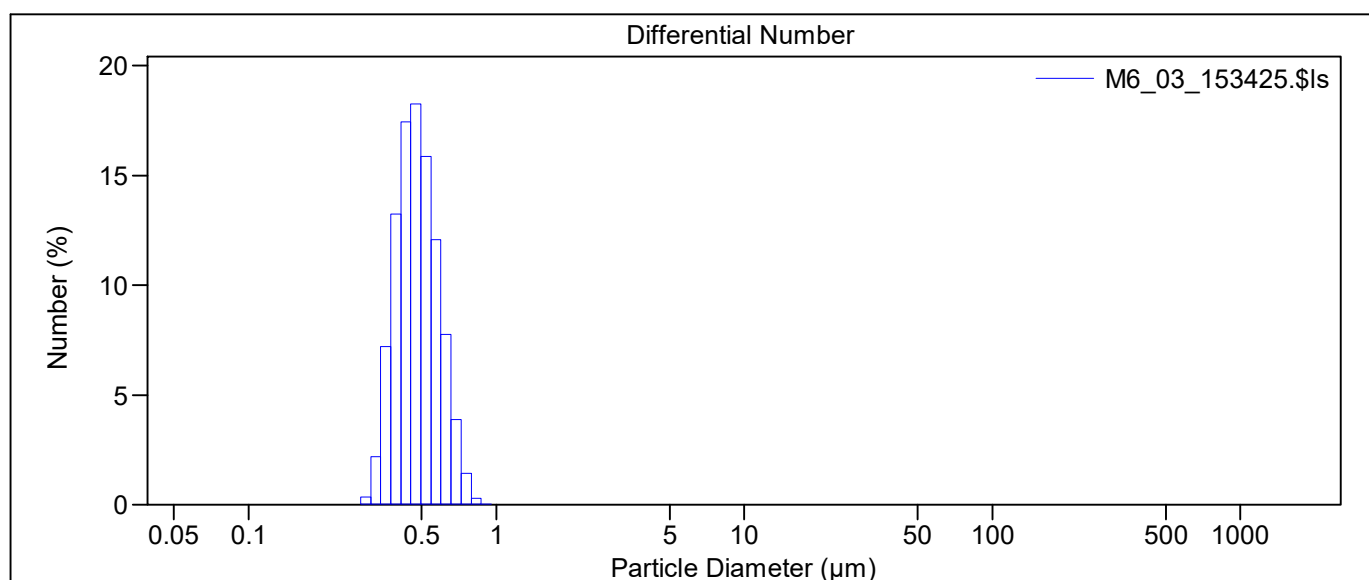
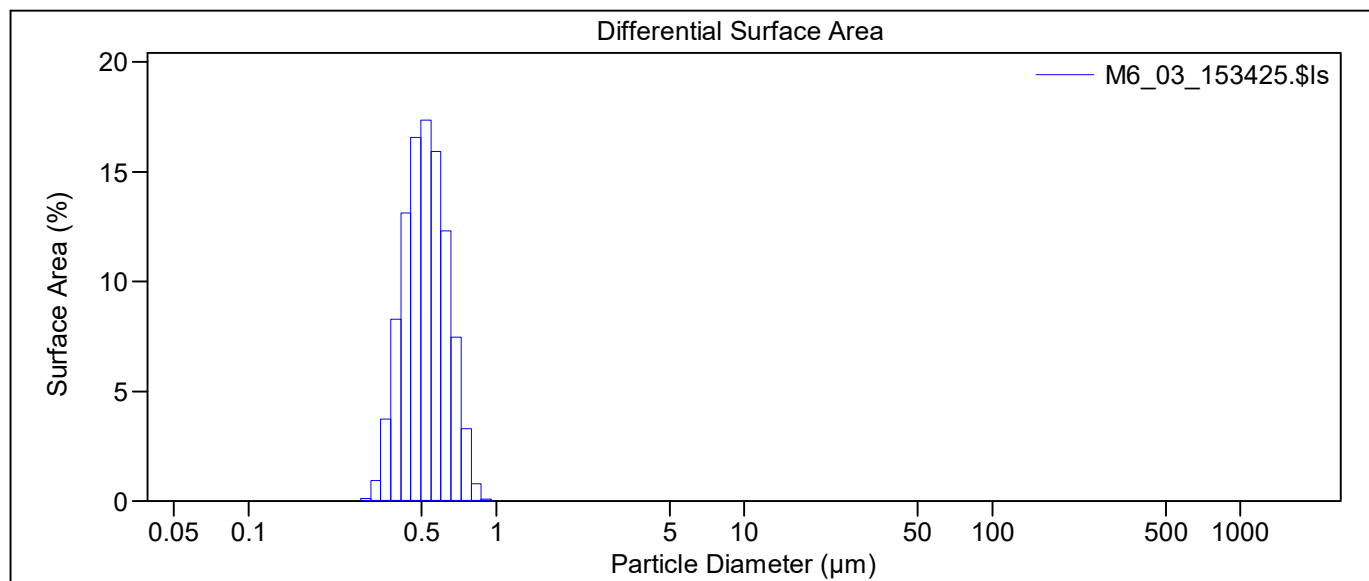
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_03_153425.\$ls		
	M6_03_153425.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.36%		
LS 13 320	Universal Liquid Module		
Start time:	15:32	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_03_153425.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.106 µm
Mean:	0.547 µm		Variance:	0.011 µm ²
Median:	0.538 µm		C.V.:	19.4%
Mean/Median ratio:	1.015		Skewness:	0.374 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.248 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.414 µm	0.466 µm	0.538 µm	0.620 µm	0.695 µm





M6.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.0017	0.0033	0.011
22	0.284	0.297	0.073	0.13	0.36
23	0.311	0.326	0.59	0.95	2.20
24	0.342	0.358	2.54	3.73	7.20
25	0.375	0.393	6.19	8.28	13.3
26	0.412	0.431	10.8	13.1	17.4
27	0.452	0.474	14.9	16.6	18.3
28	0.496	0.520	17.1	17.4	15.9
29	0.545	0.571	17.3	15.9	12.1
30	0.598	0.627	14.7	12.3	7.74
31	0.656	0.688	9.74	7.45	3.89
32	0.721	0.755	4.73	3.30	1.43
33	0.791	0.829	1.22	0.77	0.28
34	0.868	0.910	0.18	0.10	0.030
35	0.953	0.999	0.0046	0.0024	0.00060
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

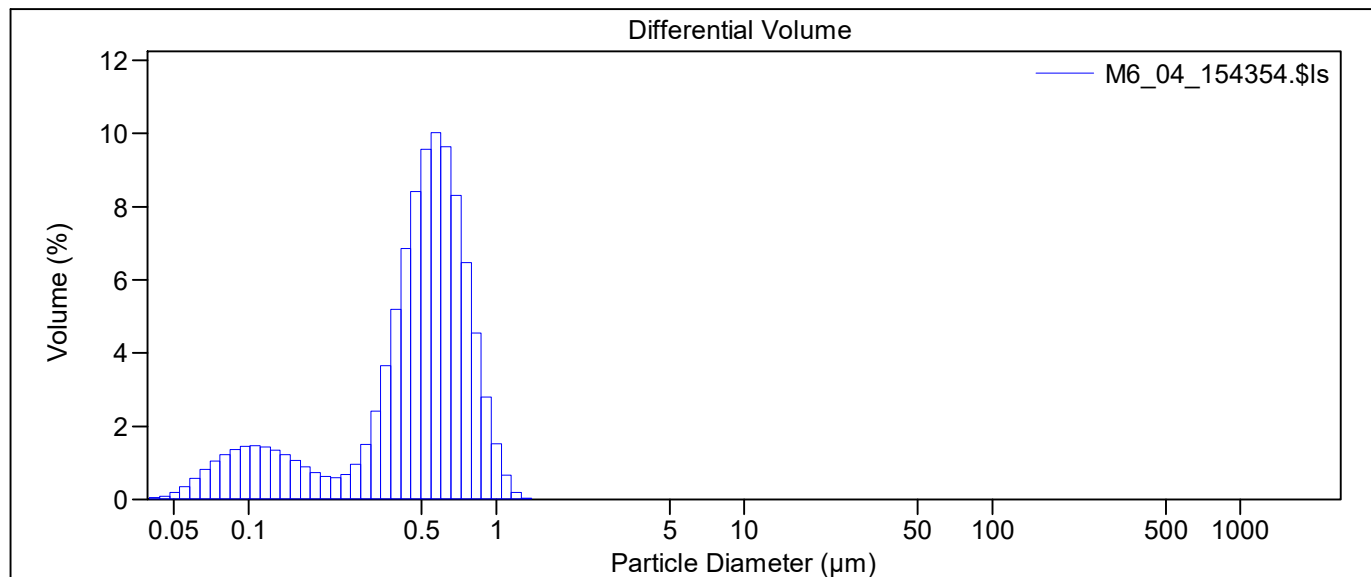
M6.\$av

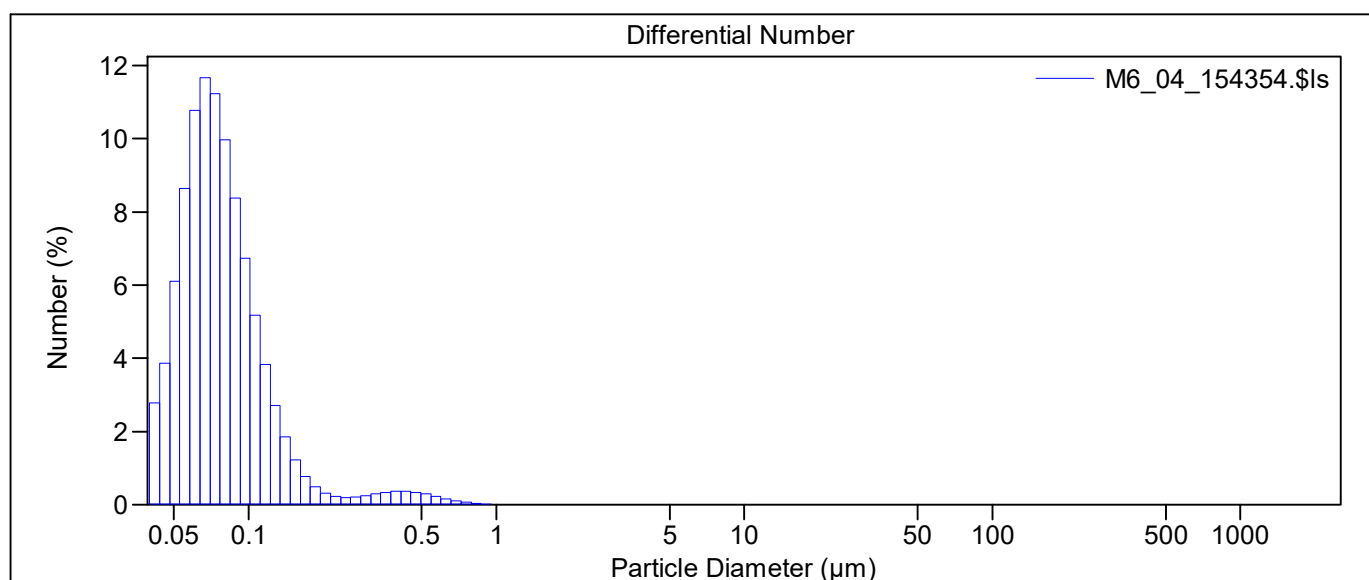
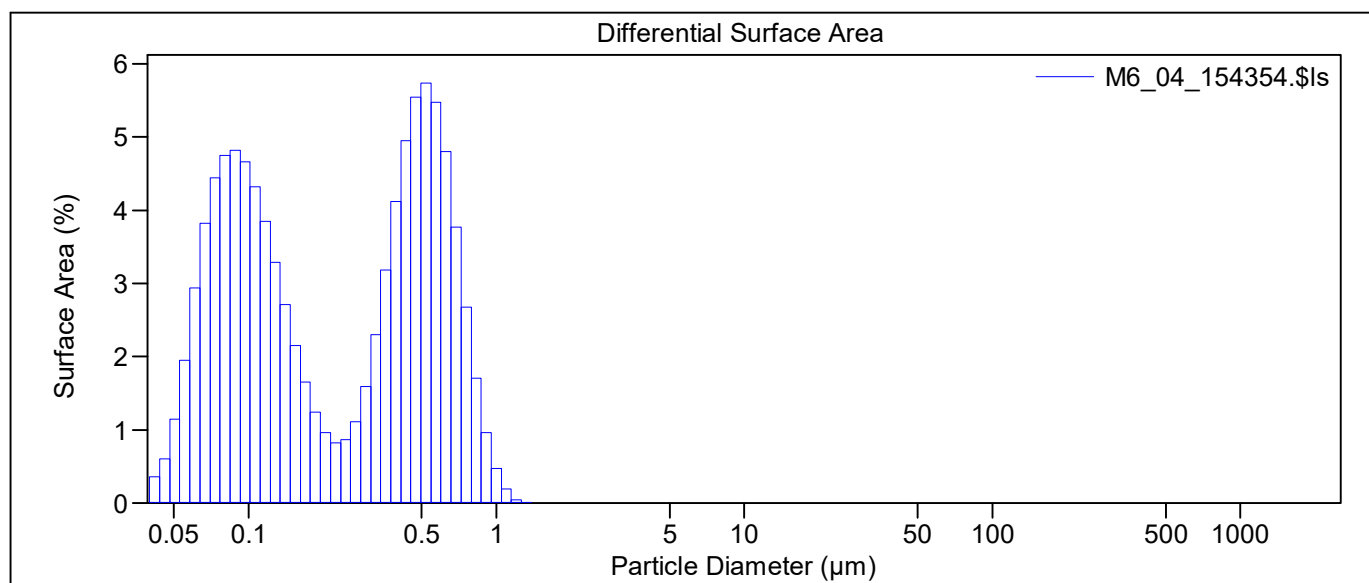
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_04_154354.\$ls		
	M6_04_154354.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.97%		
LS 13 320	Universal Liquid Module		
Start time:	15:42	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_04_154354.\$ls	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.234 µm
Mean:	0.501 µm		Variance:	0.055 µm ²
Median:	0.515 µm		C.V.:	46.7%
Mean/Median ratio:	0.972		Skewness:	-0.067 Left skewed
Mode:	0.571 µm		Kurtosis:	-0.302 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.122 µm	0.368 µm	0.515 µm	0.654 µm	0.788 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.048	0.36	2.78
2	0.044	0.046	0.089	0.60	3.86
3	0.048	0.050	0.19	1.14	6.10
4	0.053	0.055	0.35	1.95	8.64
5	0.058	0.061	0.57	2.94	10.8
6	0.064	0.067	0.82	3.83	11.7
7	0.070	0.073	1.04	4.44	11.2
8	0.077	0.080	1.23	4.75	9.97
9	0.084	0.088	1.36	4.81	8.38
10	0.093	0.097	1.45	4.66	6.73
11	0.102	0.106	1.47	4.32	5.18
12	0.112	0.117	1.44	3.85	3.83
13	0.122	0.128	1.35	3.29	2.72
14	0.134	0.141	1.22	2.71	1.86
15	0.148	0.155	1.07	2.15	1.22
16	0.162	0.170	0.90	1.65	0.78
17	0.178	0.186	0.74	1.24	0.49

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.63	0.96	0.31
19	0.214	0.225	0.59	0.83	0.22
20	0.235	0.247	0.68	0.87	0.19
21	0.258	0.271	0.96	1.11	0.21
22	0.284	0.297	1.51	1.59	0.24
23	0.311	0.326	2.41	2.30	0.29
24	0.342	0.358	3.65	3.18	0.34
25	0.375	0.393	5.19	4.12	0.36
26	0.412	0.431	6.85	4.95	0.36
27	0.452	0.474	8.41	5.54	0.34
28	0.496	0.520	9.57	5.74	0.29
29	0.545	0.571	10.0	5.48	0.23
30	0.598	0.627	9.63	4.80	0.17
31	0.656	0.688	8.31	3.77	0.11
32	0.721	0.755	6.48	2.68	0.064
33	0.791	0.829	4.54	1.71	0.034
34	0.868	0.910	2.80	0.96	0.016
35	0.953	0.999	1.53	0.48	0.0065
36	1.047	1.097	0.66	0.19	0.0021
37	1.149	1.204	0.18	0.048	0.00045
38	1.261	1.321	0.034	0.0081	0.000063
39	1.385	1.451	0.0022	0.00048	0.000003
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

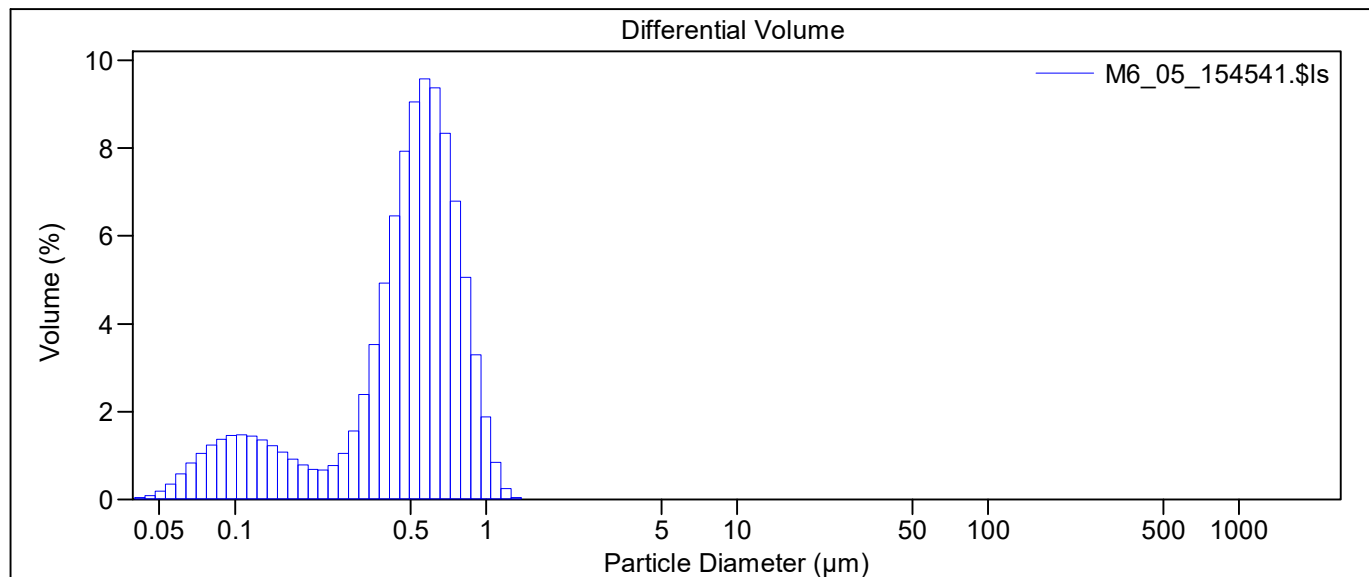
M6.\$av

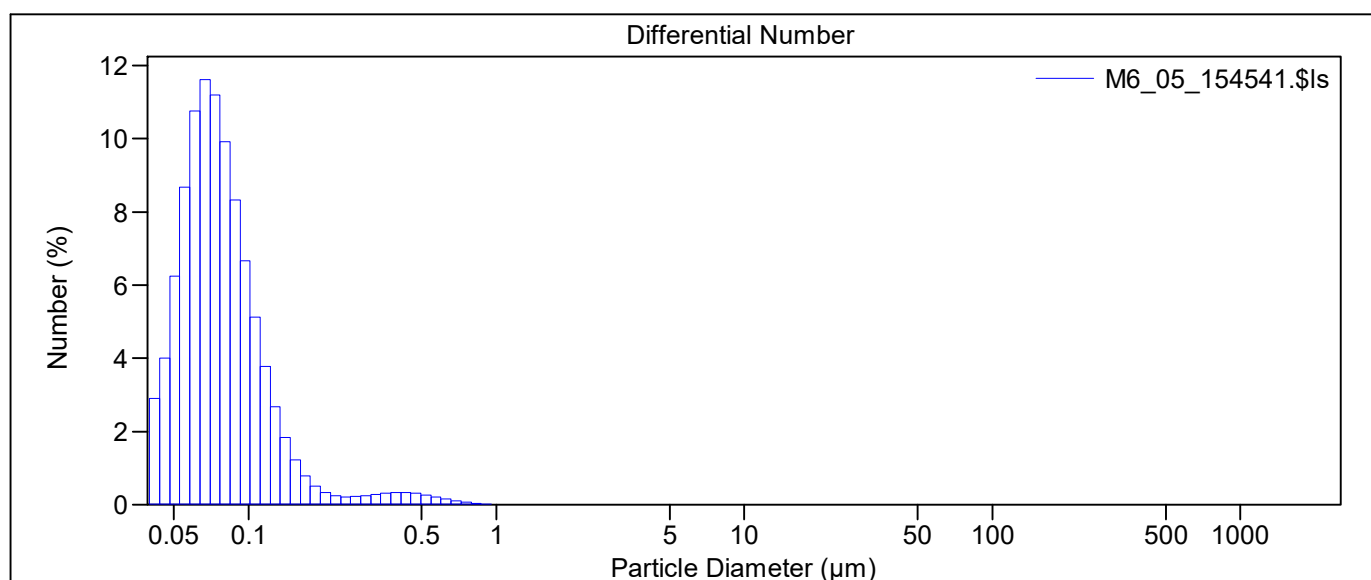
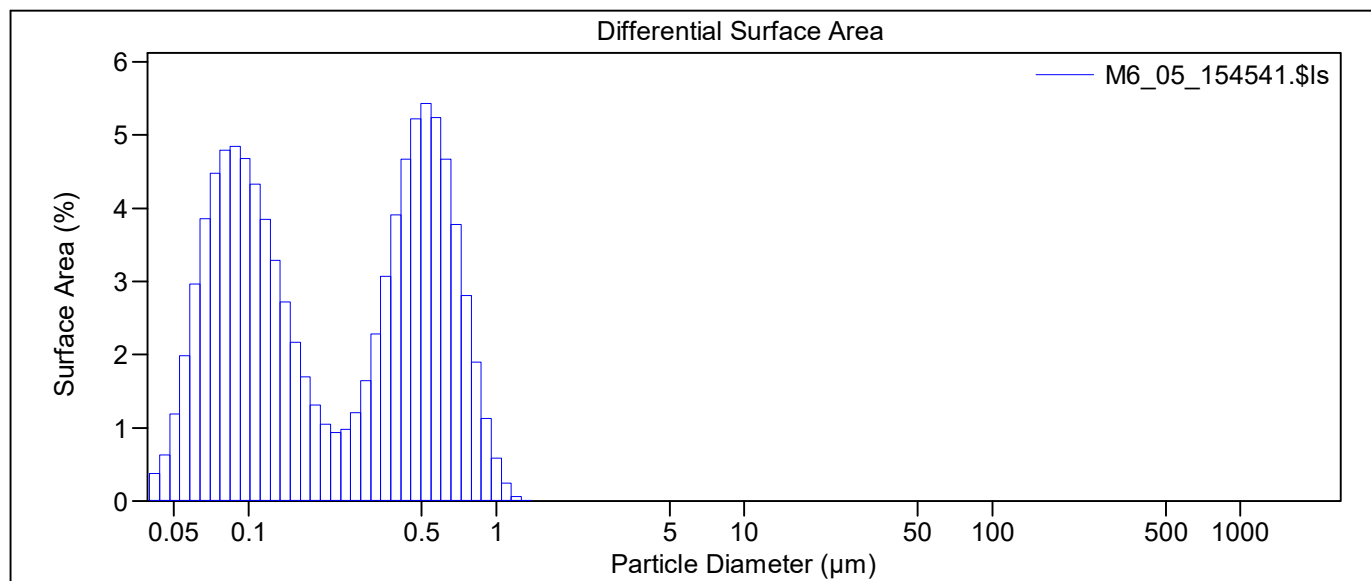
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_05_154541.\$ls		
	M6_05_154541.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.05%		
LS 13 320	Universal Liquid Module		
Start time:	15:44	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_05_154541.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.242 μm
Mean:	0.507 μm		Variance:	0.059 μm ²
Median:	0.520 μm		C.V.:	47.7%
Mean/Median ratio:	0.975		Skewness:	-0.033 Left skewed
Mode:	0.571 μm		Kurtosis:	-0.370 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.121 μm	0.364 μm	0.520 μm	0.668 μm	0.812 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.051	0.38	2.90
2	0.044	0.046	0.093	0.63	4.00
3	0.048	0.050	0.19	1.19	6.24
4	0.053	0.055	0.35	1.99	8.68
5	0.058	0.061	0.58	2.96	10.7
6	0.064	0.067	0.83	3.86	11.6
7	0.070	0.073	1.05	4.48	11.2
8	0.077	0.080	1.24	4.79	9.92
9	0.084	0.088	1.37	4.84	8.33
10	0.093	0.097	1.45	4.68	6.67
11	0.102	0.106	1.48	4.33	5.13
12	0.112	0.117	1.44	3.85	3.78
13	0.122	0.128	1.35	3.29	2.68
14	0.134	0.141	1.23	2.72	1.84
15	0.148	0.155	1.08	2.17	1.22
16	0.162	0.170	0.92	1.70	0.79
17	0.178	0.186	0.78	1.31	0.51

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.69	1.05	0.34
19	0.214	0.225	0.67	0.94	0.25
20	0.235	0.247	0.77	0.98	0.22
21	0.258	0.271	1.05	1.21	0.22
22	0.284	0.297	1.57	1.64	0.25
23	0.311	0.326	2.39	2.28	0.29
24	0.342	0.358	3.52	3.07	0.32
25	0.375	0.393	4.93	3.91	0.34
26	0.412	0.431	6.46	4.67	0.34
27	0.452	0.474	7.92	5.22	0.31
28	0.496	0.520	9.06	5.43	0.27
29	0.545	0.571	9.58	5.24	0.22
30	0.598	0.627	9.38	4.67	0.16
31	0.656	0.688	8.34	3.78	0.11
32	0.721	0.755	6.79	2.80	0.066
33	0.791	0.829	5.05	1.90	0.037
34	0.868	0.910	3.30	1.13	0.018
35	0.953	0.999	1.88	0.59	0.0079
36	1.047	1.097	0.85	0.24	0.0027
37	1.149	1.204	0.24	0.063	0.00059
38	1.261	1.321	0.048	0.011	0.000087
39	1.385	1.451	0.0035	0.00076	0.000005
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

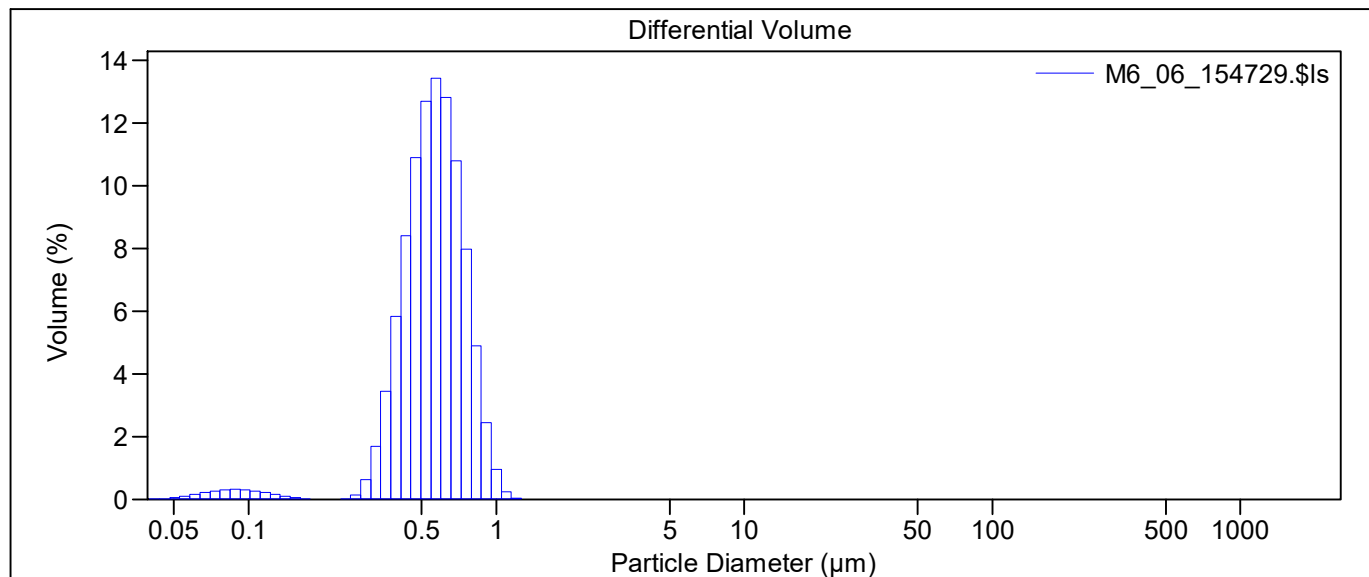
M6.\$av

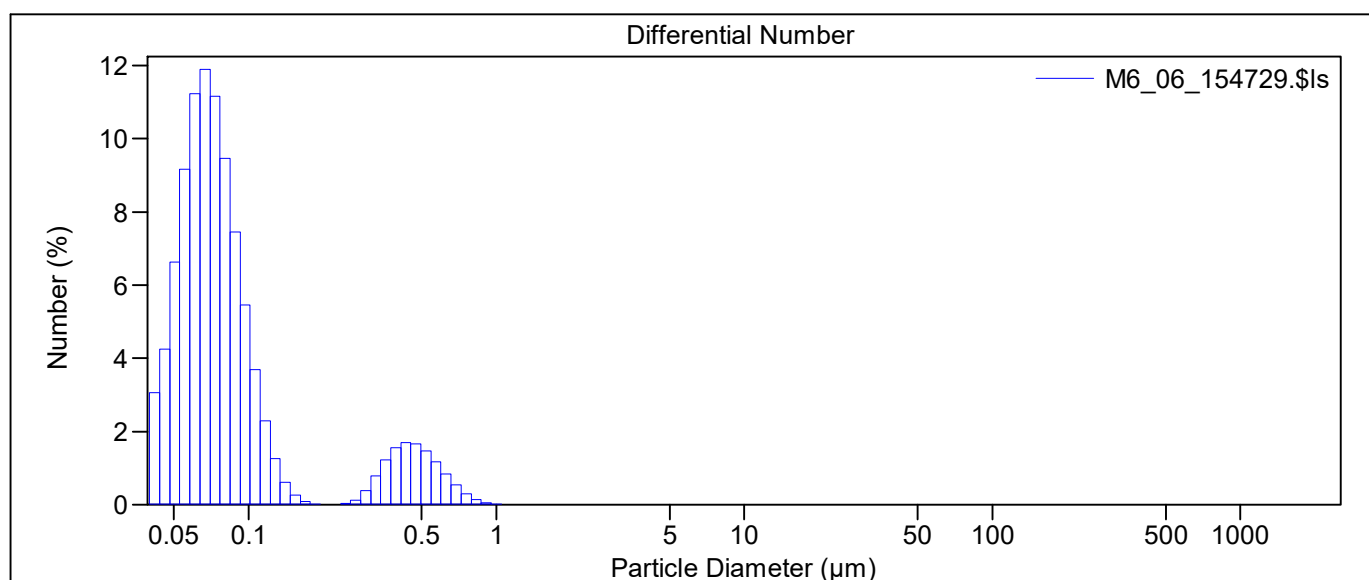
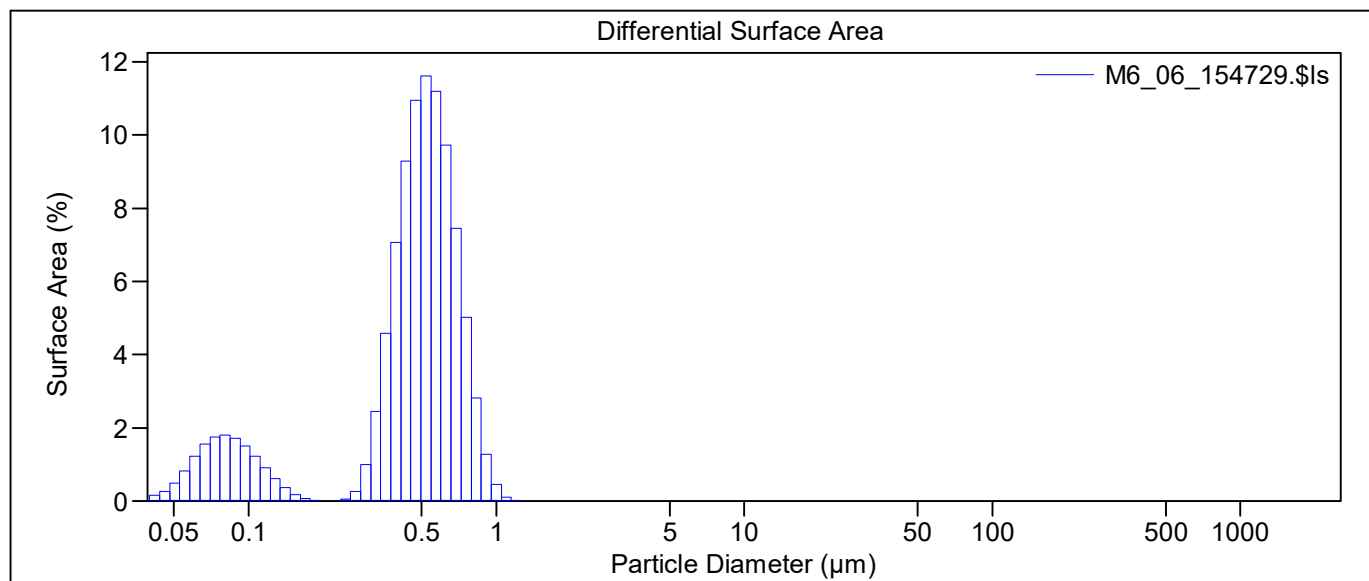
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_06_154729.\$ls		
	M6_06_154729.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.34%		
LS 13 320	Universal Liquid Module		
Start time:	15:45	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_06_154729.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.165 µm
Mean:	0.567 µm		Variance:	0.027 µm ²
Median:	0.559 µm		C.V.:	29.2%
Mean/Median ratio:	1.013		Skewness:	-0.052 Left skewed
Mode:	0.571 µm		Kurtosis:	0.914 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.384 µm	0.461 µm	0.559 µm	0.671 µm	0.779 µm





M6.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.014	0.16	3.06
2	0.044	0.046	0.026	0.26	4.25
3	0.048	0.050	0.053	0.50	6.63
4	0.053	0.055	0.096	0.83	9.17
5	0.058	0.061	0.16	1.22	11.2
6	0.064	0.067	0.22	1.56	11.9
7	0.070	0.073	0.27	1.76	11.2
8	0.077	0.080	0.30	1.80	9.46
9	0.084	0.088	0.32	1.71	7.46
10	0.093	0.097	0.31	1.50	5.46
11	0.102	0.106	0.27	1.22	3.68
12	0.112	0.117	0.22	0.91	2.28
13	0.122	0.128	0.16	0.61	1.26
14	0.134	0.141	0.11	0.36	0.62
15	0.148	0.155	0.059	0.18	0.26
16	0.162	0.170	0.026	0.073	0.087
17	0.178	0.186	0.0092	0.024	0.023

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.0021	0.0049	0.0040
19	0.214	0.225	0.0029	0.0061	0.0041
20	0.235	0.247	0.025	0.047	0.027
21	0.258	0.271	0.15	0.27	0.12
22	0.284	0.297	0.63	1.00	0.39
23	0.311	0.326	1.68	2.46	0.79
24	0.342	0.358	3.45	4.58	1.22
25	0.375	0.393	5.83	7.06	1.56
26	0.412	0.431	8.42	9.28	1.70
27	0.452	0.474	10.9	10.9	1.67
28	0.496	0.520	12.7	11.6	1.47
29	0.545	0.571	13.4	11.2	1.17
30	0.598	0.627	12.8	9.73	0.85
31	0.656	0.688	10.8	7.46	0.54
32	0.721	0.755	7.97	5.02	0.30
33	0.791	0.829	4.89	2.81	0.14
34	0.868	0.910	2.45	1.28	0.053
35	0.953	0.999	0.95	0.45	0.016
36	1.047	1.097	0.25	0.11	0.0031
37	1.149	1.204	0.046	0.018	0.00043
38	1.261	1.321	0.0042	0.0015	0.000030
39	1.385	1.451	0.000067	0.000022	3.56E-7
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

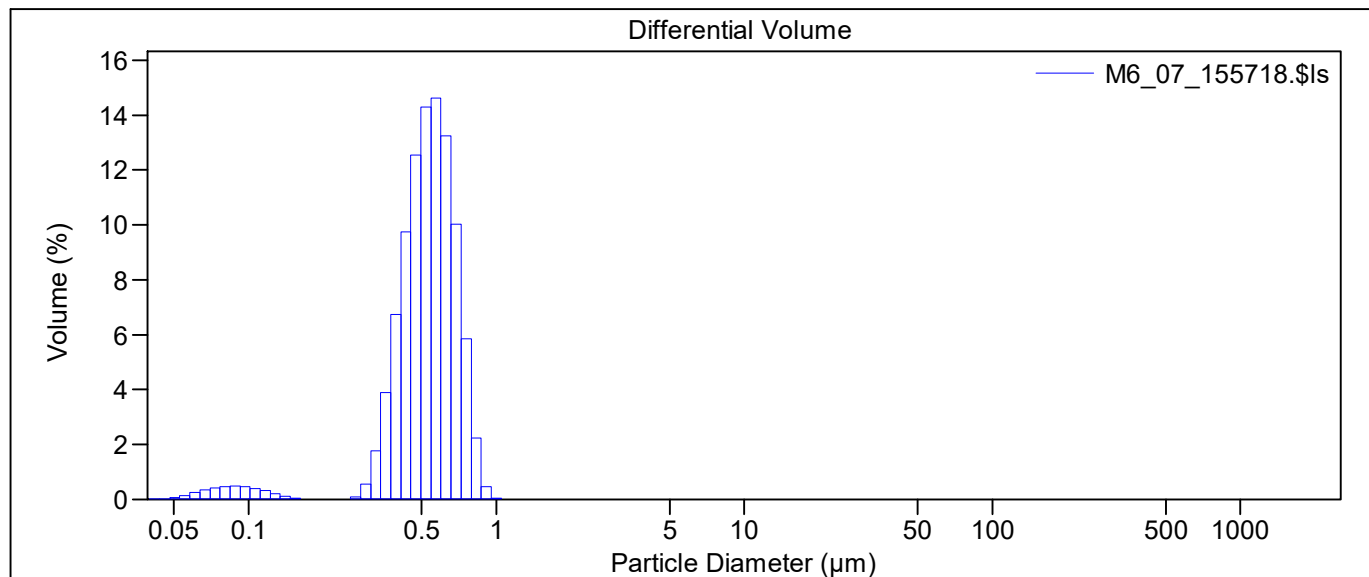
M6.\$av

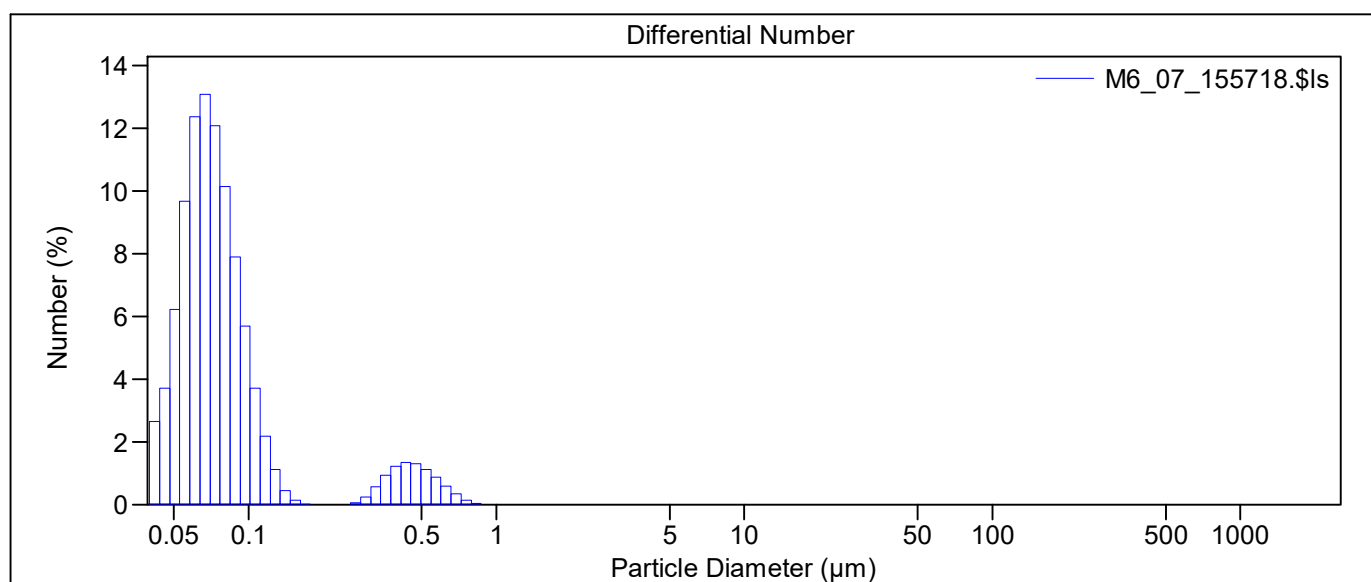
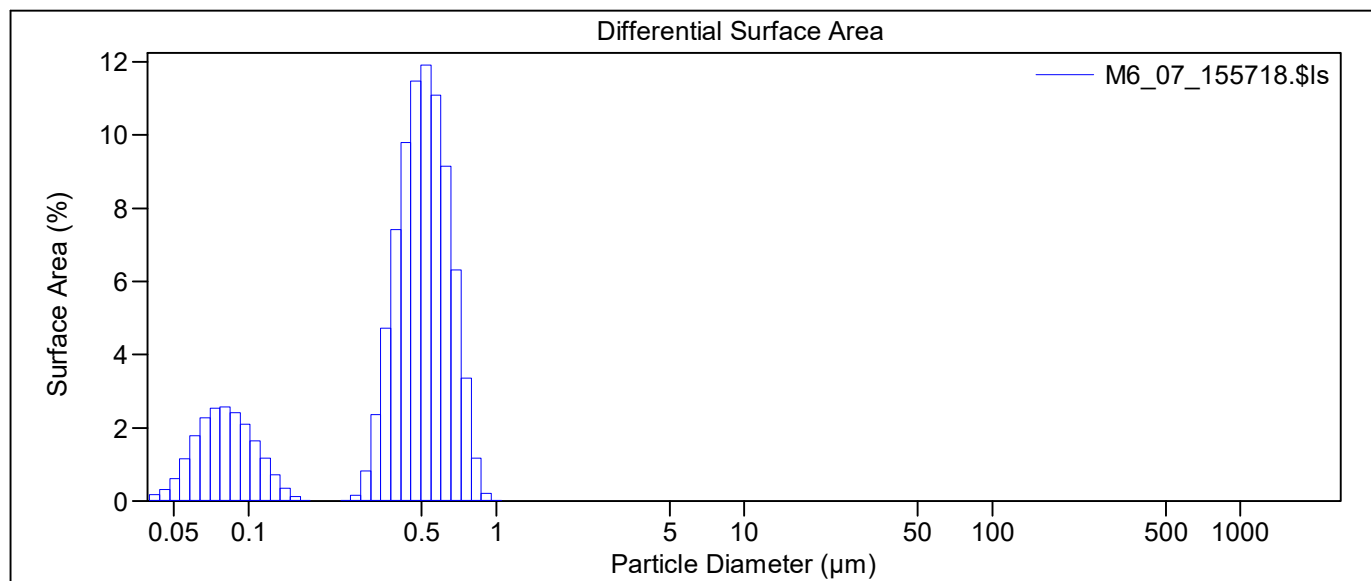
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_07_155718.\$ls		
	M6_07_155718.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.95%		
LS 13 320	Universal Liquid Module		
Start time:	15:55	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_07_155718.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.149 µm
Mean:	0.530 µm		Variance:	0.022 µm ²
Median:	0.533 µm		C.V.:	28.0%
Mean/Median ratio:	0.995		Skewness:	-0.603 Left skewed
Mode:	0.571 µm		Kurtosis:	1.339 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.373 µm	0.445 µm	0.533 µm	0.628 µm	0.712 µm





M6.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.018	0.18	2.66
2	0.044	0.046	0.033	0.31	3.72
3	0.048	0.050	0.072	0.62	6.23
4	0.053	0.055	0.15	1.16	9.67
5	0.058	0.061	0.25	1.79	12.4
6	0.064	0.067	0.35	2.28	13.1
7	0.070	0.073	0.43	2.54	12.1
8	0.077	0.080	0.48	2.57	10.1
9	0.084	0.088	0.49	2.41	7.90
10	0.093	0.097	0.47	2.09	5.69
11	0.102	0.106	0.40	1.65	3.72
12	0.112	0.117	0.32	1.17	2.19
13	0.122	0.128	0.21	0.72	1.12
14	0.134	0.141	0.11	0.35	0.45
15	0.148	0.155	0.045	0.13	0.14
16	0.162	0.170	0.0096	0.024	0.022
17	0.178	0.186	0.0010	0.0024	0.0018

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.000010	0.000020	0.000012
19	0.214	0.225	0.000068	0.00013	0.000066
20	0.235	0.247	0.0083	0.015	0.0061
21	0.258	0.271	0.10	0.16	0.056
22	0.284	0.297	0.57	0.83	0.24
23	0.311	0.326	1.78	2.37	0.57
24	0.342	0.358	3.90	4.72	0.94
25	0.375	0.393	6.73	7.42	1.23
26	0.412	0.431	9.75	9.79	1.35
27	0.452	0.474	12.6	11.5	1.31
28	0.496	0.520	14.3	11.9	1.13
29	0.545	0.571	14.6	11.1	0.87
30	0.598	0.627	13.2	9.15	0.60
31	0.656	0.688	10.0	6.31	0.34
32	0.721	0.755	5.85	3.36	0.15
33	0.791	0.829	2.23	1.17	0.043
34	0.868	0.910	0.46	0.22	0.0067
35	0.953	0.999	0.039	0.017	0.00044
36	1.047	1.097	0.00032	0.00013	0.000003
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

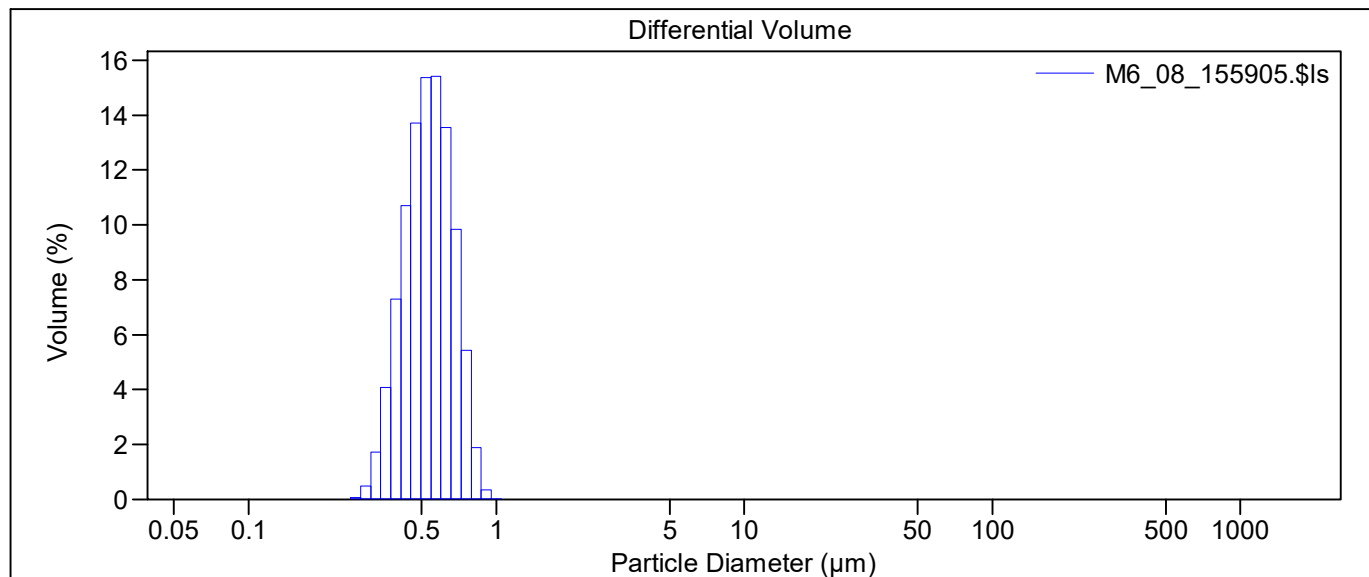
M6.\$av

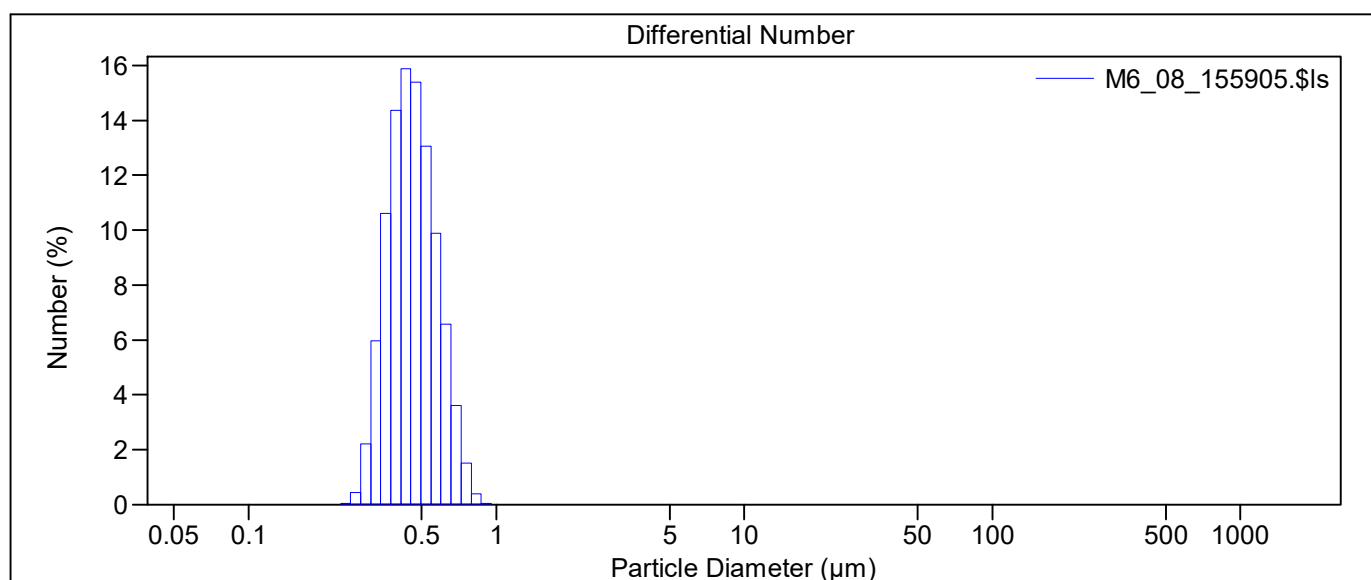
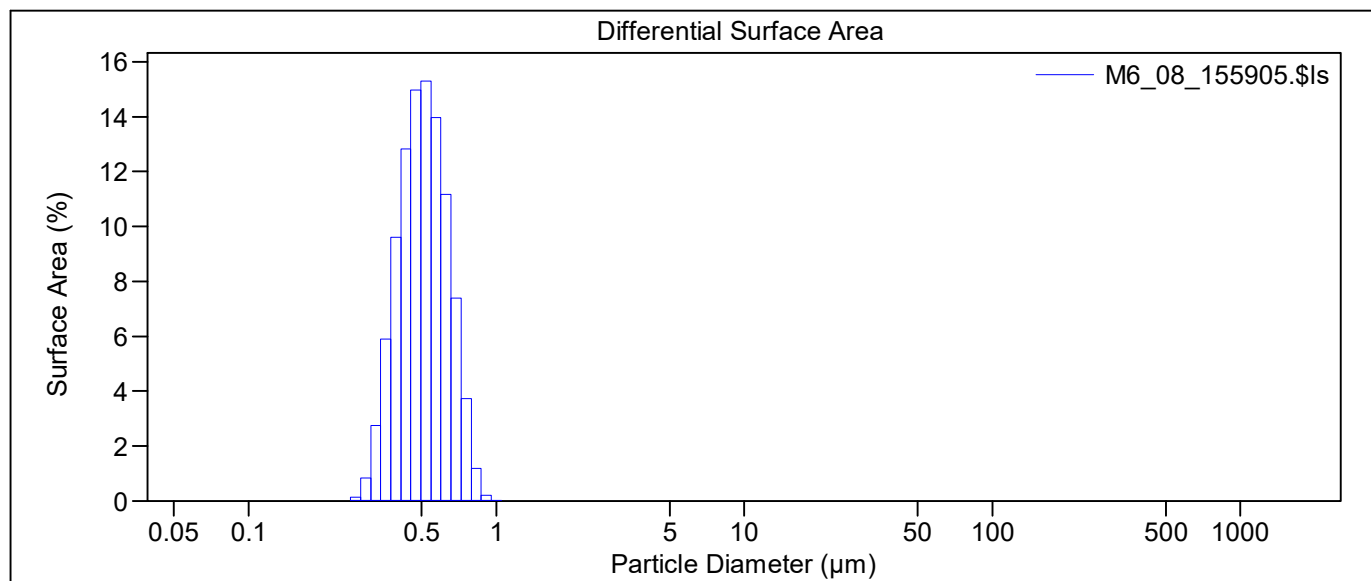
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_08_155905.\$ls		
	M6_08_155905.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.03%		
LS 13 320	Universal Liquid Module		
Start time:	15:57	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_08_155905.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.118 μm
Mean:	0.543 μm		Variance:	0.014 μm ²
Median:	0.534 μm		C.V.:	21.8%
Mean/Median ratio:	1.016		Skewness:	0.361 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.281 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.393 μm	0.454 μm	0.534 μm	0.624 μm	0.706 μm





M6.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0.000036	0.000084	0.00038
20	0.235	0.247	0.0050	0.010	0.040
21	0.258	0.271	0.075	0.14	0.45
22	0.284	0.297	0.49	0.85	2.22
23	0.311	0.326	1.73	2.75	5.96
24	0.342	0.358	4.08	5.90	10.6
25	0.375	0.393	7.31	9.62	14.4
26	0.412	0.431	10.7	12.8	15.9
27	0.452	0.474	13.7	15.0	15.4
28	0.496	0.520	15.4	15.3	13.0
29	0.545	0.571	15.4	14.0	9.89
30	0.598	0.627	13.5	11.2	6.57
31	0.656	0.688	9.84	7.40	3.61
32	0.721	0.755	5.44	3.72	1.51
33	0.791	0.829	1.89	1.18	0.40
34	0.868	0.910	0.35	0.20	0.056
35	0.953	0.999	0.025	0.013	0.0030
36	1.047	1.097	0.00019	0.000087	0.000017
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

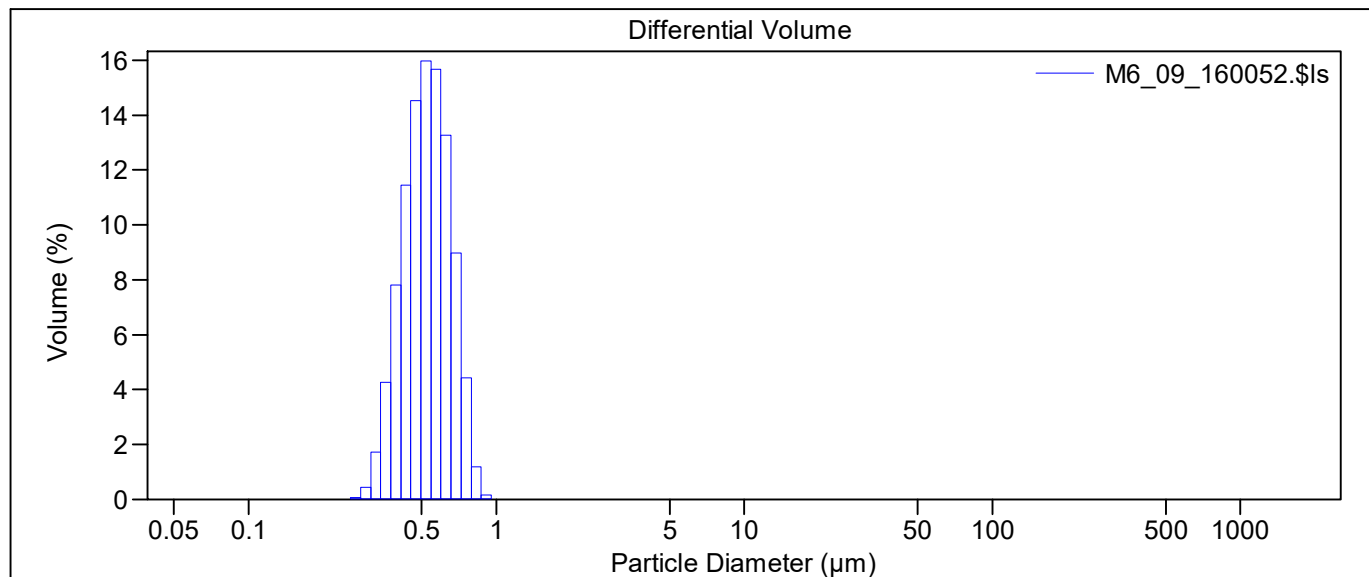
M6.\$av

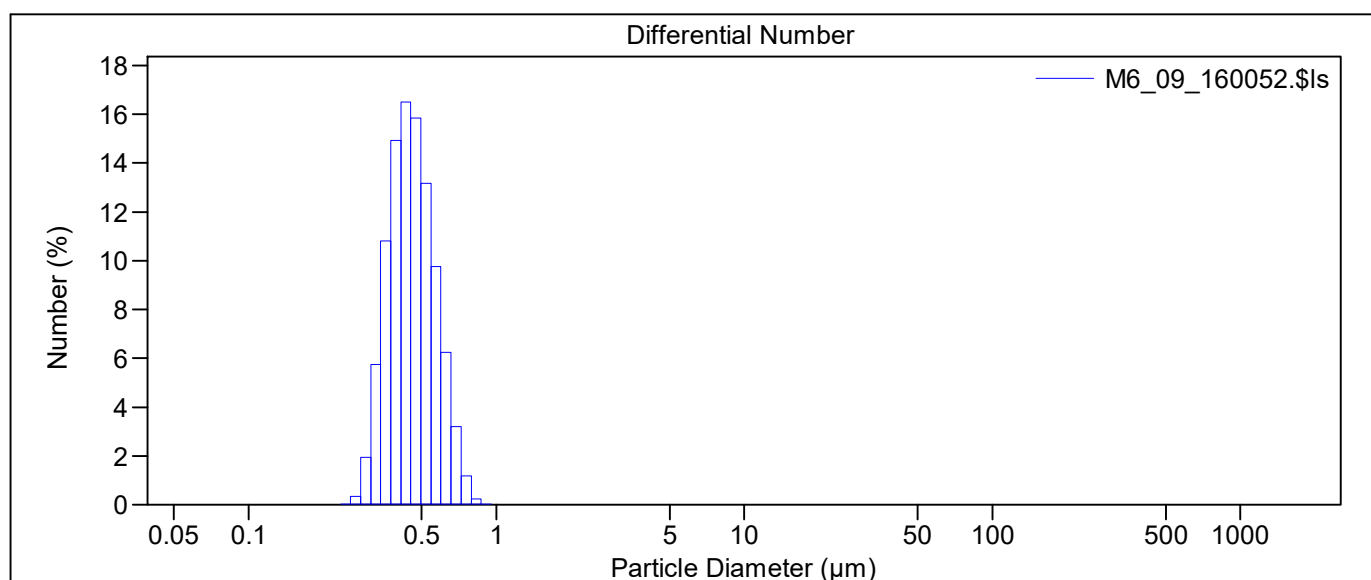
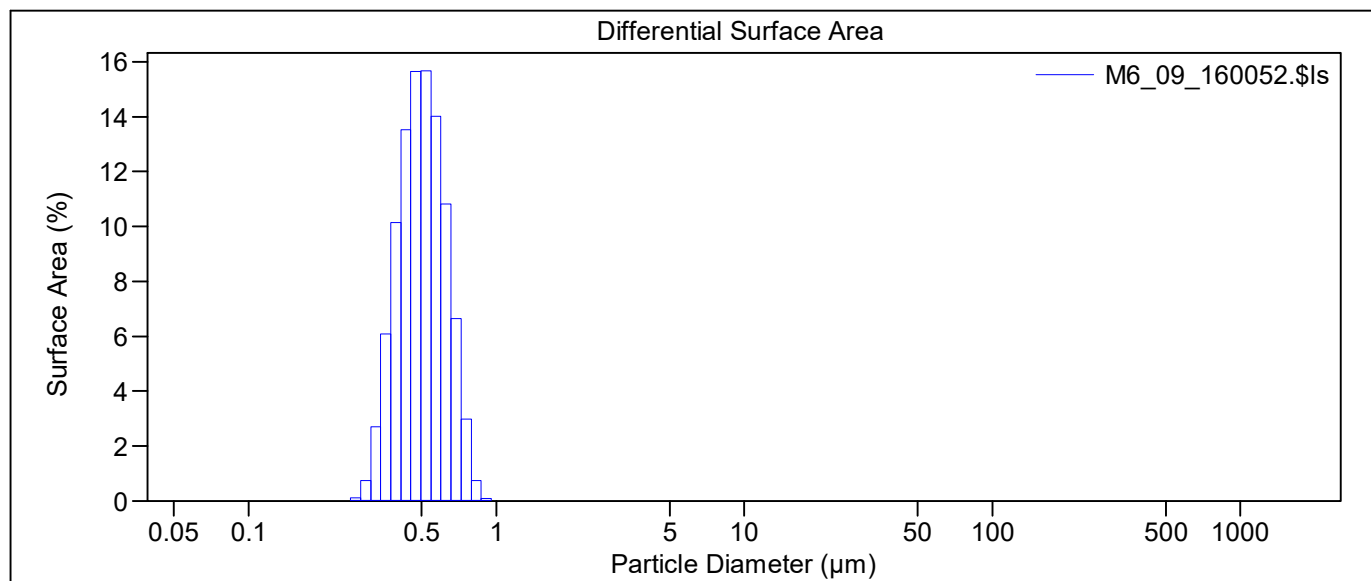
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_09_160052.\$ls		
	M6_09_160052.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.22%		
LS 13 320	Universal Liquid Module		
Start time:	15:59	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_09_160052.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.534 μm	S.D.:	0.112 μm	
Median:	0.526 μm	Variance:	0.013 μm ²	
Mean/Median ratio:	1.015	C.V.:	21.0%	
Mode:	0.520 μm	Skewness:	0.352 Right skewed	
		Kurtosis:	-0.300 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.392 μm	0.449 μm	0.526 μm	0.611 μm	0.691 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0.000020	0.000045	0.00020
20	0.235	0.247	0.0031	0.0064	0.024
21	0.258	0.271	0.060	0.11	0.35
22	0.284	0.297	0.44	0.75	1.94
23	0.311	0.326	1.72	2.69	5.75
24	0.342	0.358	4.28	6.10	10.8
25	0.375	0.393	7.82	10.1	14.9
26	0.412	0.431	11.4	13.5	16.5
27	0.452	0.474	14.5	15.7	15.8
28	0.496	0.520	16.0	15.7	13.2
29	0.545	0.571	15.7	14.0	9.77
30	0.598	0.627	13.3	10.8	6.26
31	0.656	0.688	8.97	6.65	3.19
32	0.721	0.755	4.43	2.99	1.19
33	0.791	0.829	1.20	0.74	0.24
34	0.868	0.910	0.17	0.096	0.026
35	0.953	0.999	0.0047	0.0024	0.00055
36	1.047	1.097	0.000015	0.000007	0.000001
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

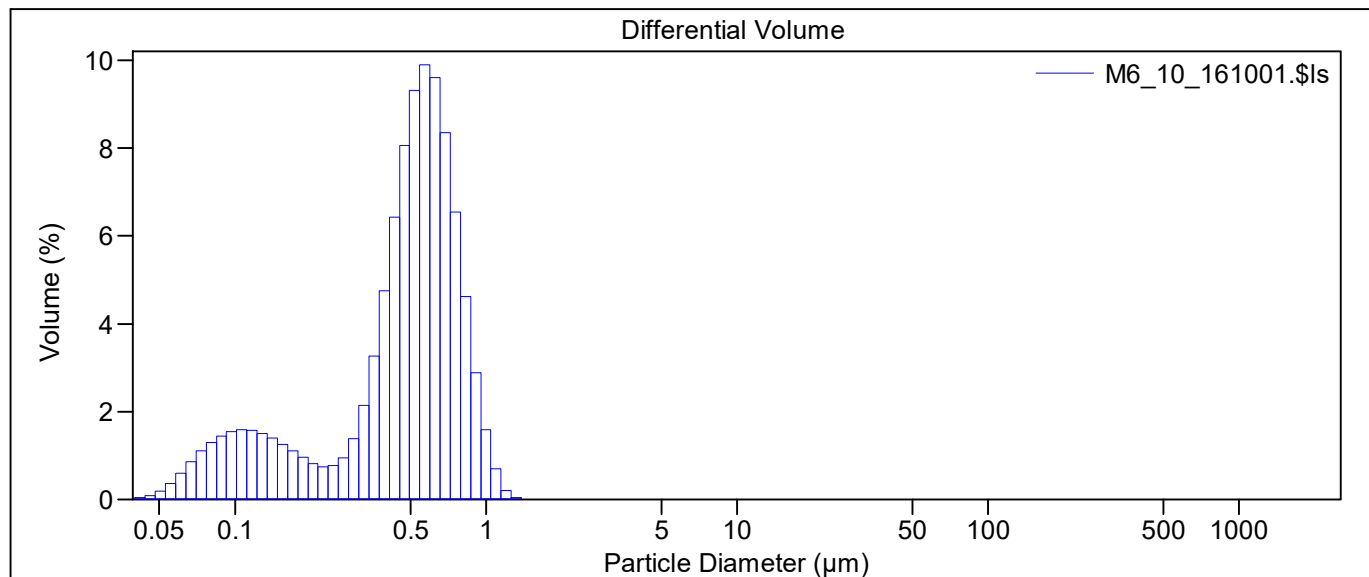
M6.\$av

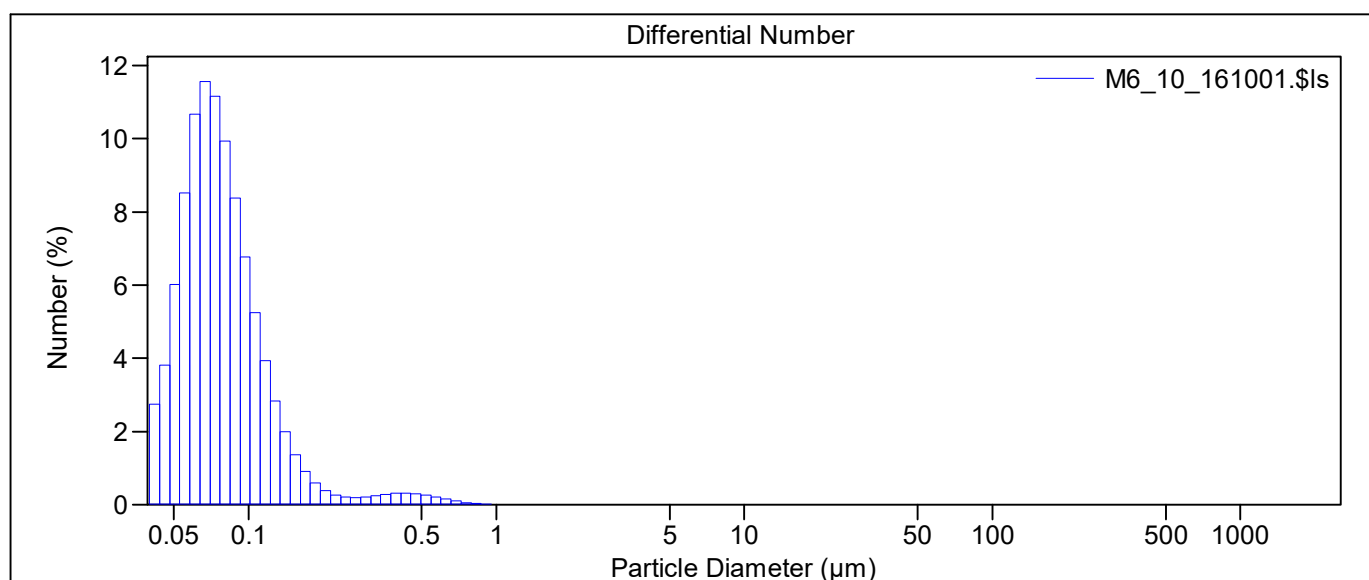
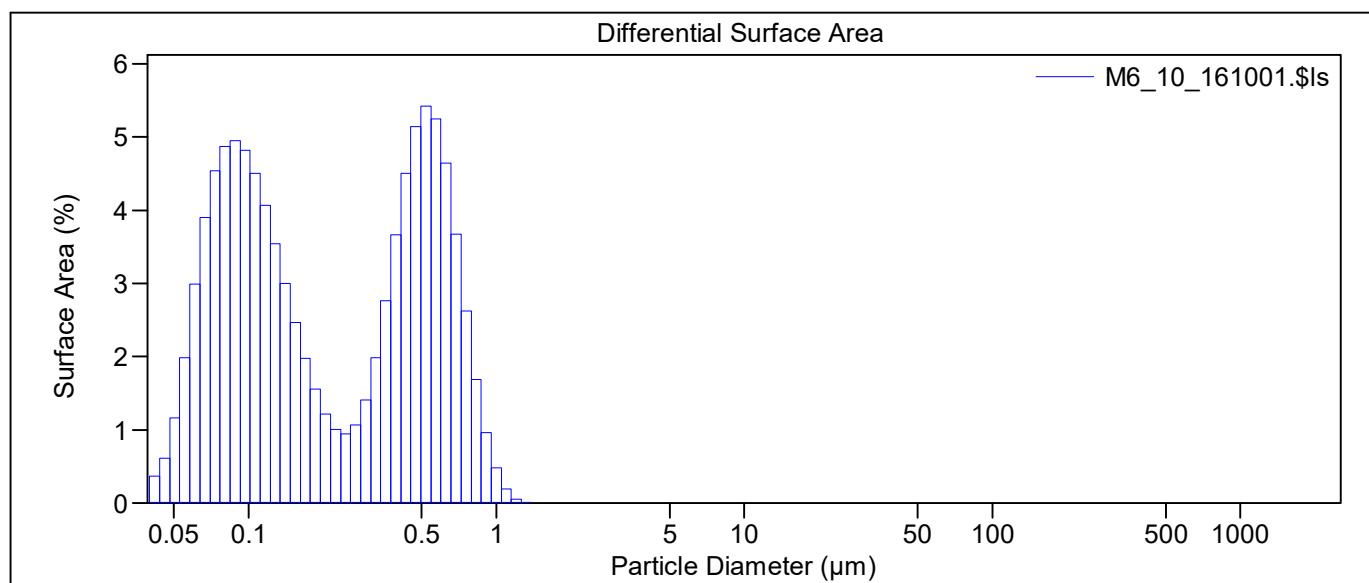
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_10_161001.\$ls		
	M6_10_161001.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.89%		
LS 13 320	Universal Liquid Module		
Start time:	16:08	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_10_161001.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.240 μm
Mean:	0.497 μm		Variance:	0.058 μm ²
Median:	0.516 μm		C.V.:	48.3%
Mean/Median ratio:	0.964		Skewness:	-0.057 Left skewed
Mode:	0.571 μm		Kurtosis:	-0.417 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.118 μm	0.355 μm	0.516 μm	0.656 μm	0.792 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.051	0.36	2.74
2	0.044	0.046	0.093	0.61	3.81
3	0.048	0.050	0.19	1.16	6.01
4	0.053	0.055	0.36	1.98	8.52
5	0.058	0.061	0.60	2.99	10.7
6	0.064	0.067	0.86	3.90	11.6
7	0.070	0.073	1.10	4.54	11.2
8	0.077	0.080	1.30	4.87	9.93
9	0.084	0.088	1.45	4.95	8.38
10	0.093	0.097	1.55	4.82	6.77
11	0.102	0.106	1.59	4.51	5.25
12	0.112	0.117	1.57	4.07	3.93
13	0.122	0.128	1.50	3.54	2.84
14	0.134	0.141	1.39	3.00	1.99
15	0.148	0.155	1.26	2.47	1.36
16	0.162	0.170	1.11	1.98	0.91
17	0.178	0.186	0.96	1.55	0.59

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.82	1.22	0.38
19	0.214	0.225	0.74	1.00	0.26
20	0.235	0.247	0.77	0.94	0.20
21	0.258	0.271	0.95	1.07	0.19
22	0.284	0.297	1.38	1.40	0.21
23	0.311	0.326	2.14	1.99	0.25
24	0.342	0.358	3.27	2.76	0.28
25	0.375	0.393	4.75	3.66	0.31
26	0.412	0.431	6.42	4.50	0.32
27	0.452	0.474	8.06	5.15	0.30
28	0.496	0.520	9.32	5.43	0.27
29	0.545	0.571	9.89	5.25	0.21
30	0.598	0.627	9.61	4.64	0.16
31	0.656	0.688	8.35	3.67	0.10
32	0.721	0.755	6.55	2.62	0.061
33	0.791	0.829	4.62	1.69	0.032
34	0.868	0.910	2.88	0.96	0.015
35	0.953	0.999	1.59	0.48	0.0064
36	1.047	1.097	0.70	0.19	0.0021
37	1.149	1.204	0.20	0.050	0.00045
38	1.261	1.321	0.037	0.0086	0.000065
39	1.385	1.451	0.0025	0.00051	0.000003
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

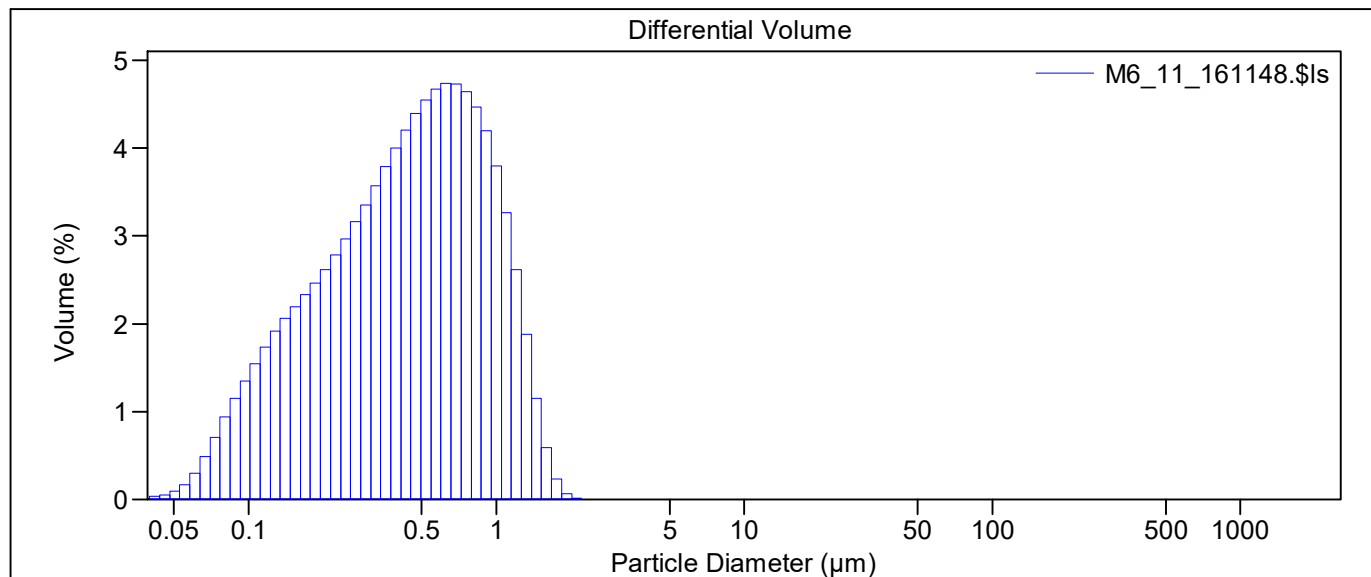
M6.\$av

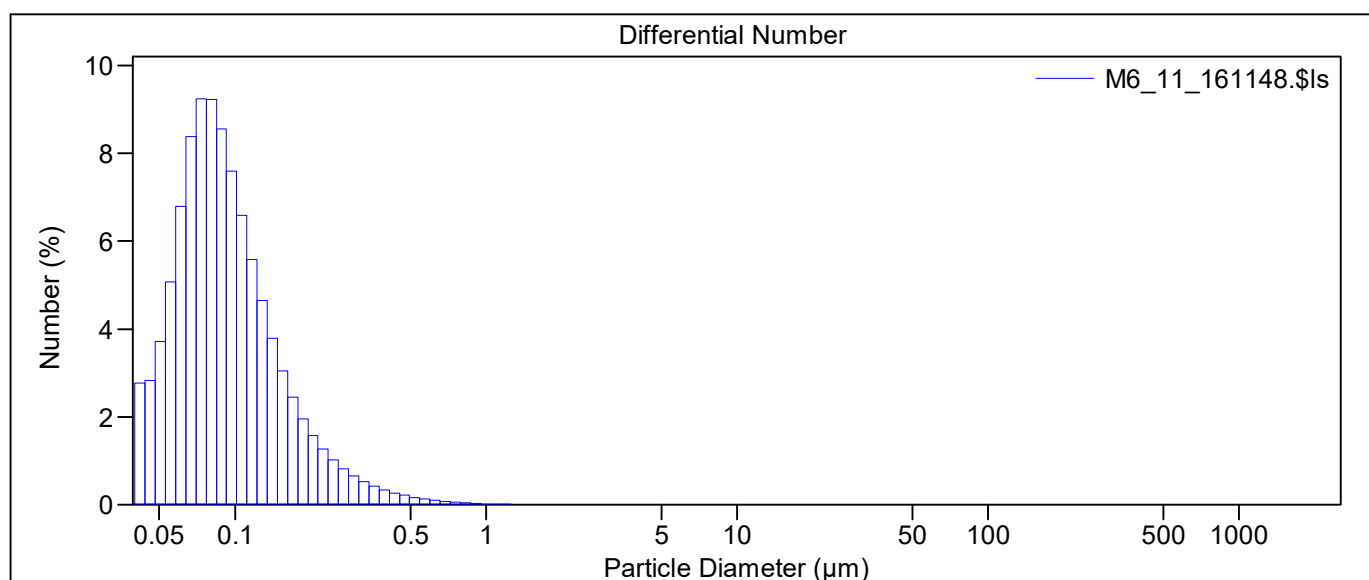
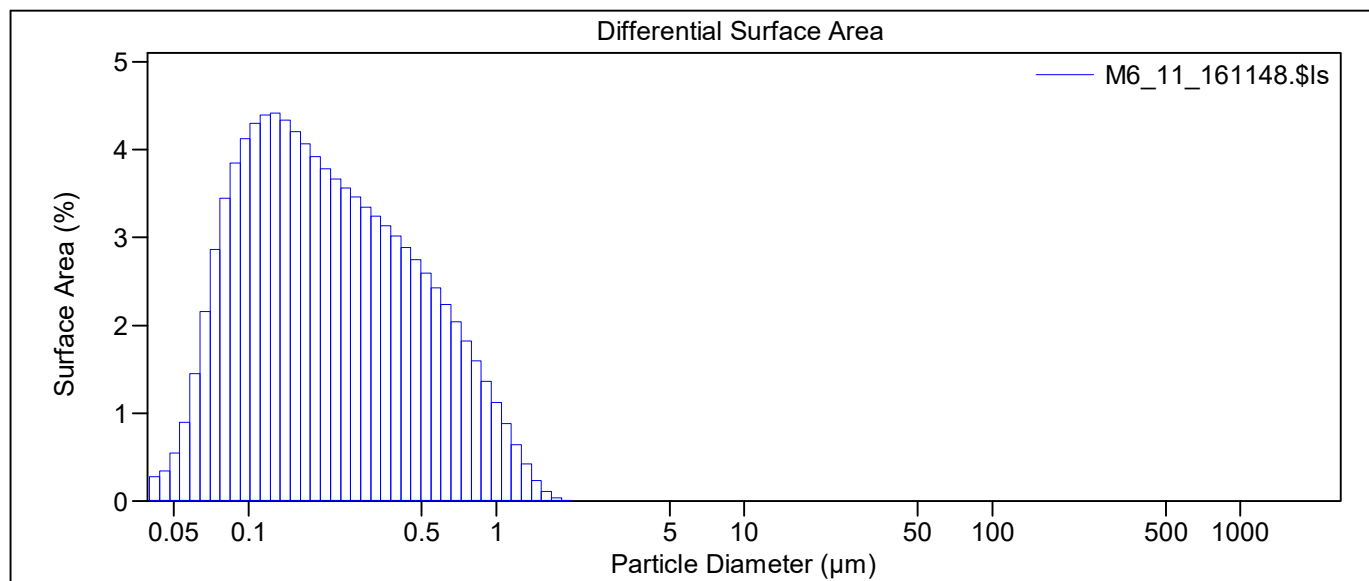
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_11_161148.\$ls		
	M6_11_161148.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.67%		
LS 13 320	Universal Liquid Module		
Start time:	16:10	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_11_161148.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.354 μm
Mean:	0.527 μm		Variance:	0.125 μm ²
Median:	0.452 μm		C.V.:	67.1%
Mean/Median ratio:	1.166		Skewness:	0.860 Right skewed
Mode:	0.627 μm		Kurtosis:	0.211 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.131 μm	0.236 μm	0.452 μm	0.750 μm	1.042 μm





M6.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.040	0.28	2.77
2	0.044	0.046	0.054	0.35	2.83
3	0.048	0.050	0.093	0.55	3.72
4	0.053	0.055	0.17	0.90	5.08
5	0.058	0.061	0.30	1.45	6.79
6	0.064	0.067	0.49	2.16	8.39
7	0.070	0.073	0.71	2.87	9.24
8	0.077	0.080	0.94	3.45	9.23
9	0.084	0.088	1.15	3.85	8.56
10	0.093	0.097	1.35	4.12	7.60
11	0.102	0.106	1.55	4.30	6.58
12	0.112	0.117	1.74	4.40	5.58
13	0.122	0.128	1.91	4.42	4.65
14	0.134	0.141	2.06	4.33	3.79
15	0.148	0.155	2.19	4.20	3.05
16	0.162	0.170	2.33	4.07	2.45
17	0.178	0.186	2.47	3.92	1.96

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.62	3.79	1.57
19	0.214	0.225	2.78	3.67	1.26
20	0.235	0.247	2.97	3.57	1.02
21	0.258	0.271	3.16	3.46	0.82
22	0.284	0.297	3.35	3.34	0.66
23	0.311	0.326	3.57	3.24	0.53
24	0.342	0.358	3.79	3.13	0.42
25	0.375	0.393	4.00	3.02	0.34
26	0.412	0.431	4.20	2.88	0.27
27	0.452	0.474	4.39	2.75	0.21
28	0.496	0.520	4.55	2.59	0.17
29	0.545	0.571	4.67	2.42	0.13
30	0.598	0.627	4.74	2.24	0.099
31	0.656	0.688	4.73	2.04	0.075
32	0.721	0.755	4.64	1.82	0.055
33	0.791	0.829	4.47	1.60	0.040
34	0.868	0.910	4.20	1.37	0.029
35	0.953	0.999	3.80	1.13	0.020
36	1.047	1.097	3.26	0.88	0.013
37	1.149	1.204	2.62	0.64	0.0077
38	1.261	1.321	1.88	0.42	0.0042
39	1.385	1.451	1.15	0.24	0.0019
40	1.520	1.592	0.59	0.11	0.00075
41	1.668	1.748	0.23	0.040	0.00023
42	1.832	1.919	0.067	0.010	0.000048
43	2.011	2.107	0.012	0.0018	0.000007
44	2.207	2.313	0.00098	0.00012	4.05E-7
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

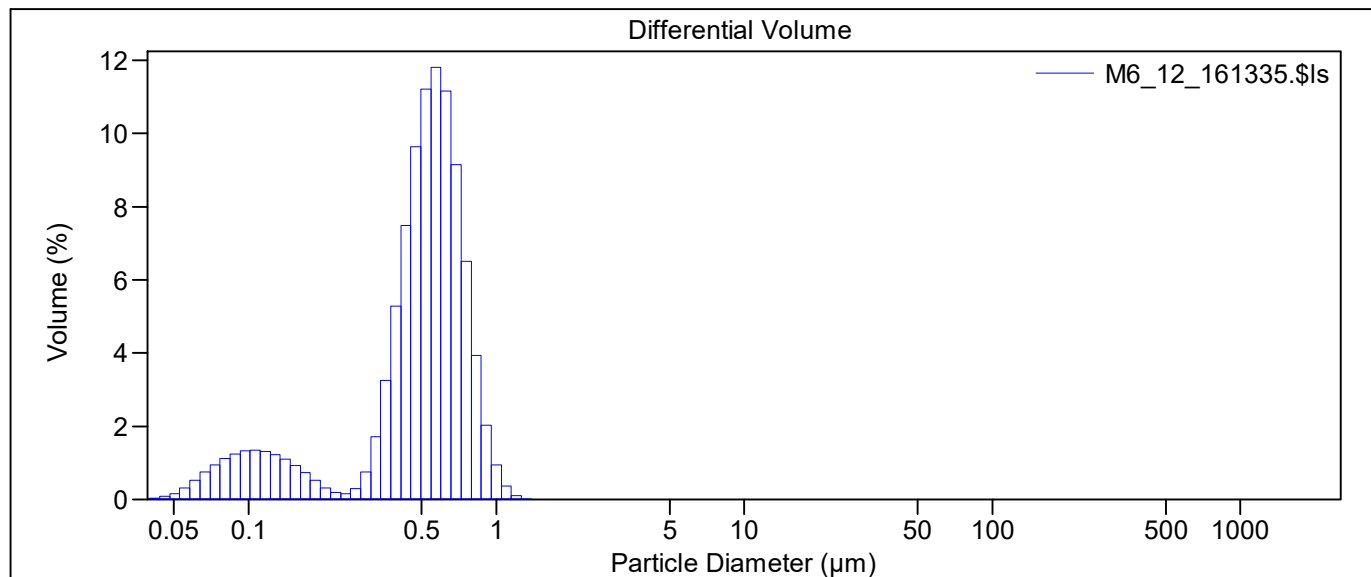
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_12_161335.\$ls		
	M6_12_161335.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.07%		
LS 13 320	Universal Liquid Module		
Start time:	16:11	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

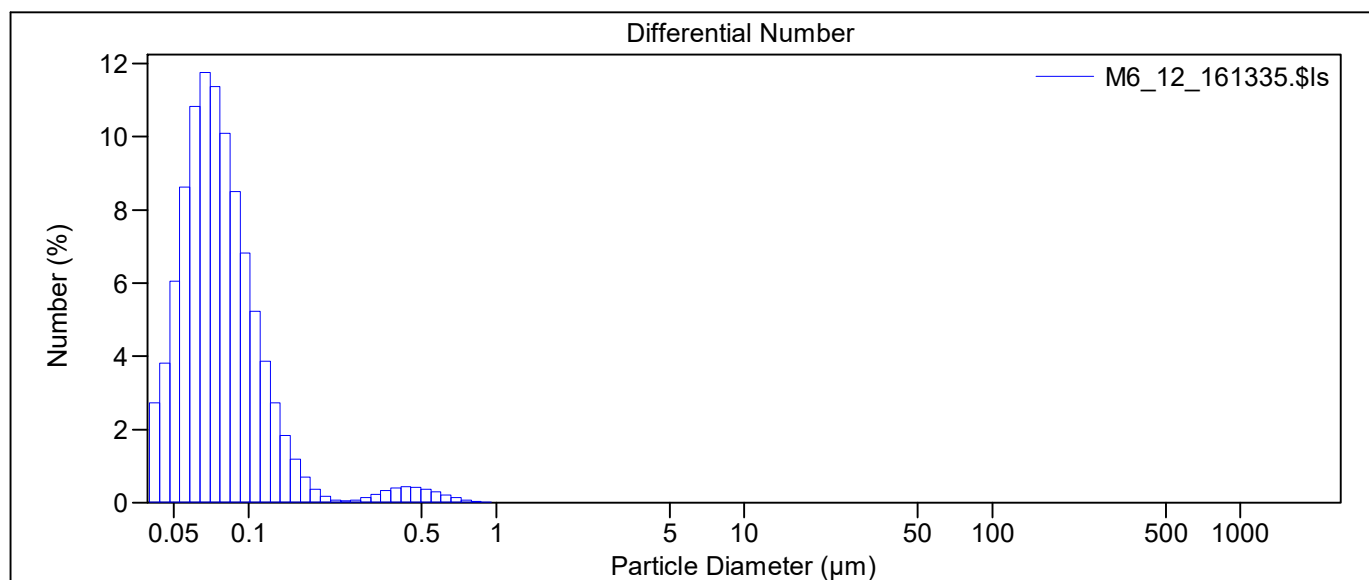
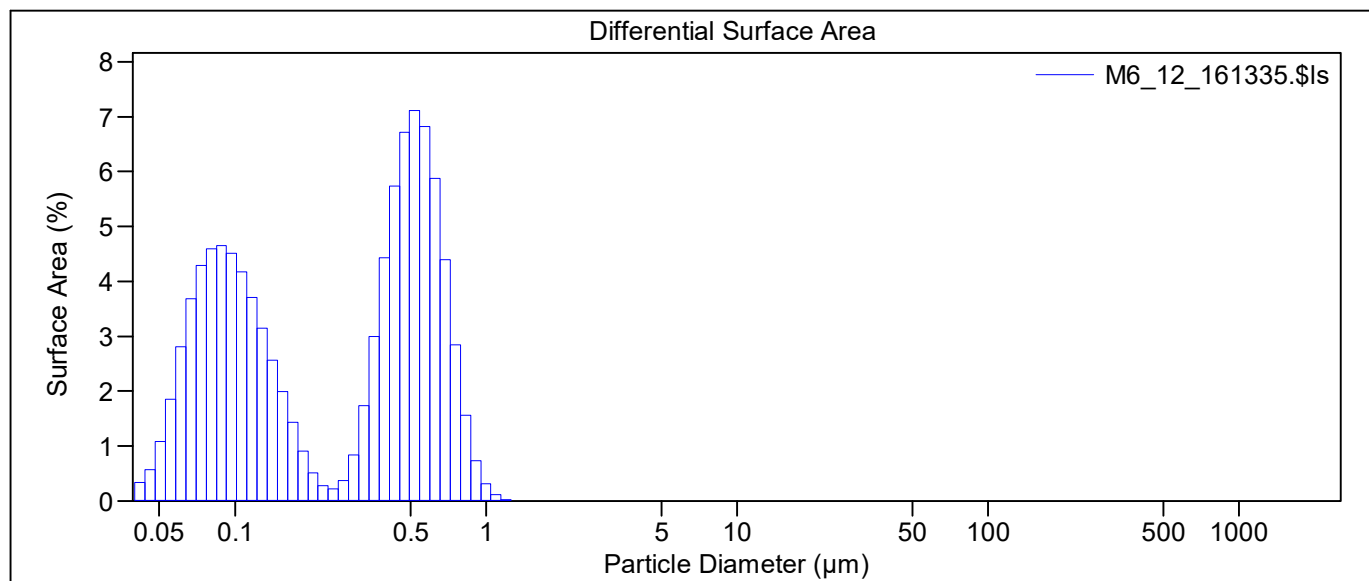
Volume Statistics (Arithmetic) M6_12_161335.\$ls

Calculations from 0.040 μm to 2000 μm

Volume:	100%	S.D.:	0.215 μm
Mean:	0.509 μm	Variance:	0.046 μm^2
Median:	0.527 μm	C.V.:	42.2%
Mean/Median ratio:	0.965	Skewness:	-0.301 Left skewed
Mode:	0.571 μm	Kurtosis:	0.013 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.131 μm	0.407 μm	0.527 μm	0.646 μm	0.763 μm





M6.\$sav					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.043	0.34	2.72
2	0.044	0.046	0.079	0.57	3.82
3	0.048	0.050	0.17	1.08	6.05
4	0.053	0.055	0.31	1.86	8.62
5	0.058	0.061	0.52	2.82	10.8
6	0.064	0.067	0.74	3.68	11.8
7	0.070	0.073	0.95	4.29	11.4
8	0.077	0.080	1.12	4.59	10.1
9	0.084	0.088	1.25	4.66	8.50
10	0.093	0.097	1.32	4.51	6.82
11	0.102	0.106	1.35	4.17	5.24
12	0.112	0.117	1.31	3.71	3.87
13	0.122	0.128	1.23	3.15	2.73
14	0.134	0.141	1.10	2.57	1.84
15	0.148	0.155	0.93	1.99	1.18
16	0.162	0.170	0.74	1.43	0.71
17	0.178	0.186	0.52	0.91	0.37

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.31	0.51	0.17
19	0.214	0.225	0.19	0.28	0.078
20	0.235	0.247	0.17	0.22	0.052
21	0.258	0.271	0.30	0.37	0.072
22	0.284	0.297	0.76	0.84	0.14
23	0.311	0.326	1.72	1.74	0.23
24	0.342	0.358	3.25	3.00	0.33
25	0.375	0.393	5.28	4.44	0.41
26	0.412	0.431	7.49	5.73	0.44
27	0.452	0.474	9.64	6.72	0.43
28	0.496	0.520	11.2	7.12	0.37
29	0.545	0.571	11.8	6.83	0.30
30	0.598	0.627	11.2	5.88	0.21
31	0.656	0.688	9.15	4.39	0.13
32	0.721	0.755	6.51	2.85	0.071
33	0.791	0.829	3.94	1.57	0.033
34	0.868	0.910	2.03	0.74	0.013
35	0.953	0.999	0.94	0.31	0.0044
36	1.047	1.097	0.37	0.11	0.0013
37	1.149	1.204	0.099	0.027	0.00027
38	1.261	1.321	0.019	0.0049	0.000040
39	1.385	1.451	0.0014	0.00031	0.000002
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

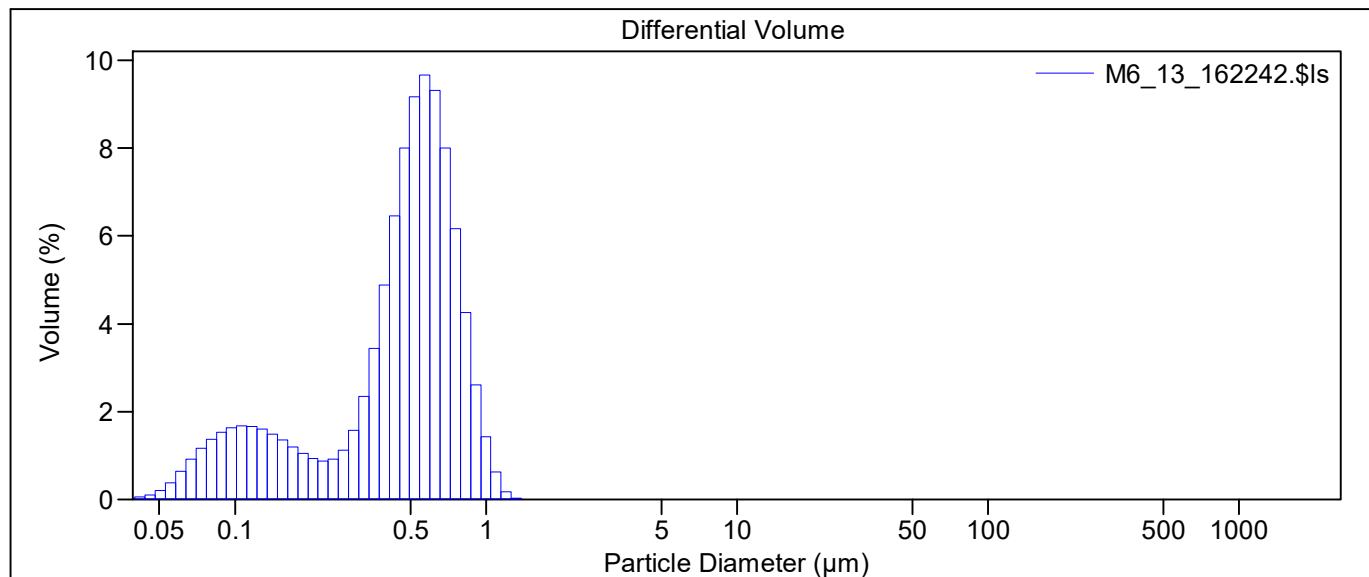
M6.\$av

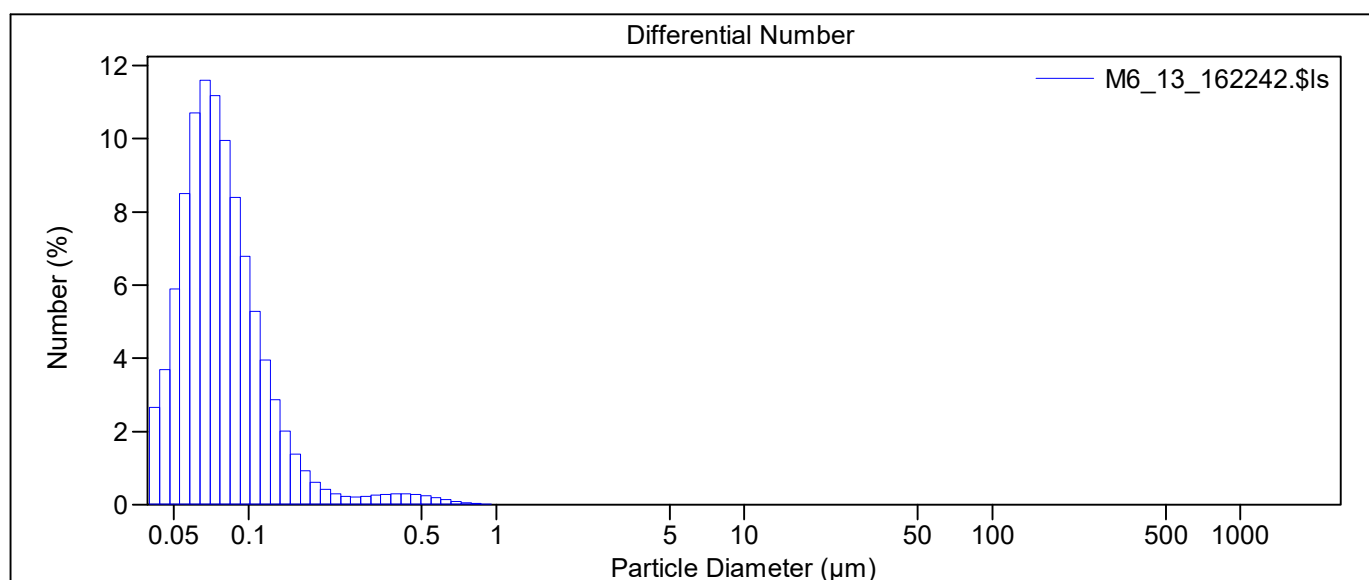
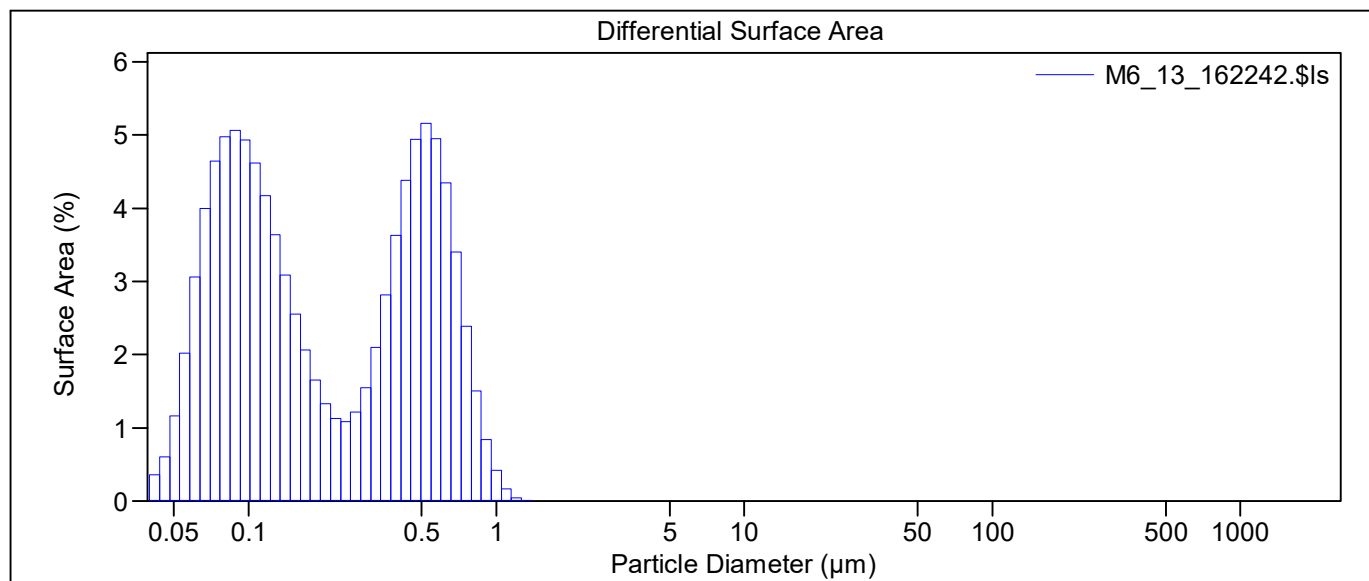
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_13_162242.\$ls		
	M6_13_162242.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.83%		
LS 13 320	Universal Liquid Module		
Start time:	16:21	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_13_162242.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.240 μm
Mean:	0.485 μm		Variance:	0.057 μm ²
Median:	0.504 μm		C.V.:	49.4%
Mean/Median ratio:	0.962		Skewness:	-0.019 Left skewed
Mode:	0.571 μm		Kurtosis:	-0.473 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.114 μm	0.332 μm	0.504 μm	0.646 μm	0.781 μm





M6.\$sav					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.052	0.36	2.66
2	0.044	0.046	0.095	0.60	3.69
3	0.048	0.050	0.20	1.16	5.89
4	0.053	0.055	0.38	2.02	8.51
5	0.058	0.061	0.64	3.06	10.7
6	0.064	0.067	0.91	4.00	11.6
7	0.070	0.073	1.16	4.64	11.2
8	0.077	0.080	1.37	4.98	9.95
9	0.084	0.088	1.53	5.06	8.40
10	0.093	0.097	1.64	4.93	6.79
11	0.102	0.106	1.68	4.62	5.27
12	0.112	0.117	1.67	4.17	3.95
13	0.122	0.128	1.60	3.64	2.86
14	0.134	0.141	1.49	3.09	2.01
15	0.148	0.155	1.35	2.55	1.38
16	0.162	0.170	1.20	2.07	0.93
17	0.178	0.186	1.05	1.65	0.62

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.93	1.33	0.41
19	0.214	0.225	0.87	1.13	0.29
20	0.235	0.247	0.91	1.08	0.23
21	0.258	0.271	1.13	1.22	0.22
22	0.284	0.297	1.57	1.55	0.23
23	0.311	0.326	2.34	2.10	0.26
24	0.342	0.358	3.45	2.82	0.28
25	0.375	0.393	4.88	3.63	0.30
26	0.412	0.431	6.46	4.38	0.30
27	0.452	0.474	8.00	4.94	0.29
28	0.496	0.520	9.17	5.16	0.25
29	0.545	0.571	9.66	4.95	0.20
30	0.598	0.627	9.31	4.34	0.14
31	0.656	0.688	8.00	3.40	0.093
32	0.721	0.755	6.17	2.39	0.054
33	0.791	0.829	4.26	1.50	0.028
34	0.868	0.910	2.61	0.84	0.013
35	0.953	0.999	1.43	0.42	0.0054
36	1.047	1.097	0.63	0.17	0.0018
37	1.149	1.204	0.17	0.042	0.00037
38	1.261	1.321	0.030	0.0067	0.000050
39	1.385	1.451	0.0017	0.00034	0.000002
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

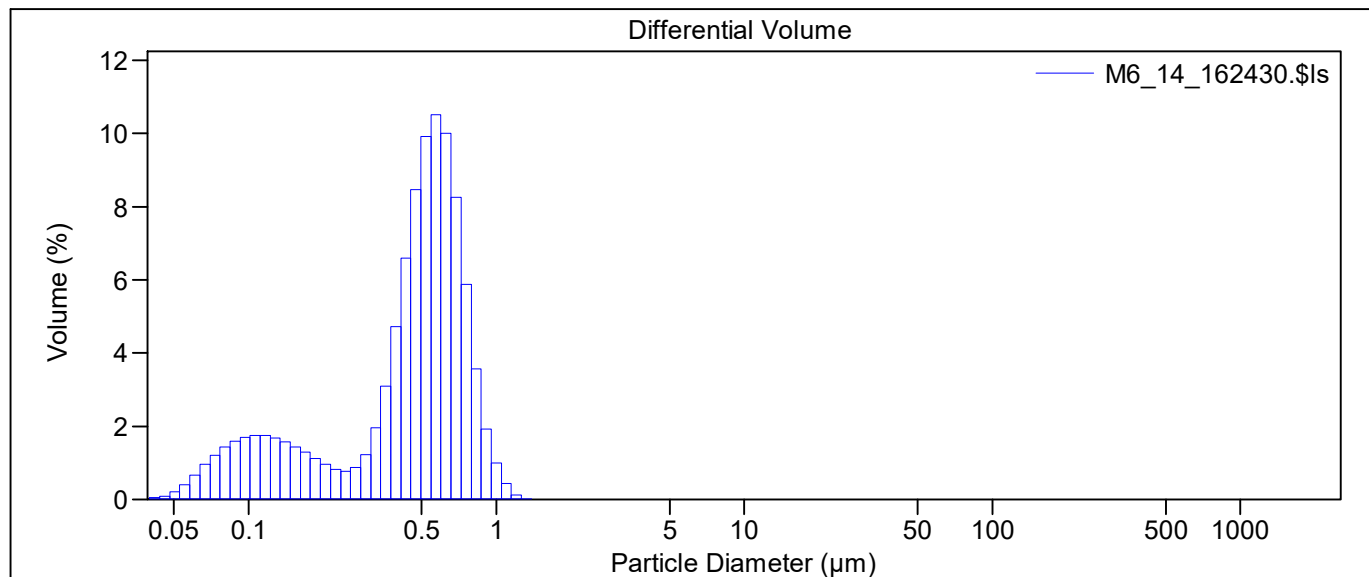
M6.\$av

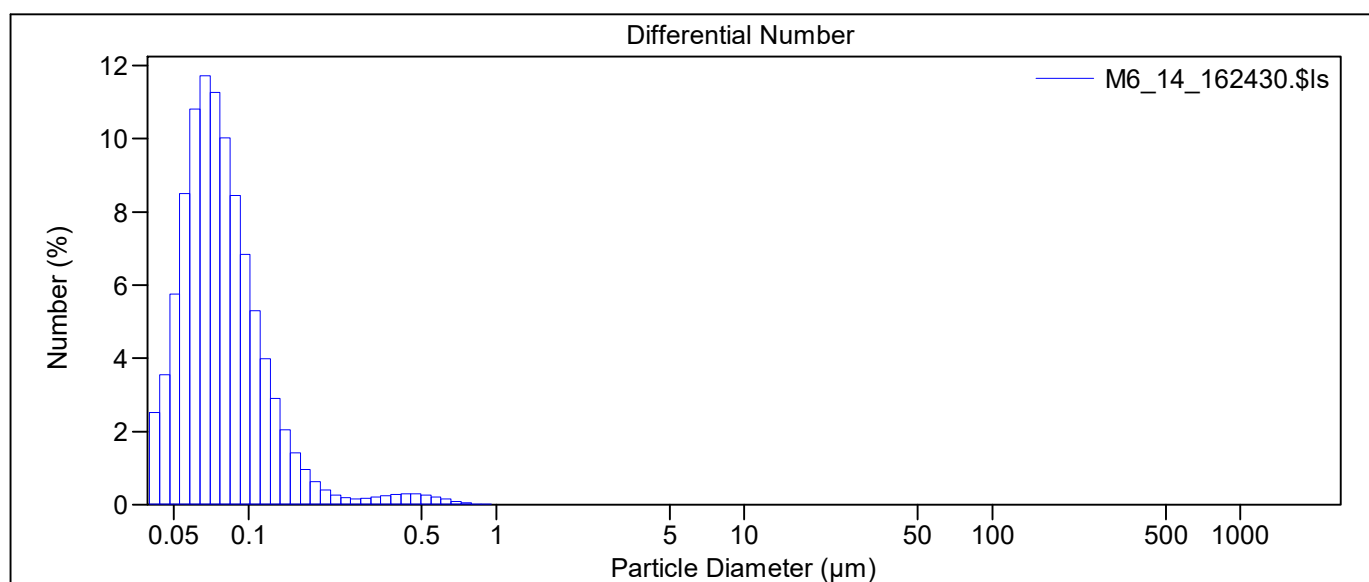
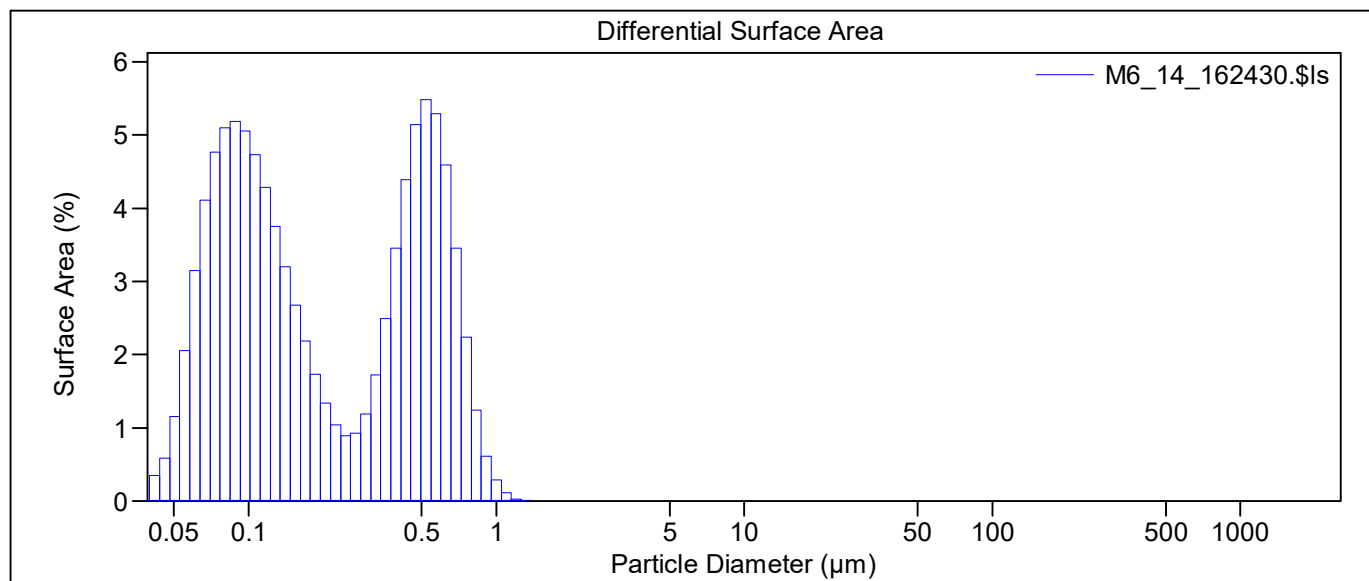
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_14_162430.\$ls		
	M6_14_162430.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.86%		
LS 13 320	Universal Liquid Module		
Start time:	16:22	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_14_162430.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.232 μm
Mean:	0.477 μm		Variance:	0.054 μm ²
Median:	0.504 μm		C.V.:	48.7%
Mean/Median ratio:	0.945		Skewness:	-0.113 Left skewed
Mode:	0.571 μm		Kurtosis:	-0.478 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.111 μm	0.334 μm	0.504 μm	0.634 μm	0.756 μm





M6.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.051	0.35	2.53
2	0.044	0.046	0.094	0.59	3.54
3	0.048	0.050	0.20	1.15	5.75
4	0.053	0.055	0.40	2.05	8.51
5	0.058	0.061	0.67	3.15	10.8
6	0.064	0.067	0.95	4.11	11.7
7	0.070	0.073	1.22	4.77	11.3
8	0.077	0.080	1.43	5.10	10.0
9	0.084	0.088	1.59	5.19	8.45
10	0.093	0.097	1.71	5.05	6.83
11	0.102	0.106	1.75	4.73	5.31
12	0.112	0.117	1.74	4.28	3.99
13	0.122	0.128	1.67	3.75	2.90
14	0.134	0.141	1.57	3.20	2.05
15	0.148	0.155	1.44	2.67	1.42
16	0.162	0.170	1.29	2.18	0.96
17	0.178	0.186	1.12	1.73	0.63

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.95	1.34	0.41
19	0.214	0.225	0.82	1.04	0.26
20	0.235	0.247	0.77	0.89	0.19
21	0.258	0.271	0.87	0.93	0.16
22	0.284	0.297	1.23	1.19	0.17
23	0.311	0.326	1.95	1.72	0.21
24	0.342	0.358	3.10	2.49	0.25
25	0.375	0.393	4.72	3.46	0.28
26	0.412	0.431	6.59	4.39	0.30
27	0.452	0.474	8.47	5.14	0.29
28	0.496	0.520	9.91	5.48	0.26
29	0.545	0.571	10.5	5.29	0.21
30	0.598	0.627	10.0	4.60	0.15
31	0.656	0.688	8.26	3.45	0.093
32	0.721	0.755	5.87	2.24	0.050
33	0.791	0.829	3.57	1.24	0.023
34	0.868	0.910	1.93	0.61	0.0094
35	0.953	0.999	0.99	0.28	0.0036
36	1.047	1.097	0.44	0.12	0.0012
37	1.149	1.204	0.12	0.029	0.00026
38	1.261	1.321	0.022	0.0047	0.000034
39	1.385	1.451	0.00095	0.00019	0.000001
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

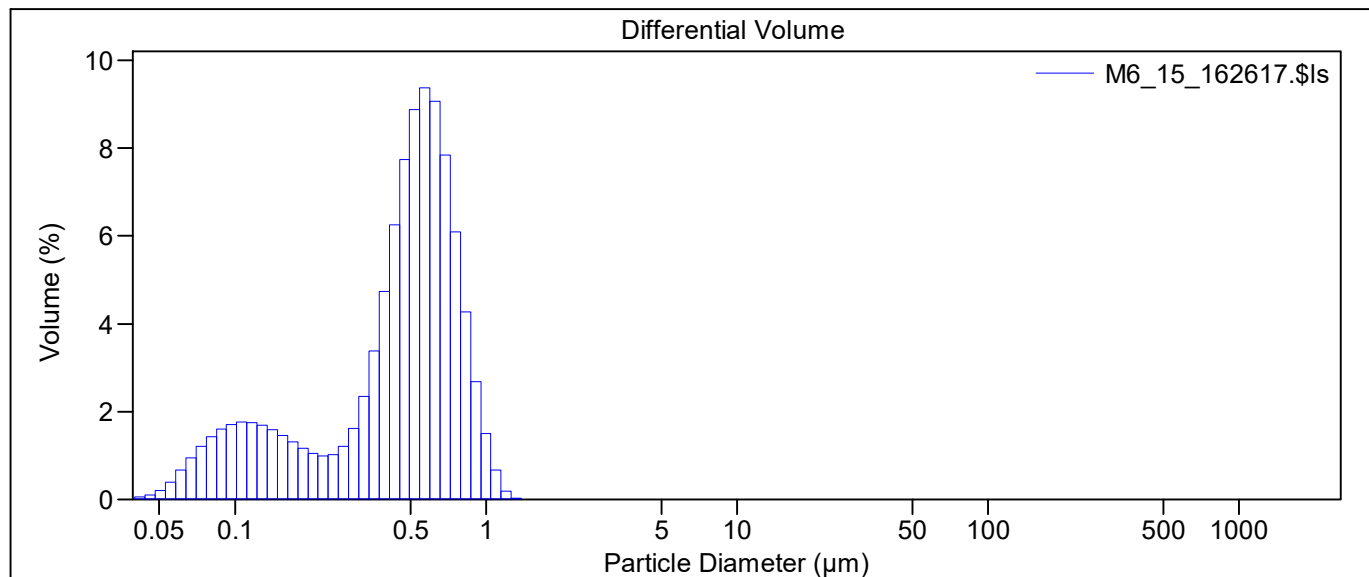
M6.\$av

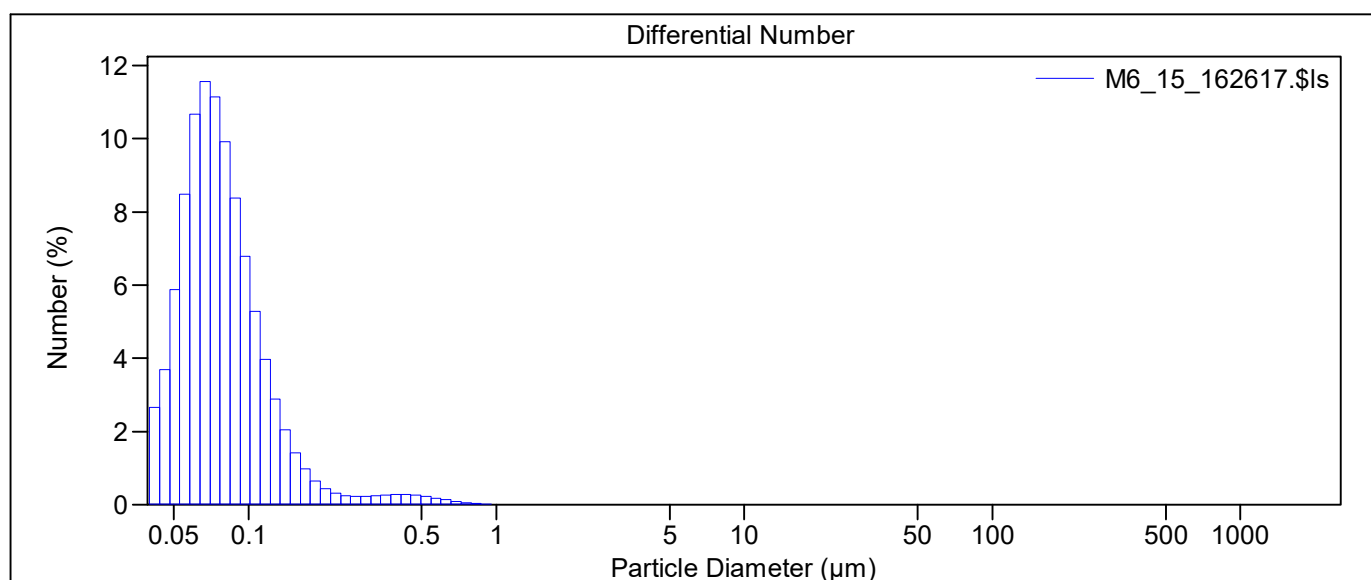
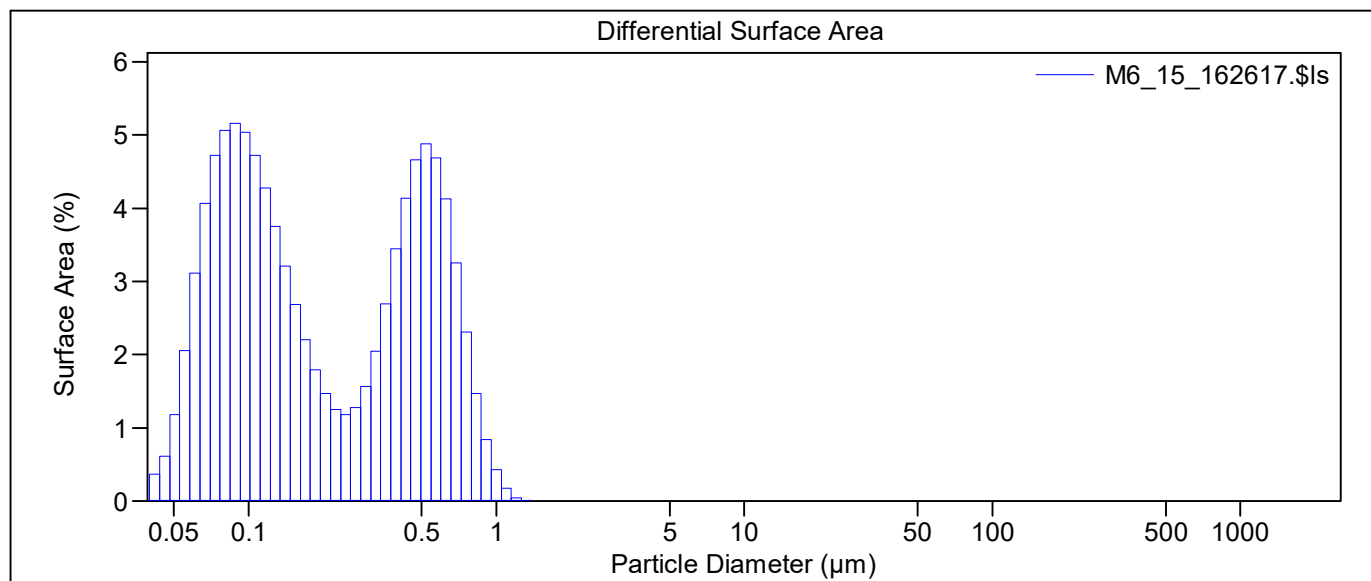
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M6\M6_15_162617.\$ls		
	M6_15_162617.\$ls		
File ID:	M6		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.78%		
LS 13 320	Universal Liquid Module		
Start time:	16:24	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M6_15_162617.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.244 μm
Mean:	0.480 μm		Variance:	0.059 μm ²
Median:	0.500 μm		C.V.:	50.8%
Mean/Median ratio:	0.961		Skewness:	0.020 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.532 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.111 μm	0.312 μm	0.500 μm	0.645 μm	0.784 μm





M6.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.054	0.37	2.66
2	0.044	0.046	0.099	0.62	3.69
3	0.048	0.050	0.21	1.18	5.88
4	0.053	0.055	0.40	2.06	8.49
5	0.058	0.061	0.66	3.12	10.7
6	0.064	0.067	0.95	4.07	11.6
7	0.070	0.073	1.21	4.72	11.2
8	0.077	0.080	1.43	5.07	9.92
9	0.084	0.088	1.60	5.16	8.39
10	0.093	0.097	1.71	5.03	6.79
11	0.102	0.106	1.76	4.72	5.29
12	0.112	0.117	1.75	4.28	3.97
13	0.122	0.128	1.69	3.76	2.89
14	0.134	0.141	1.58	3.21	2.05
15	0.148	0.155	1.45	2.68	1.42
16	0.162	0.170	1.31	2.21	0.97
17	0.178	0.186	1.17	1.79	0.65

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.05	1.47	0.44
19	0.214	0.225	0.98	1.25	0.31
20	0.235	0.247	1.02	1.18	0.25
21	0.258	0.271	1.21	1.28	0.22
22	0.284	0.297	1.63	1.56	0.22
23	0.311	0.326	2.34	2.05	0.24
24	0.342	0.358	3.38	2.70	0.27
25	0.375	0.393	4.74	3.44	0.28
26	0.412	0.431	6.26	4.14	0.28
27	0.452	0.474	7.74	4.67	0.26
28	0.496	0.520	8.88	4.88	0.23
29	0.545	0.571	9.37	4.69	0.18
30	0.598	0.627	9.07	4.13	0.13
31	0.656	0.688	7.84	3.25	0.087
32	0.721	0.755	6.10	2.31	0.051
33	0.791	0.829	4.28	1.47	0.027
34	0.868	0.910	2.68	0.84	0.013
35	0.953	0.999	1.50	0.43	0.0054
36	1.047	1.097	0.67	0.17	0.0018
37	1.149	1.204	0.19	0.044	0.00039
38	1.261	1.321	0.033	0.0071	0.000052
39	1.385	1.451	0.0018	0.00036	0.000002
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M6.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M7\M7.\$sav M7.\$sav

File ID: M7

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_01_163806.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M7\M7_02_163954.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M7\M7_03_164142.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M7\M7_04_165120.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M7\M7_06_165456.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M7\M7_07_170420.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M7\M7_11_171919.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M7\M7_15_173326.\$ls

Volume Statistics (Arithmetic) M7.\$sav

Calculations from 0.040 μm to 2000 μm

Volume: 100%

Mean: 0.530 μm

Median: 0.508 μm

Mean/Median ratio: 1.042

Mode: 0.520 μm

S.D.: 0.226 μm

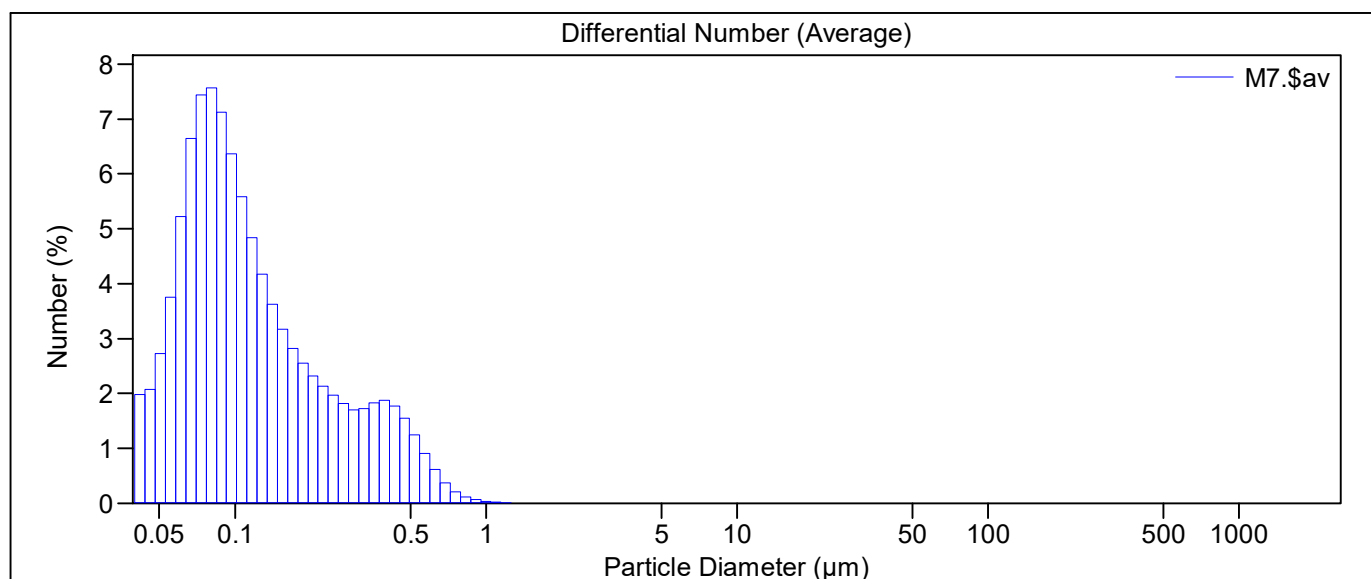
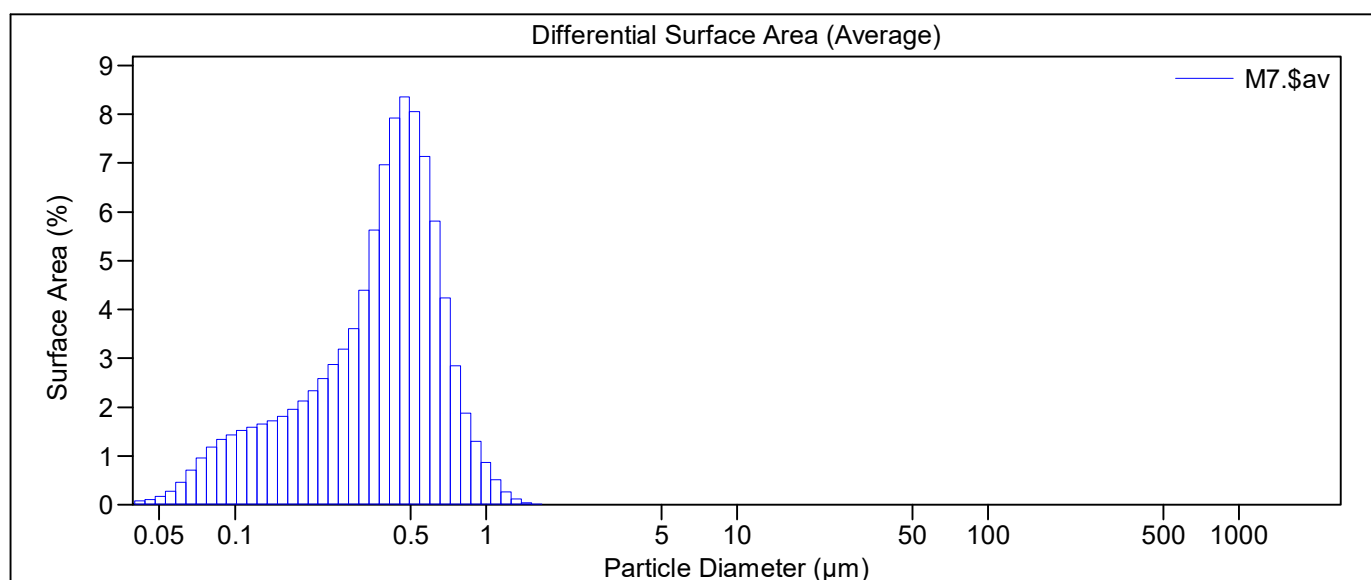
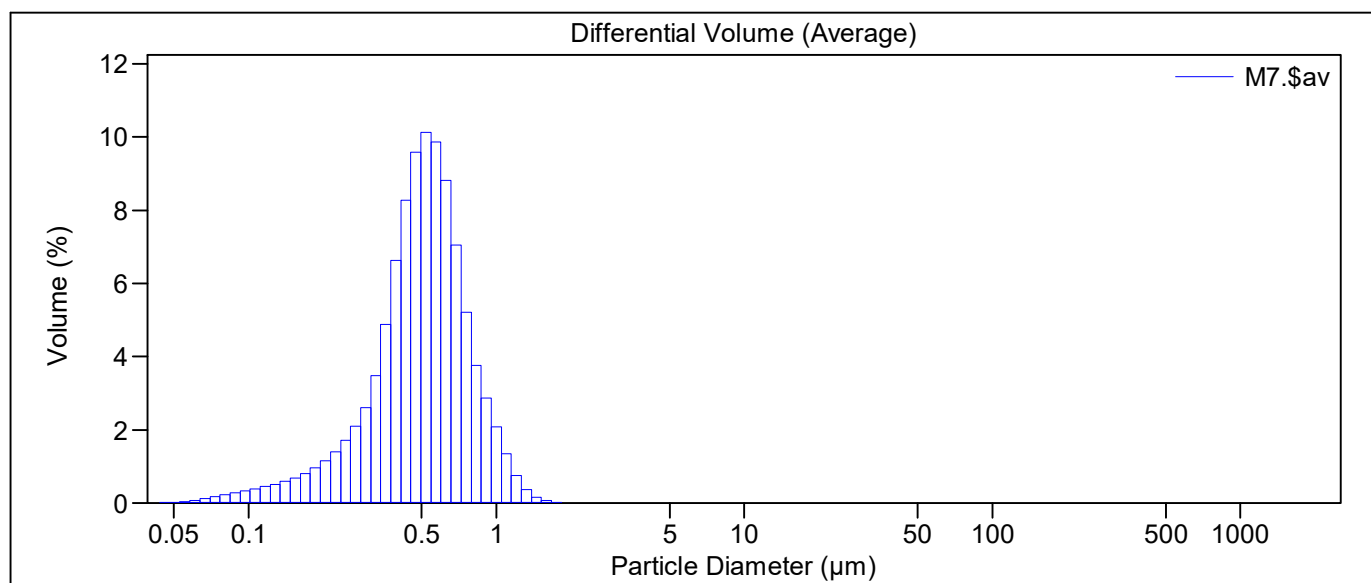
Variance: 0.051 μm^2

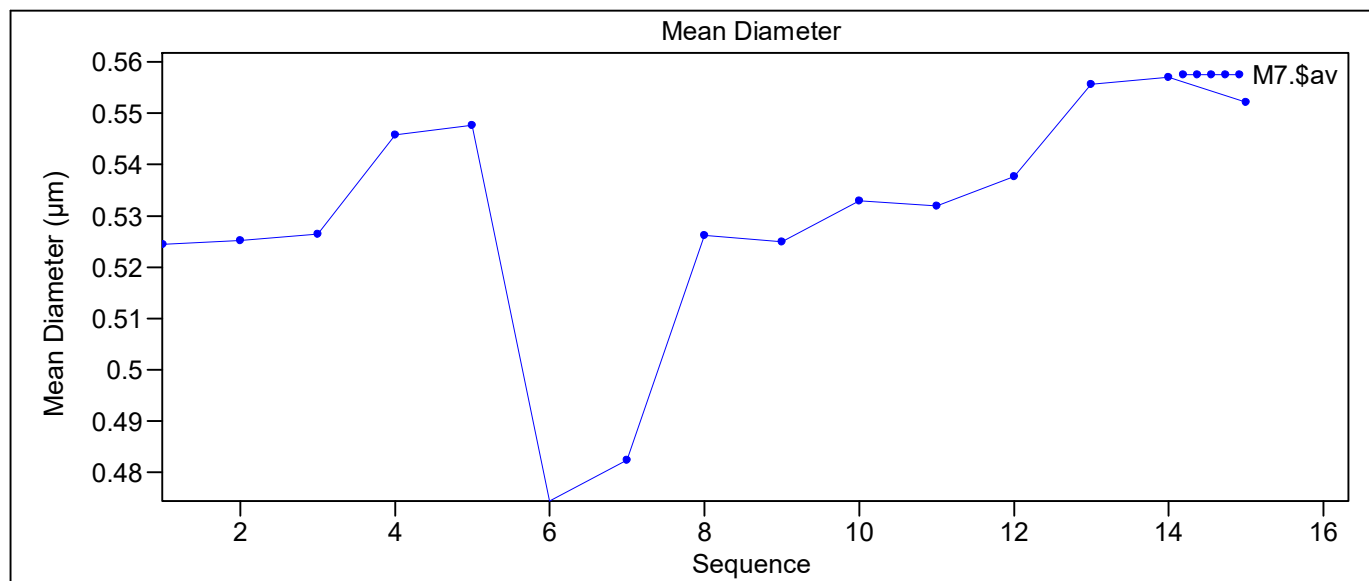
C.V.: 42.6%

Skewness: 0.756 Right skewed

Kurtosis: 1.384 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.259 μm	0.386 μm	0.508 μm	0.648 μm	0.821 μm





M7.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.0085	0.083	1.98
2	0.044	0.046	0.012	0.11	2.08
3	0.048	0.050	0.020	0.17	2.72
4	0.053	0.055	0.037	0.28	3.76
5	0.058	0.061	0.068	0.46	5.22
6	0.064	0.067	0.11	0.71	6.65
7	0.070	0.073	0.17	0.96	7.44
8	0.077	0.080	0.23	1.18	7.57
9	0.084	0.088	0.29	1.33	7.12
10	0.093	0.097	0.34	1.44	6.37
11	0.102	0.106	0.39	1.52	5.59
12	0.112	0.117	0.45	1.58	4.83
13	0.122	0.128	0.51	1.65	4.18
14	0.134	0.141	0.59	1.72	3.63
15	0.148	0.155	0.68	1.82	3.17
16	0.162	0.170	0.80	1.95	2.82
17	0.178	0.186	0.96	2.12	2.55
18	0.195	0.205	1.16	2.33	2.33
19	0.214	0.225	1.40	2.58	2.14
20	0.235	0.247	1.71	2.87	1.97
21	0.258	0.271	2.09	3.19	1.82
22	0.284	0.297	2.60	3.61	1.71
23	0.311	0.326	3.47	4.40	1.73
24	0.342	0.358	4.87	5.62	1.83
25	0.375	0.393	6.63	6.97	1.88
26	0.412	0.431	8.28	7.92	1.78
27	0.452	0.474	9.58	8.36	1.55
28	0.496	0.520	10.1	8.05	1.24
29	0.545	0.571	9.87	7.14	0.91
30	0.598	0.627	8.81	5.81	0.62
31	0.656	0.688	7.06	4.24	0.37
32	0.721	0.755	5.21	2.85	0.21
33	0.791	0.829	3.76	1.87	0.11
34	0.868	0.910	2.88	1.31	0.066
35	0.953	0.999	2.09	0.86	0.036
36	1.047	1.097	1.35	0.51	0.018
37	1.149	1.204	0.76	0.26	0.0075
38	1.261	1.321	0.36	0.11	0.0027
39	1.385	1.451	0.16	0.045	0.00089
40	1.520	1.592	0.063	0.016	0.00027
41	1.668	1.748	0.023	0.0055	0.000075

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.0065	0.0014	0.000016
43	2.011	2.107	0.0013	0.00026	0.000002
44	2.207	2.313	0.00012	0.000022	1.68E-7
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

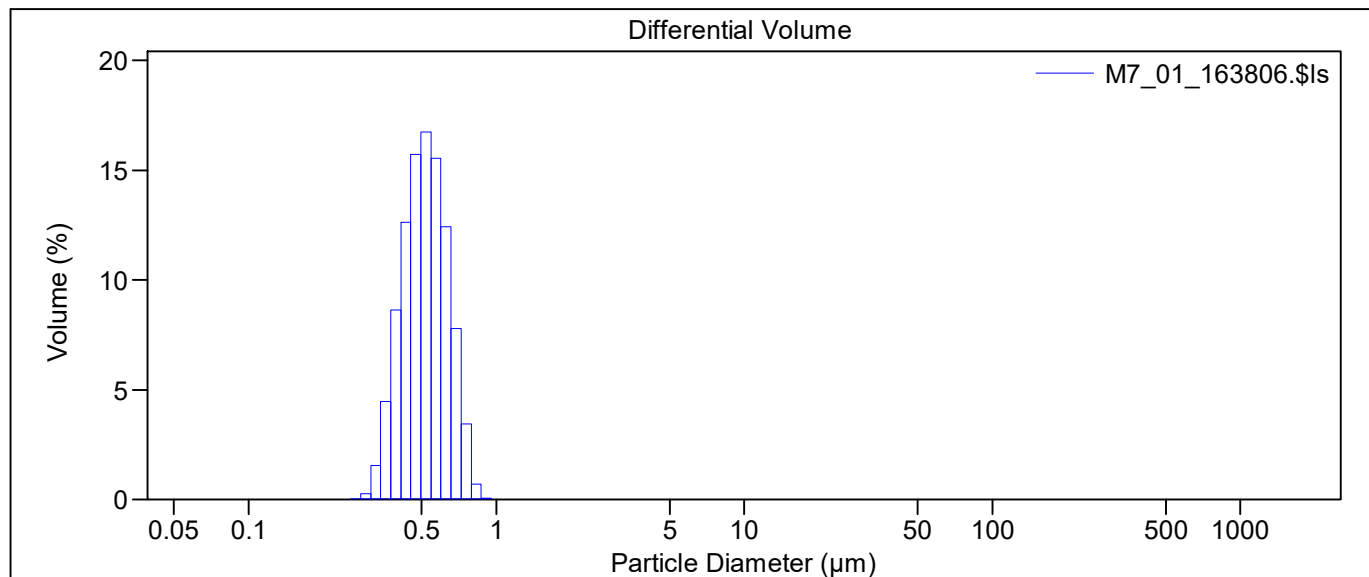
M7.\$av

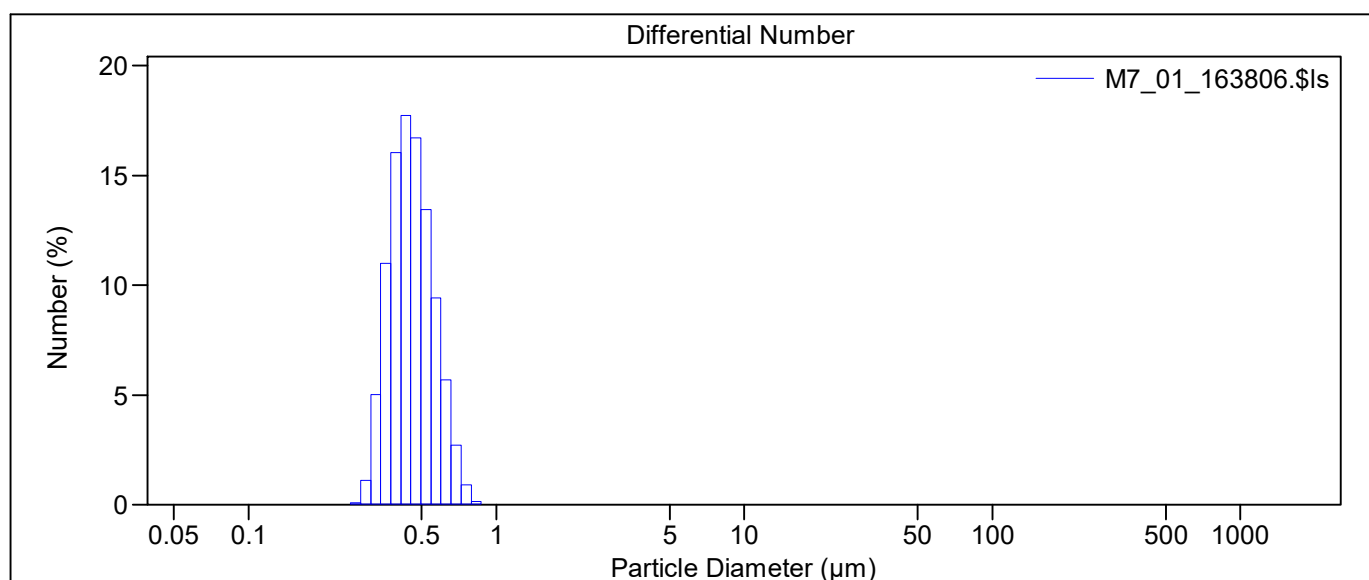
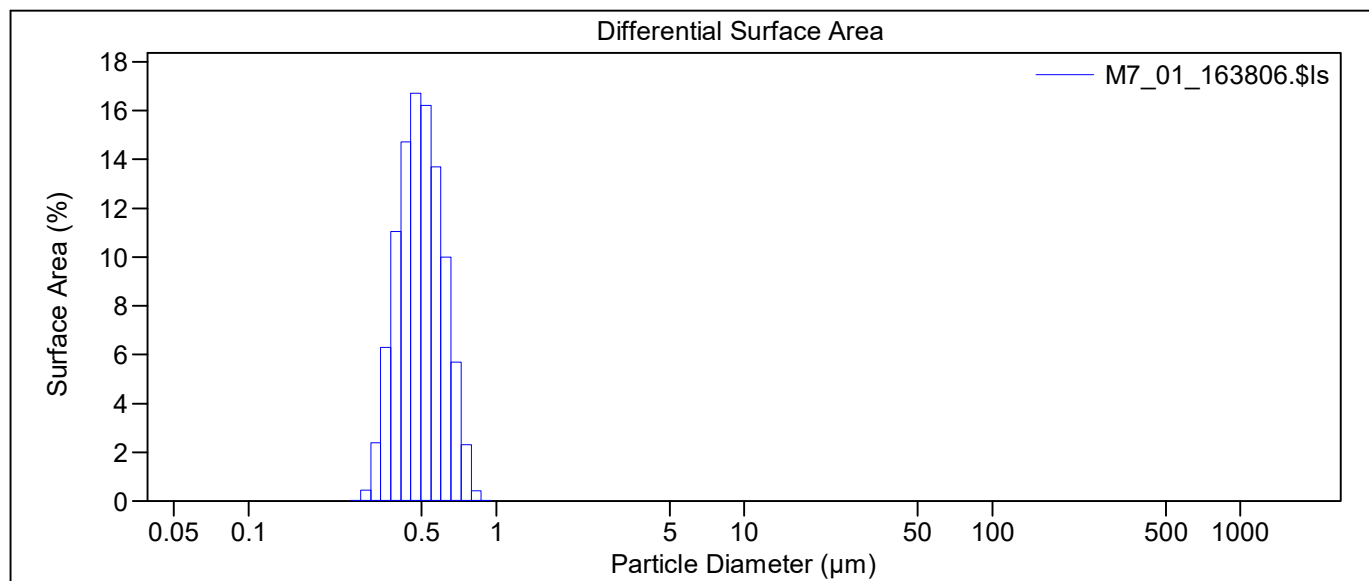
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_01_163806.\$ls		
	M7_01_163806.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.20%		
LS 13 320	Universal Liquid Module		
Start time:	16:36	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	54%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_01_163806.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.524 μm	S.D.:	0.106 μm	
Median:	0.516 μm	Variance:	0.011 μm ²	
Mean/Median ratio:	1.017	C.V.:	20.2%	
Mode:	0.520 μm	Skewness:	0.392 Right skewed	
		Kurtosis:	-0.293 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.391 μm	0.444 μm	0.516 μm	0.596 μm	0.673 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.016	0.029	0.090
22	0.284	0.297	0.26	0.44	1.11
23	0.311	0.326	1.55	2.38	5.02
24	0.342	0.358	4.47	6.29	11.0
25	0.375	0.393	8.63	11.1	16.0
26	0.412	0.431	12.6	14.7	17.7
27	0.452	0.474	15.7	16.7	16.7
28	0.496	0.520	16.7	16.2	13.4
29	0.545	0.571	15.5	13.7	9.43
30	0.598	0.627	12.4	9.98	5.70
31	0.656	0.688	7.79	5.70	2.70
32	0.721	0.755	3.45	2.30	0.90
33	0.791	0.829	0.71	0.43	0.14
34	0.868	0.910	0.063	0.035	0.0094
35	0.953	0.999	0	0	0
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

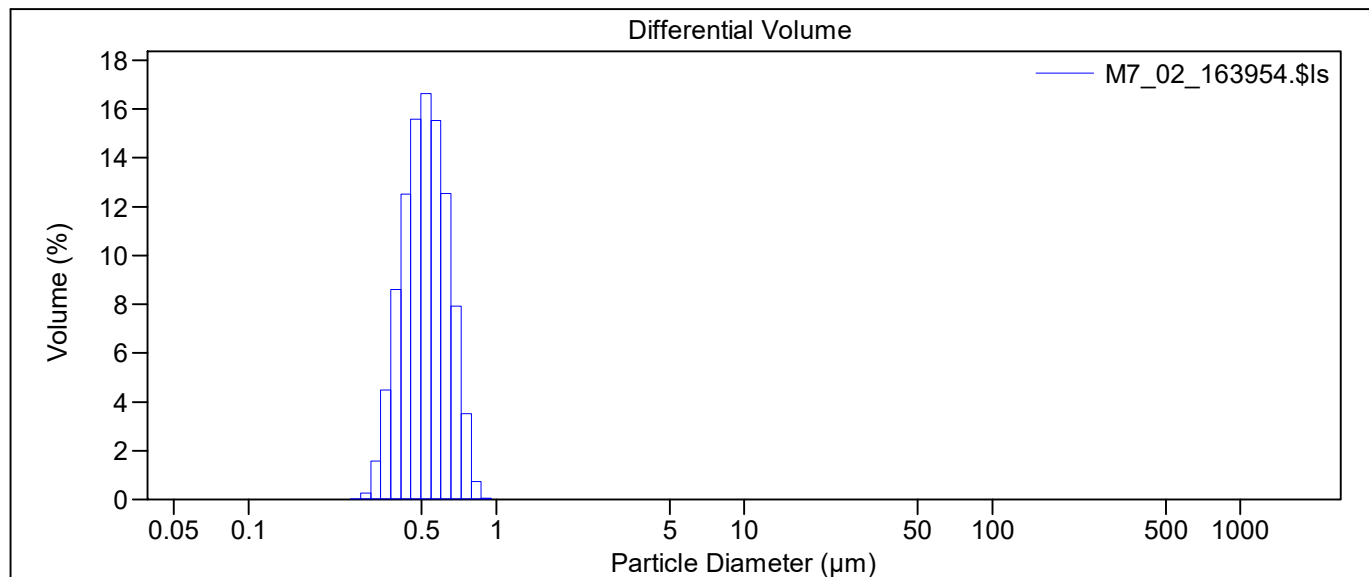
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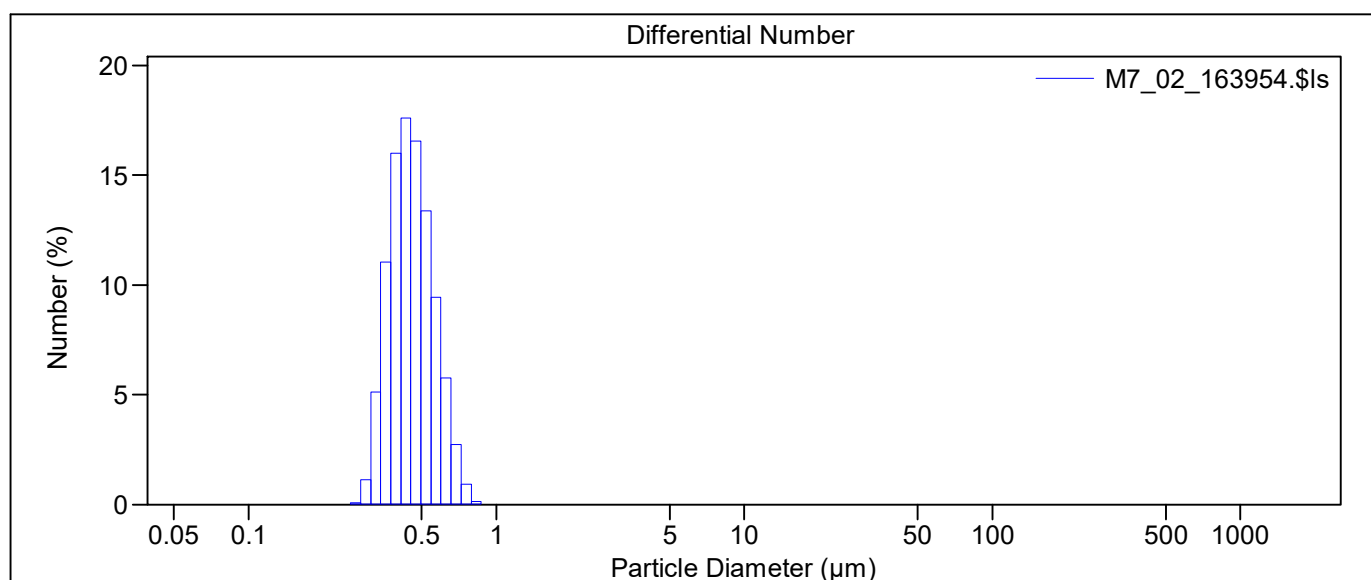
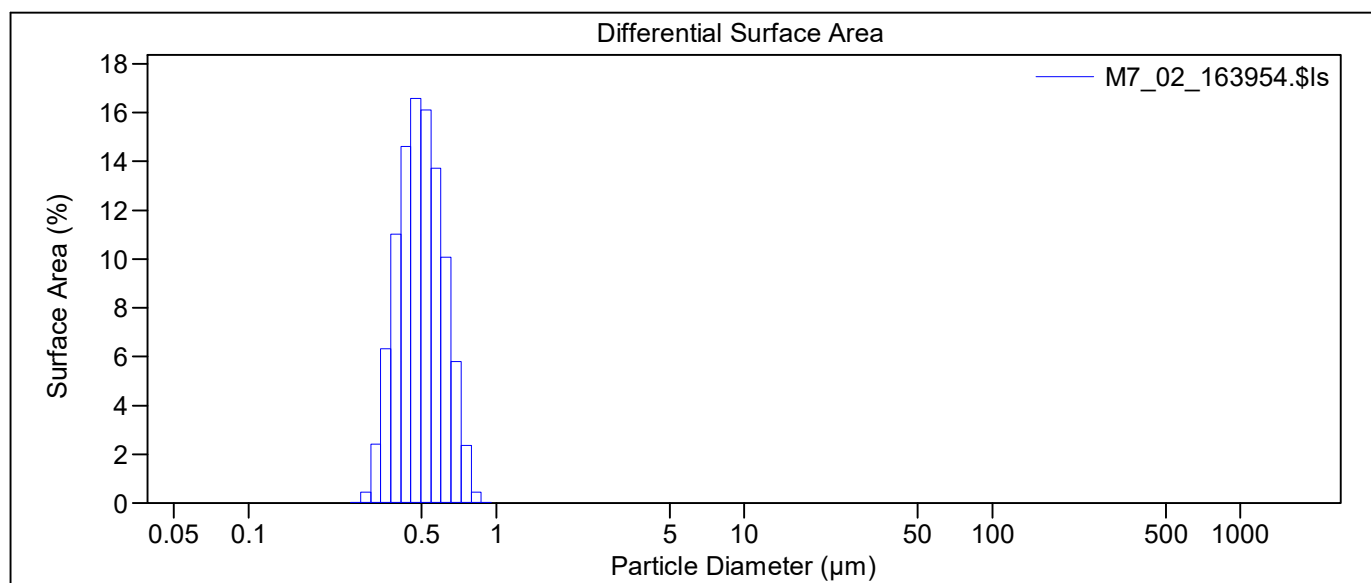
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_02_163954.\$ls		
	M7_02_163954.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.15%		
LS 13 320	Universal Liquid Module		
Start time:	16:38	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	54%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_02_163954.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.107 μm
Mean:	0.525 μm		Variance:	0.011 μm ²
Median:	0.517 μm		C.V.:	20.3%
Mean/Median ratio:	1.017		Skewness:	0.384 Right skewed
Mode:	0.520 μm		Kurtosis:	-0.310 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.391 μm	0.444 μm	0.517 μm	0.597 μm	0.675 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.017	0.031	0.095
22	0.284	0.297	0.27	0.45	1.14
23	0.311	0.326	1.57	2.43	5.12
24	0.342	0.358	4.49	6.32	11.1
25	0.375	0.393	8.59	11.0	16.0
26	0.412	0.431	12.5	14.6	17.6
27	0.452	0.474	15.6	16.6	16.6
28	0.496	0.520	16.6	16.1	13.4
29	0.545	0.571	15.5	13.7	9.45
30	0.598	0.627	12.5	10.1	5.76
31	0.656	0.688	7.92	5.80	2.75
32	0.721	0.755	3.53	2.35	0.93
33	0.791	0.829	0.73	0.44	0.15
34	0.868	0.910	0.064	0.036	0.0097
35	0.953	0.999	0	0	0
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

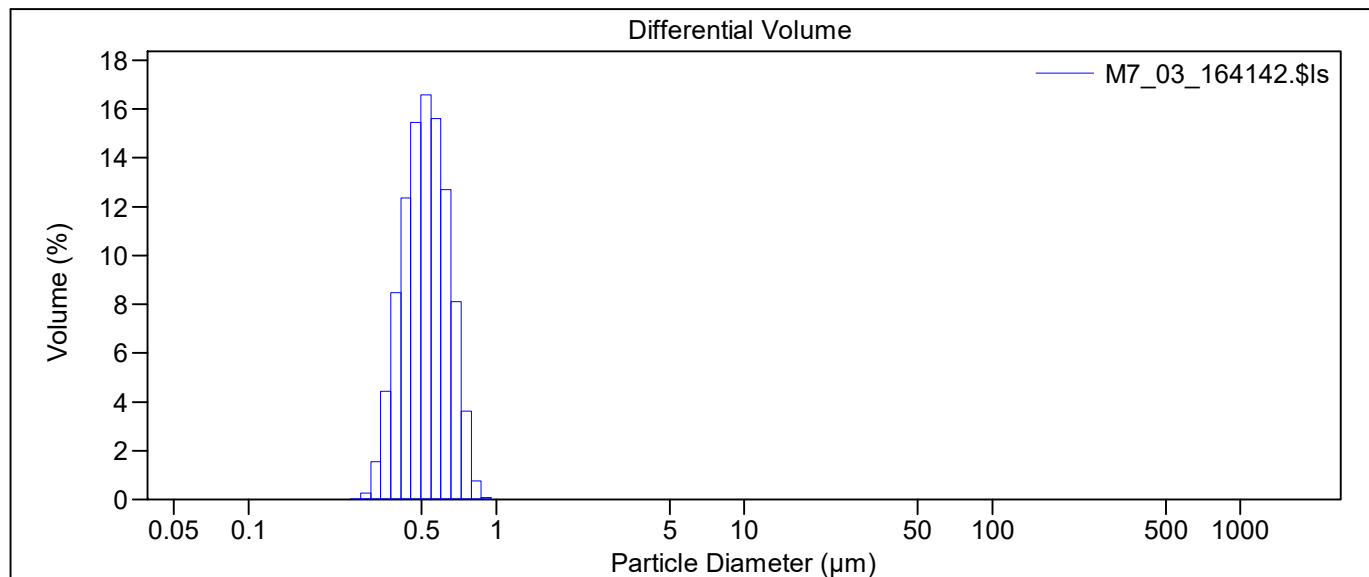
M7.\$av

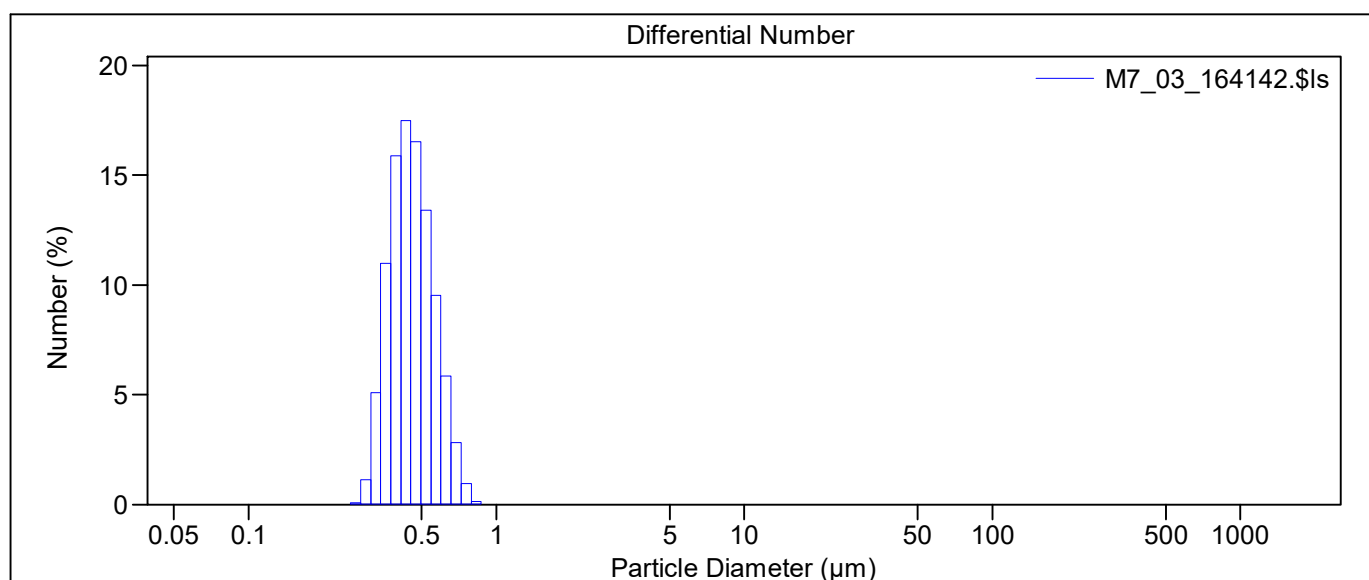
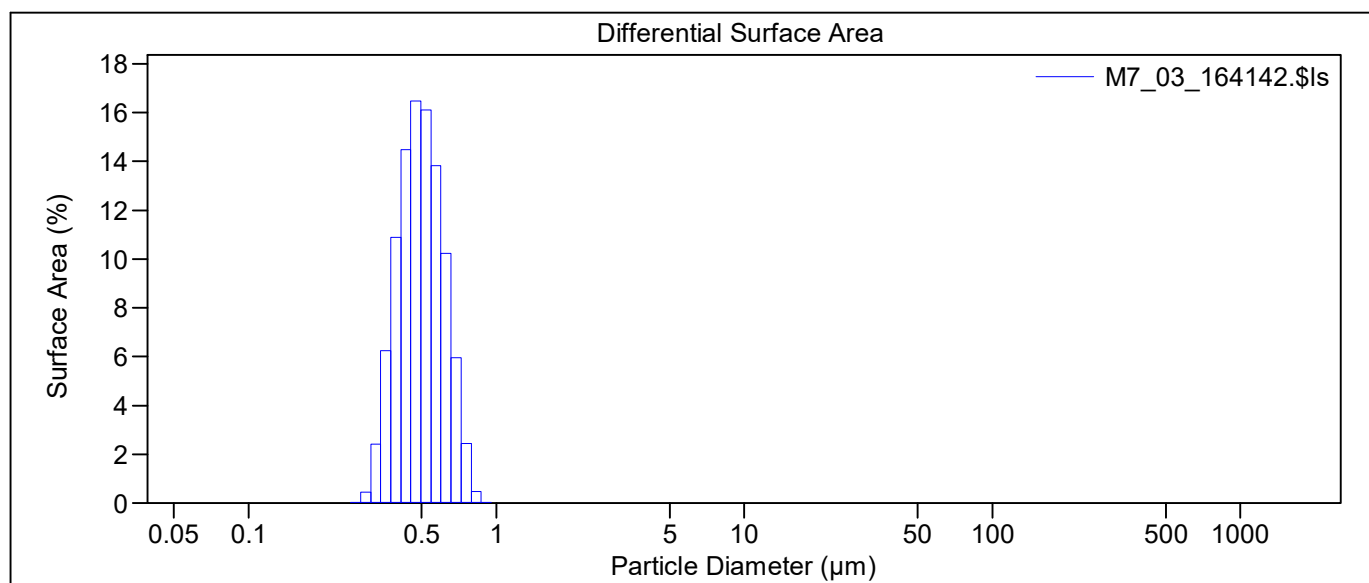
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_03_164142.\$ls		
	M7_03_164142.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.09%		
LS 13 320	Universal Liquid Module		
Start time:	16:40	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	54%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_03_164142.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.107 μm
Mean:	0.526 μm		Variance:	0.011 μm ²
Median:	0.518 μm		C.V.:	20.3%
Mean/Median ratio:	1.016		Skewness:	0.374 Right skewed
Mode:	0.520 μm		Kurtosis:	-0.325 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.391 μm	0.445 μm	0.518 μm	0.599 μm	0.677 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.017	0.031	0.096
22	0.284	0.297	0.26	0.45	1.14
23	0.311	0.326	1.55	2.41	5.09
24	0.342	0.358	4.43	6.25	11.0
25	0.375	0.393	8.48	10.9	15.9
26	0.412	0.431	12.4	14.5	17.5
27	0.452	0.474	15.4	16.5	16.5
28	0.496	0.520	16.6	16.1	13.4
29	0.545	0.571	15.6	13.8	9.55
30	0.598	0.627	12.7	10.2	5.87
31	0.656	0.688	8.10	5.95	2.83
32	0.721	0.755	3.63	2.43	0.96
33	0.791	0.829	0.76	0.46	0.15
34	0.868	0.910	0.067	0.037	0.010
35	0.953	0.999	0	0	0
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

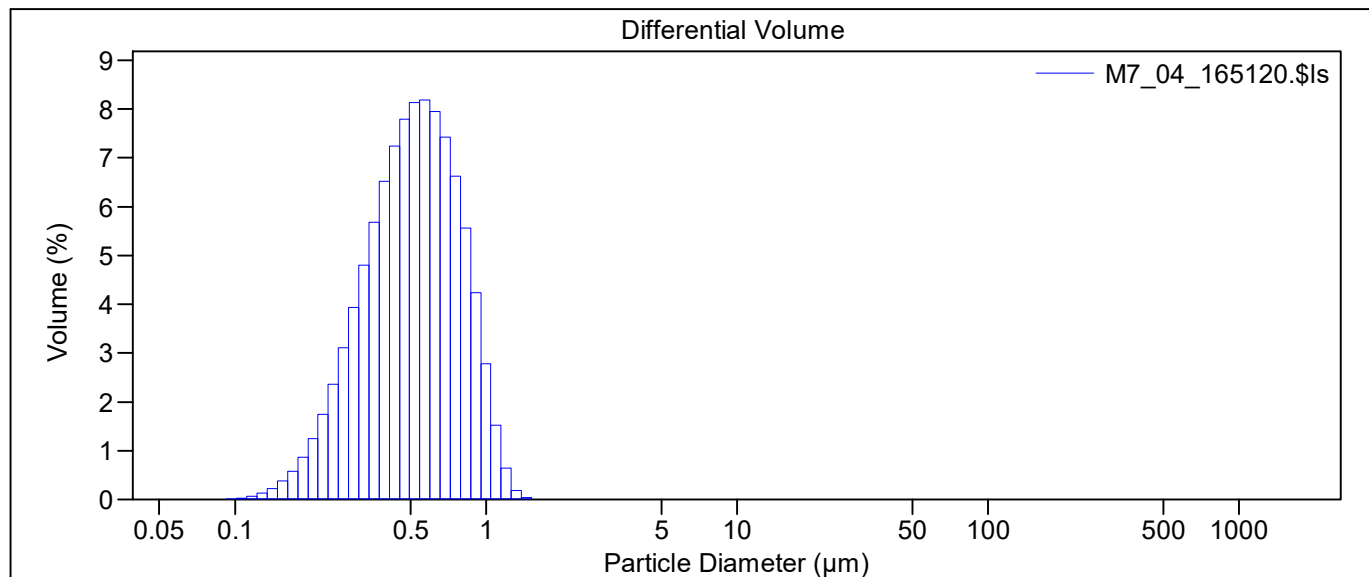
M7.\$av

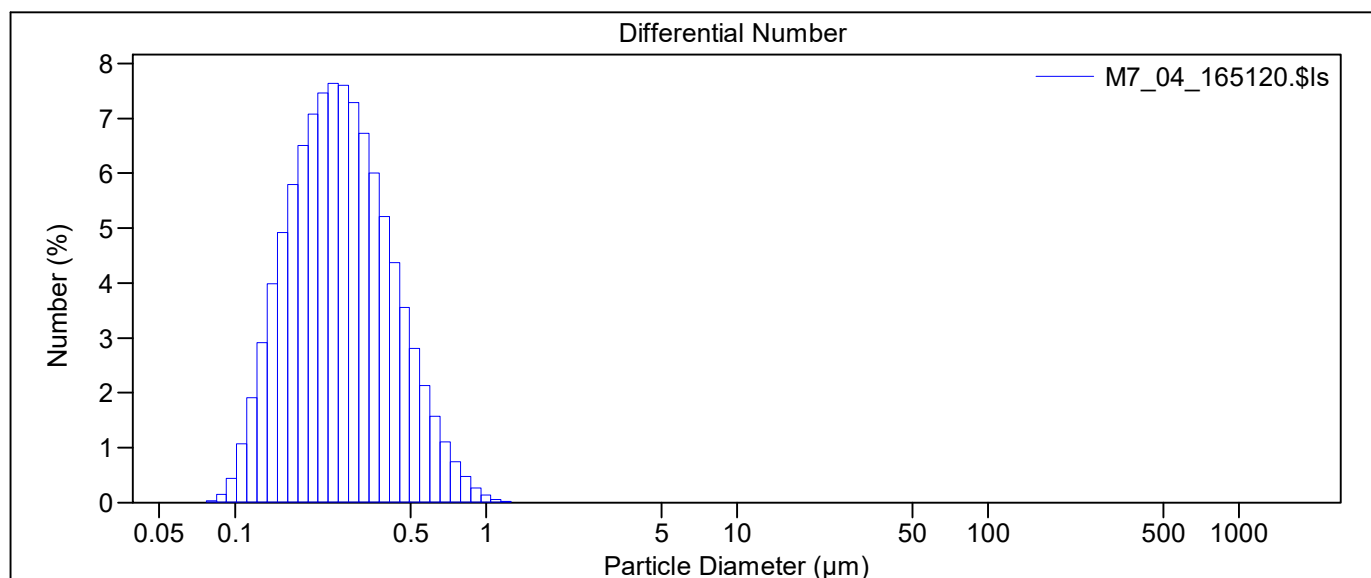
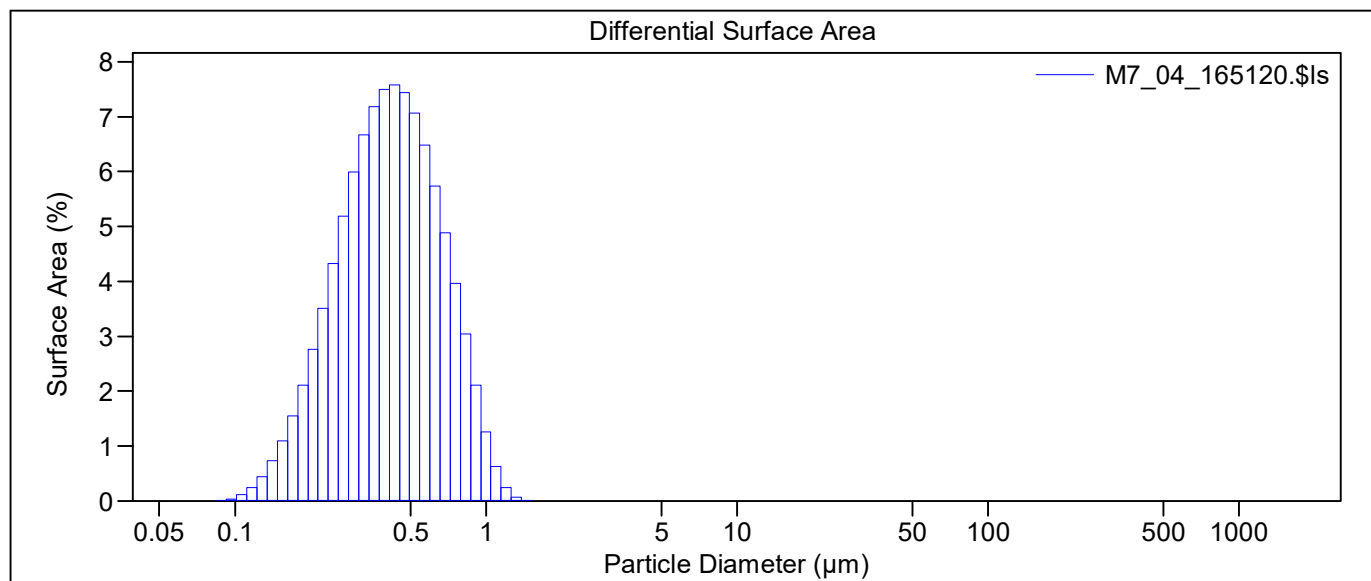
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_04_165120.\$ls		
	M7_04_165120.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.69%		
LS 13 320	Universal Liquid Module		
Start time:	16:49	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_04_165120.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.224 μm
Mean:	0.546 μm		Variance:	0.050 μm ²
Median:	0.516 μm		C.V.:	41.1%
Mean/Median ratio:	1.058		Skewness:	0.604 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.0070 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.278 μm	0.374 μm	0.516 μm	0.691 μm	0.860 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0.00032	0.0018	0.030
9	0.084	0.088	0.0022	0.011	0.15
10	0.093	0.097	0.0083	0.039	0.44
11	0.102	0.106	0.027	0.11	1.07
12	0.112	0.117	0.063	0.24	1.92
13	0.122	0.128	0.13	0.45	2.91
14	0.134	0.141	0.23	0.74	3.99
15	0.148	0.155	0.37	1.10	4.92
16	0.162	0.170	0.58	1.56	5.79
17	0.178	0.186	0.87	2.11	6.51

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.25	2.76	7.08
19	0.214	0.225	1.74	3.51	7.46
20	0.235	0.247	2.36	4.33	7.64
21	0.258	0.271	3.11	5.19	7.61
22	0.284	0.297	3.94	5.99	7.29
23	0.311	0.326	4.81	6.67	6.73
24	0.342	0.358	5.68	7.18	6.01
25	0.375	0.393	6.51	7.50	5.21
26	0.412	0.431	7.24	7.59	4.37
27	0.452	0.474	7.79	7.44	3.56
28	0.496	0.520	8.13	7.07	2.81
29	0.545	0.571	8.19	6.49	2.14
30	0.598	0.627	7.95	5.74	1.57
31	0.656	0.688	7.42	4.88	1.11
32	0.721	0.755	6.62	3.97	0.75
33	0.791	0.829	5.57	3.04	0.47
34	0.868	0.910	4.24	2.11	0.27
35	0.953	0.999	2.79	1.26	0.14
36	1.047	1.097	1.52	0.63	0.056
37	1.149	1.204	0.64	0.24	0.018
38	1.261	1.321	0.19	0.064	0.0040
39	1.385	1.451	0.035	0.011	0.00056
40	1.520	1.592	0.0025	0.00072	0.000030
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

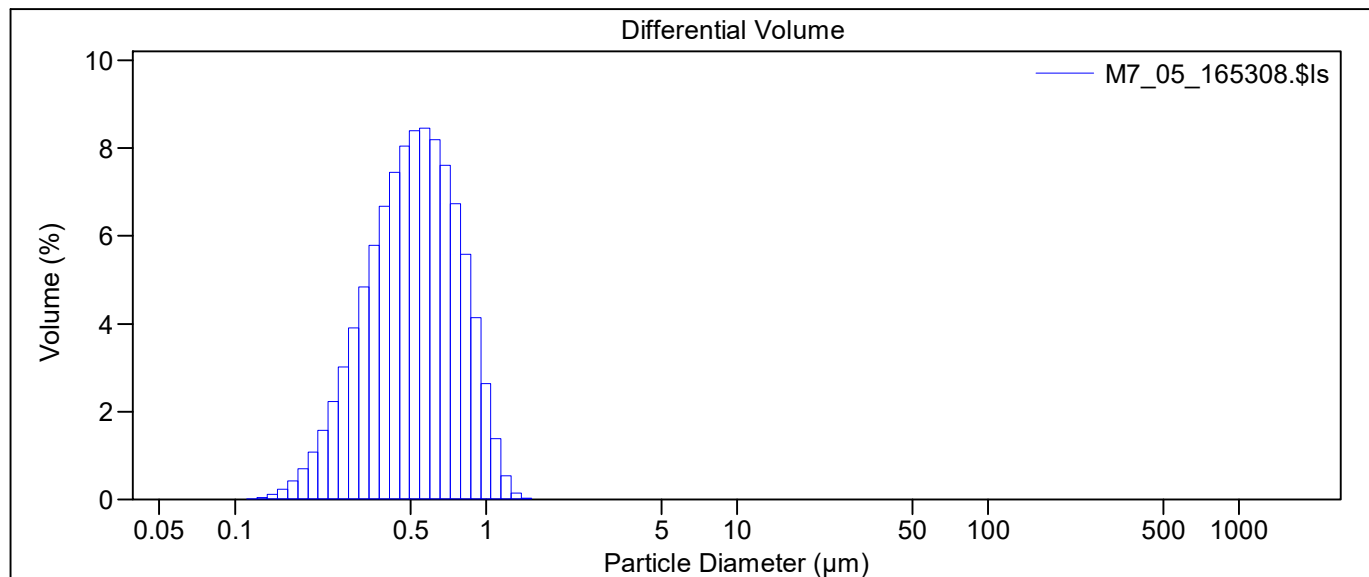
M7.\$av

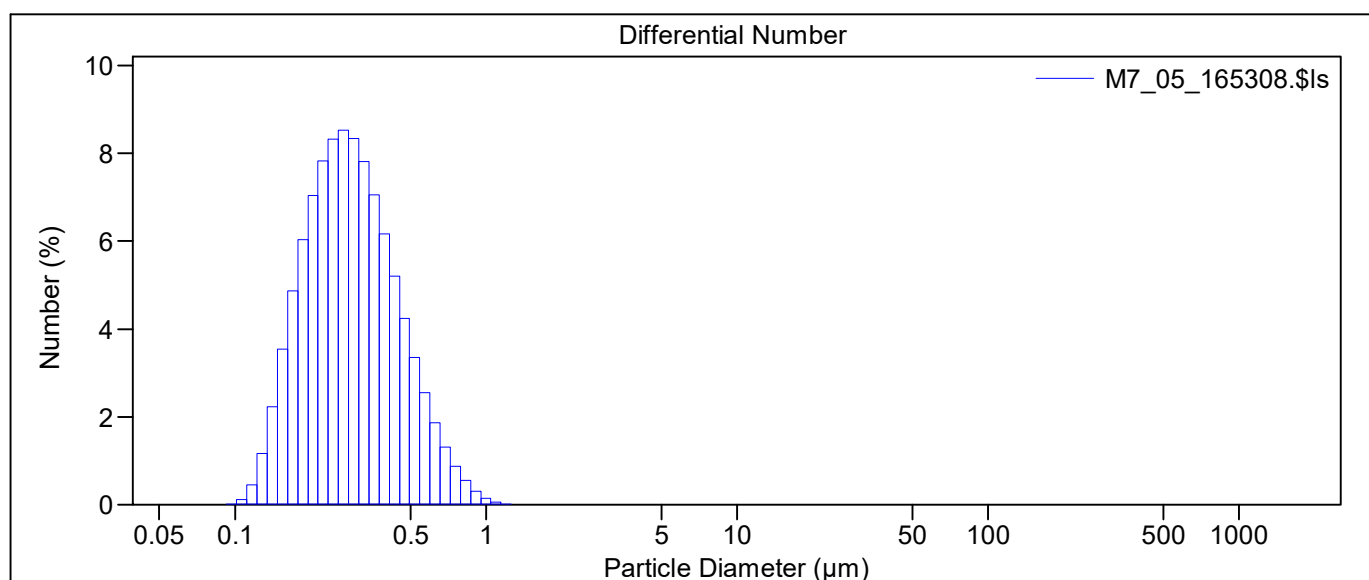
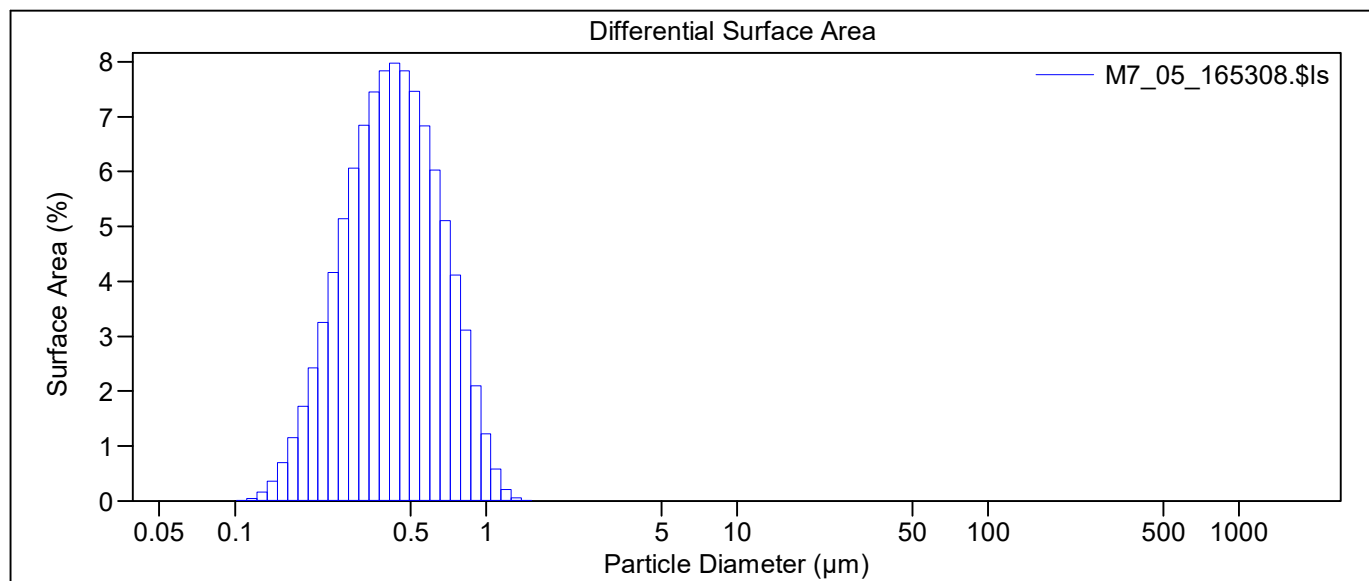
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_05_165308.\$ls		
	M7_05_165308.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.74%		
LS 13 320	Universal Liquid Module		
Start time:	16:51	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_05_165308.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.217 µm
Mean:	0.548 µm		Variance:	0.047 µm ²
Median:	0.519 µm		C.V.:	39.7%
Mean/Median ratio:	1.056		Skewness:	0.610 Right skewed
Mode:	0.571 µm		Kurtosis:	0.0026 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.288 µm	0.381 µm	0.519 µm	0.689 µm	0.853 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0.000002	0.000010	0.00020
9	0.084	0.088	0.000012	0.000065	0.0010
10	0.093	0.097	0.00026	0.0012	0.016
11	0.102	0.106	0.0025	0.011	0.11
12	0.112	0.117	0.013	0.051	0.46
13	0.122	0.128	0.044	0.16	1.17
14	0.134	0.141	0.11	0.37	2.24
15	0.148	0.155	0.23	0.70	3.54
16	0.162	0.170	0.42	1.15	4.87
17	0.178	0.186	0.70	1.72	6.03

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.07	2.42	7.04
19	0.214	0.225	1.58	3.25	7.82
20	0.235	0.247	2.23	4.17	8.33
21	0.258	0.271	3.02	5.14	8.53
22	0.284	0.297	3.90	6.06	8.34
23	0.311	0.326	4.84	6.84	7.81
24	0.342	0.358	5.78	7.45	7.06
25	0.375	0.393	6.68	7.84	6.16
26	0.412	0.431	7.46	7.98	5.20
27	0.452	0.474	8.05	7.84	4.24
28	0.496	0.520	8.40	7.46	3.35
29	0.545	0.571	8.46	6.84	2.55
30	0.598	0.627	8.19	6.03	1.87
31	0.656	0.688	7.61	5.10	1.31
32	0.721	0.755	6.73	4.11	0.88
33	0.791	0.829	5.59	3.11	0.55
34	0.868	0.910	4.14	2.10	0.31
35	0.953	0.999	2.64	1.22	0.15
36	1.047	1.097	1.39	0.58	0.059
37	1.149	1.204	0.55	0.21	0.018
38	1.261	1.321	0.15	0.053	0.0037
39	1.385	1.451	0.026	0.0082	0.00047
40	1.520	1.592	0.0013	0.00038	0.000018
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

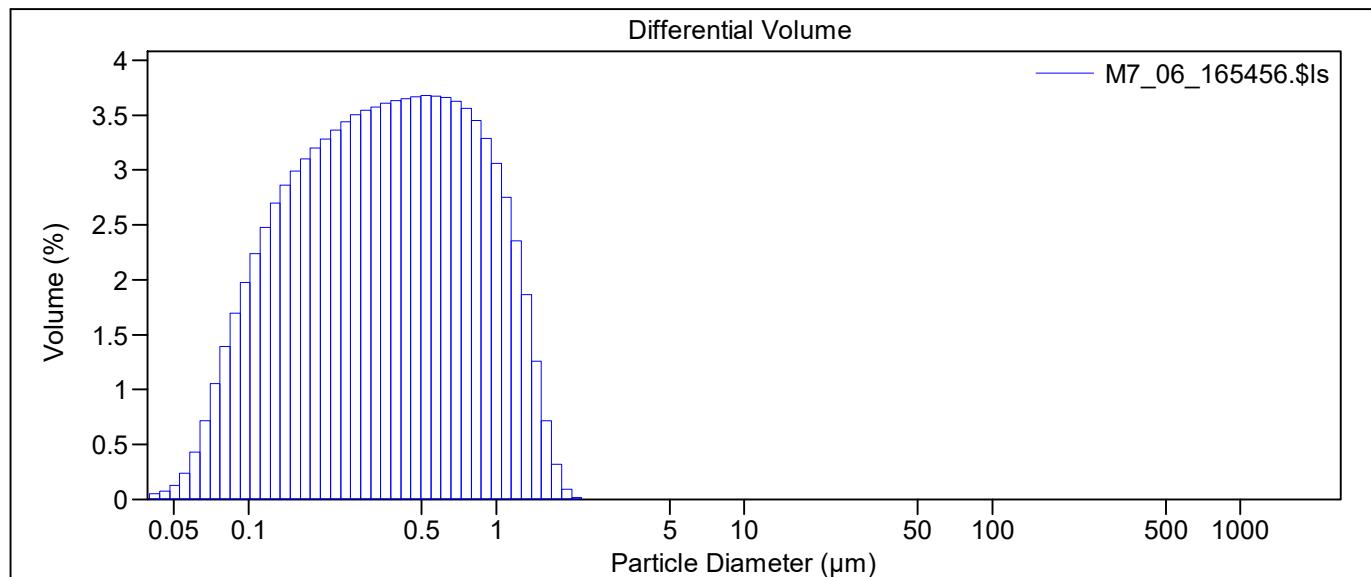
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_06_165456.\$ls		
	M7_06_165456.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.55%		
LS 13 320	Universal Liquid Module		
Start time:	16:53	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

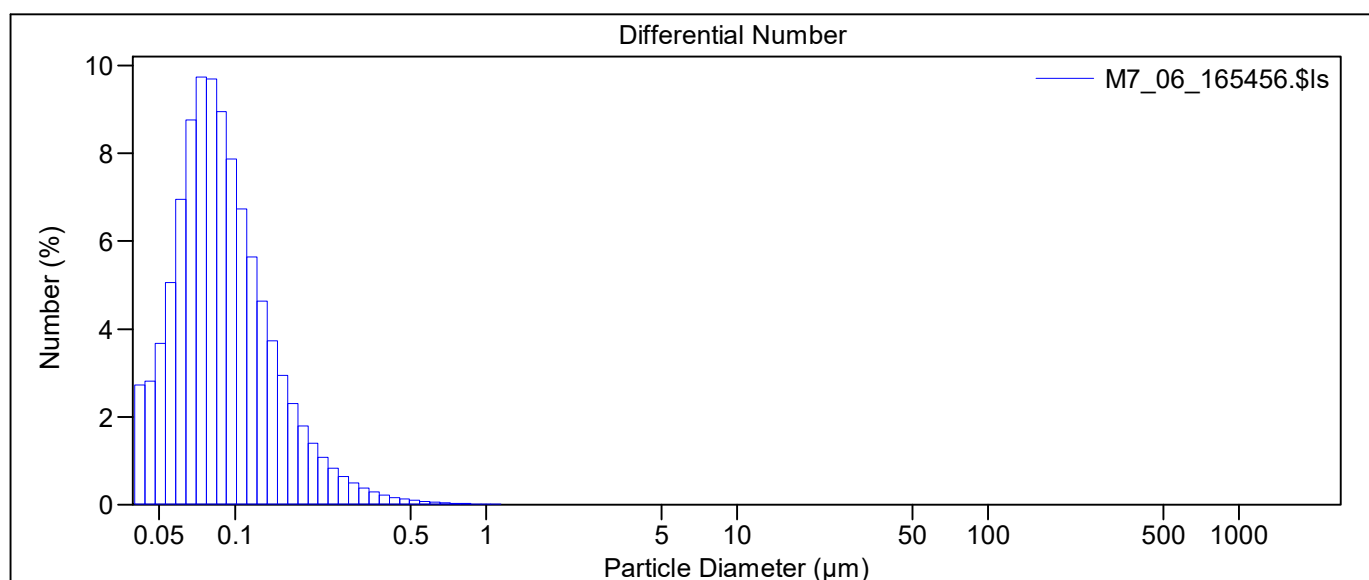
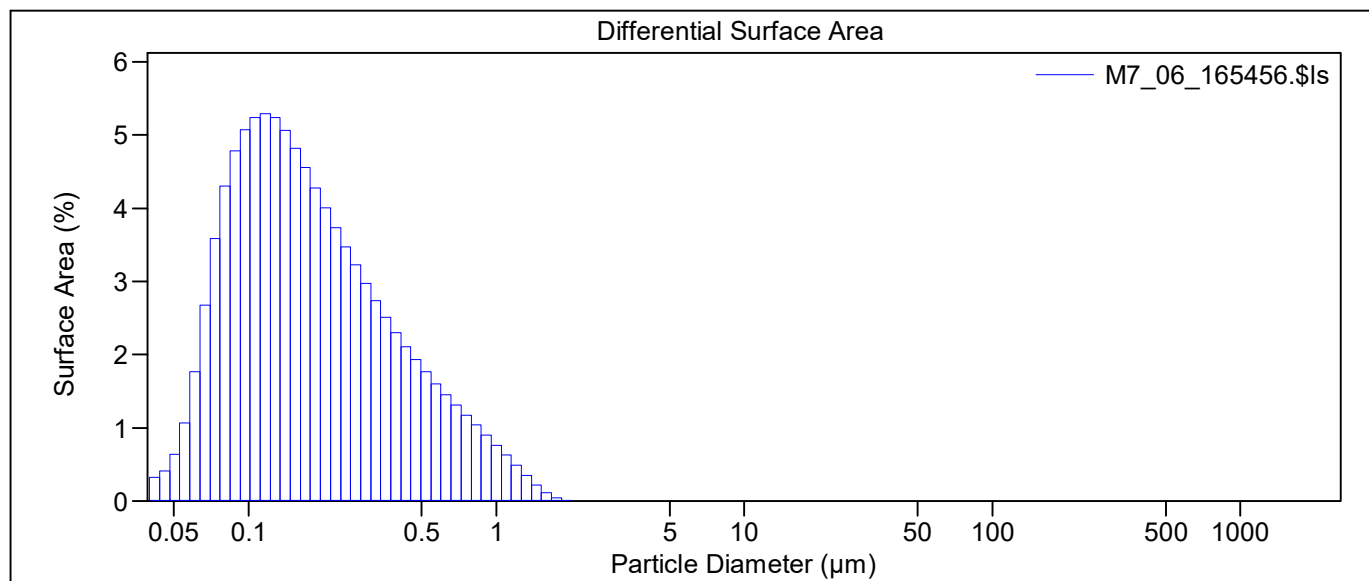
Volume Statistics (Arithmetic) M7_06_165456.\$ls

Calculations from 0.040 μm to 2000 μm

Volume:	100%	S.D.:	0.366 μm
Mean:	0.474 μm	Variance:	0.134 μm^2
Median:	0.360 μm	C.V.:	77.1%
Mean/Median ratio:	1.319	Skewness:	1.130 Right skewed
Mode:	0.520 μm	Kurtosis:	0.712 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.112 μm	0.183 μm	0.360 μm	0.681 μm	1.028 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.055	0.33	2.72
2	0.044	0.046	0.075	0.41	2.82
3	0.048	0.050	0.13	0.64	3.67
4	0.053	0.055	0.24	1.07	5.06
5	0.058	0.061	0.43	1.76	6.95
6	0.064	0.067	0.72	2.68	8.76
7	0.070	0.073	1.06	3.59	9.73
8	0.077	0.080	1.39	4.31	9.70
9	0.084	0.088	1.70	4.79	8.95
10	0.093	0.097	1.97	5.07	7.87
11	0.102	0.106	2.24	5.24	6.74
12	0.112	0.117	2.48	5.29	5.65
13	0.122	0.128	2.70	5.24	4.64
14	0.134	0.141	2.86	5.07	3.73
15	0.148	0.155	2.99	4.82	2.94
16	0.162	0.170	3.10	4.56	2.31
17	0.178	0.186	3.20	4.28	1.80

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.28	4.00	1.40
19	0.214	0.225	3.36	3.73	1.08
20	0.235	0.247	3.44	3.48	0.83
21	0.258	0.271	3.50	3.23	0.64
22	0.284	0.297	3.55	2.98	0.49
23	0.311	0.326	3.58	2.73	0.37
24	0.342	0.358	3.61	2.51	0.29
25	0.375	0.393	3.63	2.30	0.22
26	0.412	0.431	3.65	2.11	0.17
27	0.452	0.474	3.67	1.93	0.13
28	0.496	0.520	3.68	1.76	0.095
29	0.545	0.571	3.67	1.60	0.072
30	0.598	0.627	3.66	1.46	0.054
31	0.656	0.688	3.63	1.32	0.041
32	0.721	0.755	3.56	1.18	0.030
33	0.791	0.829	3.45	1.04	0.022
34	0.868	0.910	3.29	0.90	0.016
35	0.953	0.999	3.06	0.76	0.011
36	1.047	1.097	2.75	0.63	0.0076
37	1.149	1.204	2.36	0.49	0.0049
38	1.261	1.321	1.86	0.35	0.0029
39	1.385	1.451	1.26	0.22	0.0015
40	1.520	1.592	0.72	0.11	0.00065
41	1.668	1.748	0.32	0.046	0.00022
42	1.832	1.919	0.096	0.012	0.000049
43	2.011	2.107	0.020	0.0023	0.000008
44	2.207	2.313	0.0018	0.00020	0.000001
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

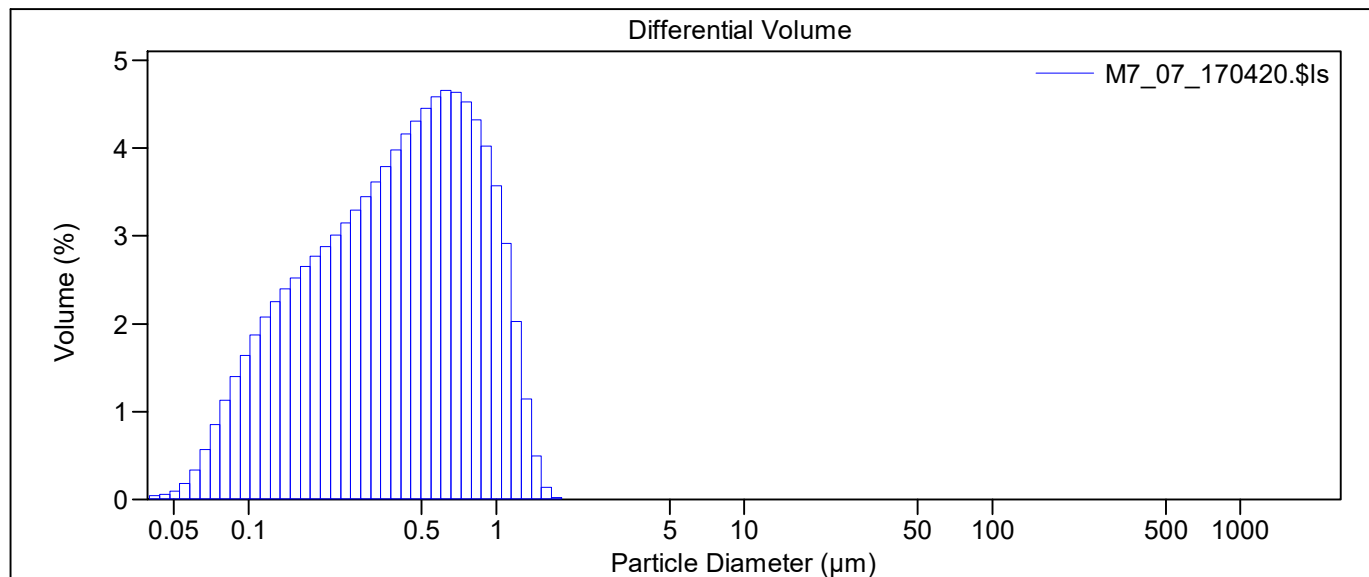
M7.\$av

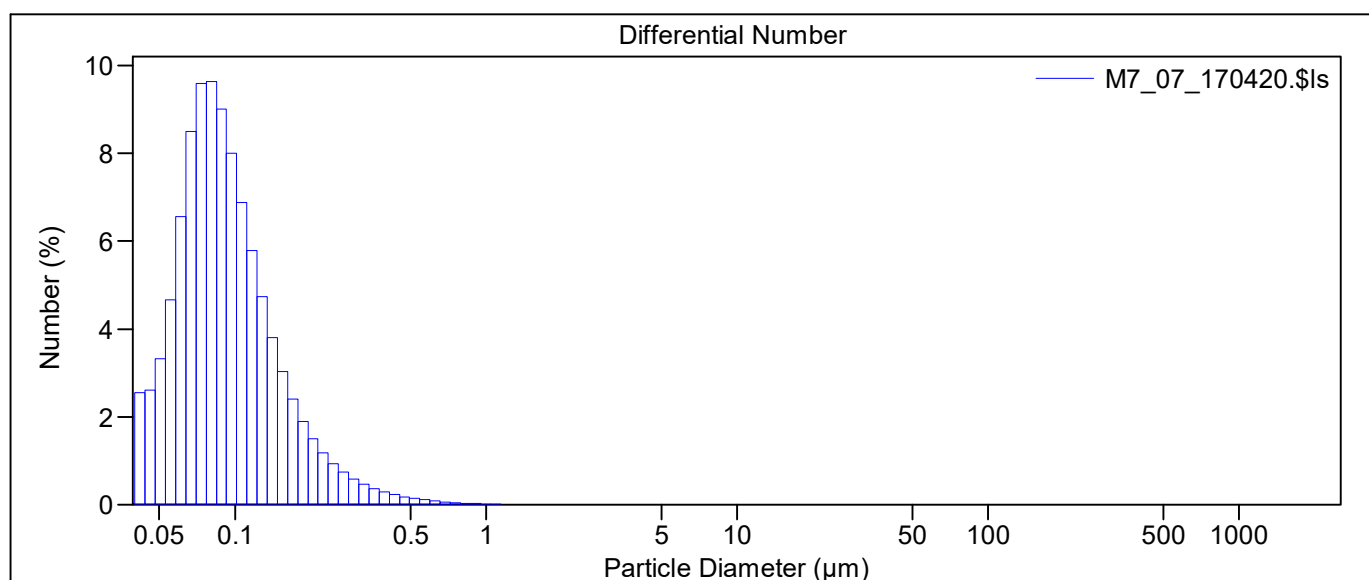
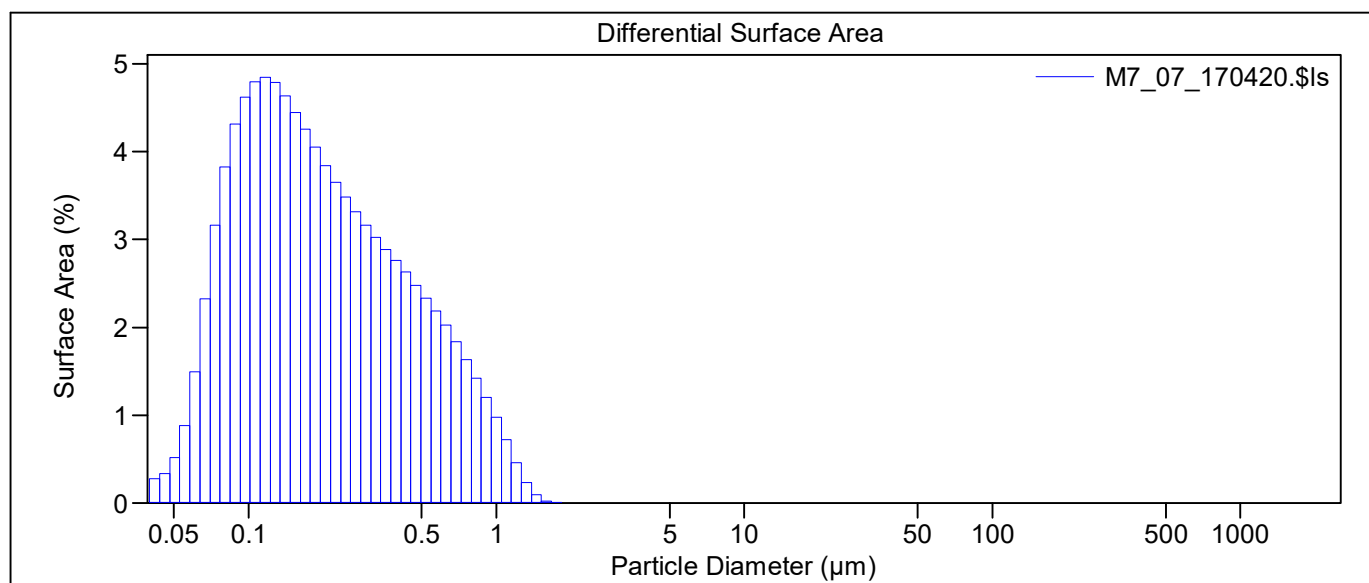
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_07_170420.\$ls		
	M7_07_170420.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.85%		
LS 13 320	Universal Liquid Module		
Start time:	17:02	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	53%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_07_170420.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.323 μm
Mean:	0.482 μm		Variance:	0.105 μm ²
Median:	0.412 μm		C.V.:	67.0%
Mean/Median ratio:	1.172		Skewness:	0.788 Right skewed
Mode:	0.627 μm		Kurtosis:	-0.104 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.121 μm	0.210 μm	0.412 μm	0.696 μm	0.962 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.042	0.28	2.56
2	0.044	0.046	0.057	0.34	2.60
3	0.048	0.050	0.096	0.52	3.33
4	0.053	0.055	0.18	0.88	4.66
5	0.058	0.061	0.33	1.49	6.57
6	0.064	0.067	0.57	2.33	8.50
7	0.070	0.073	0.85	3.17	9.59
8	0.077	0.080	1.13	3.83	9.63
9	0.084	0.088	1.40	4.31	9.00
10	0.093	0.097	1.64	4.62	8.00
11	0.102	0.106	1.87	4.79	6.89
12	0.112	0.117	2.08	4.85	5.78
13	0.122	0.128	2.25	4.79	4.74
14	0.134	0.141	2.40	4.64	3.81
15	0.148	0.155	2.52	4.45	3.03
16	0.162	0.170	2.65	4.26	2.41
17	0.178	0.186	2.77	4.05	1.90

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.88	3.84	1.50
19	0.214	0.225	3.01	3.65	1.18
20	0.235	0.247	3.15	3.48	0.93
21	0.258	0.271	3.29	3.32	0.74
22	0.284	0.297	3.45	3.16	0.58
23	0.311	0.326	3.62	3.02	0.46
24	0.342	0.358	3.79	2.89	0.37
25	0.375	0.393	3.98	2.76	0.29
26	0.412	0.431	4.16	2.63	0.23
27	0.452	0.474	4.31	2.48	0.18
28	0.496	0.520	4.45	2.34	0.14
29	0.545	0.571	4.58	2.19	0.11
30	0.598	0.627	4.66	2.03	0.084
31	0.656	0.688	4.64	1.84	0.063
32	0.721	0.755	4.53	1.63	0.047
33	0.791	0.829	4.32	1.42	0.034
34	0.868	0.910	4.02	1.21	0.024
35	0.953	0.999	3.57	0.98	0.016
36	1.047	1.097	2.92	0.73	0.0098
37	1.149	1.204	2.03	0.46	0.0052
38	1.261	1.321	1.15	0.24	0.0022
39	1.385	1.451	0.50	0.093	0.00072
40	1.520	1.592	0.14	0.023	0.00015
41	1.668	1.748	0.025	0.0038	0.000020
42	1.832	1.919	0.0019	0.00027	0.000001
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

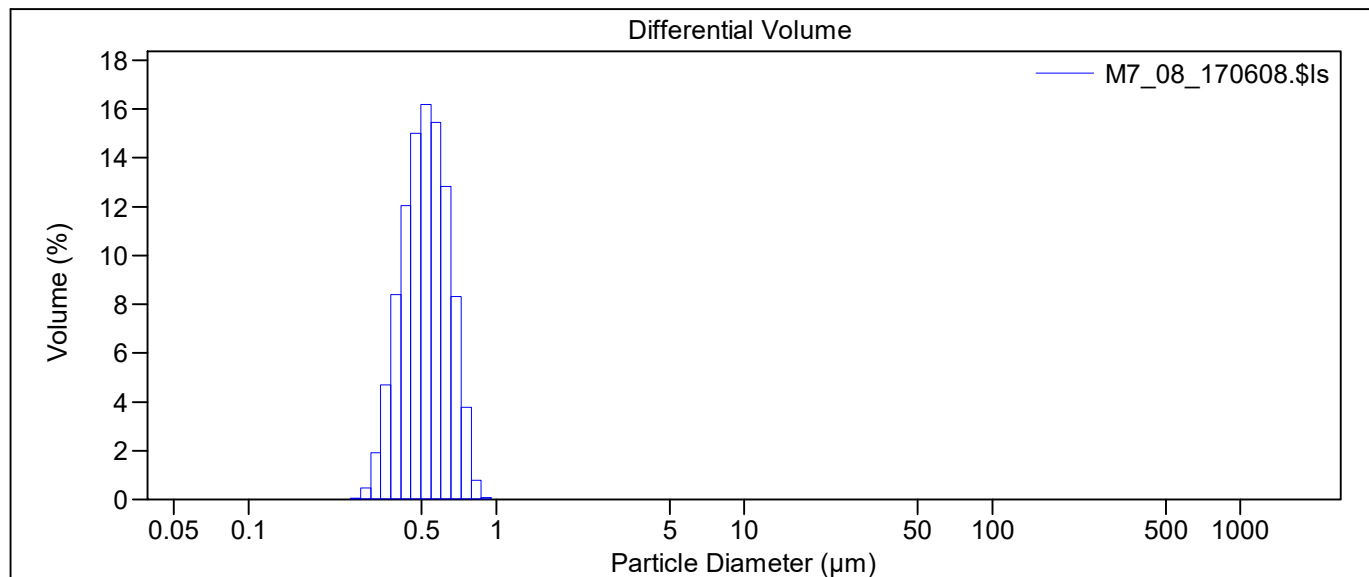
M7.\$av

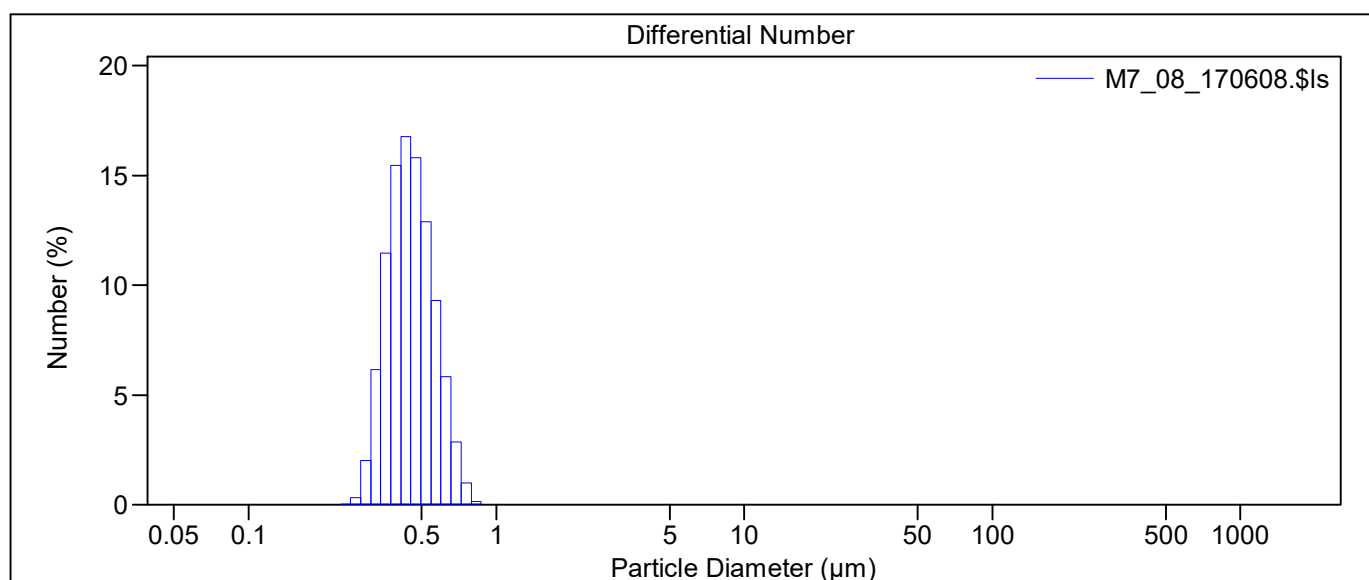
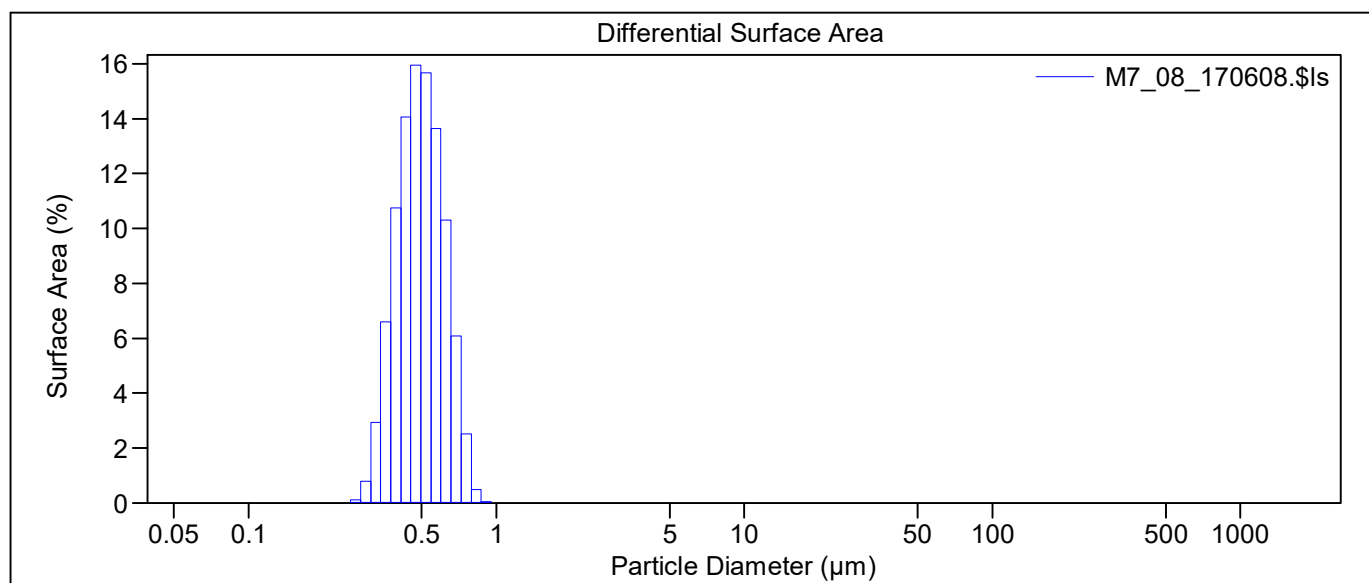
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_08_170608.\$ls		
	M7_08_170608.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.00%		
LS 13 320	Universal Liquid Module		
Start time:	17:04	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	53%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_08_170608.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.526 μm	S.D.:	0.109 μm	
Median:	0.518 μm	Variance:	0.012 μm ²	
Mean/Median ratio:	1.015	C.V.:	20.8%	
Mode:	0.520 μm	Skewness:	0.336 Right skewed	
		Kurtosis:	-0.362 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.388 μm	0.443 μm	0.518 μm	0.602 μm	0.679 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0.0021	0.0043	0.016
21	0.258	0.271	0.057	0.11	0.32
22	0.284	0.297	0.47	0.80	2.02
23	0.311	0.326	1.91	2.94	6.14
24	0.342	0.358	4.70	6.61	11.4
25	0.375	0.393	8.39	10.8	15.5
26	0.412	0.431	12.0	14.1	16.8
27	0.452	0.474	15.0	16.0	15.8
28	0.496	0.520	16.2	15.7	12.9
29	0.545	0.571	15.5	13.6	9.30
30	0.598	0.627	12.8	10.3	5.83
31	0.656	0.688	8.31	6.09	2.86
32	0.721	0.755	3.77	2.52	0.98
33	0.791	0.829	0.79	0.48	0.16
34	0.868	0.910	0.070	0.039	0.010
35	0.953	0.999	0	0	0
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

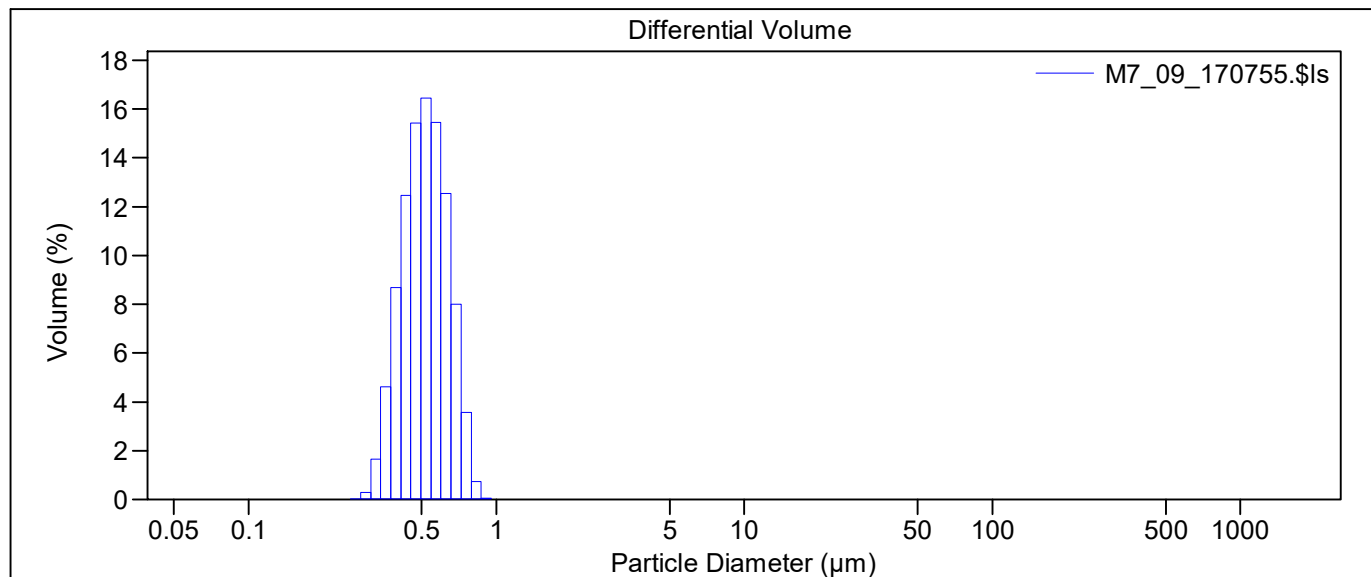
M7.\$av

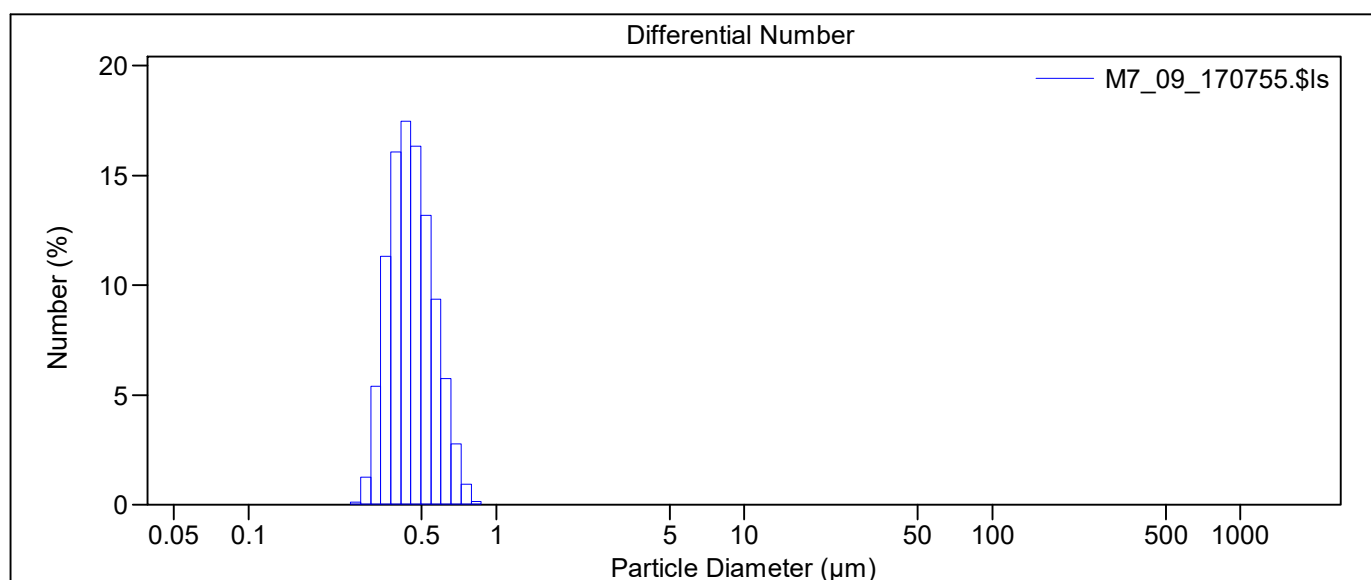
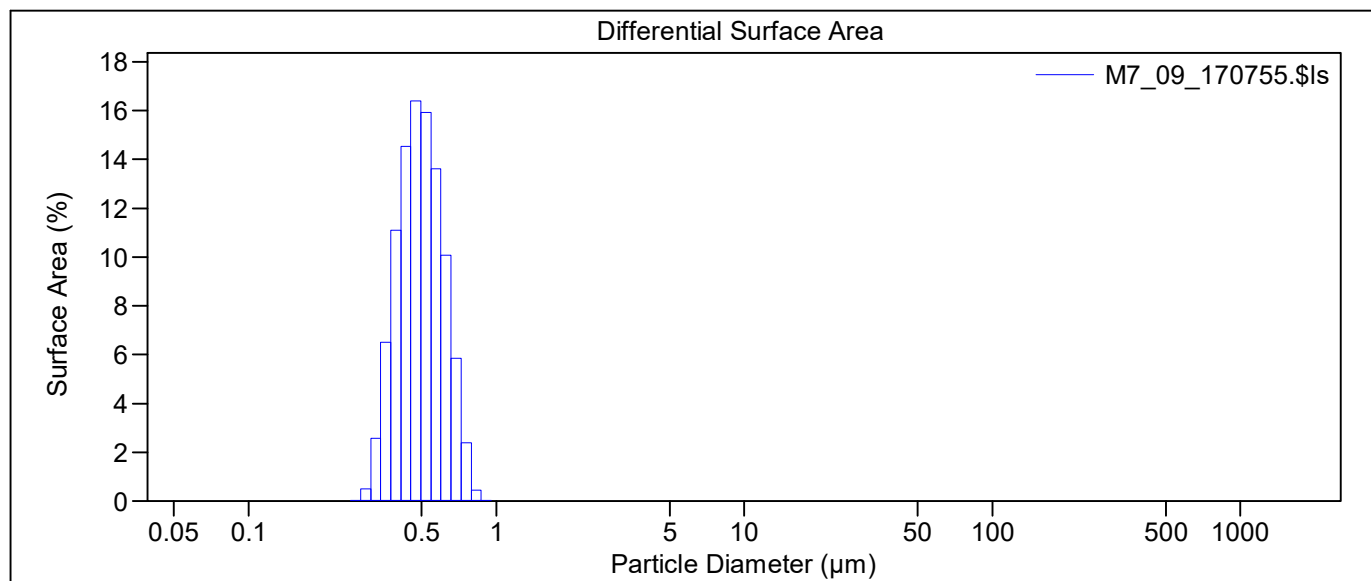
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_09_170755.\$ls		
	M7_09_170755.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.09%		
LS 13 320	Universal Liquid Module		
Start time:	17:06	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	7%	PIDS Obscur:	53%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_09_170755.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.107 μm
Mean:	0.525 μm		Variance:	0.012 μm ²
Median:	0.516 μm		C.V.:	20.5%
Mean/Median ratio:	1.017		Skewness:	0.378 Right skewed
Mode:	0.520 μm		Kurtosis:	-0.327 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.390 μm	0.443 μm	0.516 μm	0.598 μm	0.676 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0	0	0
20	0.235	0.247	0	0	0
21	0.258	0.271	0.019	0.035	0.11
22	0.284	0.297	0.29	0.49	1.24
23	0.311	0.326	1.66	2.57	5.39
24	0.342	0.358	4.62	6.50	11.3
25	0.375	0.393	8.67	11.1	16.1
26	0.412	0.431	12.5	14.5	17.5
27	0.452	0.474	15.4	16.4	16.3
28	0.496	0.520	16.5	15.9	13.2
29	0.545	0.571	15.5	13.6	9.34
30	0.598	0.627	12.6	10.1	5.74
31	0.656	0.688	7.99	5.85	2.76
32	0.721	0.755	3.57	2.38	0.93
33	0.791	0.829	0.74	0.45	0.15
34	0.868	0.910	0.065	0.036	0.0098
35	0.953	0.999	0	0	0
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

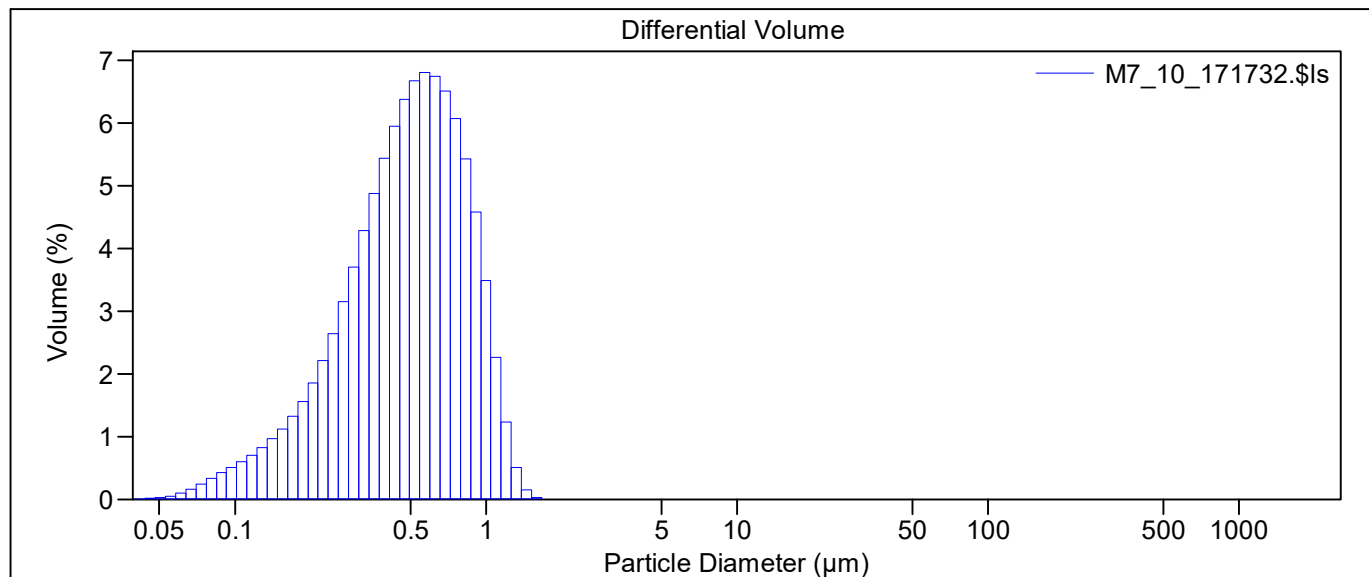
M7.\$av

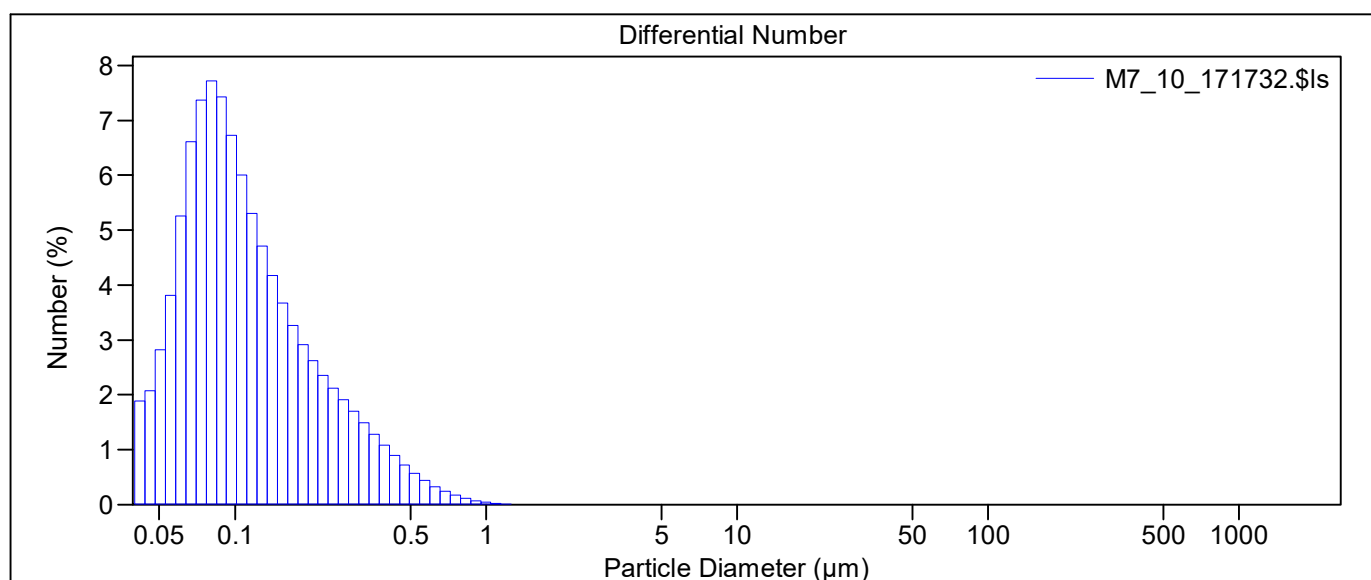
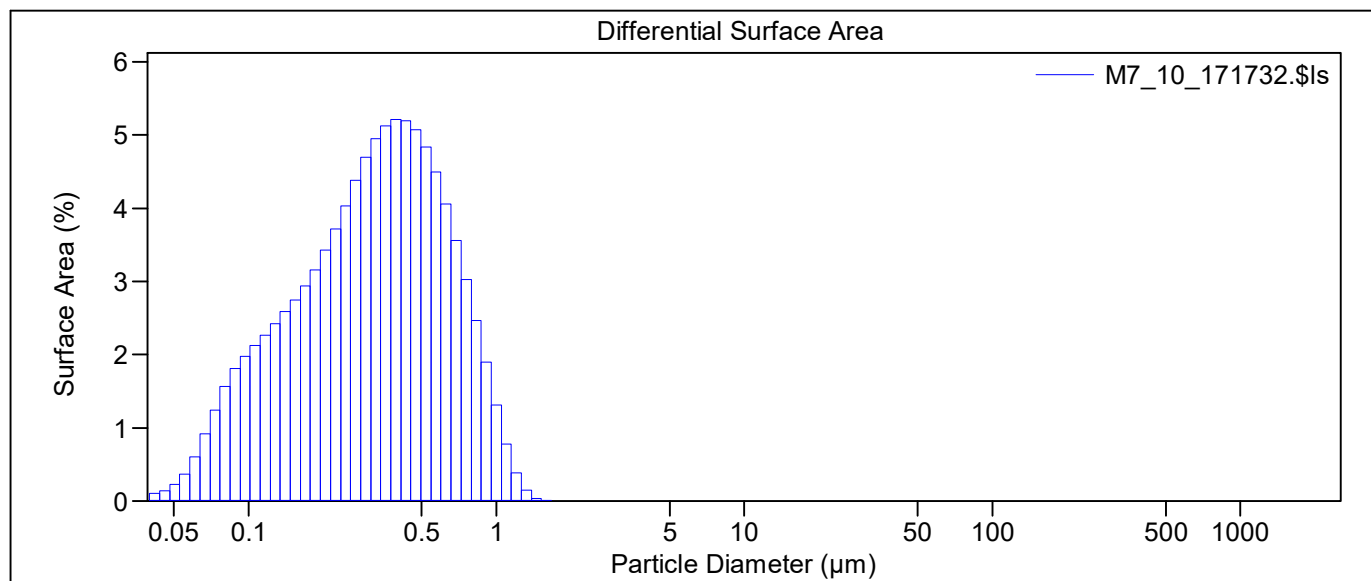
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_10_171732.\$ls		
	M7_10_171732.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.59%		
LS 13 320	Universal Liquid Module		
Start time:	17:15	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_10_171732.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.268 µm
Mean:	0.533 µm		Variance:	0.072 µm ²
Median:	0.500 µm		C.V.:	50.2%
Mean/Median ratio:	1.066		Skewness:	0.553 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.125 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.206 µm	0.329 µm	0.500 µm	0.708 µm	0.910 µm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.011	0.10	1.89
2	0.044	0.046	0.017	0.14	2.08
3	0.048	0.050	0.030	0.22	2.82
4	0.053	0.055	0.054	0.37	3.81
5	0.058	0.061	0.098	0.61	5.26
6	0.064	0.067	0.16	0.92	6.62
7	0.070	0.073	0.24	1.24	7.37
8	0.077	0.080	0.33	1.56	7.73
9	0.084	0.088	0.42	1.81	7.43
10	0.093	0.097	0.51	1.97	6.72
11	0.102	0.106	0.60	2.13	6.01
12	0.112	0.117	0.70	2.26	5.31
13	0.122	0.128	0.82	2.42	4.71
14	0.134	0.141	0.97	2.59	4.18
15	0.148	0.155	1.13	2.74	3.67
16	0.162	0.170	1.32	2.94	3.27
17	0.178	0.186	1.56	3.16	2.92

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.86	3.43	2.62
19	0.214	0.225	2.21	3.71	2.36
20	0.235	0.247	2.64	4.03	2.12
21	0.258	0.271	3.15	4.38	1.92
22	0.284	0.297	3.71	4.70	1.70
23	0.311	0.326	4.29	4.95	1.49
24	0.342	0.358	4.87	5.13	1.28
25	0.375	0.393	5.44	5.21	1.08
26	0.412	0.431	5.95	5.19	0.89
27	0.452	0.474	6.38	5.07	0.72
28	0.496	0.520	6.68	4.84	0.57
29	0.545	0.571	6.81	4.49	0.44
30	0.598	0.627	6.75	4.06	0.33
31	0.656	0.688	6.51	3.56	0.24
32	0.721	0.755	6.07	3.03	0.17
33	0.791	0.829	5.43	2.47	0.12
34	0.868	0.910	4.58	1.89	0.073
35	0.953	0.999	3.49	1.31	0.042
36	1.047	1.097	2.27	0.78	0.021
37	1.149	1.204	1.24	0.39	0.0085
38	1.261	1.321	0.51	0.15	0.0027
39	1.385	1.451	0.15	0.039	0.00059
40	1.520	1.592	0.028	0.0066	0.000084
41	1.668	1.748	0.0018	0.00039	0.000004
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

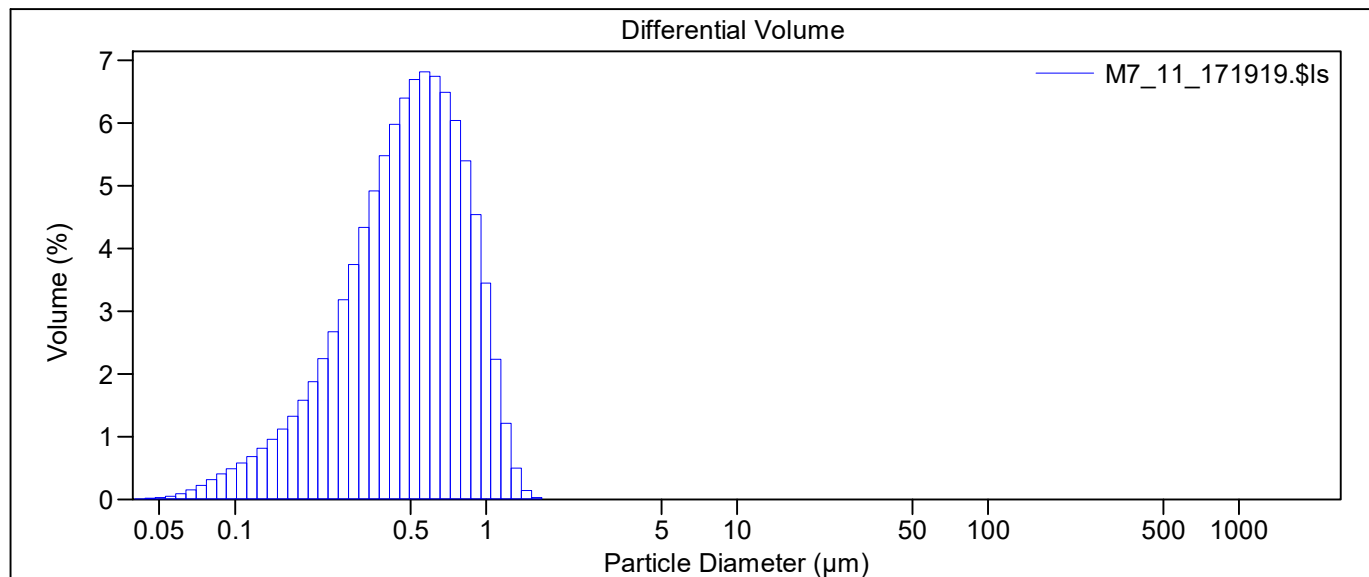
M7.\$av

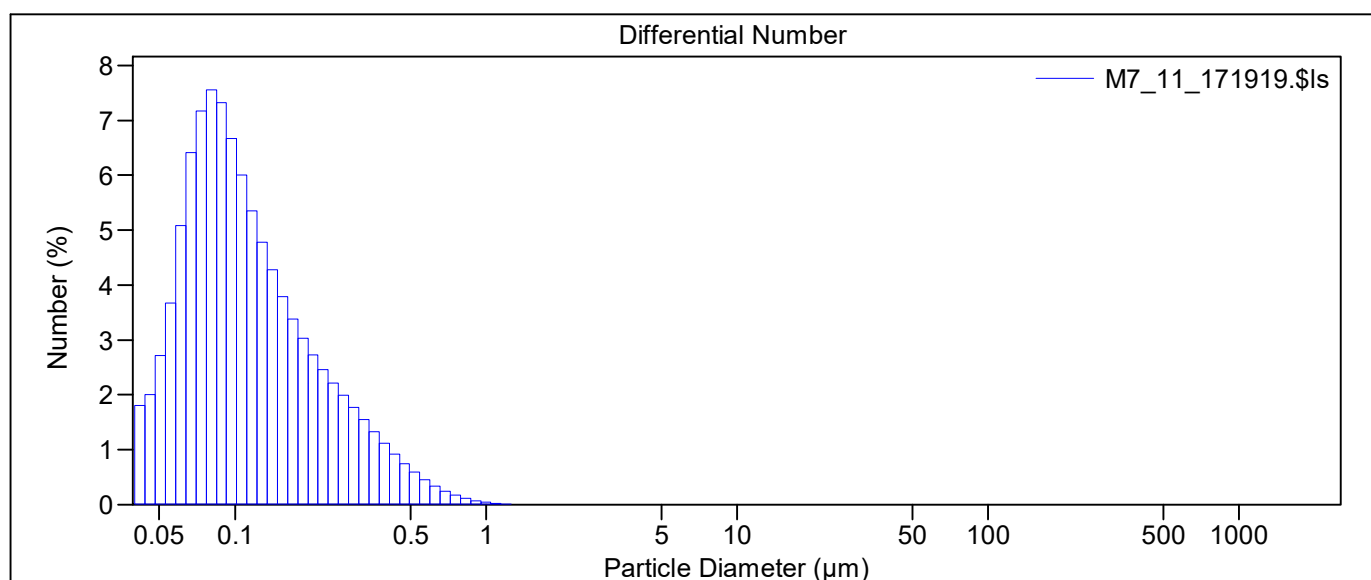
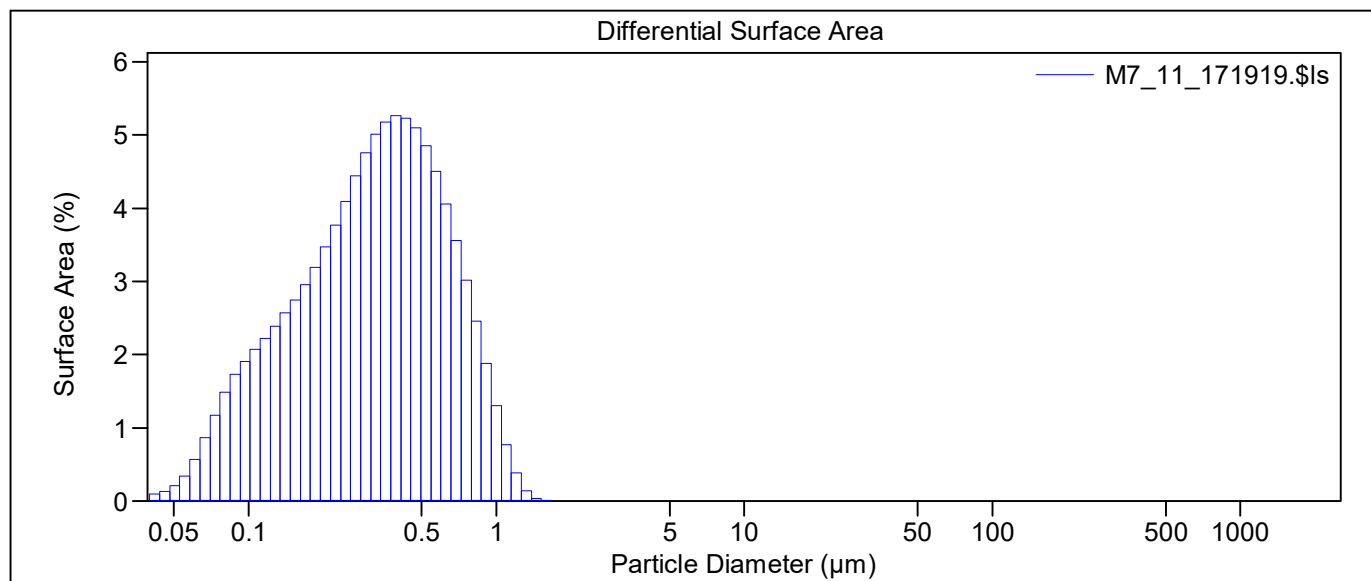
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_11_171919.\$ls		
	M7_11_171919.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.59%		
LS 13 320	Universal Liquid Module		
Start time:	17:17	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_11_171919.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.532 μm	S.D.:	0.267 μm	
Median:	0.498 μm	Variance:	0.071 μm ²	
Mean/Median ratio:	1.067	C.V.:	50.1%	
Mode:	0.571 μm	Skewness:	0.561 Right skewed	
		Kurtosis:	-0.113 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.207 μm	0.328 μm	0.498 μm	0.706 μm	0.908 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.011	0.096	1.81
2	0.044	0.046	0.016	0.13	2.00
3	0.048	0.050	0.028	0.21	2.72
4	0.053	0.055	0.050	0.34	3.67
5	0.058	0.061	0.092	0.57	5.08
6	0.064	0.067	0.15	0.87	6.41
7	0.070	0.073	0.23	1.17	7.18
8	0.077	0.080	0.32	1.49	7.56
9	0.084	0.088	0.41	1.74	7.32
10	0.093	0.097	0.49	1.91	6.67
11	0.102	0.106	0.58	2.07	6.01
12	0.112	0.117	0.69	2.22	5.35
13	0.122	0.128	0.81	2.39	4.78
14	0.134	0.141	0.96	2.58	4.28
15	0.148	0.155	1.13	2.75	3.79
16	0.162	0.170	1.33	2.96	3.38
17	0.178	0.186	1.58	3.20	3.03

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.88	3.47	2.73
19	0.214	0.225	2.24	3.77	2.46
20	0.235	0.247	2.67	4.09	2.22
21	0.258	0.271	3.19	4.45	2.00
22	0.284	0.297	3.75	4.76	1.78
23	0.311	0.326	4.33	5.01	1.55
24	0.342	0.358	4.91	5.18	1.33
25	0.375	0.393	5.48	5.26	1.12
26	0.412	0.431	5.98	5.23	0.93
27	0.452	0.474	6.40	5.10	0.75
28	0.496	0.520	6.69	4.86	0.59
29	0.545	0.571	6.81	4.51	0.46
30	0.598	0.627	6.74	4.06	0.34
31	0.656	0.688	6.49	3.56	0.25
32	0.721	0.755	6.04	3.02	0.17
33	0.791	0.829	5.40	2.46	0.12
34	0.868	0.910	4.54	1.88	0.075
35	0.953	0.999	3.45	1.30	0.043
36	1.047	1.097	2.24	0.77	0.021
37	1.149	1.204	1.22	0.38	0.0087
38	1.261	1.321	0.50	0.14	0.0027
39	1.385	1.451	0.15	0.038	0.00059
40	1.520	1.592	0.027	0.0064	0.000084
41	1.668	1.748	0.0017	0.00037	0.000004
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

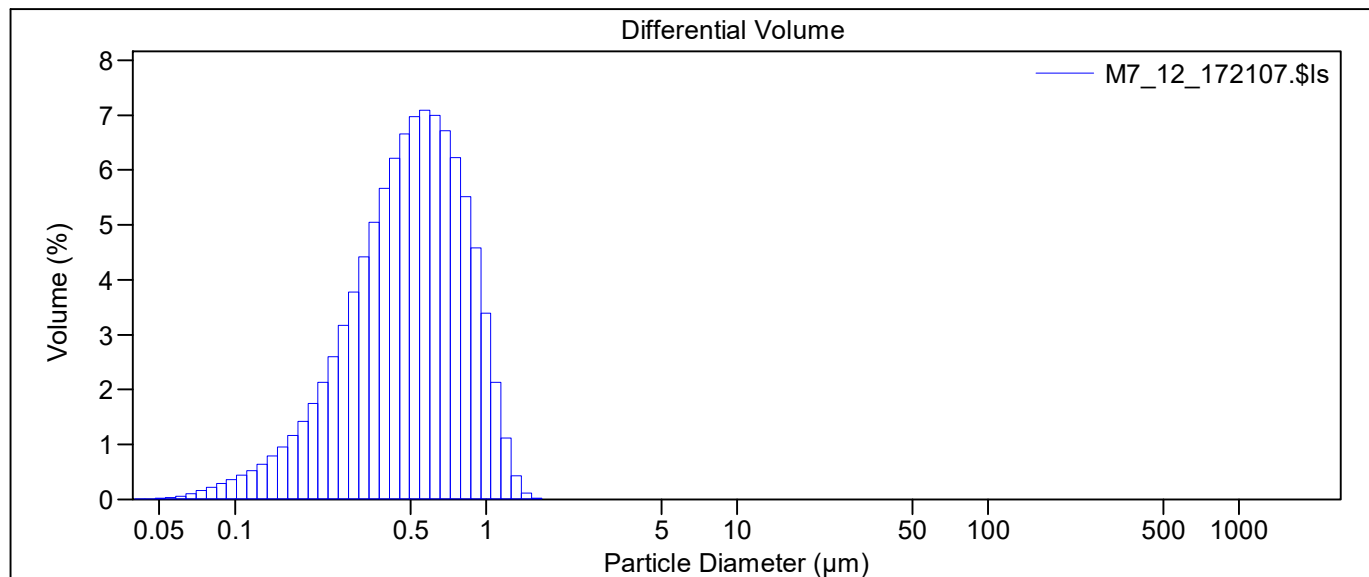
M7.\$av

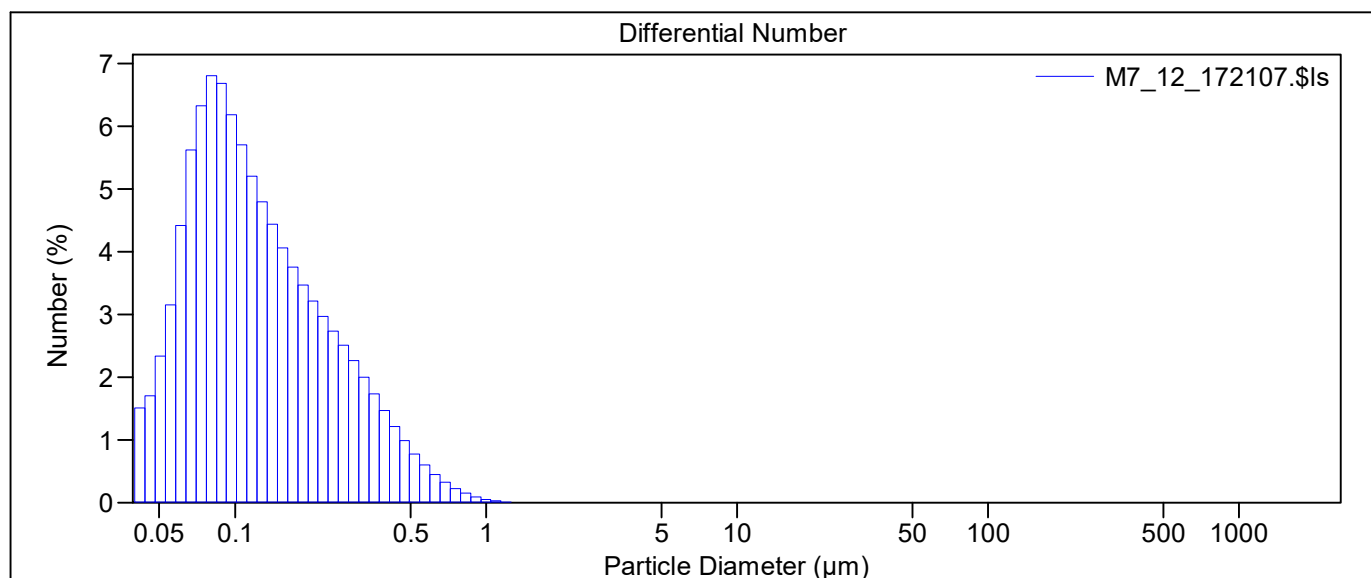
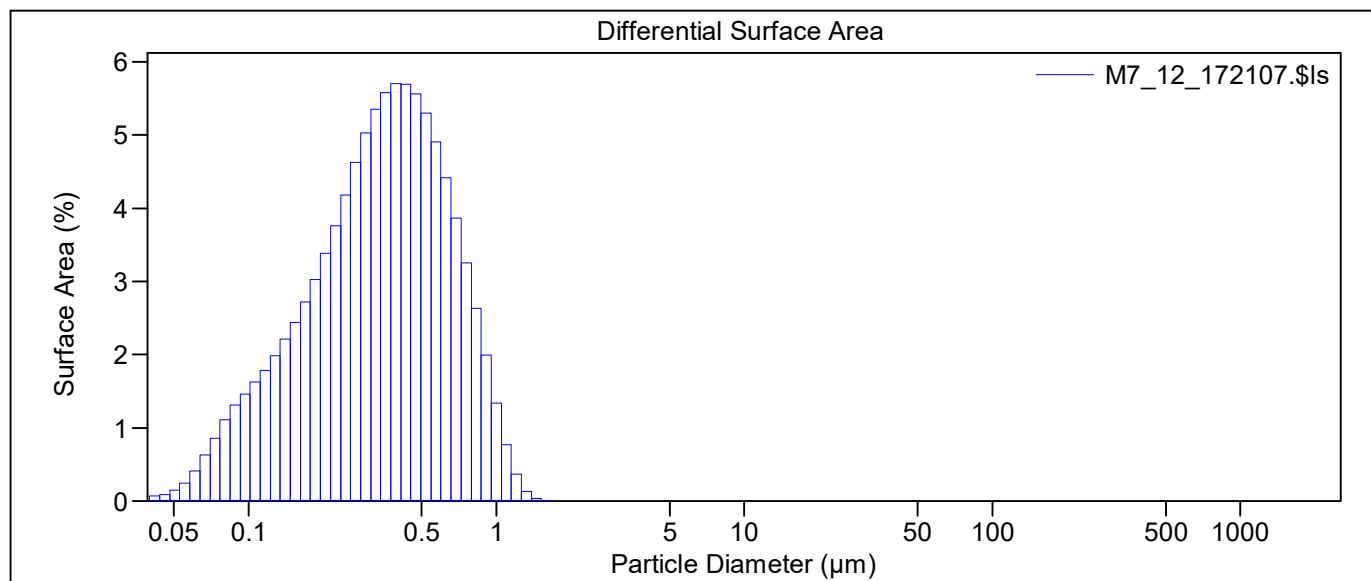
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_12_172107.\$ls		
	M7_12_172107.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.66%		
LS 13 320	Universal Liquid Module		
Start time:	17:19	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_12_172107.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.258 μm
Mean:	0.538 μm		Variance:	0.067 μm ²
Median:	0.505 μm		C.V.:	48.1%
Mean/Median ratio:	1.064		Skewness:	0.553 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.100 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.224 μm	0.341 μm	0.505 μm	0.707 μm	0.902 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.0071	0.067	1.51
2	0.044	0.046	0.011	0.091	1.71
3	0.048	0.050	0.019	0.15	2.33
4	0.053	0.055	0.034	0.24	3.15
5	0.058	0.061	0.063	0.41	4.42
6	0.064	0.067	0.11	0.63	5.62
7	0.070	0.073	0.16	0.86	6.33
8	0.077	0.080	0.23	1.11	6.81
9	0.084	0.088	0.29	1.31	6.68
10	0.093	0.097	0.36	1.46	6.18
11	0.102	0.106	0.44	1.62	5.70
12	0.112	0.117	0.53	1.79	5.20
13	0.122	0.128	0.64	1.99	4.80
14	0.134	0.141	0.79	2.22	4.44
15	0.148	0.155	0.96	2.44	4.06
16	0.162	0.170	1.17	2.72	3.75
17	0.178	0.186	1.43	3.03	3.47

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.75	3.39	3.22
19	0.214	0.225	2.14	3.76	2.97
20	0.235	0.247	2.61	4.18	2.74
21	0.258	0.271	3.17	4.63	2.51
22	0.284	0.297	3.78	5.03	2.27
23	0.311	0.326	4.41	5.35	2.00
24	0.342	0.358	5.05	5.58	1.73
25	0.375	0.393	5.67	5.70	1.47
26	0.412	0.431	6.21	5.69	1.22
27	0.452	0.474	6.66	5.56	0.99
28	0.496	0.520	6.97	5.30	0.78
29	0.545	0.571	7.09	4.91	0.60
30	0.598	0.627	7.00	4.42	0.45
31	0.656	0.688	6.72	3.86	0.32
32	0.721	0.755	6.22	3.26	0.23
33	0.791	0.829	5.51	2.63	0.15
34	0.868	0.910	4.59	1.99	0.096
35	0.953	0.999	3.39	1.34	0.053
36	1.047	1.097	2.14	0.77	0.026
37	1.149	1.204	1.12	0.37	0.010
38	1.261	1.321	0.43	0.13	0.0029
39	1.385	1.451	0.12	0.032	0.00060
40	1.520	1.592	0.019	0.0048	0.000075
41	1.668	1.748	0.00077	0.00017	0.000002
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

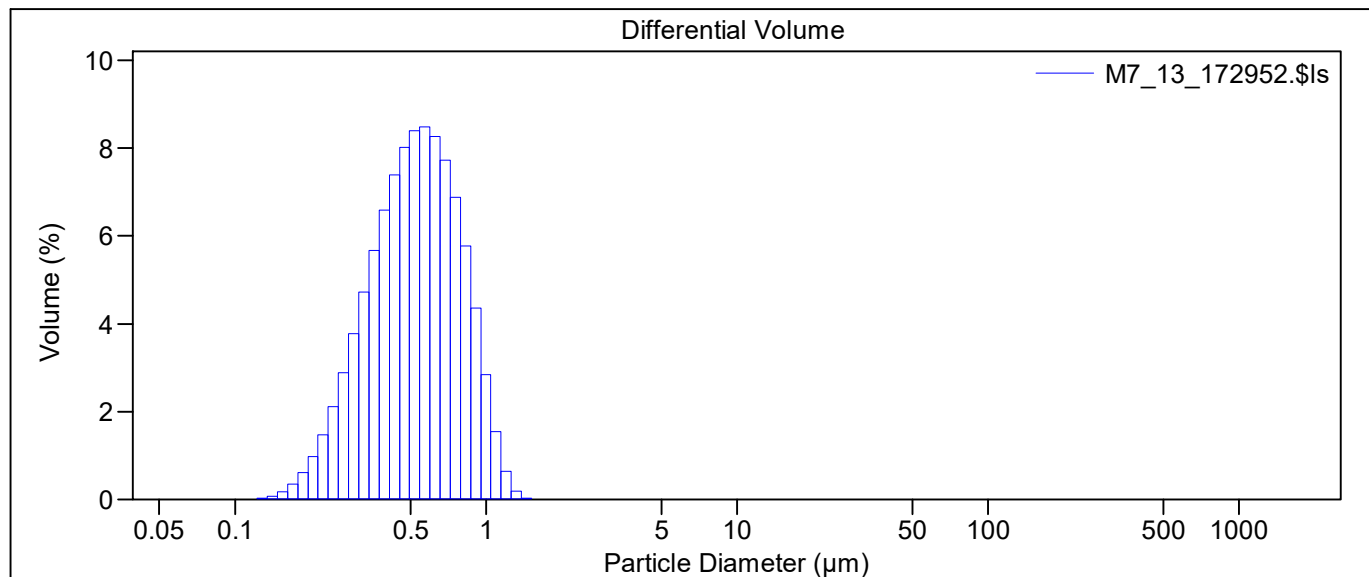
M7.\$av

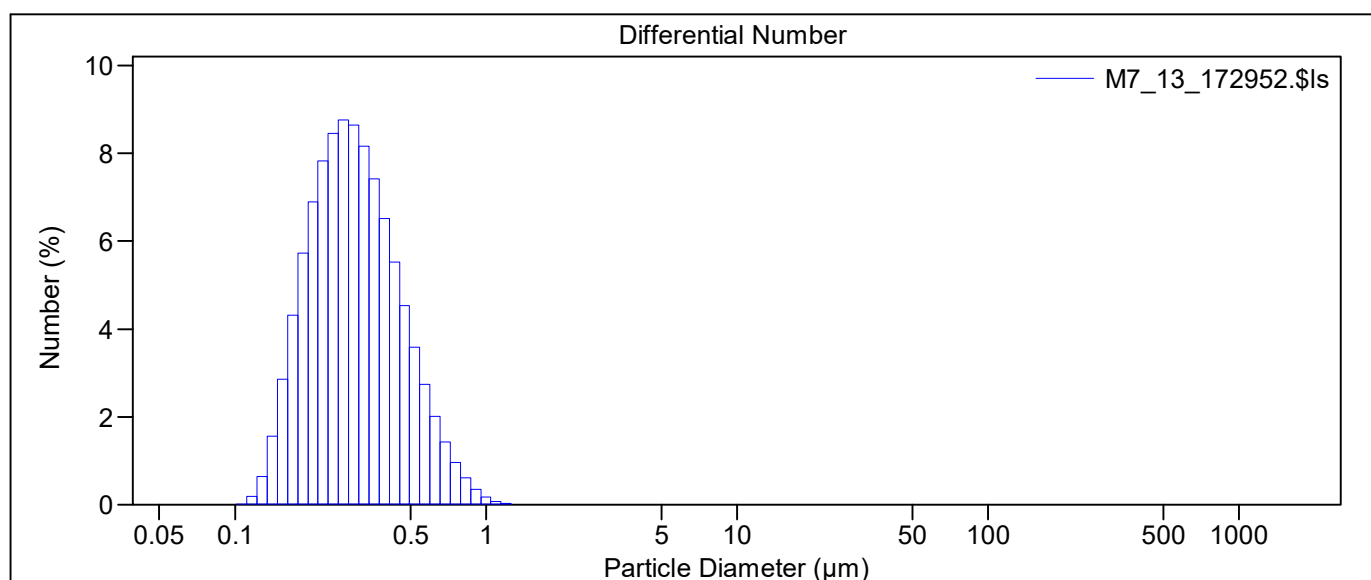
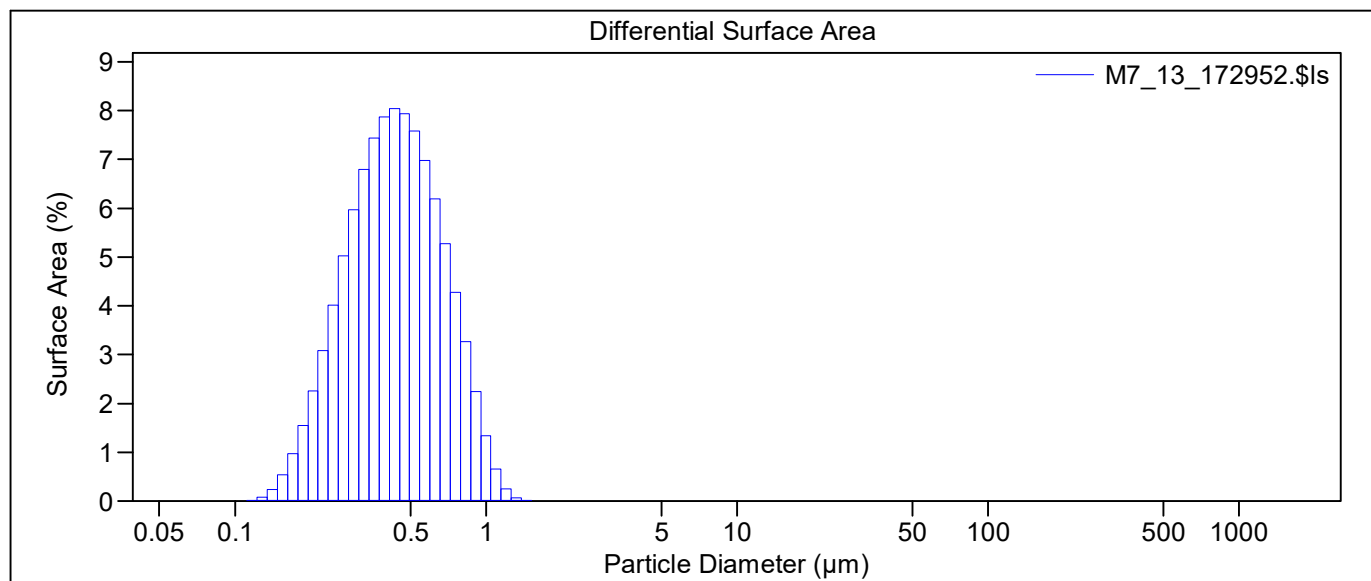
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_13_172952.\$ls		
	M7_13_172952.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.93%		
LS 13 320	Universal Liquid Module		
Start time:	17:28	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_13_172952.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.220 µm
Mean:	0.556 µm		Variance:	0.048 µm ²
Median:	0.526 µm		C.V.:	39.5%
Mean/Median ratio:	1.057		Skewness:	0.619 Right skewed
Mode:	0.571 µm		Kurtosis:	0.015 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.293 µm	0.387 µm	0.526 µm	0.698 µm	0.863 µm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0.00037	0.0016	0.018
12	0.112	0.117	0.0049	0.020	0.18
13	0.122	0.128	0.022	0.082	0.64
14	0.134	0.141	0.072	0.24	1.56
15	0.148	0.155	0.18	0.54	2.86
16	0.162	0.170	0.35	0.97	4.31
17	0.178	0.186	0.62	1.55	5.72

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.98	2.26	6.90
19	0.214	0.225	1.48	3.08	7.82
20	0.235	0.247	2.11	4.02	8.46
21	0.258	0.271	2.89	5.02	8.76
22	0.284	0.297	3.78	5.97	8.65
23	0.311	0.326	4.72	6.79	8.17
24	0.342	0.358	5.67	7.44	7.42
25	0.375	0.393	6.59	7.87	6.52
26	0.412	0.431	7.39	8.04	5.53
27	0.452	0.474	8.01	7.94	4.53
28	0.496	0.520	8.40	7.58	3.59
29	0.545	0.571	8.49	6.98	2.74
30	0.598	0.627	8.27	6.19	2.02
31	0.656	0.688	7.72	5.27	1.42
32	0.721	0.755	6.88	4.28	0.96
33	0.791	0.829	5.77	3.27	0.61
34	0.868	0.910	4.36	2.25	0.35
35	0.953	0.999	2.84	1.33	0.17
36	1.047	1.097	1.54	0.66	0.070
37	1.149	1.204	0.64	0.25	0.022
38	1.261	1.321	0.19	0.067	0.0049
39	1.385	1.451	0.035	0.011	0.00069
40	1.520	1.592	0.0024	0.00070	0.000035
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

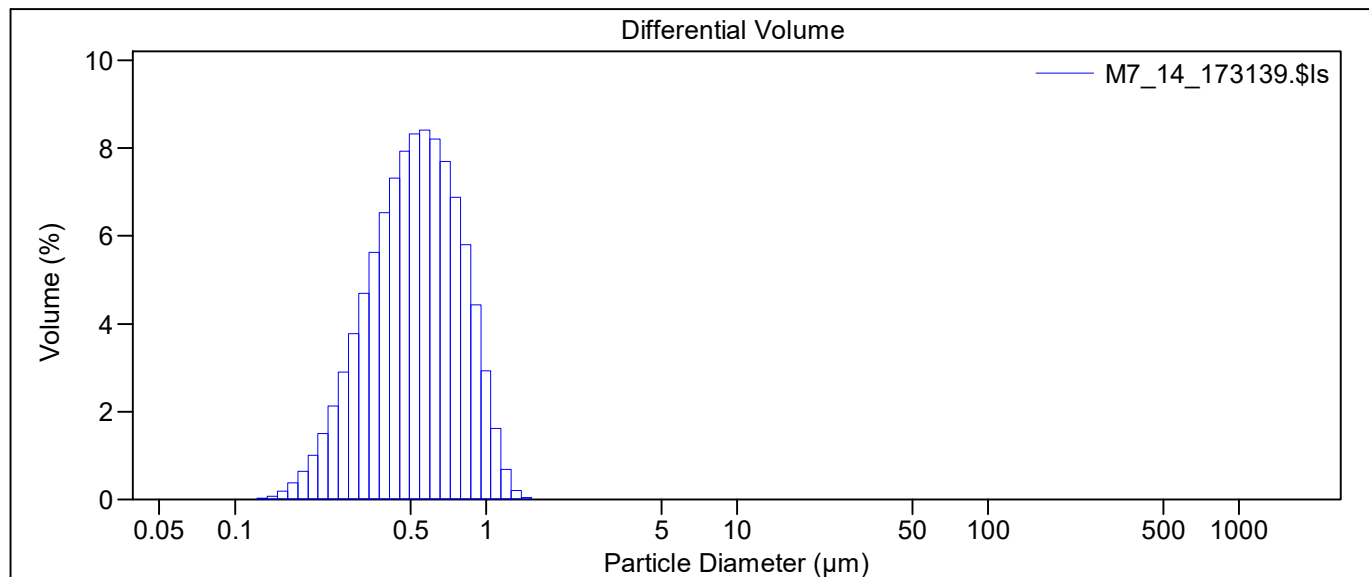
M7.\$av

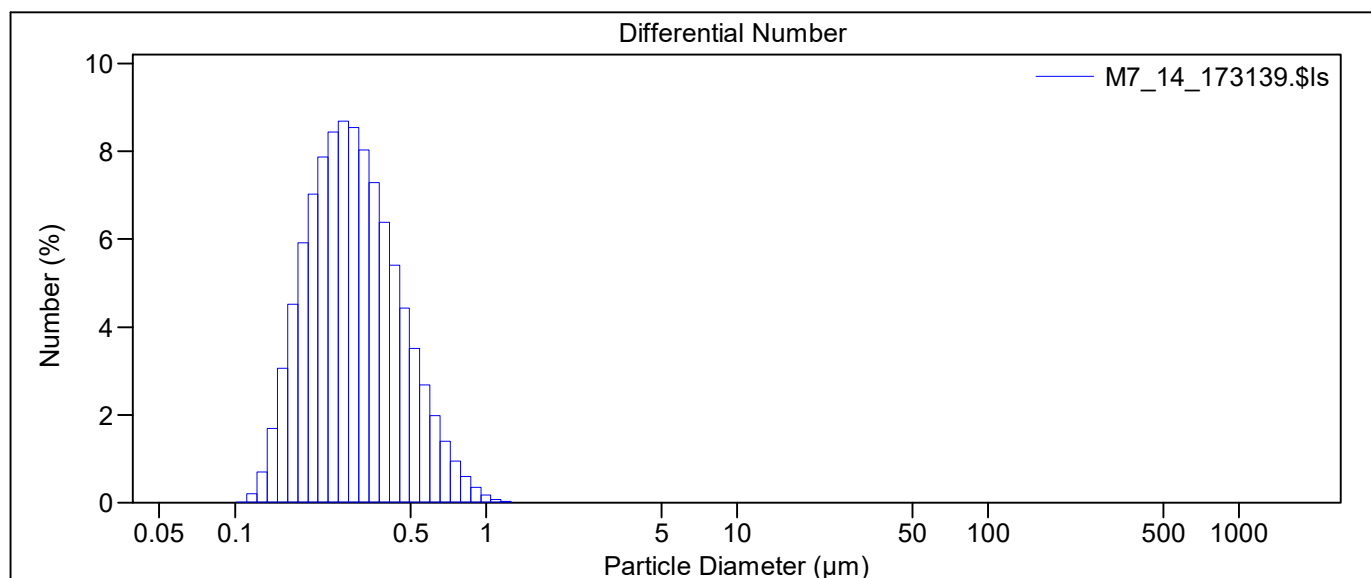
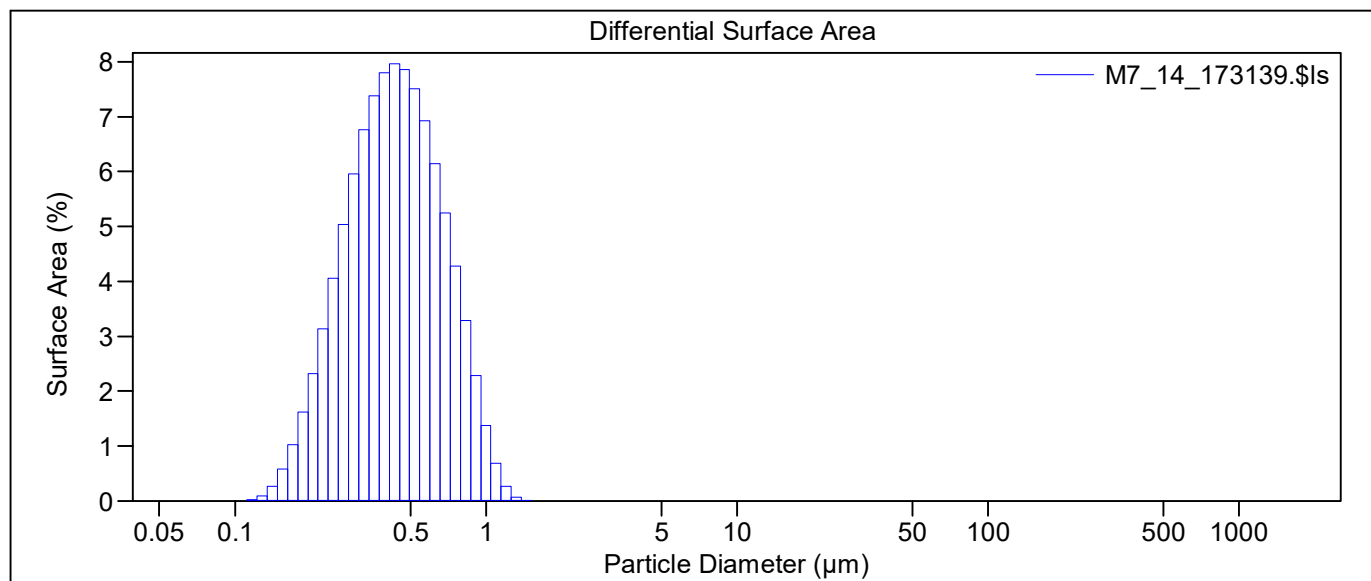
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_14_173139.\$ls		
	M7_14_173139.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.84%		
LS 13 320	Universal Liquid Module		
Start time:	17:29	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_14_173139.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.222 μm
Mean:	0.557 μm		Variance:	0.049 μm ²
Median:	0.527 μm		C.V.:	39.8%
Mean/Median ratio:	1.057		Skewness:	0.620 Right skewed
Mode:	0.571 μm		Kurtosis:	0.012 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.292 μm	0.387 μm	0.527 μm	0.701 μm	0.867 μm





M7.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0.00044	0.0019	0.021
12	0.112	0.117	0.0055	0.022	0.20
13	0.122	0.128	0.025	0.092	0.71
14	0.134	0.141	0.080	0.27	1.69
15	0.148	0.155	0.19	0.58	3.06
16	0.162	0.170	0.37	1.03	4.52
17	0.178	0.186	0.64	1.62	5.91

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.01	2.32	7.02
19	0.214	0.225	1.50	3.14	7.87
20	0.235	0.247	2.13	4.06	8.44
21	0.258	0.271	2.90	5.04	8.69
22	0.284	0.297	3.77	5.96	8.54
23	0.311	0.326	4.70	6.76	8.03
24	0.342	0.358	5.63	7.39	7.29
25	0.375	0.393	6.53	7.80	6.39
26	0.412	0.431	7.32	7.96	5.41
27	0.452	0.474	7.93	7.86	4.43
28	0.496	0.520	8.32	7.51	3.51
29	0.545	0.571	8.42	6.92	2.69
30	0.598	0.627	8.21	6.15	1.98
31	0.656	0.688	7.69	5.25	1.40
32	0.721	0.755	6.88	4.28	0.95
33	0.791	0.829	5.80	3.29	0.60
34	0.868	0.910	4.44	2.29	0.35
35	0.953	0.999	2.93	1.37	0.17
36	1.047	1.097	1.61	0.69	0.073
37	1.149	1.204	0.69	0.27	0.023
38	1.261	1.321	0.21	0.074	0.0053
39	1.385	1.451	0.040	0.013	0.00079
40	1.520	1.592	0.0030	0.00090	0.000045
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

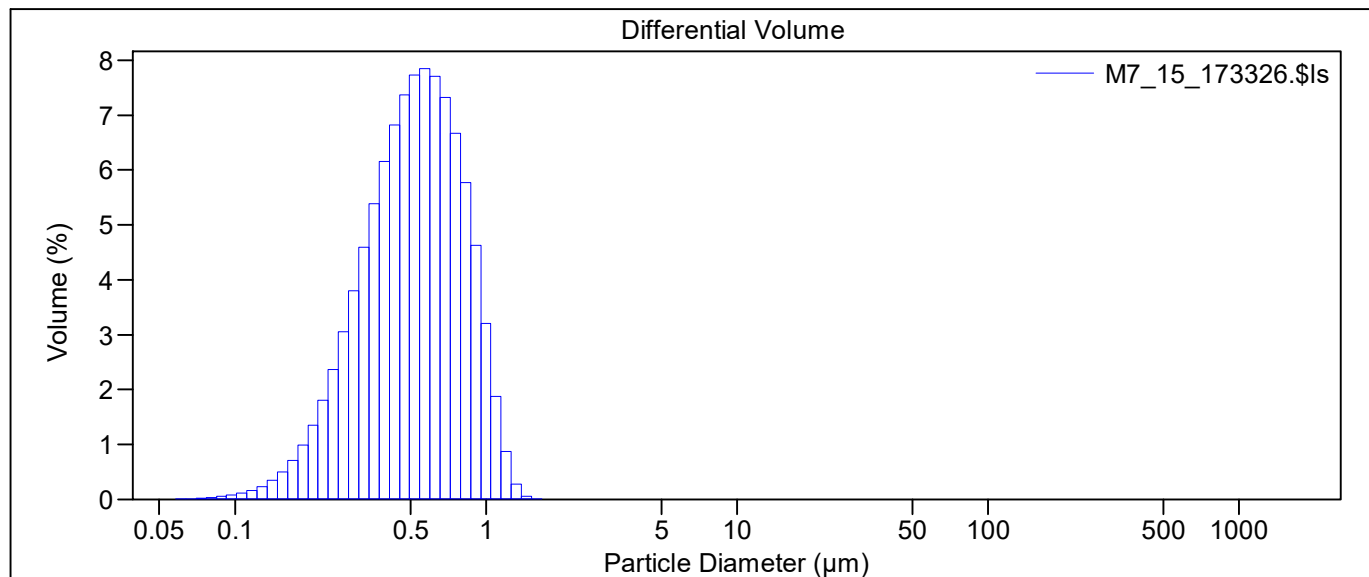
M7.\$av

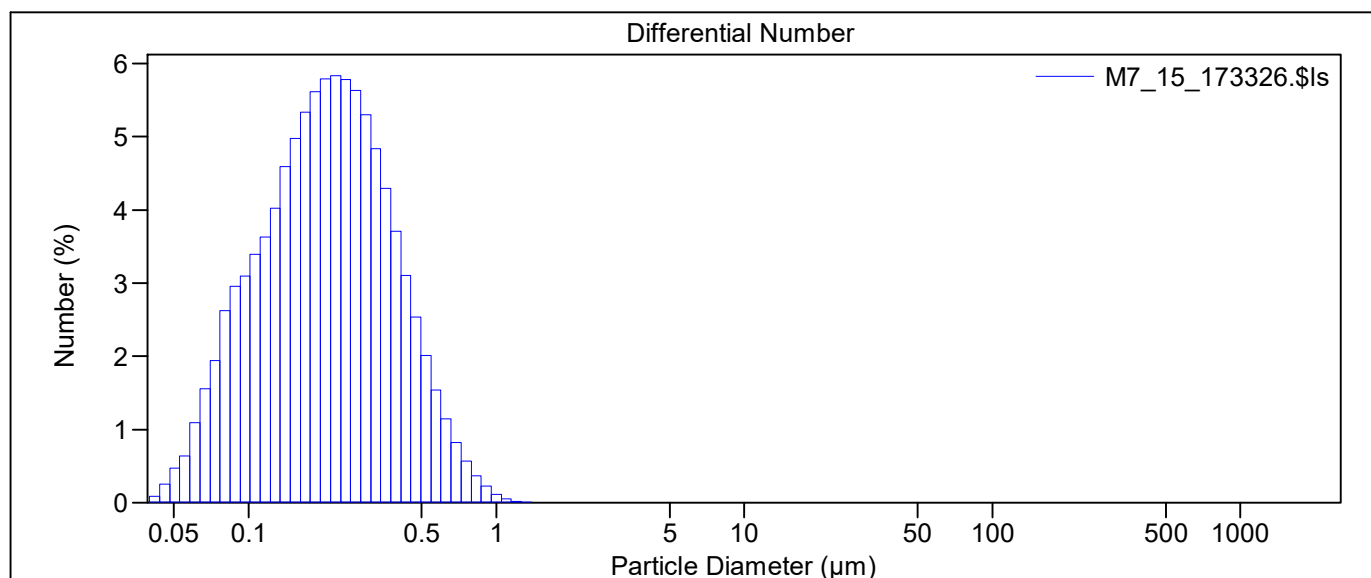
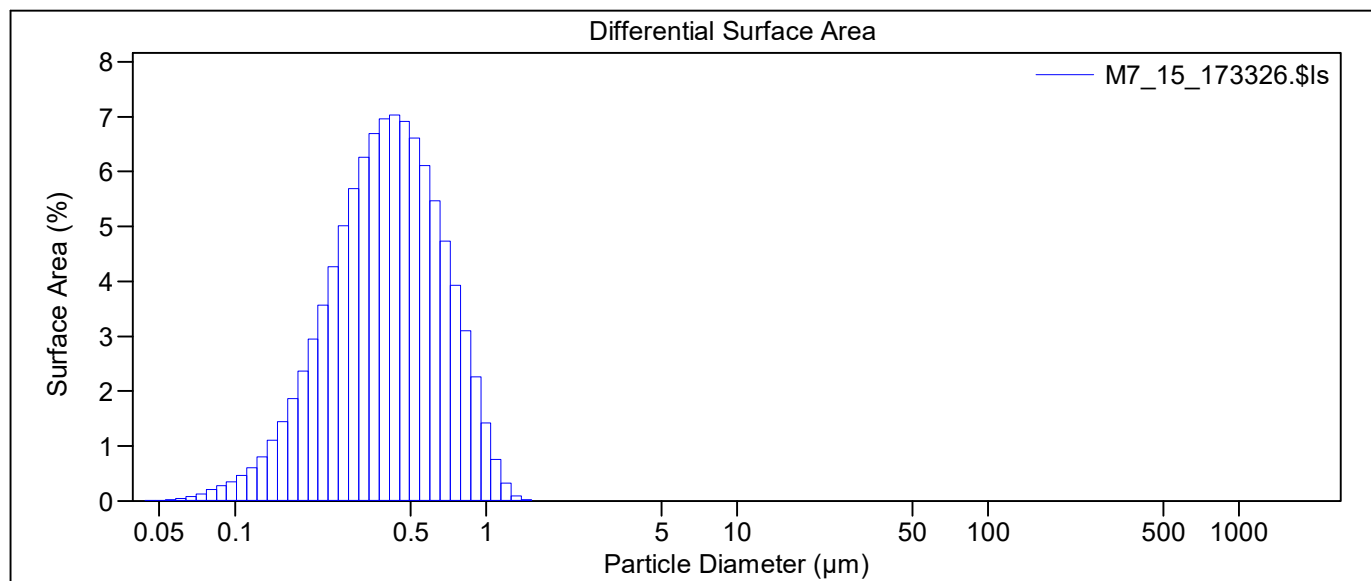
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M7\M7_15_173326.\$ls		
	M7_15_173326.\$ls		
File ID:	M7		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.66%		
LS 13 320	Universal Liquid Module		
Start time:	17:31	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M7_15_173326.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.237 μm
Mean:	0.552 μm		Variance:	0.056 μm ²
Median:	0.521 μm		C.V.:	42.9%
Mean/Median ratio:	1.059		Skewness:	0.574 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.064 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.268 μm	0.371 μm	0.521 μm	0.707 μm	0.886 μm





M7.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.00018	0.0019	0.090
2	0.044	0.046	0.00069	0.0066	0.26
3	0.048	0.050	0.0016	0.015	0.47
4	0.053	0.055	0.0030	0.024	0.64
5	0.058	0.061	0.0067	0.049	1.09
6	0.064	0.067	0.013	0.084	1.56
7	0.070	0.073	0.021	0.13	1.95
8	0.077	0.080	0.037	0.21	2.63
9	0.084	0.088	0.056	0.28	2.96
10	0.093	0.097	0.077	0.35	3.10
11	0.102	0.106	0.11	0.47	3.39
12	0.112	0.117	0.16	0.60	3.63
13	0.122	0.128	0.23	0.81	4.02
14	0.134	0.141	0.35	1.11	4.59
15	0.148	0.155	0.50	1.45	4.97
16	0.162	0.170	0.71	1.87	5.34
17	0.178	0.186	0.99	2.37	5.62

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.36	2.95	5.79
19	0.214	0.225	1.81	3.57	5.83
20	0.235	0.247	2.37	4.27	5.78
21	0.258	0.271	3.05	5.01	5.63
22	0.284	0.297	3.80	5.69	5.30
23	0.311	0.326	4.59	6.26	4.84
24	0.342	0.358	5.39	6.69	4.29
25	0.375	0.393	6.15	6.96	3.71
26	0.412	0.431	6.83	7.03	3.11
27	0.452	0.474	7.37	6.92	2.54
28	0.496	0.520	7.73	6.61	2.01
29	0.545	0.571	7.85	6.11	1.54
30	0.598	0.627	7.71	5.47	1.15
31	0.656	0.688	7.32	4.73	0.82
32	0.721	0.755	6.67	3.93	0.57
33	0.791	0.829	5.78	3.10	0.37
34	0.868	0.910	4.63	2.26	0.22
35	0.953	0.999	3.21	1.43	0.12
36	1.047	1.097	1.88	0.76	0.052
37	1.149	1.204	0.87	0.32	0.018
38	1.261	1.321	0.28	0.094	0.0044
39	1.385	1.451	0.061	0.019	0.00073
40	1.520	1.592	0.0060	0.0017	0.000055
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M7.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M8\M8.\$av M8.\$av

File ID: M8

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_01_174353.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M8\M8_15_183824.\$ls

Volume Statistics (Arithmetic) M8.\$av

Calculations from 0.040 μm to 2000 μm

Volume: 100%

Mean: 0.514 μm

S.D.: 0.306 μm

Median: 0.468 μm

Variance: 0.094 μm^2

Mean/Median ratio: 1.098

C.V.: 59.5%

Mode: 0.571 μm

Skewness: 1.066 Right skewed

Kurtosis: 2.008 Leptokurtic

<10%

<25%

<50%

<75%

<90%

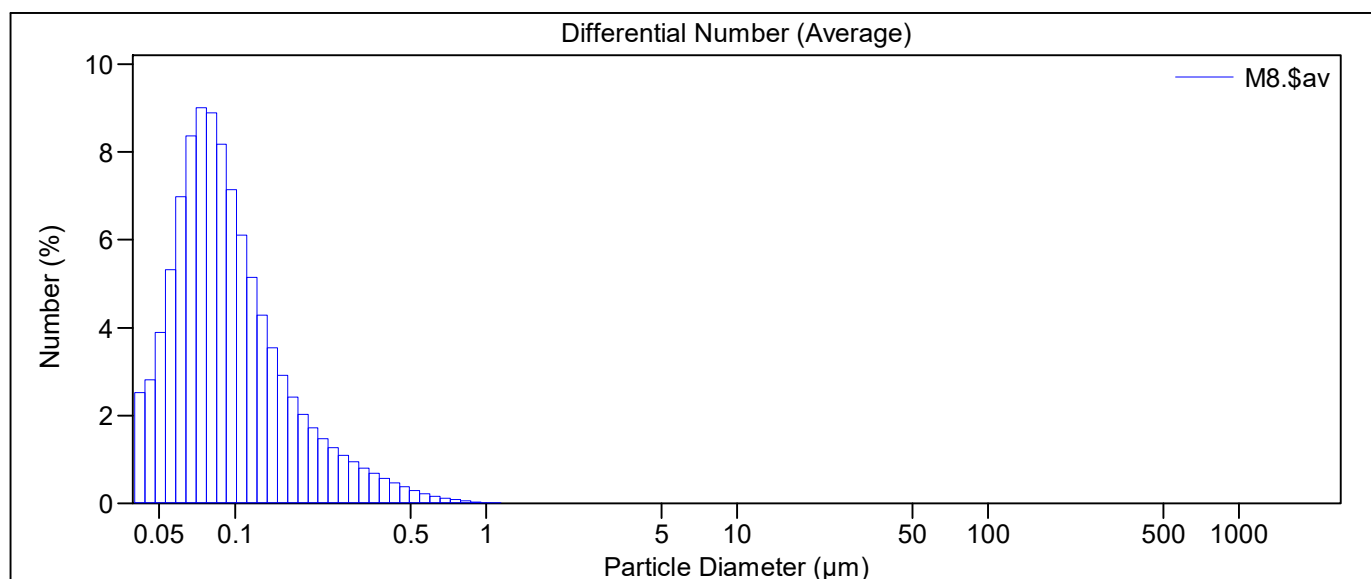
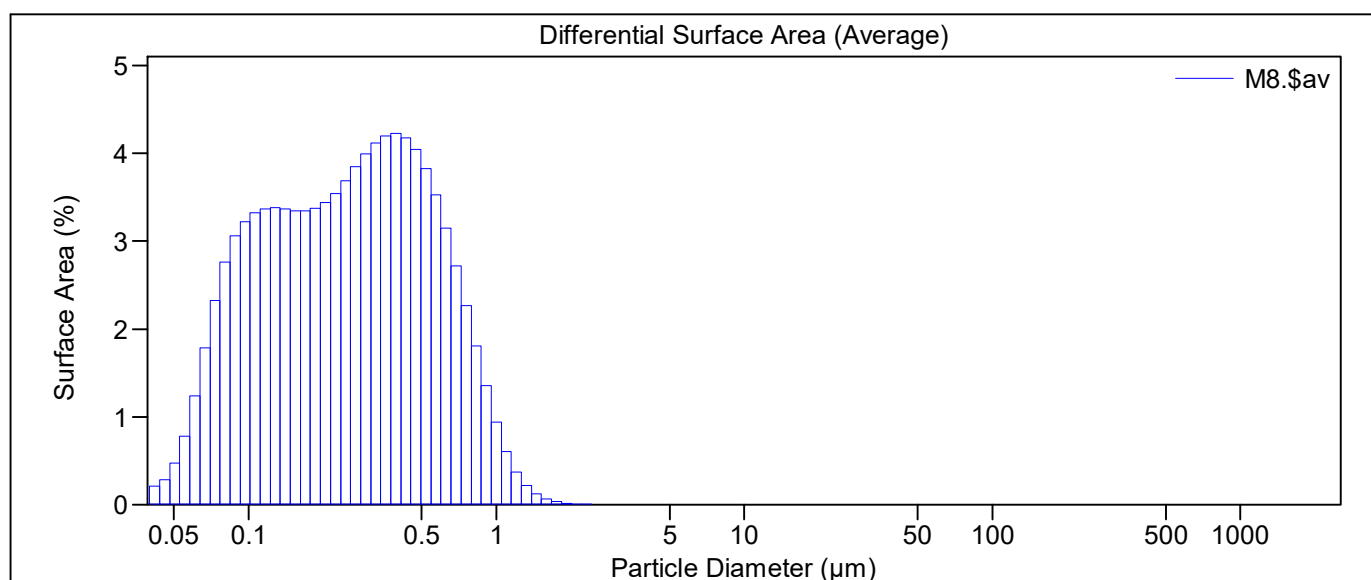
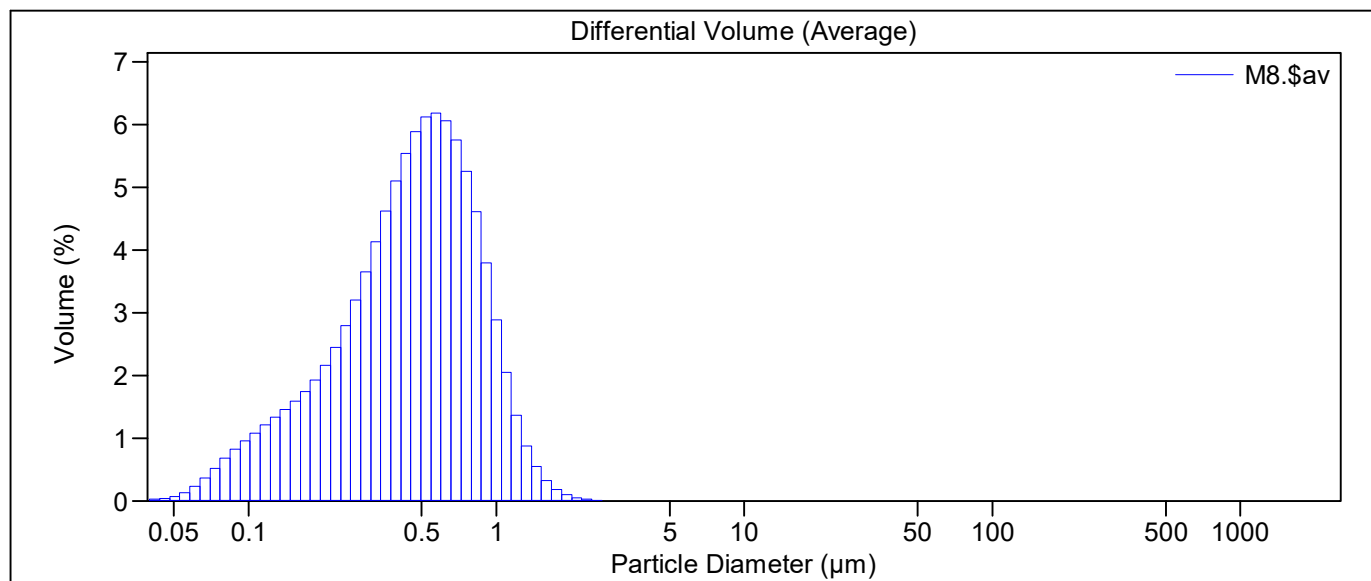
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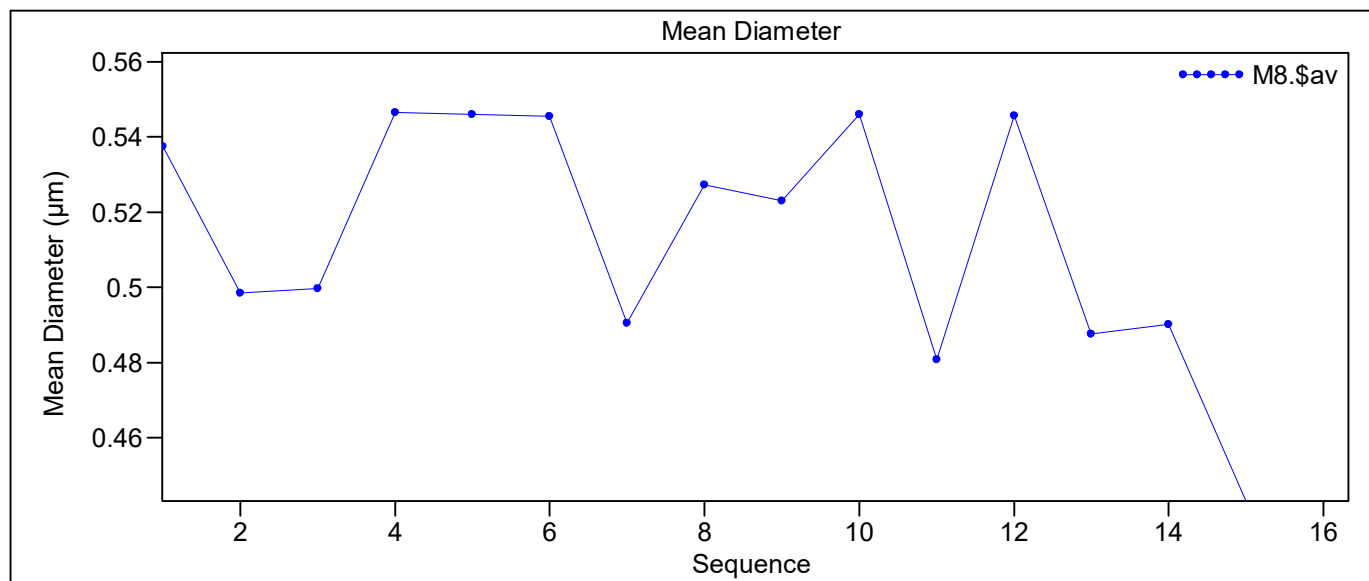
0.285 μm

0.468 μm

0.689 μm

0.919 μm





M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.027	0.21	2.52
2	0.044	0.046	0.040	0.28	2.81
3	0.048	0.050	0.074	0.48	3.89
4	0.053	0.055	0.13	0.78	5.32
5	0.058	0.061	0.23	1.24	6.99
6	0.064	0.067	0.37	1.79	8.37
7	0.070	0.073	0.52	2.32	9.01
8	0.077	0.080	0.68	2.76	8.89
9	0.084	0.088	0.83	3.06	8.17
10	0.093	0.097	0.96	3.22	7.15
11	0.102	0.106	1.09	3.32	6.11
12	0.112	0.117	1.21	3.37	5.15
13	0.122	0.128	1.34	3.39	4.29
14	0.134	0.141	1.46	3.37	3.54
15	0.148	0.155	1.59	3.34	2.92
16	0.162	0.170	1.75	3.35	2.43
17	0.178	0.186	1.93	3.38	2.03
18	0.195	0.205	2.16	3.44	1.72
19	0.214	0.225	2.45	3.55	1.47
20	0.235	0.247	2.79	3.69	1.27
21	0.258	0.271	3.20	3.85	1.10
22	0.284	0.297	3.65	4.00	0.95
23	0.311	0.326	4.13	4.12	0.81
24	0.342	0.358	4.62	4.20	0.68
25	0.375	0.393	5.10	4.23	0.57
26	0.412	0.431	5.54	4.18	0.47
27	0.452	0.474	5.89	4.05	0.38
28	0.496	0.520	6.12	3.83	0.30
29	0.545	0.571	6.19	3.53	0.23
30	0.598	0.627	6.07	3.15	0.17
31	0.656	0.688	5.75	2.72	0.12
32	0.721	0.755	5.26	2.27	0.083
33	0.791	0.829	4.61	1.81	0.055
34	0.868	0.910	3.80	1.36	0.034
35	0.953	0.999	2.89	0.94	0.020
36	1.047	1.097	2.05	0.61	0.011
37	1.149	1.204	1.37	0.37	0.0053
38	1.261	1.321	0.88	0.22	0.0026
39	1.385	1.451	0.55	0.12	0.0012
40	1.520	1.592	0.33	0.068	0.00056
41	1.668	1.748	0.18	0.034	0.00024

M8.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.099	0.017	0.000095
43	2.011	2.107	0.052	0.0080	0.000038
44	2.207	2.313	0.027	0.0039	0.000015
45	2.423	2.539	0.013	0.0017	0.000006
46	2.660	2.787	0.0050	0.00058	0.000002
47	2.920	3.059	0.0014	0.00014	3.23E-7
48	3.205	3.358	0.00021	0.000021	3.84E-8
49	3.519	3.687	0.000007	0.000001	9.33E-10
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

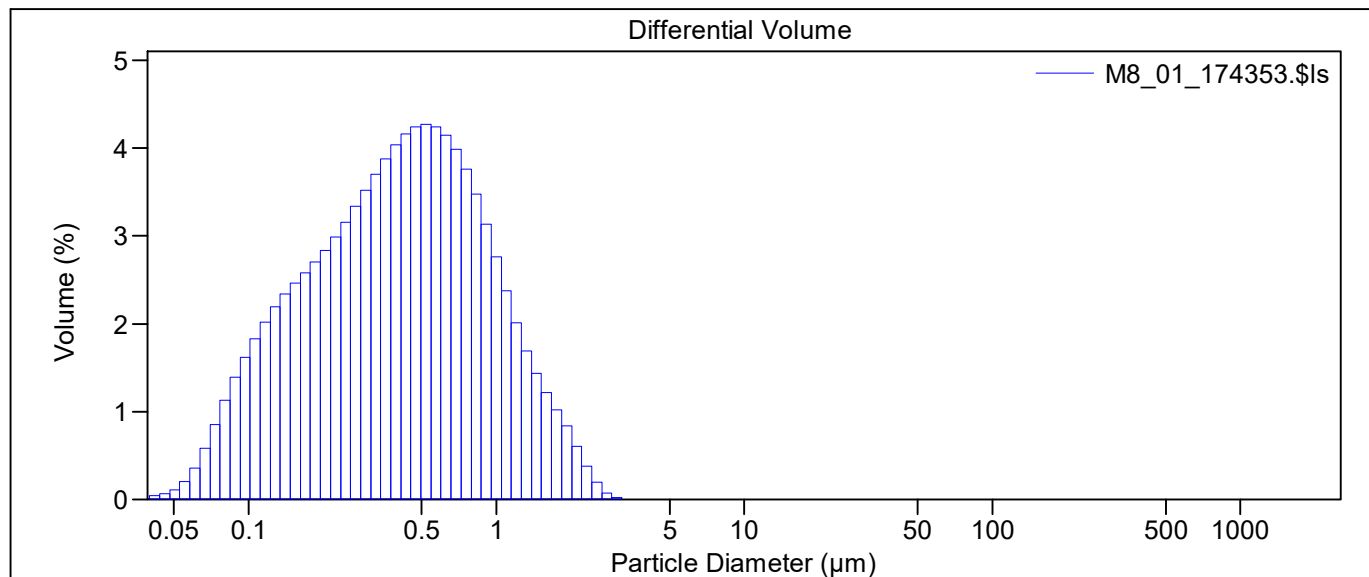
M8.\$av

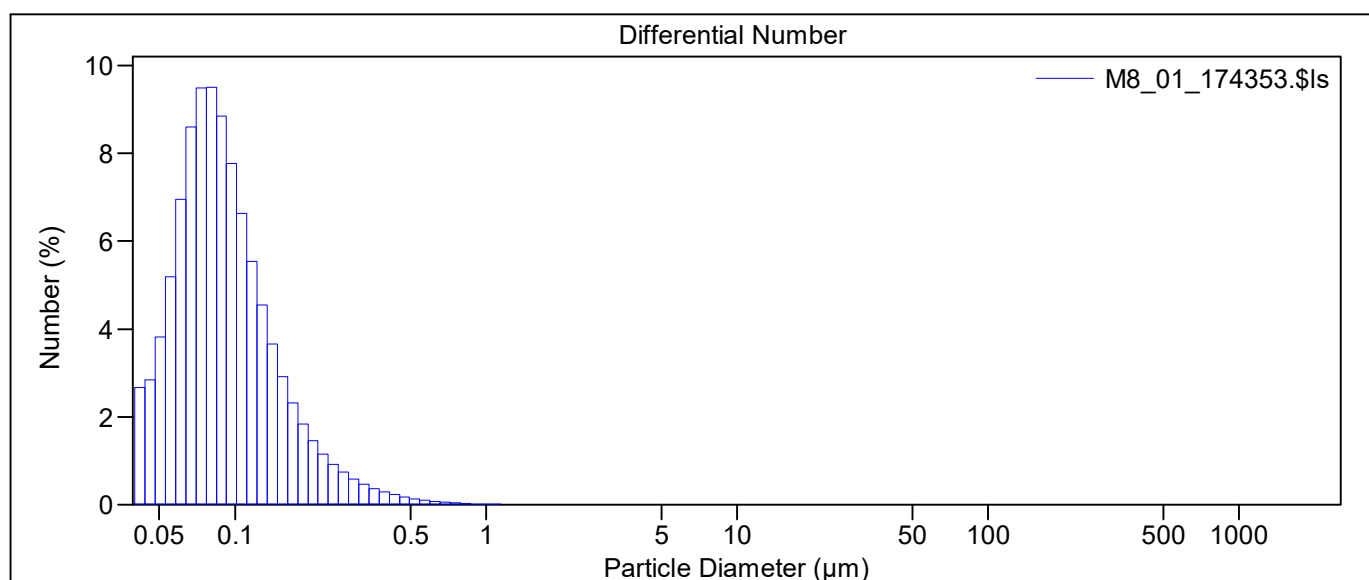
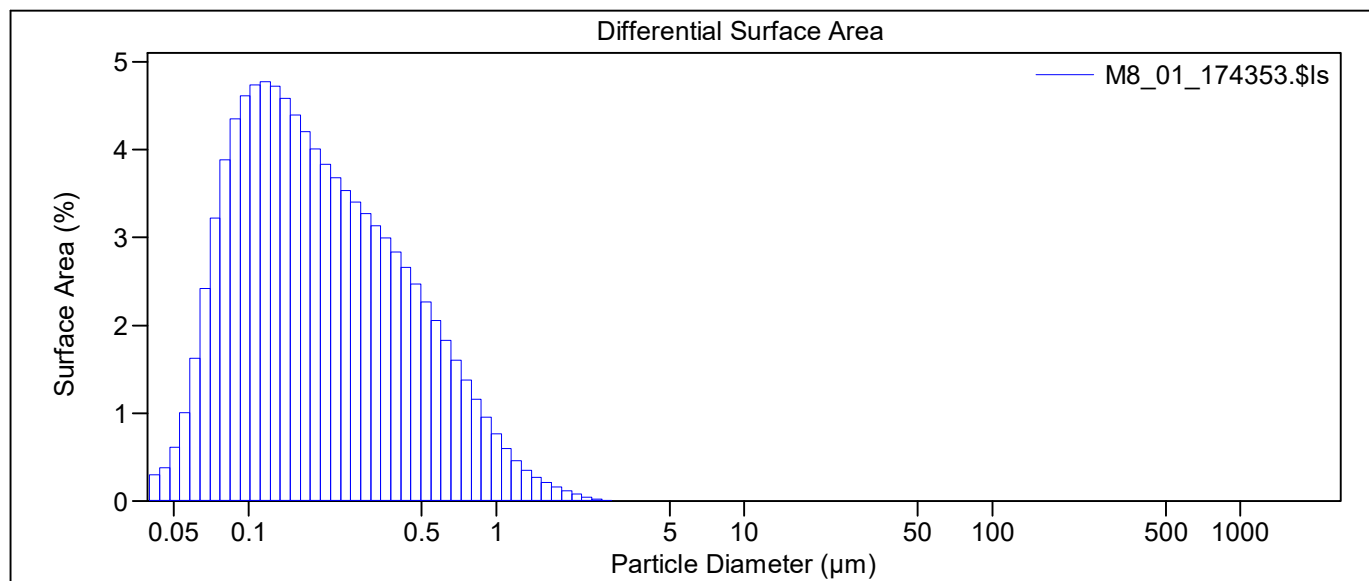
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_01_174353.\$ls		
	M8_01_174353.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.35%		
LS 13 320	Universal Liquid Module		
Start time:	17:42	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_01_174353.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.442 μm
Mean:	0.538 μm		Variance:	0.195 μm ²
Median:	0.412 μm		C.V.:	82.1%
Mean/Median ratio:	1.304		Skewness:	1.645 Right skewed
Mode:	0.520 μm		Kurtosis:	3.193 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.121 μm	0.212 μm	0.412 μm	0.721 μm	1.127 μm





M8.\$av					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.045	0.30	2.67
2	0.044	0.046	0.063	0.38	2.84
3	0.048	0.050	0.11	0.61	3.82
4	0.053	0.055	0.20	1.01	5.19
5	0.058	0.061	0.36	1.62	6.96
6	0.064	0.067	0.59	2.42	8.60
7	0.070	0.073	0.85	3.22	9.49
8	0.077	0.080	1.13	3.88	9.51
9	0.084	0.088	1.39	4.35	8.84
10	0.093	0.097	1.62	4.61	7.77
11	0.102	0.106	1.83	4.74	6.63
12	0.112	0.117	2.02	4.78	5.54
13	0.122	0.128	2.19	4.72	4.55
14	0.134	0.141	2.34	4.58	3.66
15	0.148	0.155	2.46	4.39	2.91
16	0.162	0.170	2.58	4.20	2.31
17	0.178	0.186	2.71	4.01	1.83

M8.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.84	3.83	1.45
19	0.214	0.225	2.99	3.68	1.16
20	0.235	0.247	3.16	3.54	0.92
21	0.258	0.271	3.34	3.40	0.74
22	0.284	0.297	3.52	3.27	0.59
23	0.311	0.326	3.70	3.14	0.47
24	0.342	0.358	3.88	2.99	0.37
25	0.375	0.393	4.04	2.84	0.29
26	0.412	0.431	4.16	2.66	0.23
27	0.452	0.474	4.24	2.47	0.17
28	0.496	0.520	4.27	2.27	0.13
29	0.545	0.571	4.24	2.05	0.100
30	0.598	0.627	4.15	1.83	0.074
31	0.656	0.688	3.99	1.60	0.054
32	0.721	0.755	3.76	1.38	0.038
33	0.791	0.829	3.48	1.16	0.027
34	0.868	0.910	3.14	0.95	0.018
35	0.953	0.999	2.76	0.76	0.012
36	1.047	1.097	2.38	0.60	0.0079
37	1.149	1.204	2.01	0.46	0.0051
38	1.261	1.321	1.69	0.35	0.0032
39	1.385	1.451	1.43	0.27	0.0021
40	1.520	1.592	1.21	0.21	0.0013
41	1.668	1.748	1.02	0.16	0.00084
42	1.832	1.919	0.83	0.12	0.00052
43	2.011	2.107	0.60	0.079	0.00028
44	2.207	2.313	0.38	0.045	0.00013
45	2.423	2.539	0.20	0.021	0.000053
46	2.660	2.787	0.074	0.0074	0.000015
47	2.920	3.059	0.020	0.0018	0.000003
48	3.205	3.358	0.0032	0.00026	3.71E-7
49	3.519	3.687	0.00010	0.000008	9.03E-9
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0

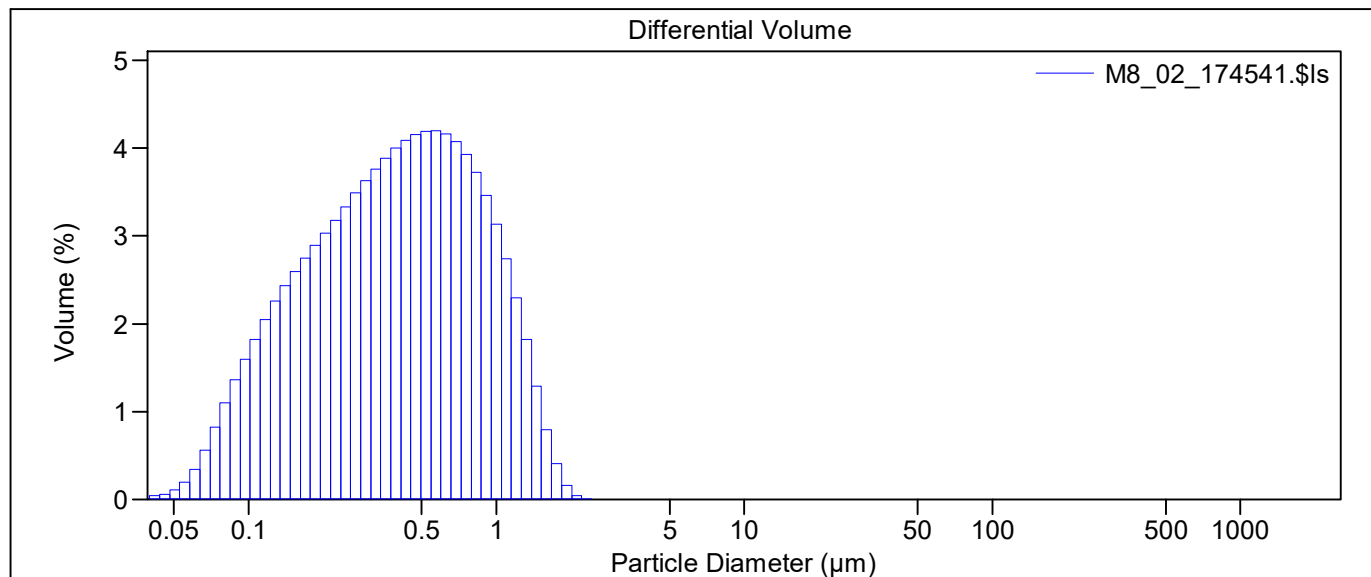
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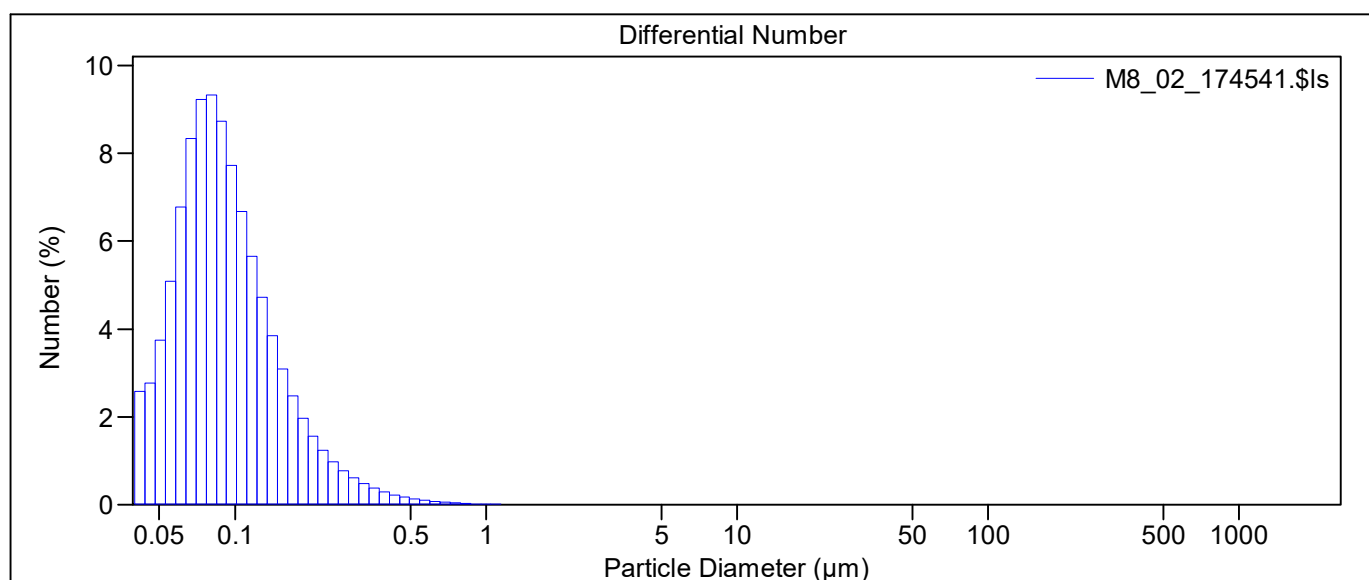
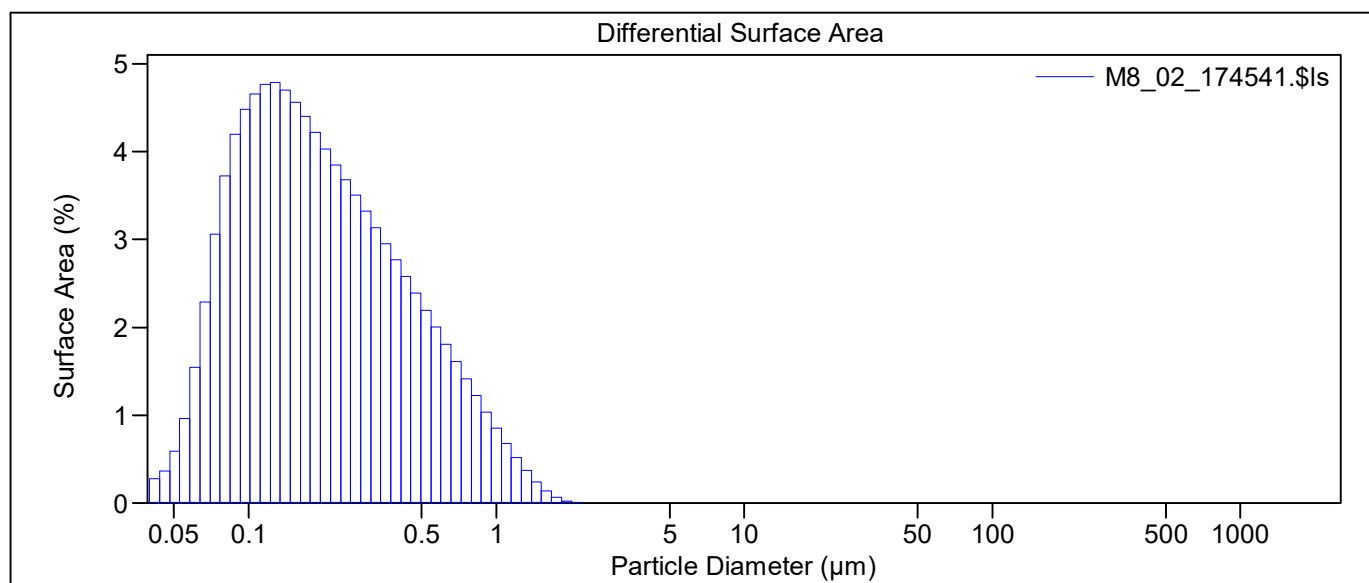
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_02_174541.\$ls		
	M8_02_174541.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.86%		
LS 13 320	Universal Liquid Module		
Start time:	17:43	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_02_174541.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.365 μm
Mean:	0.499 μm		Variance:	0.133 μm ²
Median:	0.400 μm		C.V.:	73.2%
Mean/Median ratio:	1.247		Skewness:	1.120 Right skewed
Mode:	0.571 μm		Kurtosis:	0.893 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.122 μm	0.208 μm	0.400 μm	0.702 μm	1.034 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.043	0.28	2.58
2	0.044	0.046	0.061	0.36	2.77
3	0.048	0.050	0.11	0.59	3.75
4	0.053	0.055	0.20	0.96	5.08
5	0.058	0.061	0.35	1.55	6.79
6	0.064	0.067	0.56	2.29	8.33
7	0.070	0.073	0.82	3.06	9.23
8	0.077	0.080	1.10	3.73	9.34
9	0.084	0.088	1.36	4.20	8.74
10	0.093	0.097	1.60	4.48	7.73
11	0.102	0.106	1.82	4.66	6.67
12	0.112	0.117	2.05	4.76	5.66
13	0.122	0.128	2.26	4.79	4.72
14	0.134	0.141	2.43	4.70	3.85
15	0.148	0.155	2.59	4.56	3.10
16	0.162	0.170	2.75	4.40	2.48
17	0.178	0.186	2.89	4.22	1.97

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.03	4.03	1.56
19	0.214	0.225	3.18	3.85	1.24
20	0.235	0.247	3.33	3.68	0.98
21	0.258	0.271	3.49	3.51	0.78
22	0.284	0.297	3.63	3.32	0.61
23	0.311	0.326	3.76	3.13	0.48
24	0.342	0.358	3.89	2.95	0.37
25	0.375	0.393	4.00	2.77	0.29
26	0.412	0.431	4.09	2.58	0.23
27	0.452	0.474	4.16	2.39	0.17
28	0.496	0.520	4.19	2.19	0.13
29	0.545	0.571	4.20	2.00	0.100
30	0.598	0.627	4.16	1.81	0.075
31	0.656	0.688	4.07	1.61	0.055
32	0.721	0.755	3.93	1.42	0.040
33	0.791	0.829	3.73	1.22	0.029
34	0.868	0.910	3.46	1.03	0.020
35	0.953	0.999	3.14	0.85	0.014
36	1.047	1.097	2.74	0.68	0.0092
37	1.149	1.204	2.30	0.52	0.0058
38	1.261	1.321	1.82	0.38	0.0035
39	1.385	1.451	1.29	0.24	0.0019
40	1.520	1.592	0.79	0.14	0.00087
41	1.668	1.748	0.41	0.064	0.00034
42	1.832	1.919	0.16	0.023	0.00010
43	2.011	2.107	0.047	0.0060	0.000022
44	2.207	2.313	0.0087	0.0010	0.000003
45	2.423	2.539	0.00043	0.000046	1.16E-7
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

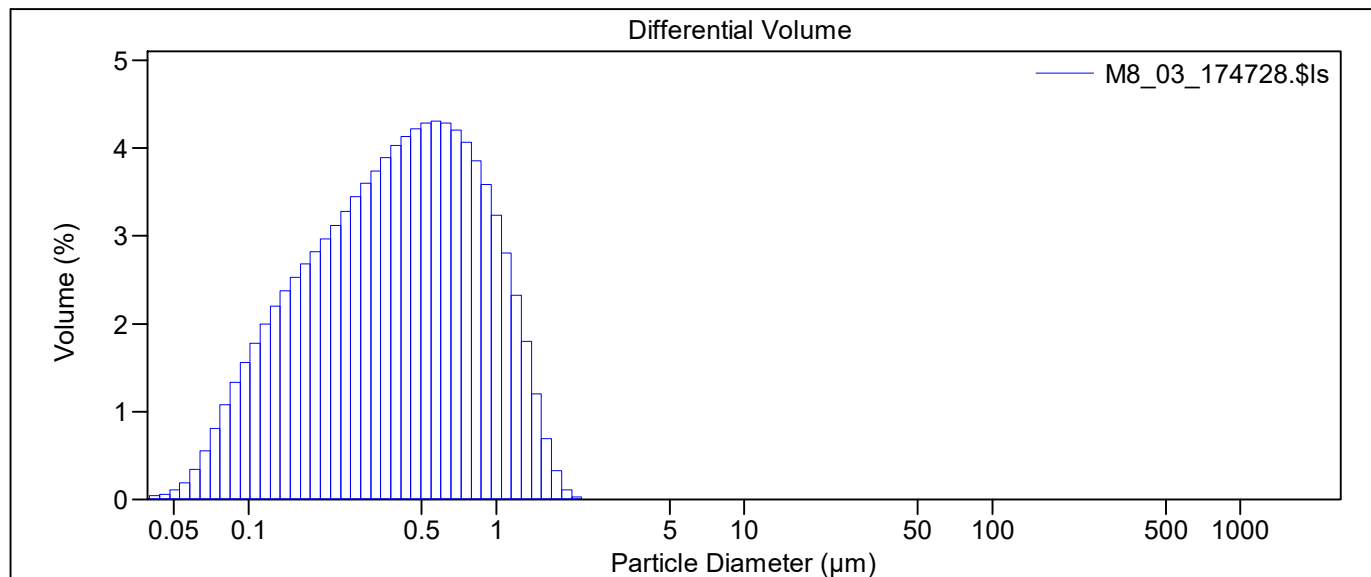
M8.\$av

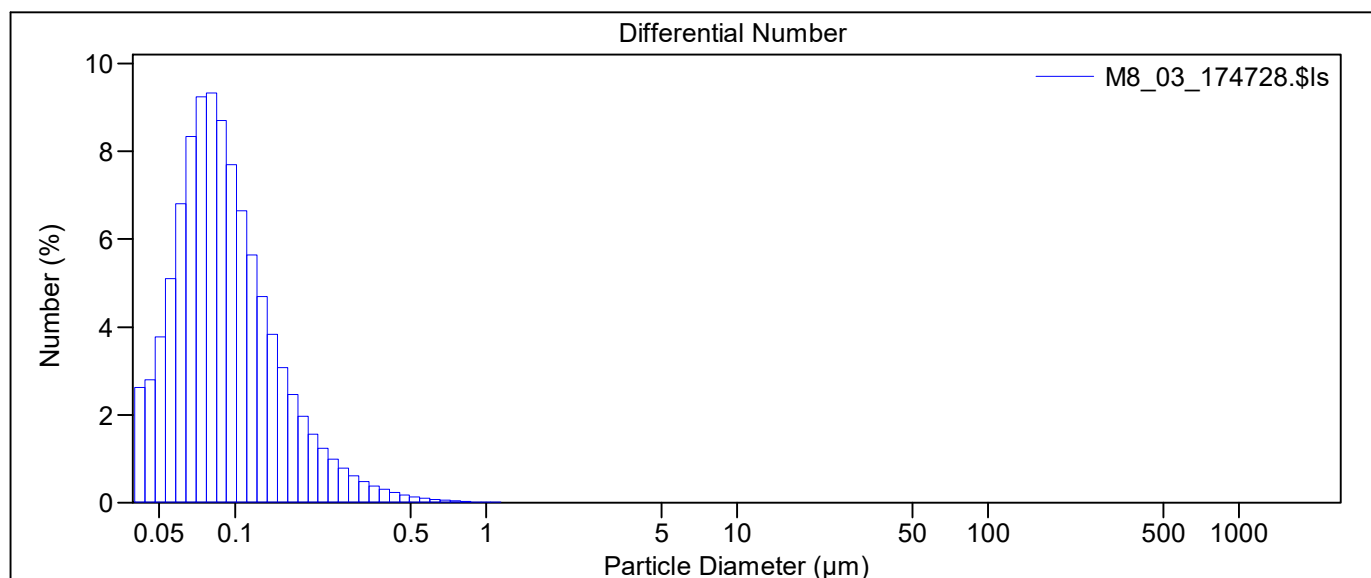
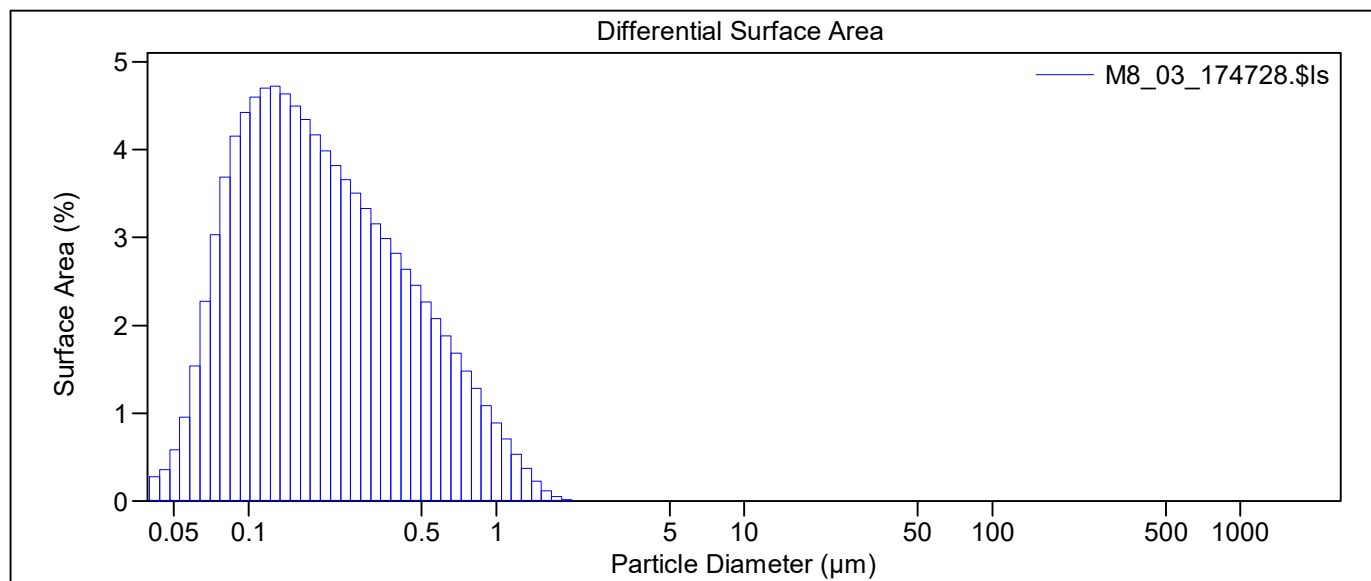
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_03_174728.\$ls		
	M8_03_174728.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.92%		
LS 13 320	Universal Liquid Module		
Start time:	17:45	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	43%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_03_174728.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.358 μm
Mean:	0.500 μm		Variance:	0.128 μm ²
Median:	0.407 μm		C.V.:	71.7%
Mean/Median ratio:	1.228		Skewness:	1.052 Right skewed
Mode:	0.571 μm		Kurtosis:	0.680 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.123 μm	0.212 μm	0.407 μm	0.706 μm	1.026 μm





M8.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.043	0.28	2.62
2	0.044	0.046	0.060	0.36	2.79
3	0.048	0.050	0.11	0.59	3.77
4	0.053	0.055	0.19	0.96	5.11
5	0.058	0.061	0.34	1.54	6.80
6	0.064	0.067	0.55	2.27	8.34
7	0.070	0.073	0.81	3.03	9.24
8	0.077	0.080	1.08	3.69	9.32
9	0.084	0.088	1.33	4.15	8.71
10	0.093	0.097	1.56	4.43	7.70
11	0.102	0.106	1.78	4.60	6.65
12	0.112	0.117	2.00	4.70	5.64
13	0.122	0.128	2.20	4.72	4.70
14	0.134	0.141	2.37	4.64	3.83
15	0.148	0.155	2.53	4.50	3.08
16	0.162	0.170	2.68	4.35	2.47
17	0.178	0.186	2.82	4.17	1.97

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.96	3.99	1.56
19	0.214	0.225	3.12	3.82	1.24
20	0.235	0.247	3.28	3.66	0.99
21	0.258	0.271	3.45	3.50	0.78
22	0.284	0.297	3.60	3.33	0.62
23	0.311	0.326	3.74	3.16	0.49
24	0.342	0.358	3.89	2.99	0.38
25	0.375	0.393	4.03	2.82	0.30
26	0.412	0.431	4.14	2.64	0.23
27	0.452	0.474	4.22	2.45	0.18
28	0.496	0.520	4.28	2.27	0.14
29	0.545	0.571	4.31	2.08	0.10
30	0.598	0.627	4.28	1.88	0.078
31	0.656	0.688	4.21	1.68	0.058
32	0.721	0.755	4.06	1.48	0.043
33	0.791	0.829	3.86	1.28	0.031
34	0.868	0.910	3.58	1.08	0.021
35	0.953	0.999	3.24	0.89	0.015
36	1.047	1.097	2.81	0.70	0.0096
37	1.149	1.204	2.32	0.53	0.0060
38	1.261	1.321	1.80	0.38	0.0035
39	1.385	1.451	1.20	0.23	0.0018
40	1.520	1.592	0.69	0.12	0.00077
41	1.668	1.748	0.33	0.051	0.00028
42	1.832	1.919	0.11	0.016	0.000069
43	2.011	2.107	0.026	0.0034	0.000012
44	2.207	2.313	0.0031	0.00037	0.000001
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

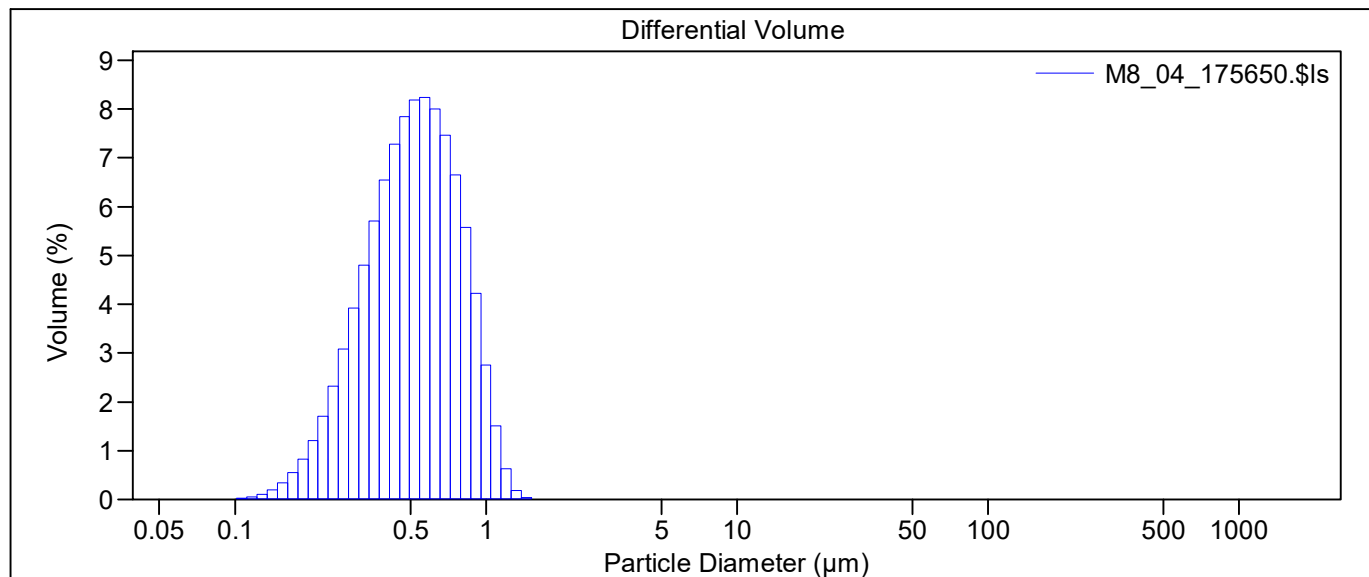
M8.\$av

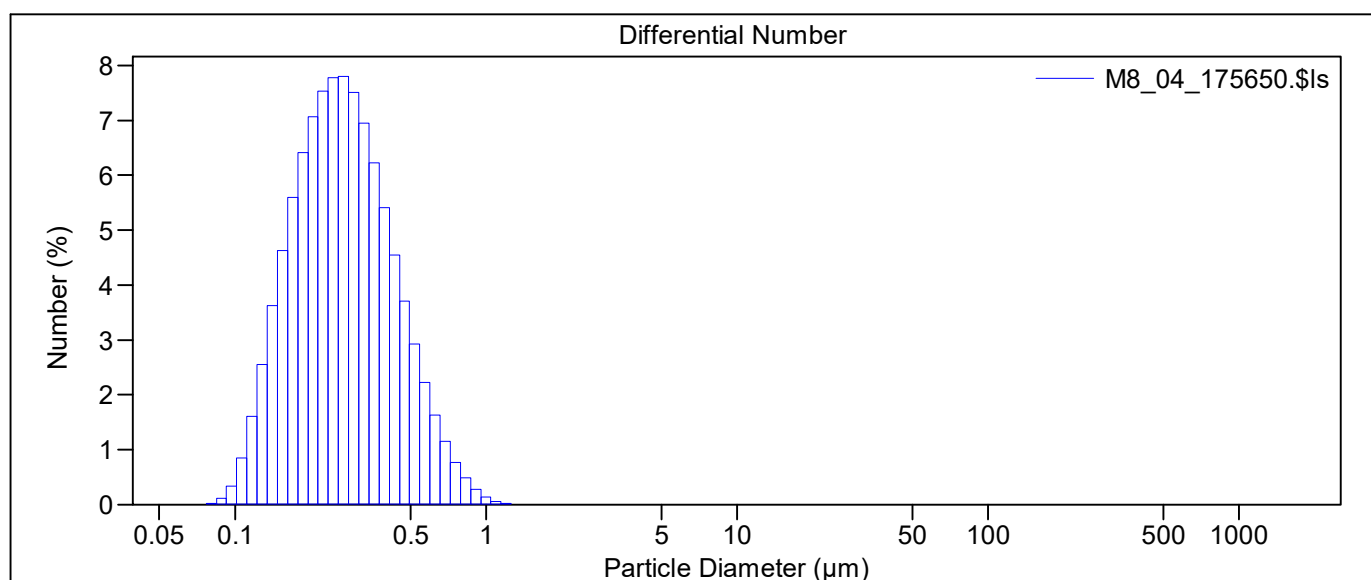
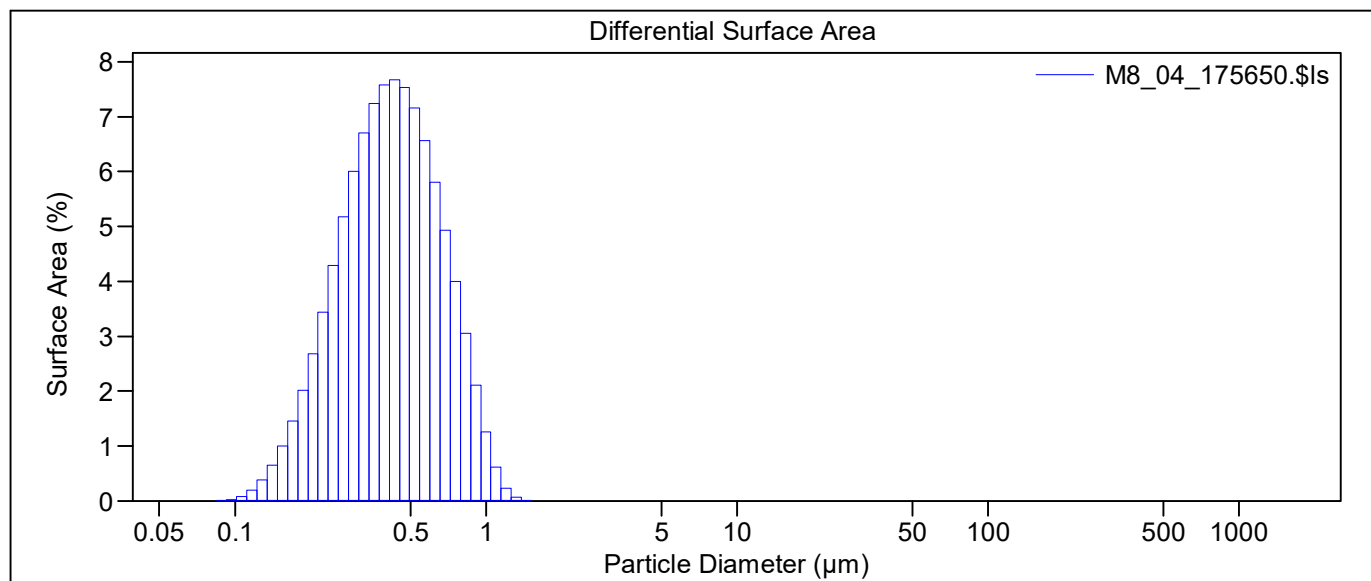
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_04_175650.\$ls		
	M8_04_175650.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	4		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.81%		
LS 13 320	Universal Liquid Module		
Start time:	17:55	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_04_175650.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.223 µm
Mean:	0.547 µm		Variance:	0.050 µm ²
Median:	0.517 µm		C.V.:	40.8%
Mean/Median ratio:	1.058		Skewness:	0.609 Right skewed
Mode:	0.571 µm		Kurtosis:	0.0071 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.280 µm	0.376 µm	0.517 µm	0.691 µm	0.859 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0.00025	0.0014	0.024
9	0.084	0.088	0.0016	0.0083	0.12
10	0.093	0.097	0.0061	0.029	0.34
11	0.102	0.106	0.020	0.087	0.85
12	0.112	0.117	0.051	0.20	1.61
13	0.122	0.128	0.11	0.38	2.55
14	0.134	0.141	0.20	0.65	3.63
15	0.148	0.155	0.34	1.00	4.62
16	0.162	0.170	0.55	1.46	5.60
17	0.178	0.186	0.83	2.02	6.41

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.21	2.68	7.07
19	0.214	0.225	1.70	3.44	7.53
20	0.235	0.247	2.32	4.29	7.78
21	0.258	0.271	3.08	5.18	7.80
22	0.284	0.297	3.92	6.00	7.51
23	0.311	0.326	4.81	6.70	6.95
24	0.342	0.358	5.70	7.24	6.23
25	0.375	0.393	6.55	7.58	5.41
26	0.412	0.431	7.29	7.68	4.55
27	0.452	0.474	7.85	7.53	3.71
28	0.496	0.520	8.19	7.16	2.92
29	0.545	0.571	8.24	6.57	2.22
30	0.598	0.627	8.01	5.81	1.63
31	0.656	0.688	7.47	4.94	1.15
32	0.721	0.755	6.65	4.00	0.78
33	0.791	0.829	5.58	3.06	0.49
34	0.868	0.910	4.22	2.11	0.28
35	0.953	0.999	2.76	1.26	0.14
36	1.047	1.097	1.50	0.62	0.057
37	1.149	1.204	0.63	0.24	0.018
38	1.261	1.321	0.19	0.064	0.0041
39	1.385	1.451	0.036	0.011	0.00058
40	1.520	1.592	0.0025	0.00072	0.000031
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

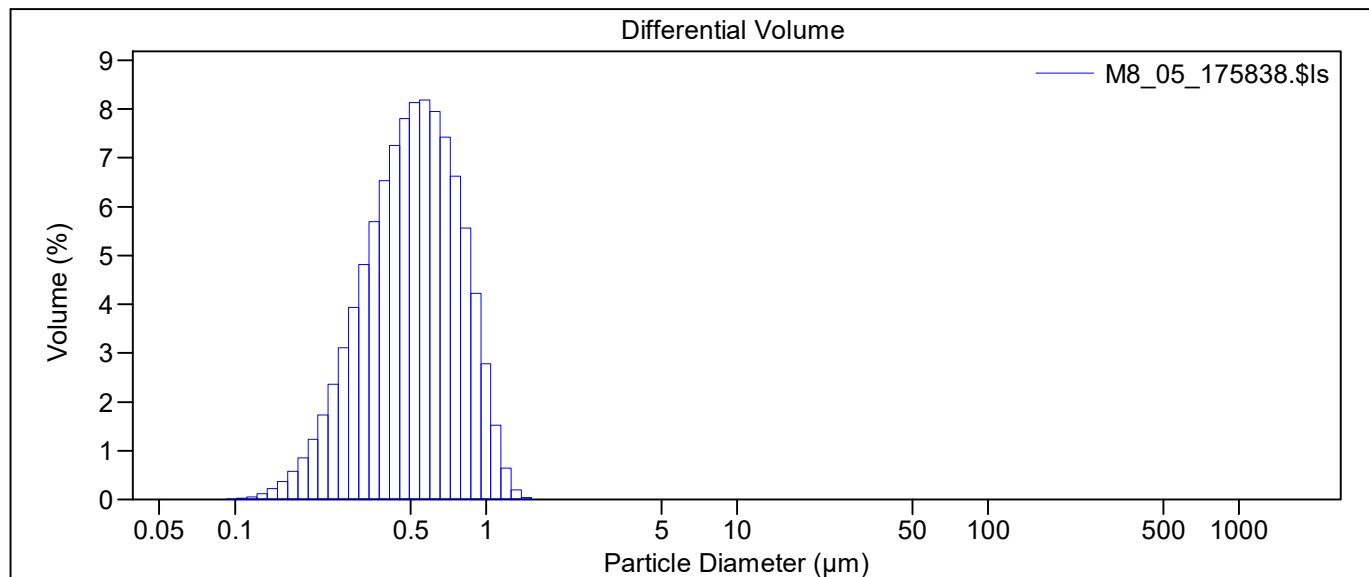
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_05_175838.\$ls		
	M8_05_175838.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.82%		
LS 13 320	Universal Liquid Module		
Start time:	17:56	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

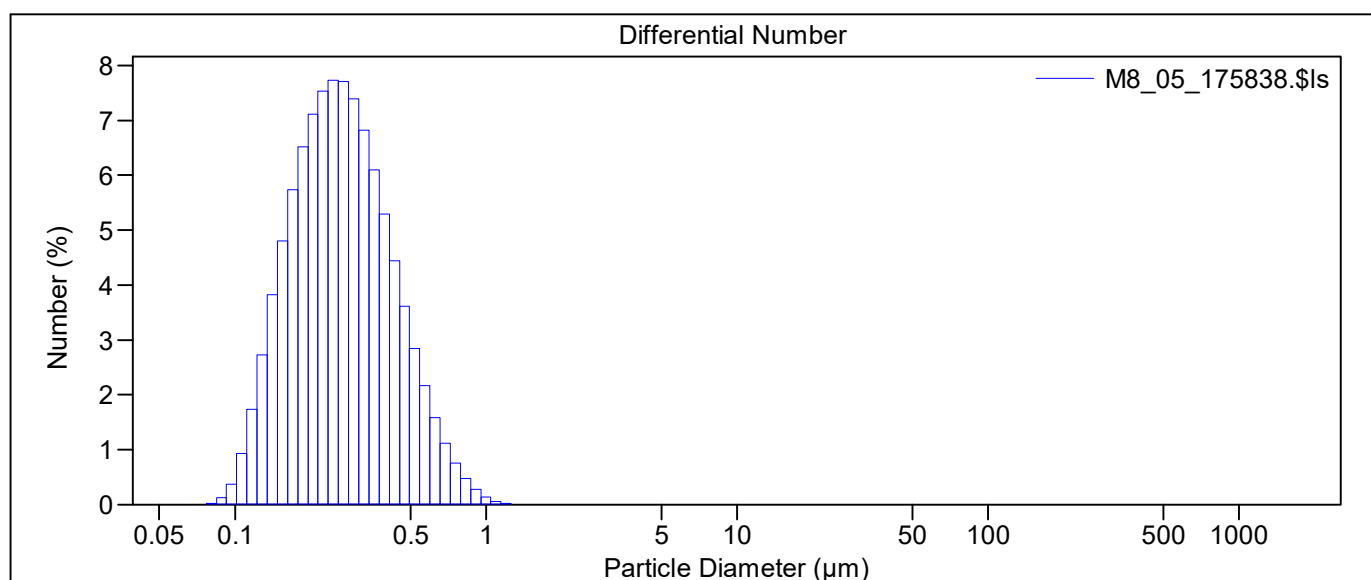
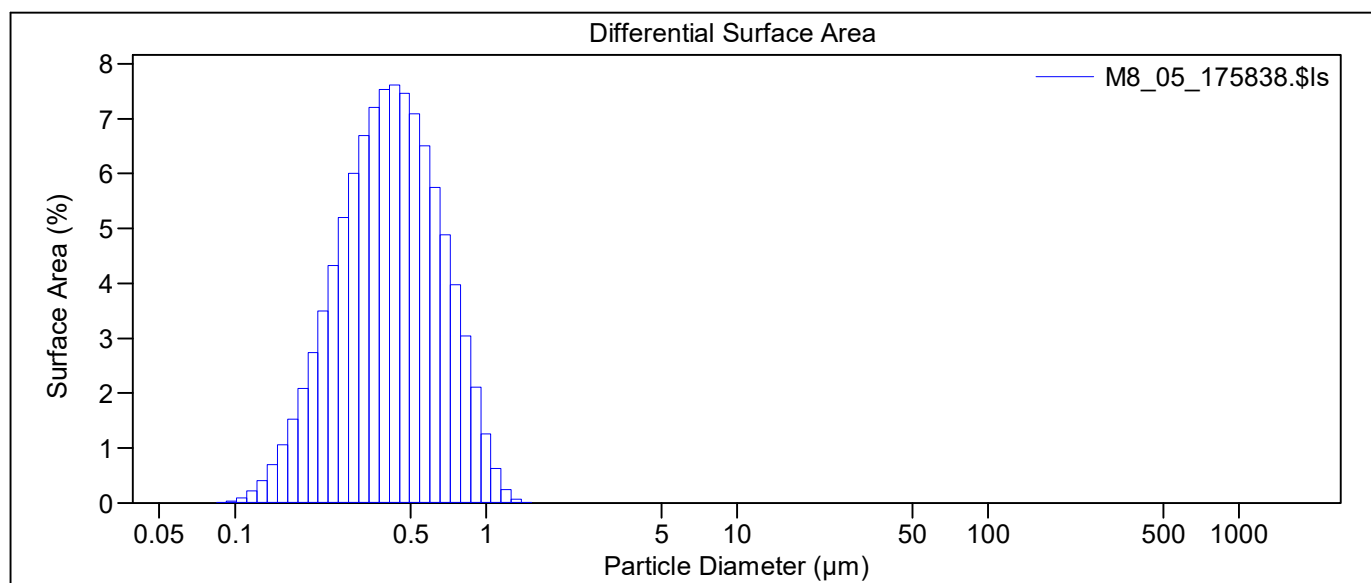
Volume Statistics (Arithmetic) M8_05_175838.\$ls

Calculations from 0.040 μm to 2000 μm

Volume:	100%	S.D.:	0.224 μm
Mean:	0.546 μm	Variance:	0.050 μm^2
Median:	0.516 μm	C.V.:	41.1%
Mean/Median ratio:	1.058	Skewness:	0.611 Right skewed
Mode:	0.571 μm	Kurtosis:	0.0073 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.278 μm	0.374 μm	0.516 μm	0.691 μm	0.860 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0.00027	0.0015	0.026
9	0.084	0.088	0.0018	0.0091	0.13
10	0.093	0.097	0.0069	0.032	0.37
11	0.102	0.106	0.023	0.097	0.93
12	0.112	0.117	0.056	0.22	1.73
13	0.122	0.128	0.12	0.41	2.72
14	0.134	0.141	0.22	0.70	3.82
15	0.148	0.155	0.36	1.06	4.80
16	0.162	0.170	0.57	1.53	5.74
17	0.178	0.186	0.86	2.08	6.51

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.24	2.74	7.12
19	0.214	0.225	1.73	3.50	7.53
20	0.235	0.247	2.36	4.33	7.73
21	0.258	0.271	3.11	5.20	7.71
22	0.284	0.297	3.94	6.01	7.39
23	0.311	0.326	4.82	6.69	6.83
24	0.342	0.358	5.70	7.21	6.10
25	0.375	0.393	6.53	7.53	5.29
26	0.412	0.431	7.25	7.62	4.44
27	0.452	0.474	7.81	7.47	3.61
28	0.496	0.520	8.14	7.09	2.85
29	0.545	0.571	8.19	6.50	2.17
30	0.598	0.627	7.96	5.75	1.59
31	0.656	0.688	7.43	4.89	1.12
32	0.721	0.755	6.62	3.97	0.76
33	0.791	0.829	5.56	3.04	0.48
34	0.868	0.910	4.23	2.11	0.28
35	0.953	0.999	2.78	1.26	0.14
36	1.047	1.097	1.52	0.63	0.057
37	1.149	1.204	0.65	0.24	0.018
38	1.261	1.321	0.19	0.066	0.0041
39	1.385	1.451	0.037	0.012	0.00060
40	1.520	1.592	0.0028	0.00079	0.000034
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0

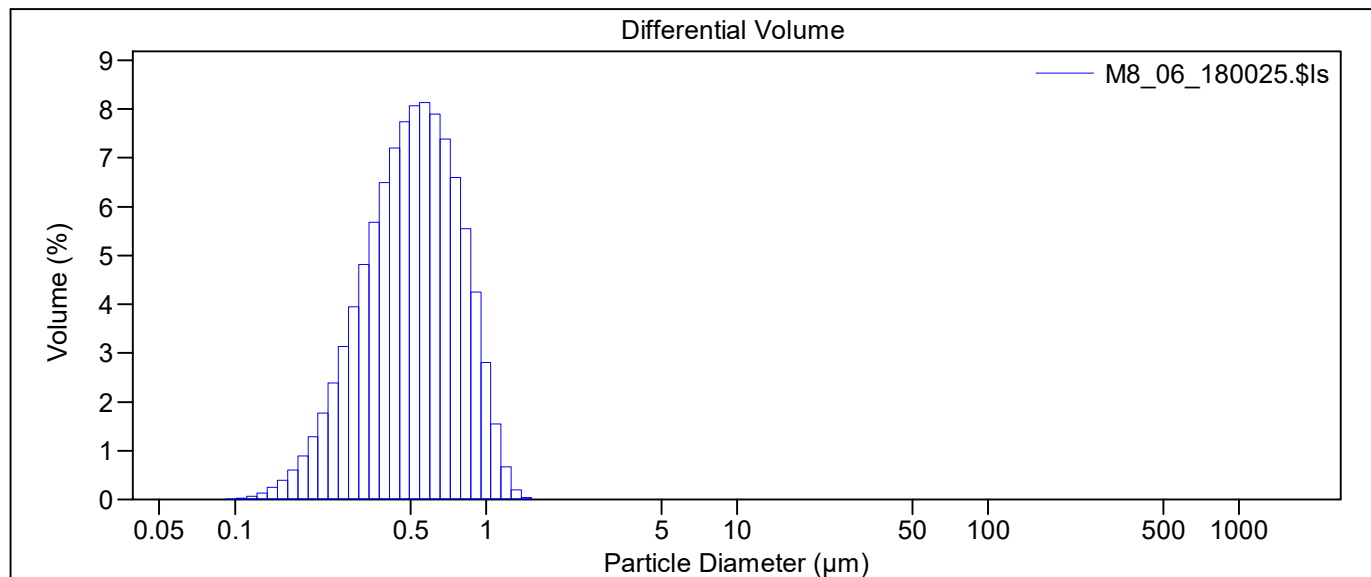
M8.\$av

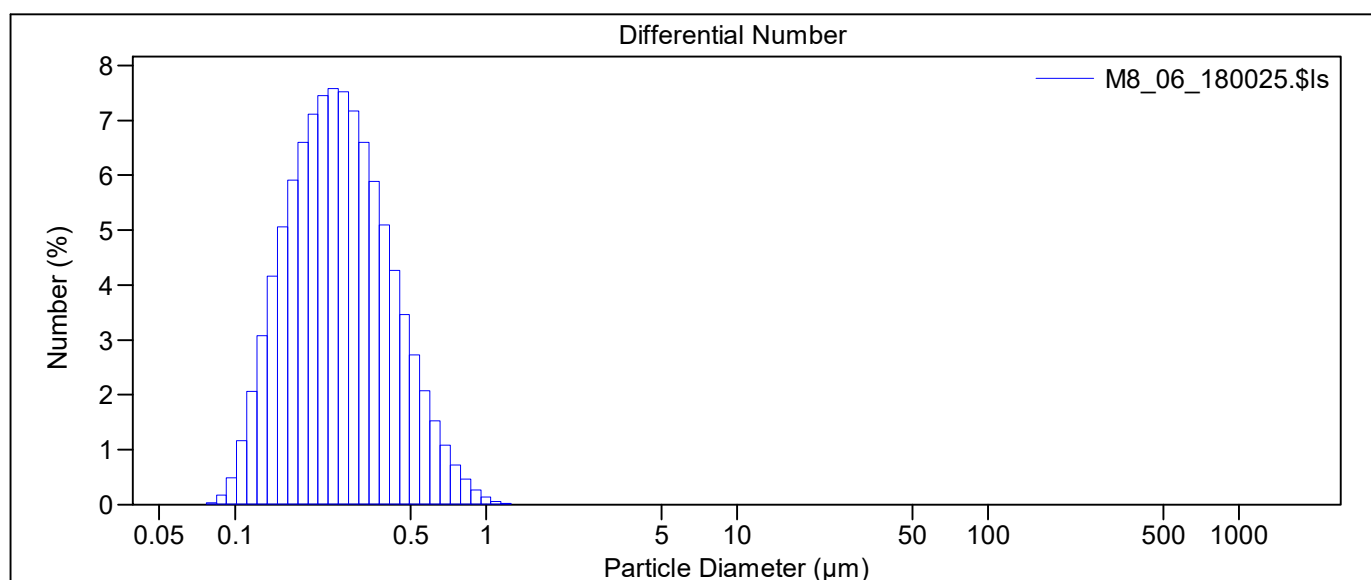
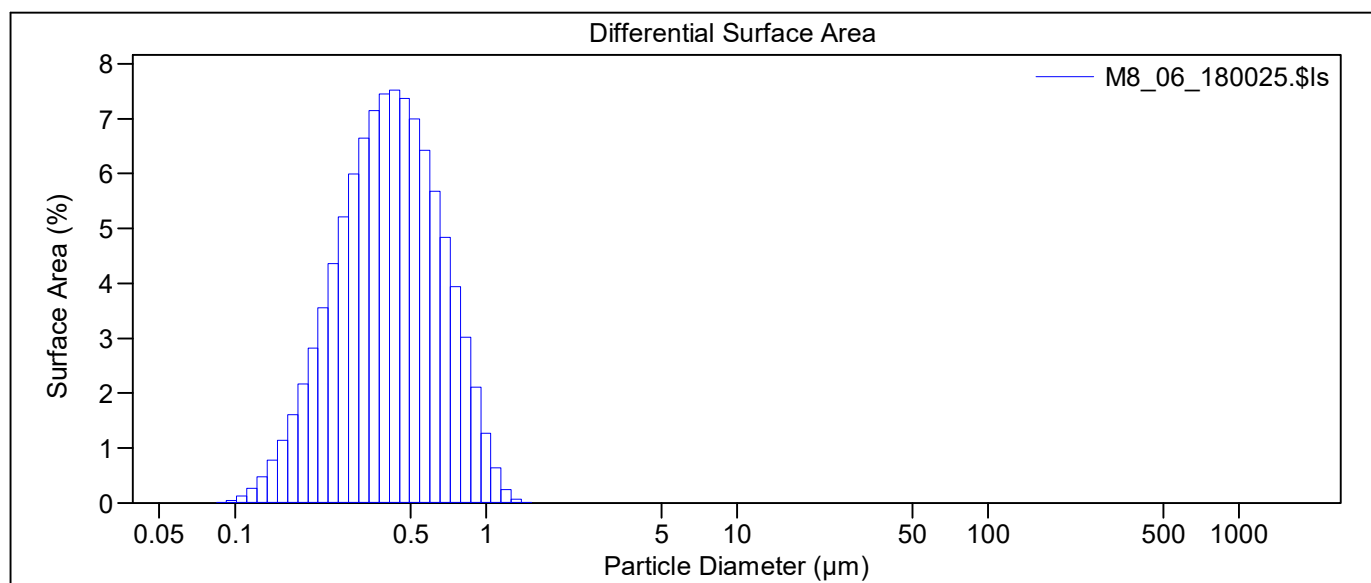
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_06_180025.\$ls		
	M8_06_180025.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.78%		
LS 13 320	Universal Liquid Module		
Start time:	17:58	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_06_180025.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.226 μm
Mean:	0.546 μm		Variance:	0.051 μm ²
Median:	0.515 μm		C.V.:	41.4%
Mean/Median ratio:	1.059		Skewness:	0.610 Right skewed
Mode:	0.571 μm		Kurtosis:	0.0028 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.276 μm	0.373 μm	0.515 μm	0.692 μm	0.862 μm





M8.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0.00040	0.0022	0.036
9	0.084	0.088	0.0026	0.013	0.18
10	0.093	0.097	0.0094	0.044	0.49
11	0.102	0.106	0.030	0.13	1.17
12	0.112	0.117	0.069	0.27	2.06
13	0.122	0.128	0.14	0.48	3.08
14	0.134	0.141	0.24	0.78	4.17
15	0.148	0.155	0.39	1.15	5.06
16	0.162	0.170	0.61	1.62	5.92
17	0.178	0.186	0.90	2.17	6.60

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.28	2.82	7.12
19	0.214	0.225	1.77	3.56	7.45
20	0.235	0.247	2.39	4.37	7.58
21	0.258	0.271	3.13	5.22	7.52
22	0.284	0.297	3.95	6.00	7.17
23	0.311	0.326	4.81	6.65	6.60
24	0.342	0.358	5.68	7.15	5.88
25	0.375	0.393	6.50	7.45	5.09
26	0.412	0.431	7.20	7.53	4.27
27	0.452	0.474	7.75	7.37	3.47
28	0.496	0.520	8.07	7.00	2.73
29	0.545	0.571	8.13	6.42	2.08
30	0.598	0.627	7.90	5.68	1.53
31	0.656	0.688	7.38	4.84	1.08
32	0.721	0.755	6.59	3.94	0.73
33	0.791	0.829	5.55	3.02	0.46
34	0.868	0.910	4.25	2.11	0.27
35	0.953	0.999	2.81	1.27	0.13
36	1.047	1.097	1.55	0.64	0.056
37	1.149	1.204	0.67	0.25	0.018
38	1.261	1.321	0.20	0.069	0.0042
39	1.385	1.451	0.040	0.012	0.00062
40	1.520	1.592	0.0031	0.00087	0.000036
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

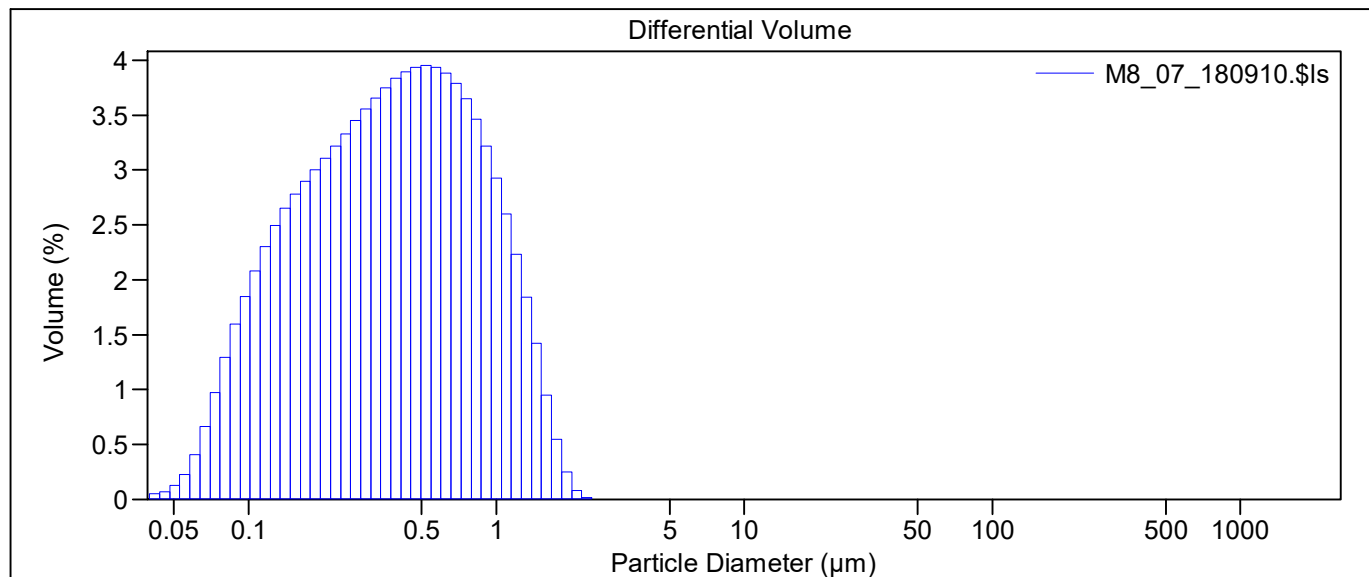
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Operator:	KW		
Run number:	7		
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Residual:	0.50%		
LS 13 320	Universal Liquid Module		
Start time:	18:07	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

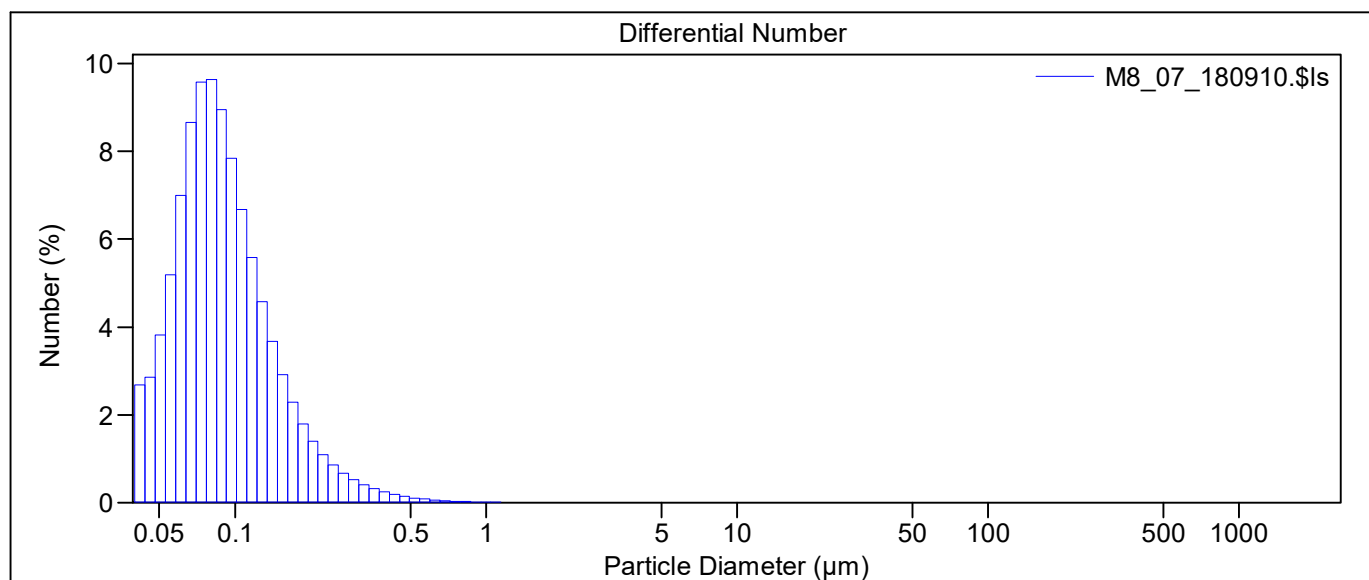
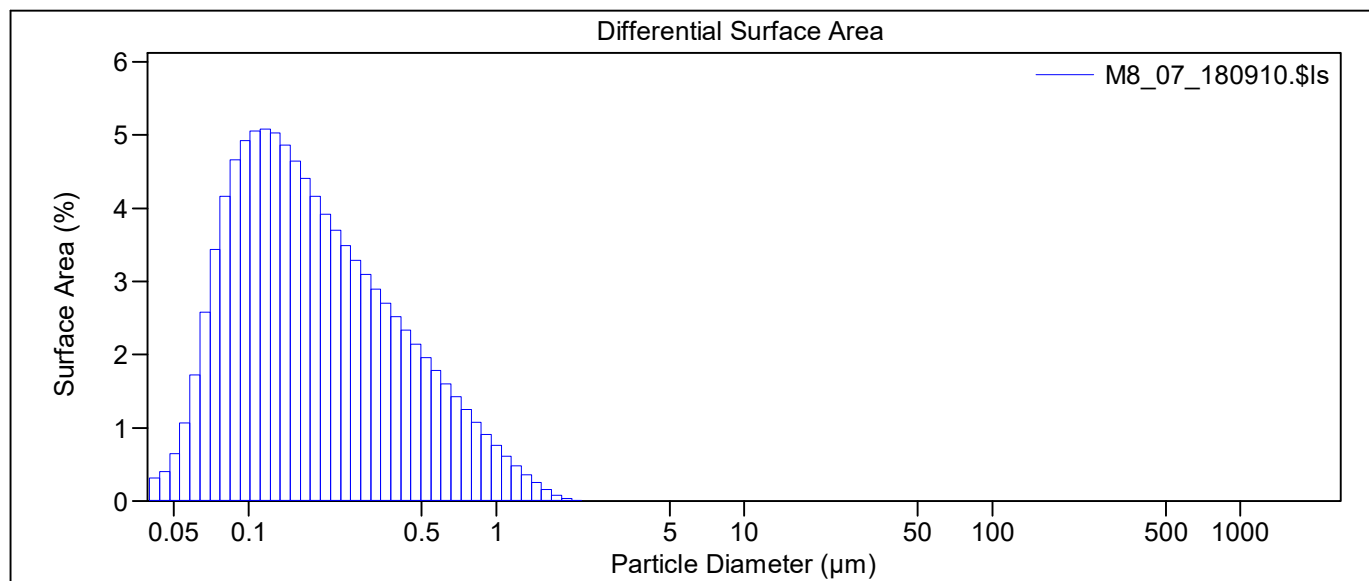
Volume Statistics (Arithmetic) M8_07_180910.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.378 µm
Mean:	0.491 µm	Variance:	0.143 µm ²
Median:	0.379 µm	C.V.:	77.1%
Mean/Median ratio:	1.293	Skewness:	1.222 Right skewed
Mode:	0.520 µm	Kurtosis:	1.172 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.115 µm	0.192 µm	0.379 µm	0.690 µm	1.045 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.051	0.31	2.68
2	0.044	0.046	0.072	0.40	2.85
3	0.048	0.050	0.13	0.65	3.82
4	0.053	0.055	0.23	1.06	5.19
5	0.058	0.061	0.41	1.73	6.99
6	0.064	0.067	0.67	2.58	8.66
7	0.070	0.073	0.98	3.44	9.58
8	0.077	0.080	1.30	4.16	9.63
9	0.084	0.088	1.59	4.66	8.95
10	0.093	0.097	1.85	4.92	7.84
11	0.102	0.106	2.08	5.05	6.68
12	0.112	0.117	2.30	5.09	5.58
13	0.122	0.128	2.50	5.03	4.58
14	0.134	0.141	2.65	4.86	3.68
15	0.148	0.155	2.78	4.64	2.91
16	0.162	0.170	2.90	4.41	2.29
17	0.178	0.186	3.01	4.16	1.80

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.11	3.92	1.41
19	0.214	0.225	3.22	3.70	1.10
20	0.235	0.247	3.33	3.49	0.86
21	0.258	0.271	3.45	3.29	0.67
22	0.284	0.297	3.56	3.09	0.53
23	0.311	0.326	3.66	2.90	0.41
24	0.342	0.358	3.75	2.70	0.32
25	0.375	0.393	3.83	2.52	0.24
26	0.412	0.431	3.90	2.33	0.19
27	0.452	0.474	3.94	2.15	0.14
28	0.496	0.520	3.95	1.96	0.11
29	0.545	0.571	3.94	1.78	0.082
30	0.598	0.627	3.88	1.60	0.061
31	0.656	0.688	3.79	1.42	0.045
32	0.721	0.755	3.65	1.25	0.033
33	0.791	0.829	3.46	1.08	0.024
34	0.868	0.910	3.22	0.91	0.017
35	0.953	0.999	2.93	0.76	0.011
36	1.047	1.097	2.60	0.61	0.0076
37	1.149	1.204	2.23	0.48	0.0050
38	1.261	1.321	1.84	0.36	0.0031
39	1.385	1.451	1.42	0.25	0.0018
40	1.520	1.592	0.95	0.15	0.00091
41	1.668	1.748	0.55	0.081	0.00040
42	1.832	1.919	0.25	0.034	0.00014
43	2.011	2.107	0.081	0.0099	0.000034
44	2.207	2.313	0.019	0.0021	0.000006
45	2.423	2.539	0.0019	0.00020	4.55E-7
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

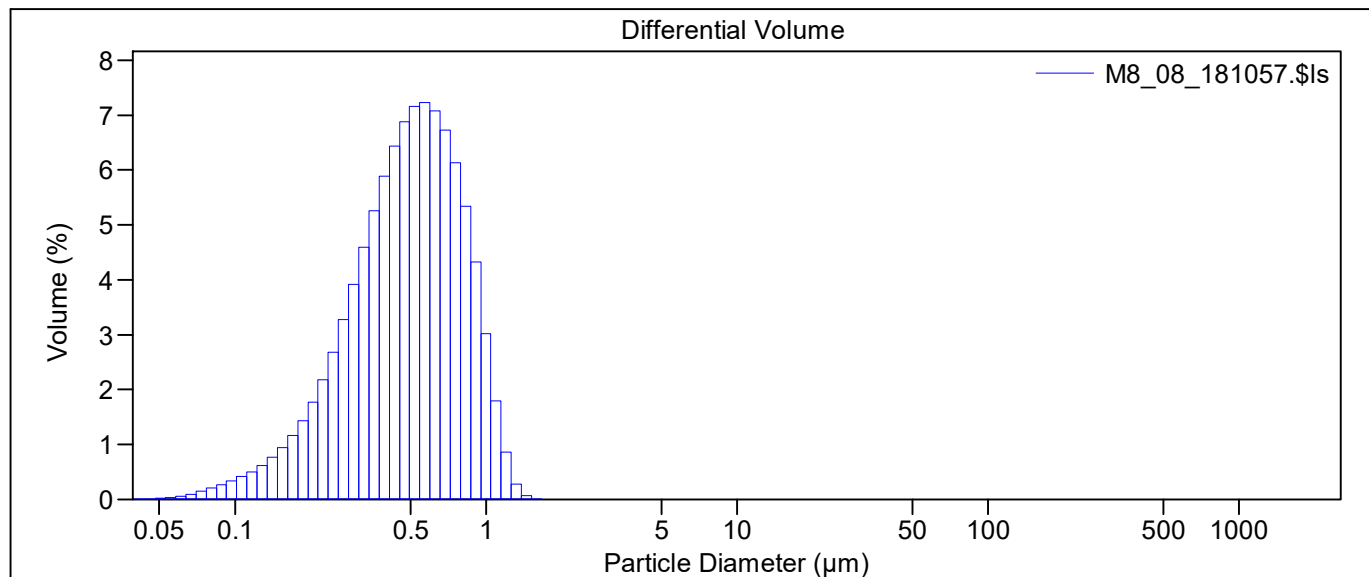
M8.\$av

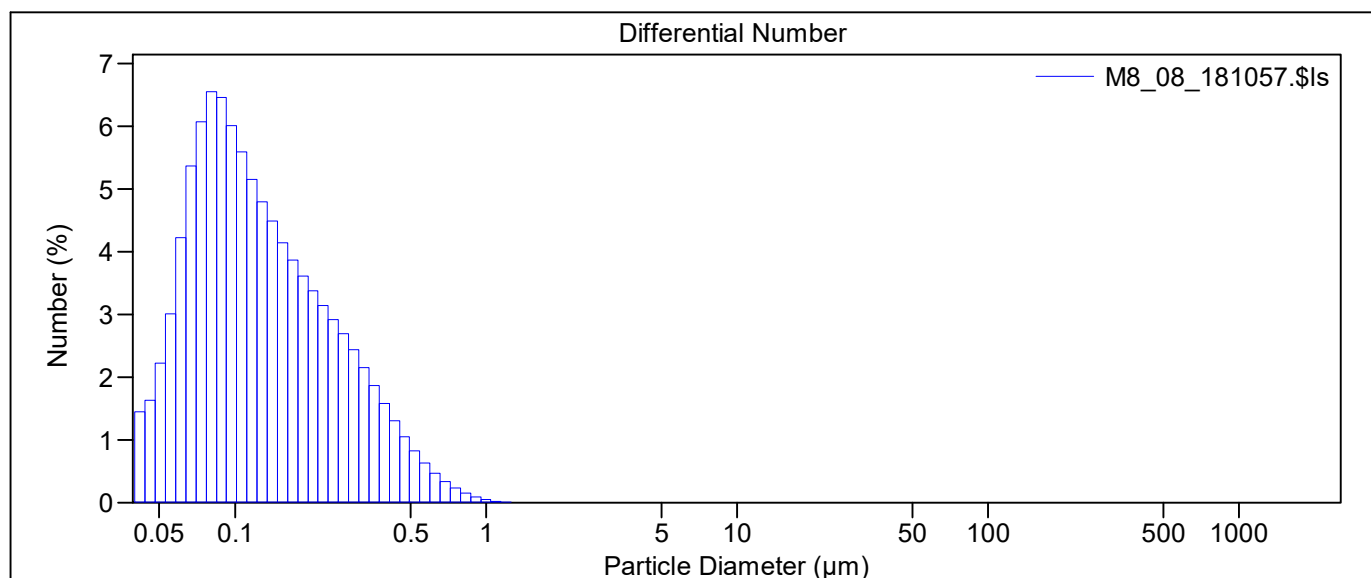
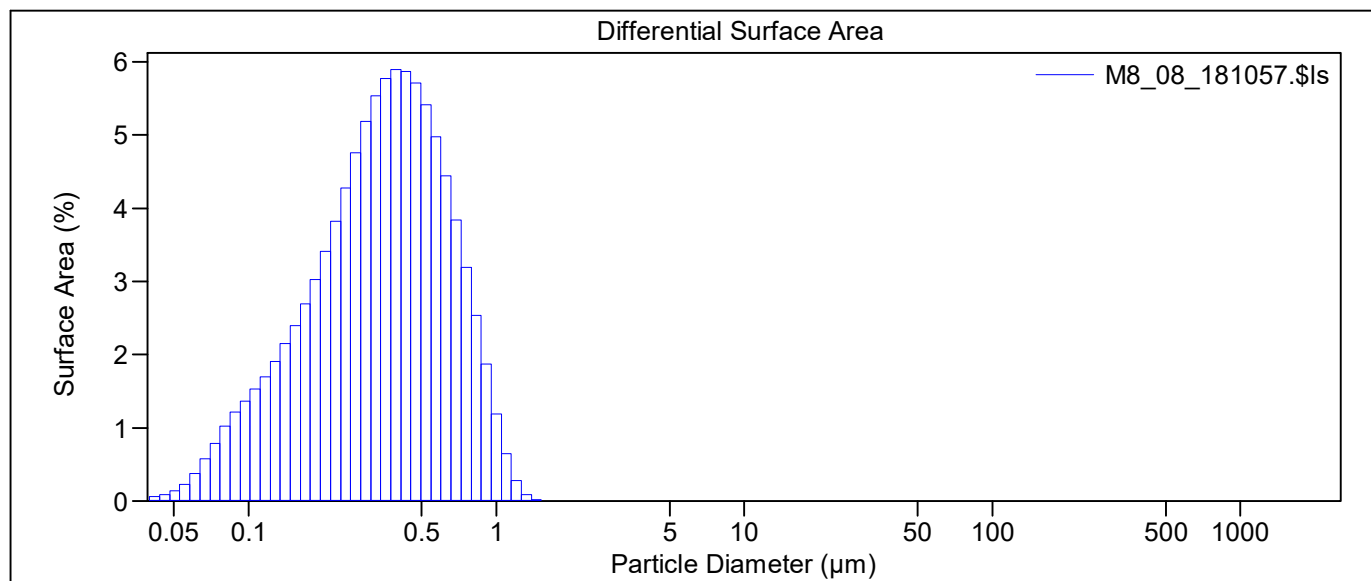
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

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	M8_08_181057.\$ls		
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Operator:	KW		
Run number:	8		
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Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.76%		
LS 13 320	Universal Liquid Module		
Start time:	18:09	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_08_181057.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.249 µm
Mean:	0.527 µm		Variance:	0.062 µm ²
Median:	0.497 µm		C.V.:	47.2%
Mean/Median ratio:	1.062		Skewness:	0.542 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.113 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.226 µm	0.339 µm	0.497 µm	0.691 µm	0.876 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.0065	0.061	1.45
2	0.044	0.046	0.0098	0.083	1.63
3	0.048	0.050	0.018	0.14	2.22
4	0.053	0.055	0.032	0.22	3.01
5	0.058	0.061	0.058	0.38	4.23
6	0.064	0.067	0.098	0.58	5.37
7	0.070	0.073	0.15	0.79	6.07
8	0.077	0.080	0.21	1.03	6.56
9	0.084	0.088	0.27	1.22	6.46
10	0.093	0.097	0.34	1.36	6.01
11	0.102	0.106	0.41	1.53	5.59
12	0.112	0.117	0.51	1.70	5.15
13	0.122	0.128	0.62	1.91	4.80
14	0.134	0.141	0.77	2.15	4.49
15	0.148	0.155	0.94	2.40	4.15
16	0.162	0.170	1.16	2.69	3.87
17	0.178	0.186	1.44	3.03	3.61

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.78	3.41	3.38
19	0.214	0.225	2.19	3.83	3.14
20	0.235	0.247	2.68	4.28	2.91
21	0.258	0.271	3.28	4.76	2.69
22	0.284	0.297	3.92	5.19	2.43
23	0.311	0.326	4.59	5.53	2.15
24	0.342	0.358	5.26	5.77	1.86
25	0.375	0.393	5.89	5.89	1.58
26	0.412	0.431	6.44	5.87	1.31
27	0.452	0.474	6.88	5.71	1.05
28	0.496	0.520	7.16	5.41	0.83
29	0.545	0.571	7.23	4.98	0.63
30	0.598	0.627	7.08	4.44	0.47
31	0.656	0.688	6.72	3.84	0.34
32	0.721	0.755	6.14	3.20	0.23
33	0.791	0.829	5.34	2.53	0.15
34	0.868	0.910	4.33	1.87	0.093
35	0.953	0.999	3.02	1.19	0.049
36	1.047	1.097	1.80	0.65	0.022
37	1.149	1.204	0.86	0.28	0.0080
38	1.261	1.321	0.28	0.084	0.0020
39	1.385	1.451	0.065	0.018	0.00034
40	1.520	1.592	0.0068	0.0017	0.000027
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

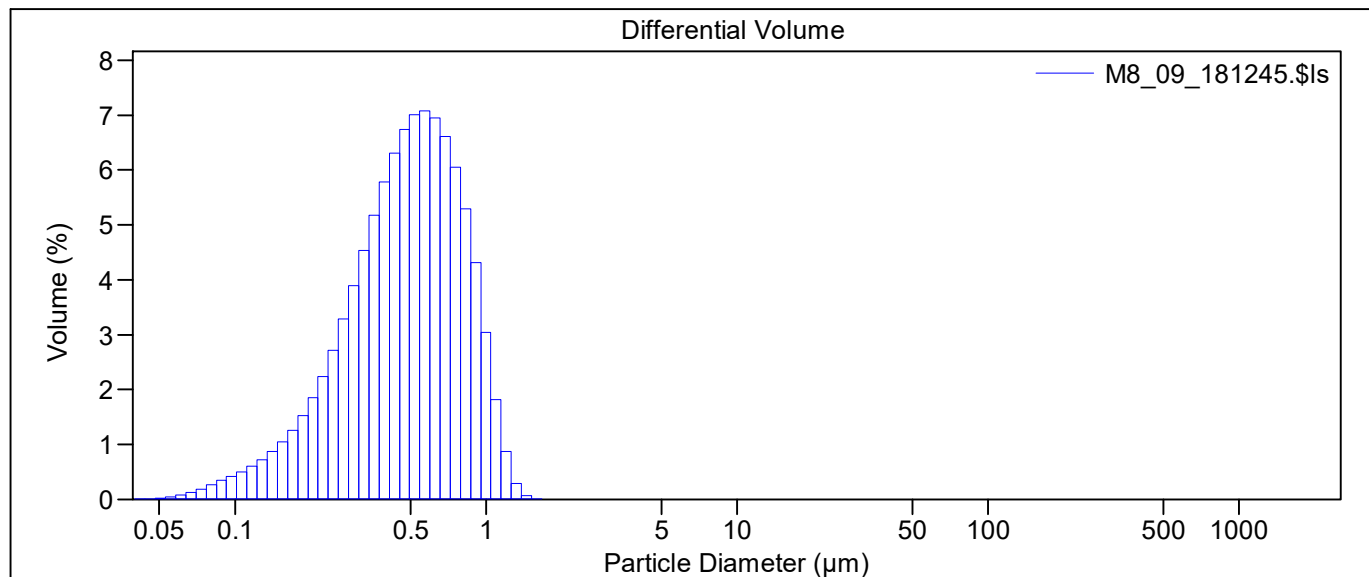
M8.\$av

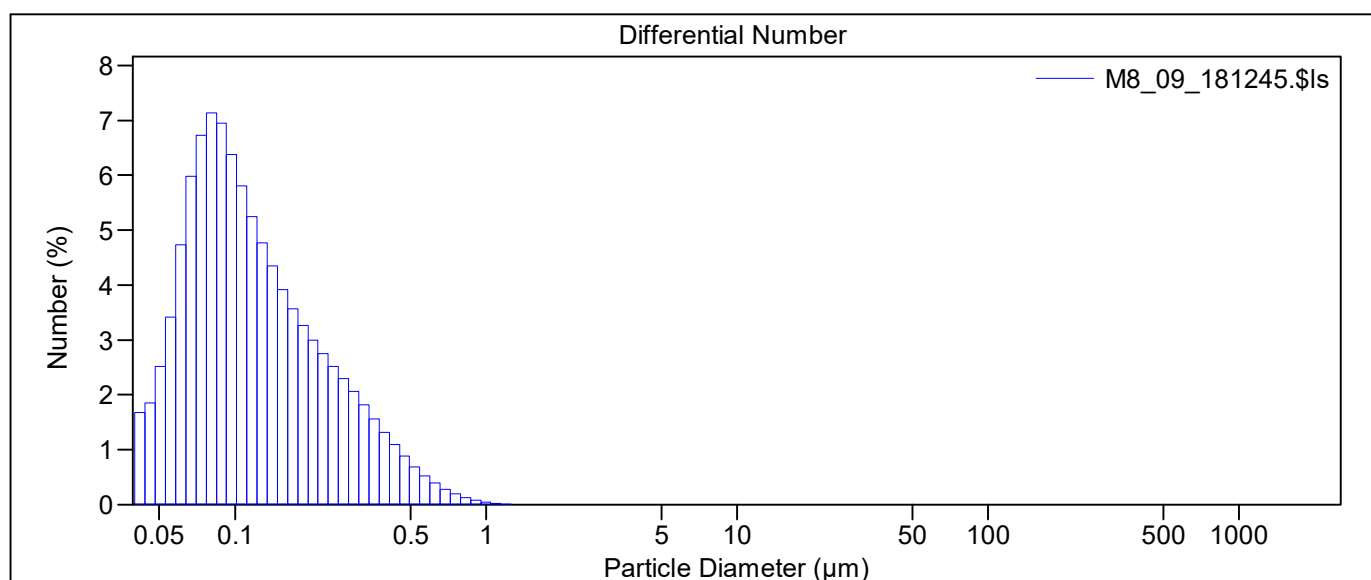
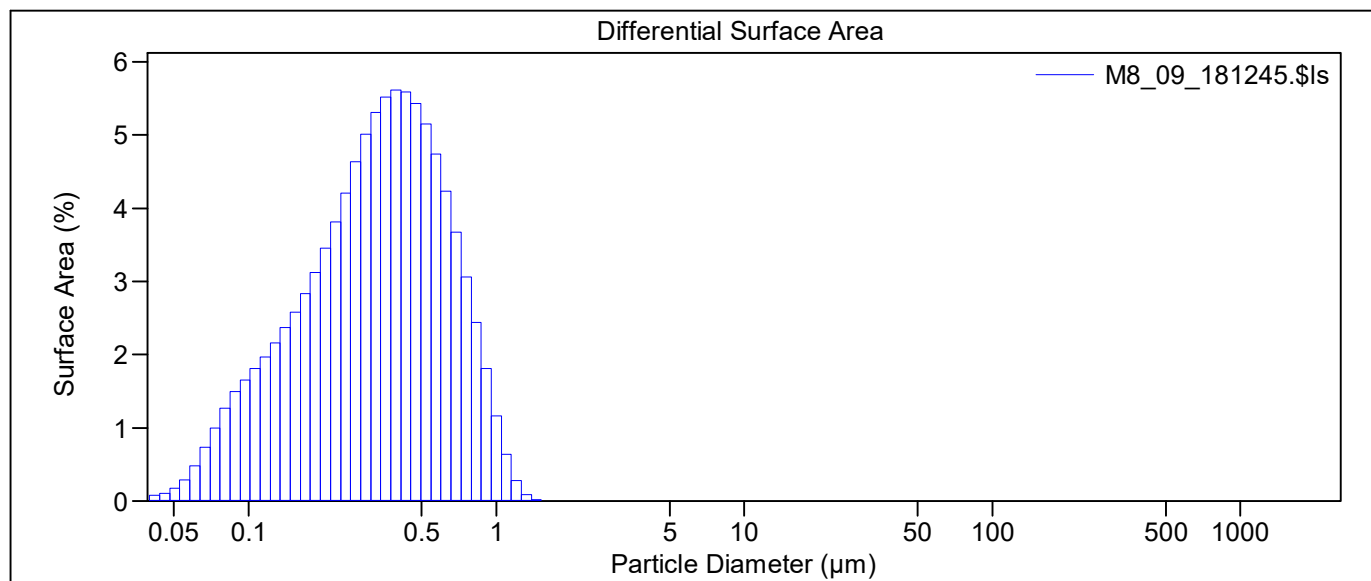
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_09_181245.\$ls		
	M8_09_181245.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.74%		
LS 13 320	Universal Liquid Module		
Start time:	18:11	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	46%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_09_181245.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.252 µm
Mean:	0.523 µm		Variance:	0.064 µm ²
Median:	0.493 µm		C.V.:	48.2%
Mean/Median ratio:	1.062		Skewness:	0.534 Right skewed
Mode:	0.571 µm		Kurtosis:	-0.141 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.215 µm	0.331 µm	0.493 µm	0.689 µm	0.877 µm





M8.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.0089	0.081	1.68
2	0.044	0.046	0.013	0.11	1.86
3	0.048	0.050	0.023	0.18	2.52
4	0.053	0.055	0.042	0.29	3.41
5	0.058	0.061	0.077	0.48	4.74
6	0.064	0.067	0.13	0.73	5.99
7	0.070	0.073	0.19	1.00	6.73
8	0.077	0.080	0.27	1.27	7.14
9	0.084	0.088	0.35	1.49	6.95
10	0.093	0.097	0.42	1.65	6.37
11	0.102	0.106	0.51	1.81	5.81
12	0.112	0.117	0.60	1.97	5.25
13	0.122	0.128	0.73	2.16	4.77
14	0.134	0.141	0.87	2.37	4.35
15	0.148	0.155	1.04	2.58	3.92
16	0.162	0.170	1.26	2.83	3.57
17	0.178	0.186	1.52	3.12	3.27

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.85	3.45	3.00
19	0.214	0.225	2.24	3.81	2.75
20	0.235	0.247	2.72	4.21	2.52
21	0.258	0.271	3.28	4.63	2.30
22	0.284	0.297	3.90	5.01	2.06
23	0.311	0.326	4.54	5.31	1.82
24	0.342	0.358	5.17	5.52	1.57
25	0.375	0.393	5.78	5.62	1.32
26	0.412	0.431	6.31	5.58	1.09
27	0.452	0.474	6.74	5.43	0.88
28	0.496	0.520	7.01	5.15	0.69
29	0.545	0.571	7.08	4.74	0.53
30	0.598	0.627	6.95	4.23	0.39
31	0.656	0.688	6.61	3.67	0.28
32	0.721	0.755	6.06	3.06	0.20
33	0.791	0.829	5.29	2.44	0.13
34	0.868	0.910	4.32	1.81	0.080
35	0.953	0.999	3.04	1.16	0.042
36	1.047	1.097	1.82	0.64	0.019
37	1.149	1.204	0.88	0.28	0.0070
38	1.261	1.321	0.29	0.085	0.0018
39	1.385	1.451	0.067	0.018	0.00031
40	1.520	1.592	0.0073	0.0017	0.000025
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

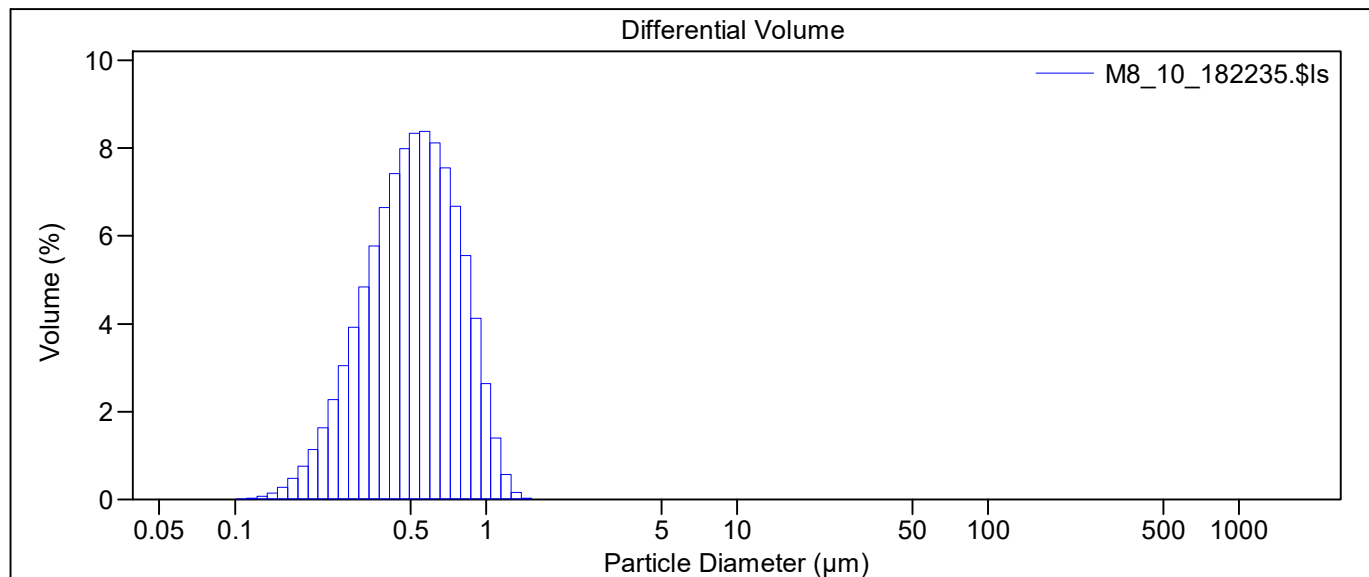
M8.\$av

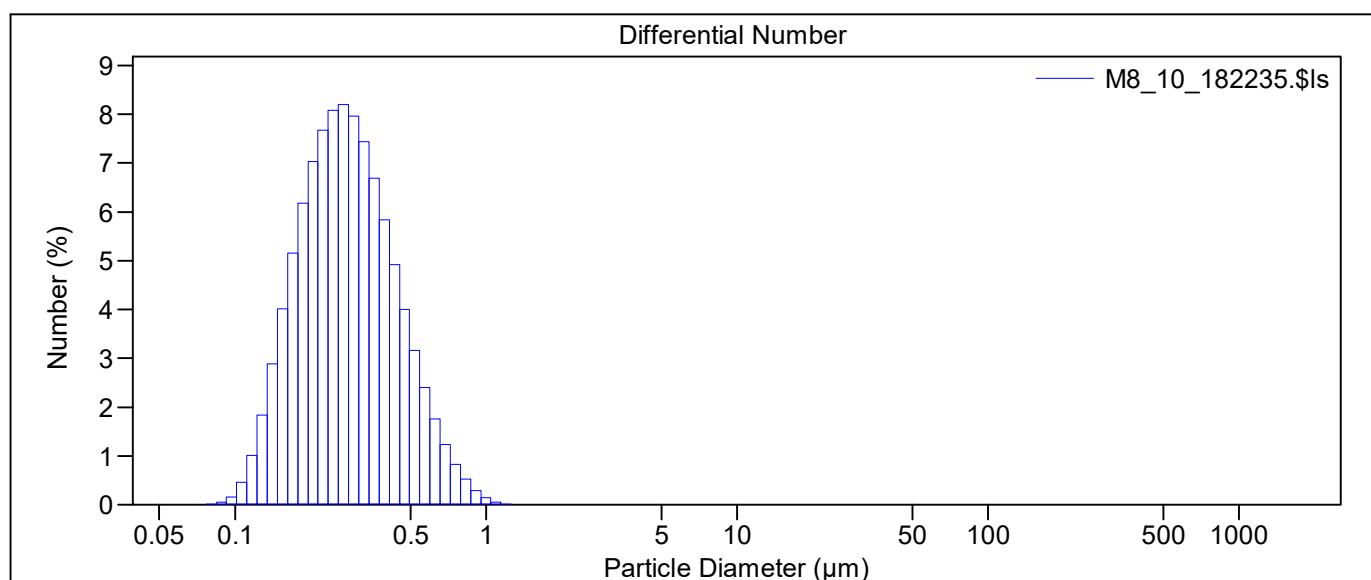
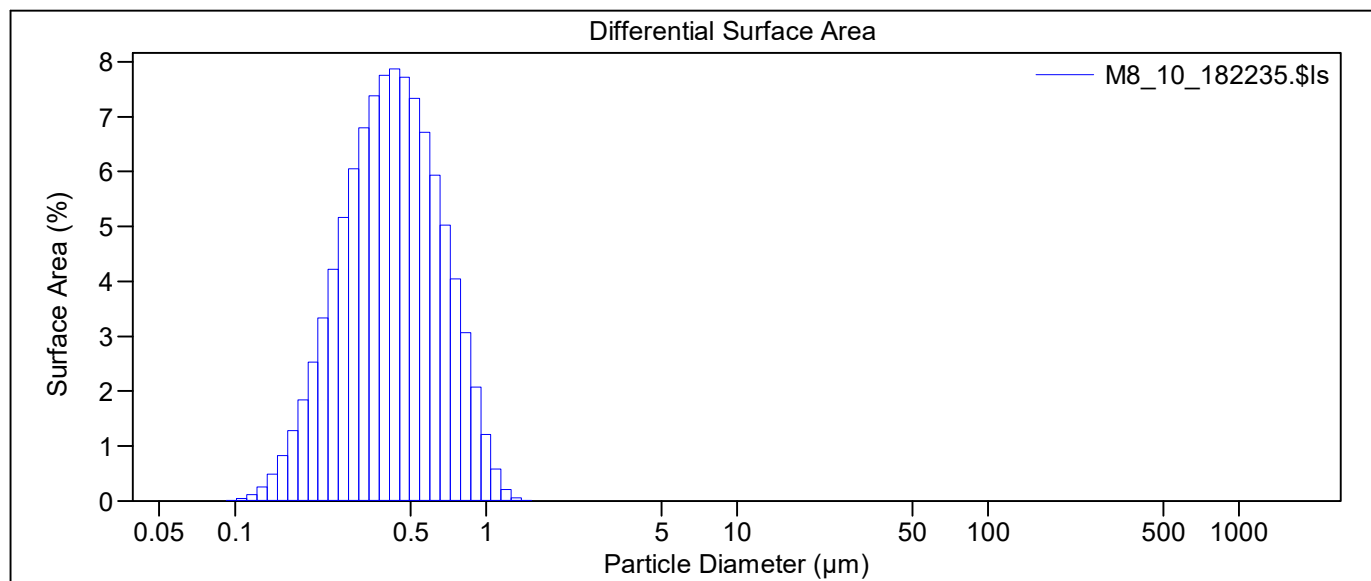
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_10_182235.\$ls		
	M8_10_182235.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.86%		
LS 13 320	Universal Liquid Module		
Start time:	18:20	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_10_182235.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.219 μm
Mean:	0.546 μm		Variance:	0.048 μm ²
Median:	0.517 μm		C.V.:	40.1%
Mean/Median ratio:	1.056		Skewness:	0.610 Right skewed
Mode:	0.571 μm		Kurtosis:	0.010 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.285 μm	0.378 μm	0.517 μm	0.688 μm	0.854 μm





M8.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0.000100	0.00057	0.010
9	0.084	0.088	0.00065	0.0034	0.050
10	0.093	0.097	0.0027	0.013	0.16
11	0.102	0.106	0.010	0.045	0.46
12	0.112	0.117	0.030	0.12	1.02
13	0.122	0.128	0.073	0.26	1.83
14	0.134	0.141	0.15	0.49	2.88
15	0.148	0.155	0.28	0.83	4.01
16	0.162	0.170	0.47	1.28	5.16
17	0.178	0.186	0.75	1.85	6.18

Beckman Coulter LS13320

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.13	2.53	7.03
19	0.214	0.225	1.63	3.33	7.68
20	0.235	0.247	2.27	4.22	8.08
21	0.258	0.271	3.05	5.17	8.20
22	0.284	0.297	3.93	6.05	7.97
23	0.311	0.326	4.84	6.80	7.43
24	0.342	0.358	5.77	7.38	6.70
25	0.375	0.393	6.65	7.75	5.83
26	0.412	0.431	7.41	7.87	4.91
27	0.452	0.474	7.99	7.73	4.00
28	0.496	0.520	8.33	7.34	3.16
29	0.545	0.571	8.38	6.72	2.40
30	0.598	0.627	8.12	5.93	1.76
31	0.656	0.688	7.54	5.02	1.23
32	0.721	0.755	6.68	4.05	0.83
33	0.791	0.829	5.55	3.07	0.52
34	0.868	0.910	4.13	2.08	0.29
35	0.953	0.999	2.65	1.21	0.14
36	1.047	1.097	1.40	0.59	0.057
37	1.149	1.204	0.56	0.21	0.017
38	1.261	1.321	0.16	0.056	0.0037
39	1.385	1.451	0.028	0.0089	0.00049
40	1.520	1.592	0.0016	0.00046	0.000021
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

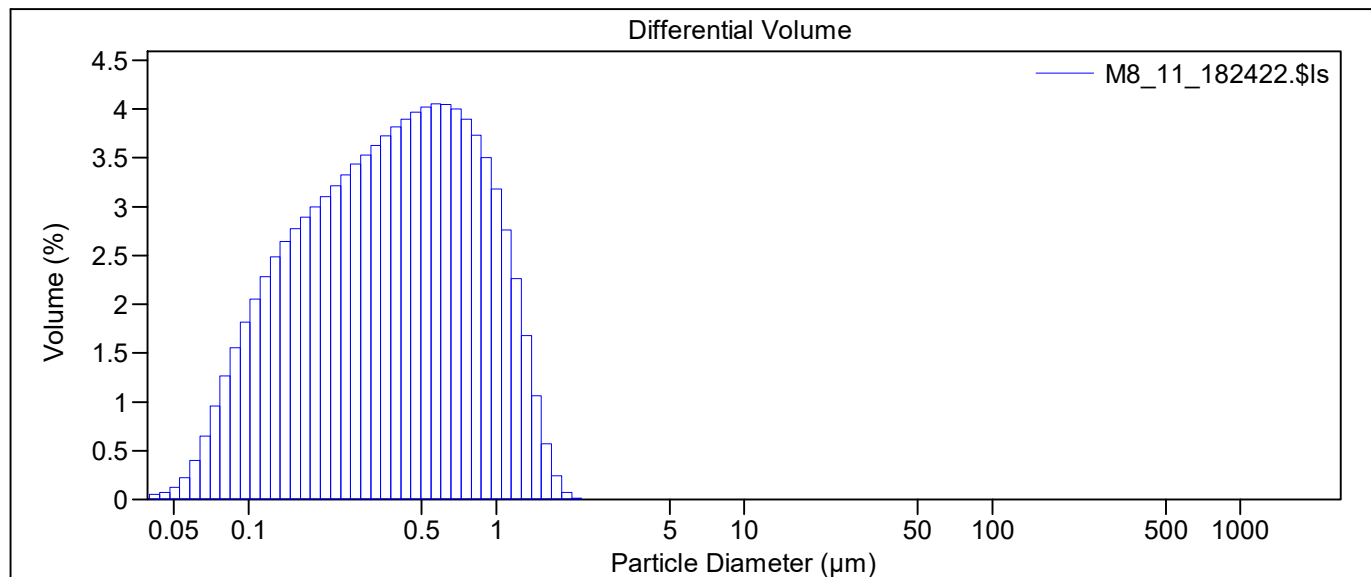
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_11_182422.\$ls		
	M8_11_182422.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.68%		
LS 13 320	Universal Liquid Module		
Start time:	18:22	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	8%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

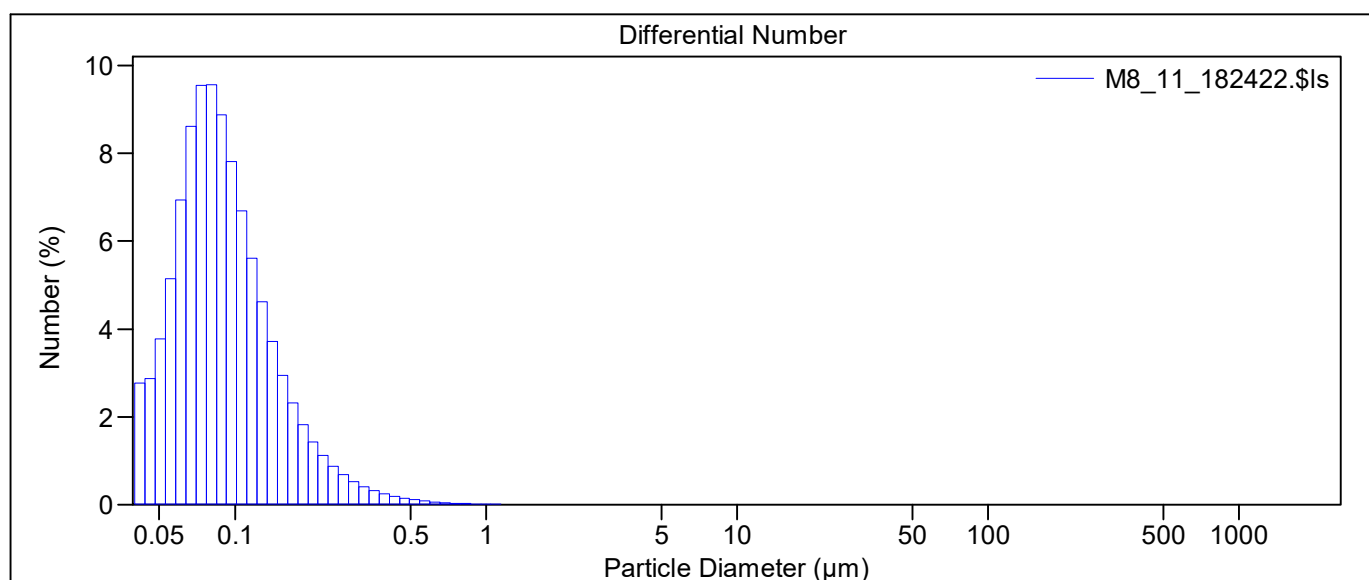
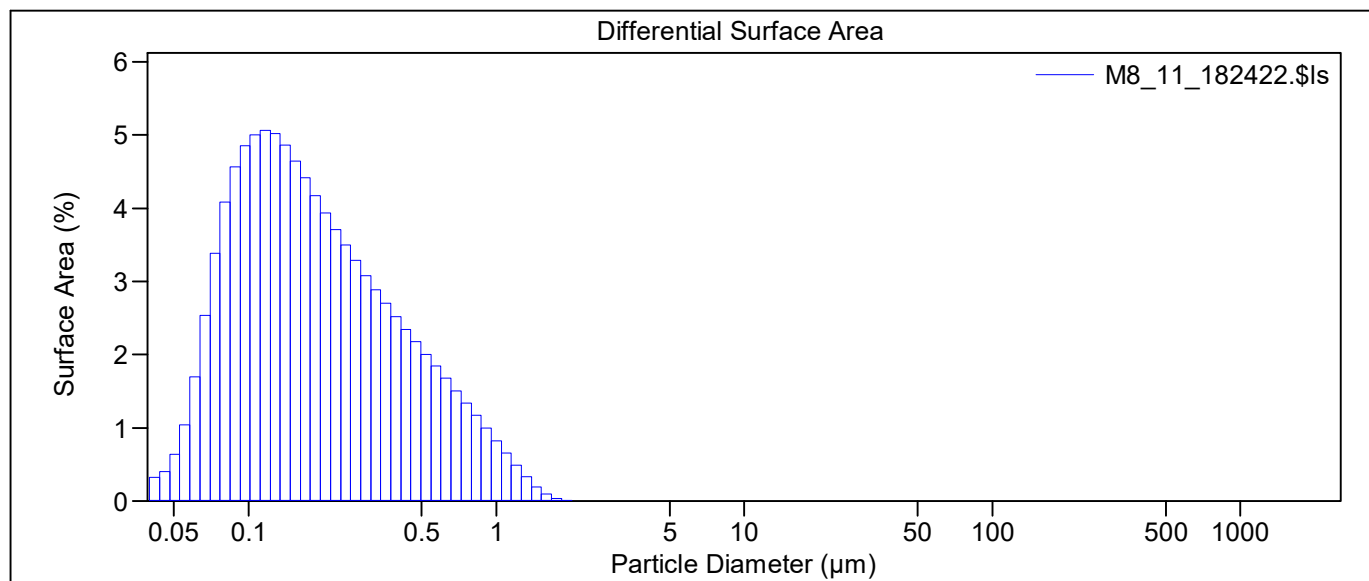
Volume Statistics (Arithmetic) M8_11_182422.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.354 µm
Mean:	0.481 µm	Variance:	0.125 µm ²
Median:	0.383 µm	C.V.:	73.5%
Mean/Median ratio:	1.256	Skewness:	1.052 Right skewed
Mode:	0.571 µm	Kurtosis:	0.595 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.116 µm	0.194 µm	0.383 µm	0.688 µm	1.008 µm





M8.\$av					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.052	0.32	2.77
2	0.044	0.046	0.071	0.40	2.87
3	0.048	0.050	0.12	0.63	3.77
4	0.053	0.055	0.22	1.04	5.15
5	0.058	0.061	0.40	1.69	6.93
6	0.064	0.067	0.65	2.53	8.61
7	0.070	0.073	0.96	3.38	9.55
8	0.077	0.080	1.27	4.08	9.56
9	0.084	0.088	1.56	4.57	8.87
10	0.093	0.097	1.81	4.85	7.82
11	0.102	0.106	2.06	5.01	6.70
12	0.112	0.117	2.28	5.06	5.62
13	0.122	0.128	2.48	5.02	4.62
14	0.134	0.141	2.64	4.86	3.72
15	0.148	0.155	2.77	4.65	2.95
16	0.162	0.170	2.89	4.42	2.32
17	0.178	0.186	3.00	4.17	1.82

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.10	3.93	1.43
19	0.214	0.225	3.21	3.71	1.12
20	0.235	0.247	3.33	3.50	0.87
21	0.258	0.271	3.44	3.29	0.68
22	0.284	0.297	3.53	3.08	0.53
23	0.311	0.326	3.63	2.88	0.41
24	0.342	0.358	3.73	2.70	0.32
25	0.375	0.393	3.82	2.52	0.25
26	0.412	0.431	3.90	2.34	0.19
27	0.452	0.474	3.97	2.17	0.15
28	0.496	0.520	4.02	2.01	0.11
29	0.545	0.571	4.05	1.84	0.086
30	0.598	0.627	4.05	1.68	0.065
31	0.656	0.688	4.00	1.51	0.048
32	0.721	0.755	3.90	1.34	0.036
33	0.791	0.829	3.73	1.17	0.026
34	0.868	0.910	3.50	1.00	0.018
35	0.953	0.999	3.18	0.83	0.013
36	1.047	1.097	2.76	0.65	0.0082
37	1.149	1.204	2.26	0.49	0.0051
38	1.261	1.321	1.68	0.33	0.0029
39	1.385	1.451	1.07	0.19	0.0014
40	1.520	1.592	0.57	0.093	0.00056
41	1.668	1.748	0.24	0.036	0.00018
42	1.832	1.919	0.072	0.0097	0.000040
43	2.011	2.107	0.015	0.0018	0.000006
44	2.207	2.313	0.0013	0.00015	4.2E-7
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

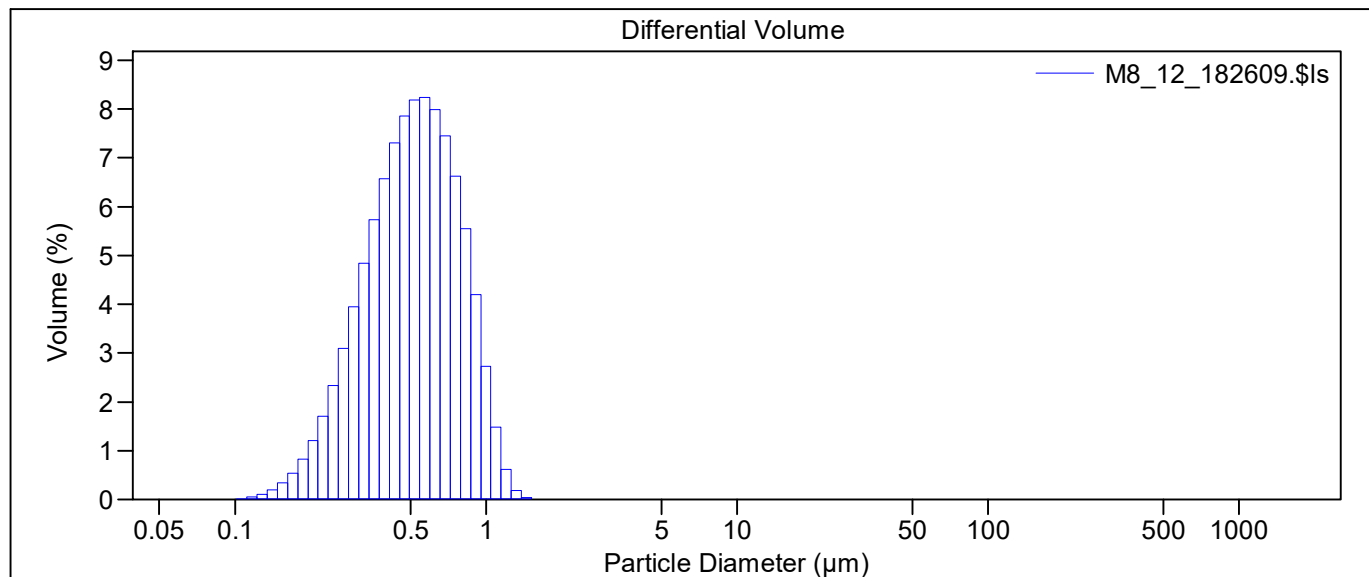
M8.\$av

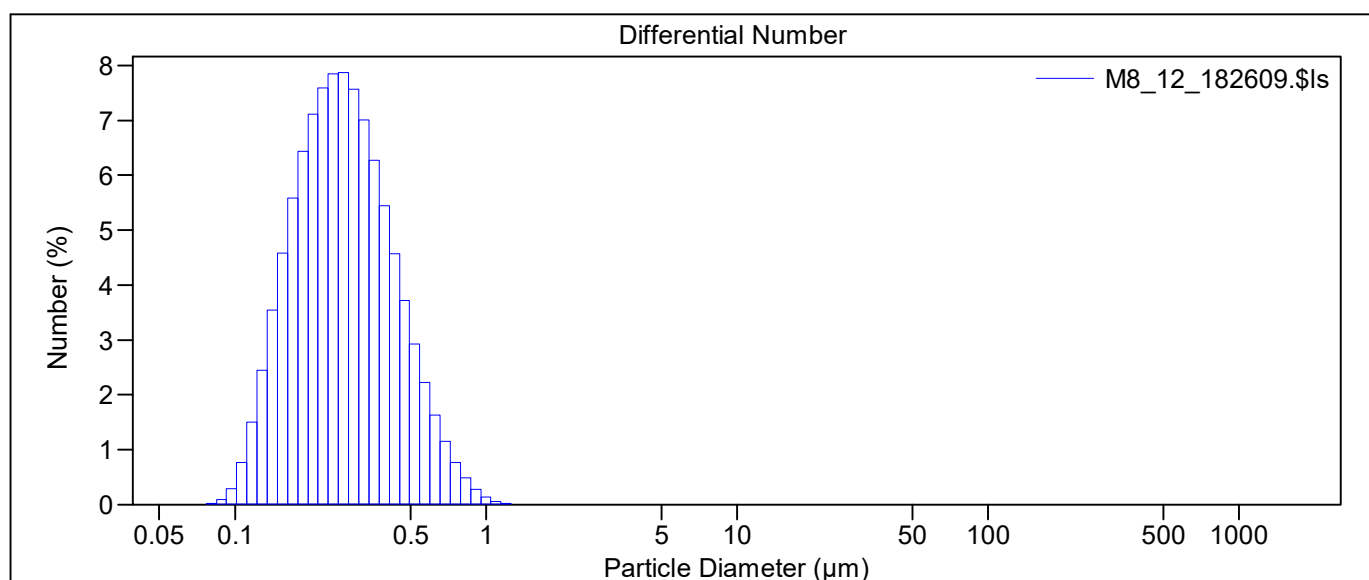
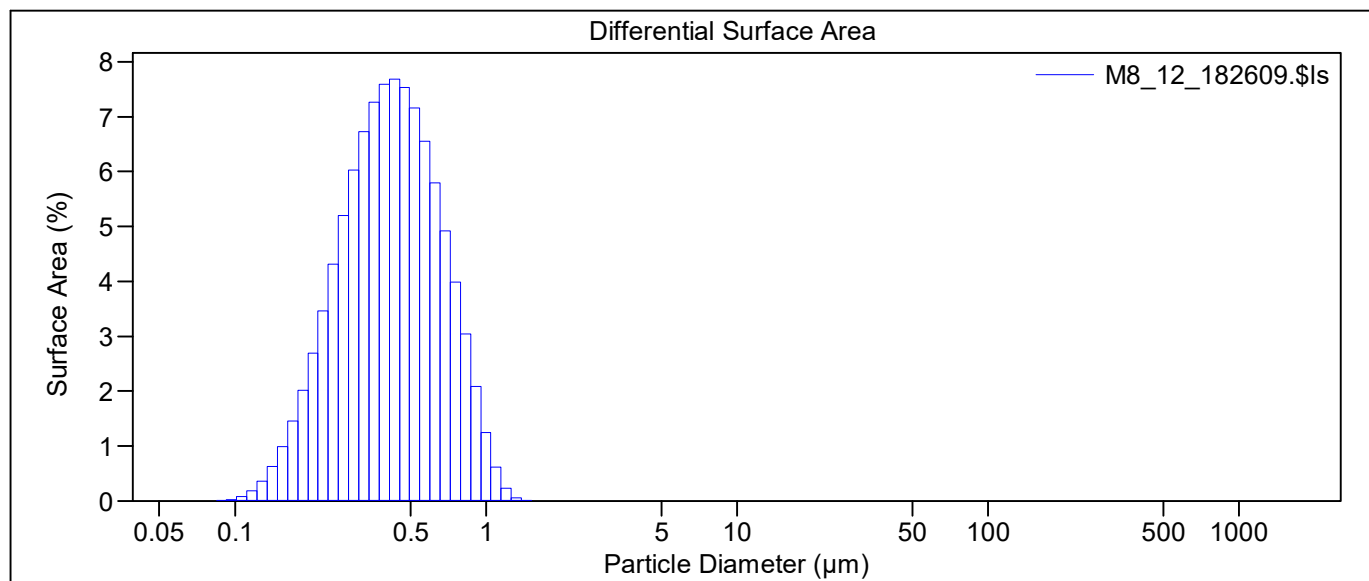
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_12_182609.\$ls		
	M8_12_182609.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	12		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.79%		
LS 13 320	Universal Liquid Module		
Start time:	18:24	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_12_182609.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.223 μm
Mean:	0.546 μm		Variance:	0.050 μm ²
Median:	0.516 μm		C.V.:	40.8%
Mean/Median ratio:	1.058		Skewness:	0.612 Right skewed
Mode:	0.571 μm		Kurtosis:	0.011 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.280 μm	0.375 μm	0.516 μm	0.690 μm	0.858 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0.00021	0.0012	0.020
9	0.084	0.088	0.0014	0.0070	0.099
10	0.093	0.097	0.0053	0.025	0.29
11	0.102	0.106	0.018	0.079	0.77
12	0.112	0.117	0.048	0.19	1.50
13	0.122	0.128	0.10	0.36	2.45
14	0.134	0.141	0.20	0.64	3.54
15	0.148	0.155	0.34	0.99	4.58
16	0.162	0.170	0.54	1.46	5.59
17	0.178	0.186	0.83	2.02	6.44

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.21	2.69	7.11
19	0.214	0.225	1.71	3.46	7.59
20	0.235	0.247	2.34	4.31	7.85
21	0.258	0.271	3.10	5.21	7.87
22	0.284	0.297	3.95	6.03	7.57
23	0.311	0.326	4.84	6.73	7.01
24	0.342	0.358	5.73	7.27	6.28
25	0.375	0.393	6.57	7.60	5.44
26	0.412	0.431	7.30	7.69	4.57
27	0.452	0.474	7.86	7.54	3.72
28	0.496	0.520	8.19	7.16	2.93
29	0.545	0.571	8.24	6.56	2.23
30	0.598	0.627	8.00	5.80	1.63
31	0.656	0.688	7.45	4.92	1.15
32	0.721	0.755	6.63	3.99	0.77
33	0.791	0.829	5.55	3.04	0.49
34	0.868	0.910	4.19	2.09	0.28
35	0.953	0.999	2.74	1.24	0.14
36	1.047	1.097	1.49	0.62	0.057
37	1.149	1.204	0.62	0.23	0.018
38	1.261	1.321	0.18	0.063	0.0040
39	1.385	1.451	0.035	0.011	0.00057
40	1.520	1.592	0.0024	0.00068	0.000030
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

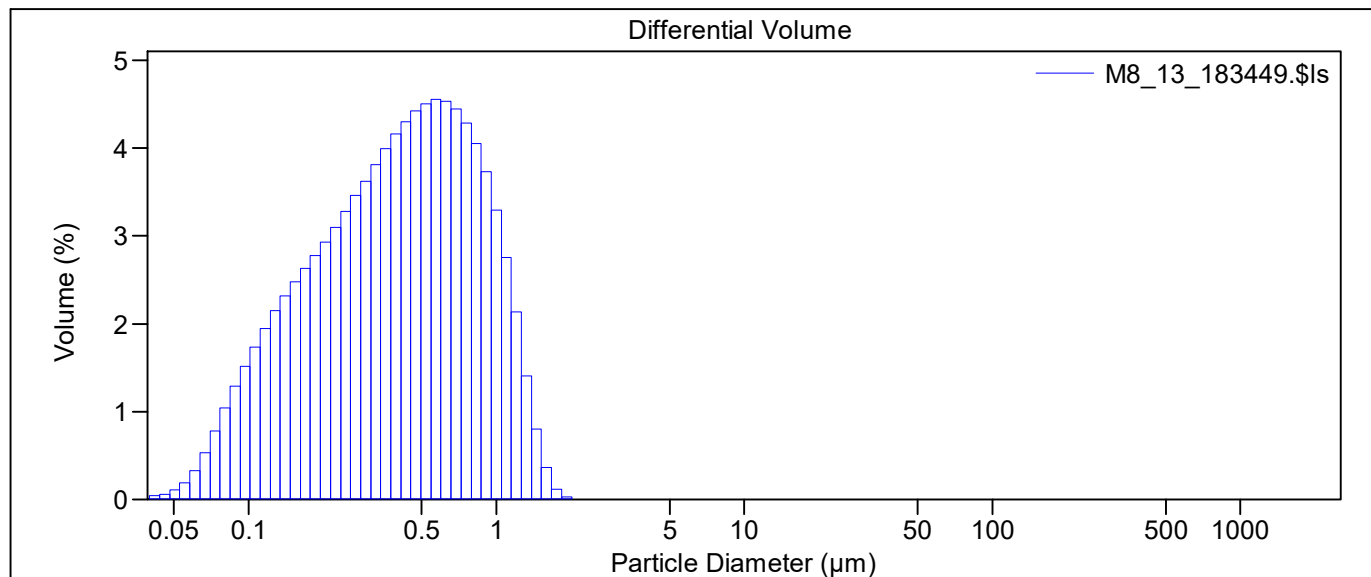
M8.\$av

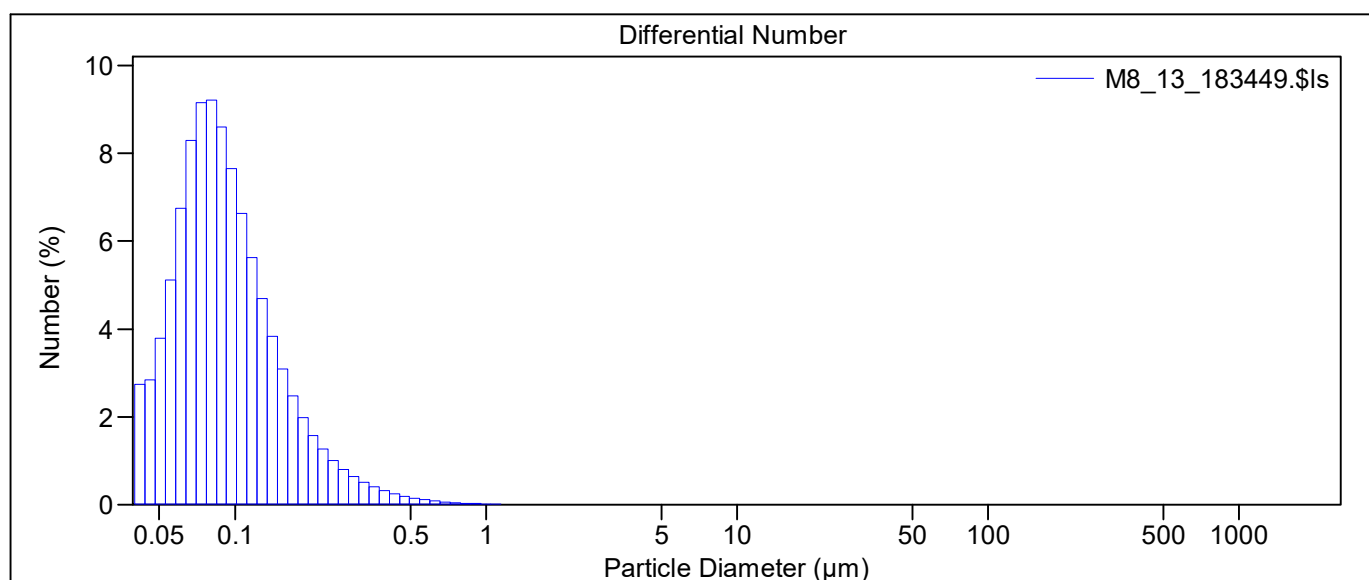
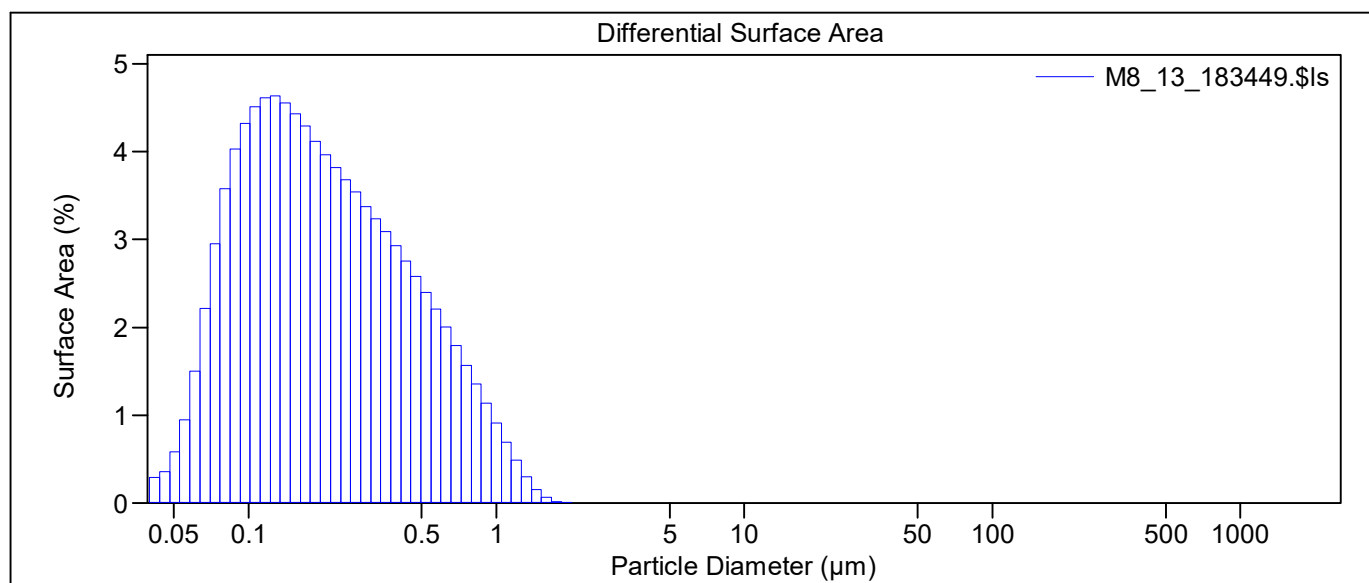
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_13_183449.\$ls		
	M8_13_183449.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	13		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.34%		
LS 13 320	Universal Liquid Module		
Start time:	18:33	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_13_183449.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.334 μm
Mean:	0.488 μm		Variance:	0.111 μm ²
Median:	0.409 μm		C.V.:	68.4%
Mean/Median ratio:	1.192		Skewness:	0.932 Right skewed
Mode:	0.571 μm		Kurtosis:	0.348 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.125 μm	0.215 μm	0.409 μm	0.691 μm	0.979 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.044	0.29	2.74
2	0.044	0.046	0.060	0.36	2.84
3	0.048	0.050	0.11	0.58	3.79
4	0.053	0.055	0.19	0.94	5.12
5	0.058	0.061	0.33	1.50	6.75
6	0.064	0.067	0.54	2.22	8.29
7	0.070	0.073	0.78	2.95	9.16
8	0.077	0.080	1.04	3.58	9.21
9	0.084	0.088	1.29	4.03	8.60
10	0.093	0.097	1.51	4.32	7.66
11	0.102	0.106	1.74	4.51	6.63
12	0.112	0.117	1.95	4.61	5.63
13	0.122	0.128	2.15	4.64	4.69
14	0.134	0.141	2.32	4.56	3.83
15	0.148	0.155	2.48	4.43	3.09
16	0.162	0.170	2.63	4.29	2.48
17	0.178	0.186	2.77	4.12	1.98

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.93	3.96	1.58
19	0.214	0.225	3.10	3.82	1.26
20	0.235	0.247	3.28	3.68	1.01
21	0.258	0.271	3.46	3.54	0.81
22	0.284	0.297	3.62	3.38	0.64
23	0.311	0.326	3.81	3.24	0.51
24	0.342	0.358	4.00	3.09	0.40
25	0.375	0.393	4.16	2.93	0.32
26	0.412	0.431	4.30	2.76	0.25
27	0.452	0.474	4.42	2.58	0.19
28	0.496	0.520	4.51	2.40	0.15
29	0.545	0.571	4.55	2.21	0.11
30	0.598	0.627	4.54	2.00	0.085
31	0.656	0.688	4.45	1.79	0.063
32	0.721	0.755	4.28	1.57	0.046
33	0.791	0.829	4.05	1.35	0.033
34	0.868	0.910	3.73	1.13	0.023
35	0.953	0.999	3.29	0.91	0.015
36	1.047	1.097	2.75	0.69	0.0096
37	1.149	1.204	2.13	0.49	0.0056
38	1.261	1.321	1.41	0.30	0.0028
39	1.385	1.451	0.80	0.15	0.0012
40	1.520	1.592	0.36	0.063	0.00041
41	1.668	1.748	0.12	0.018	0.000099
42	1.832	1.919	0.026	0.0038	0.000017
43	2.011	2.107	0.0027	0.00036	0.000001
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

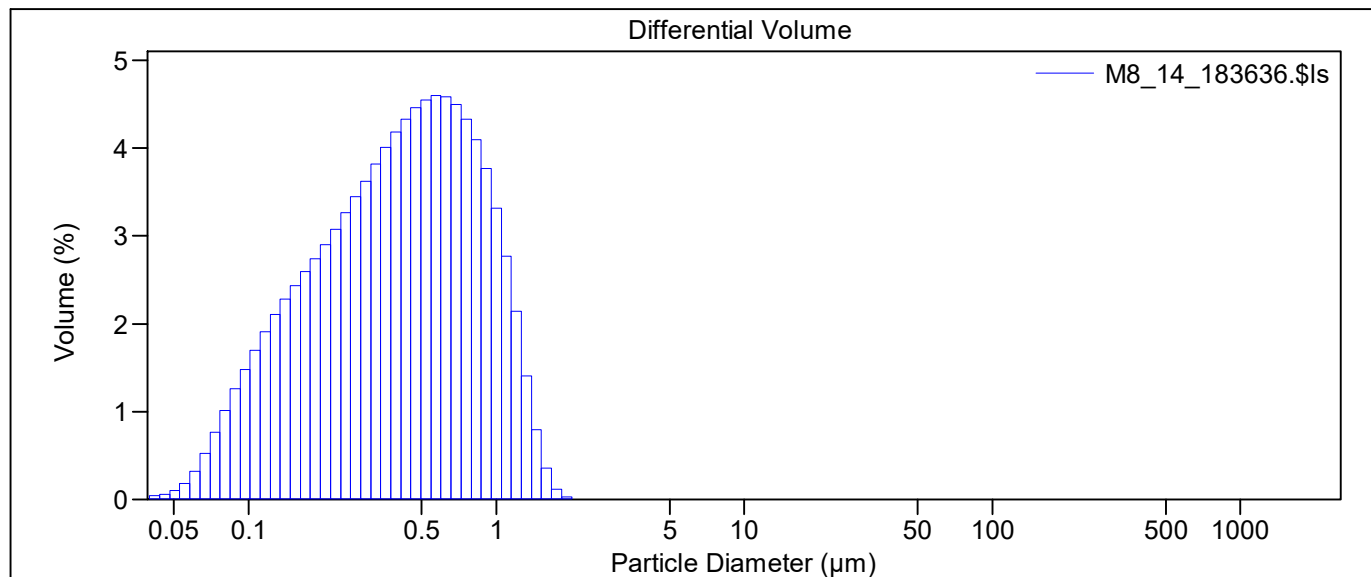
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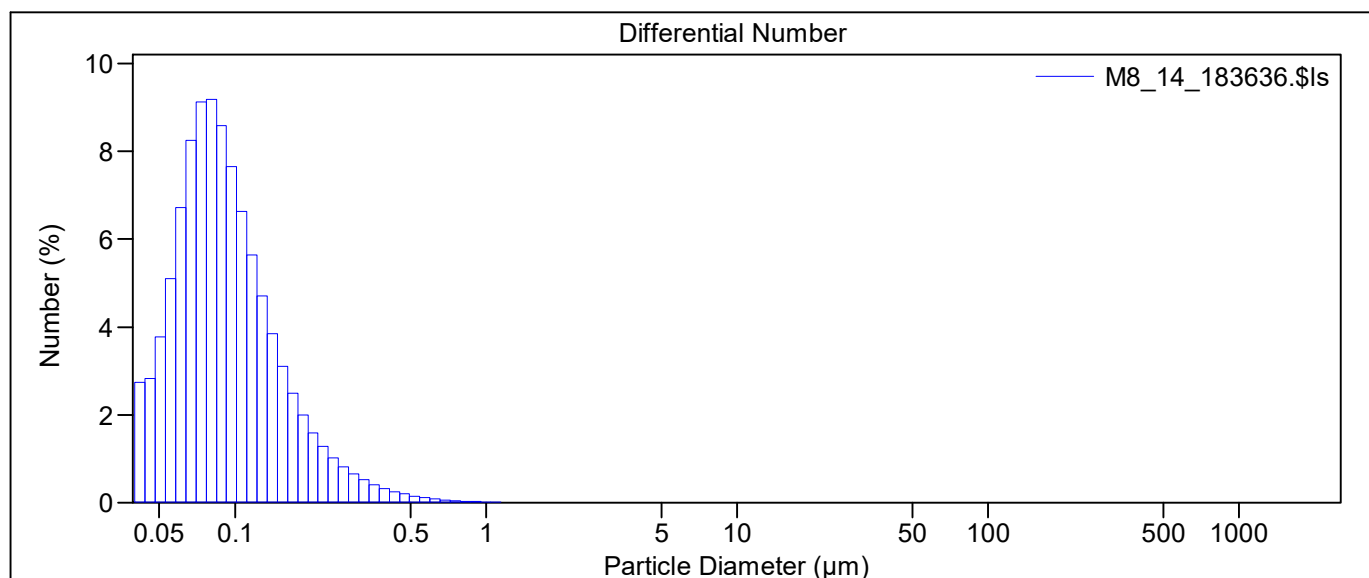
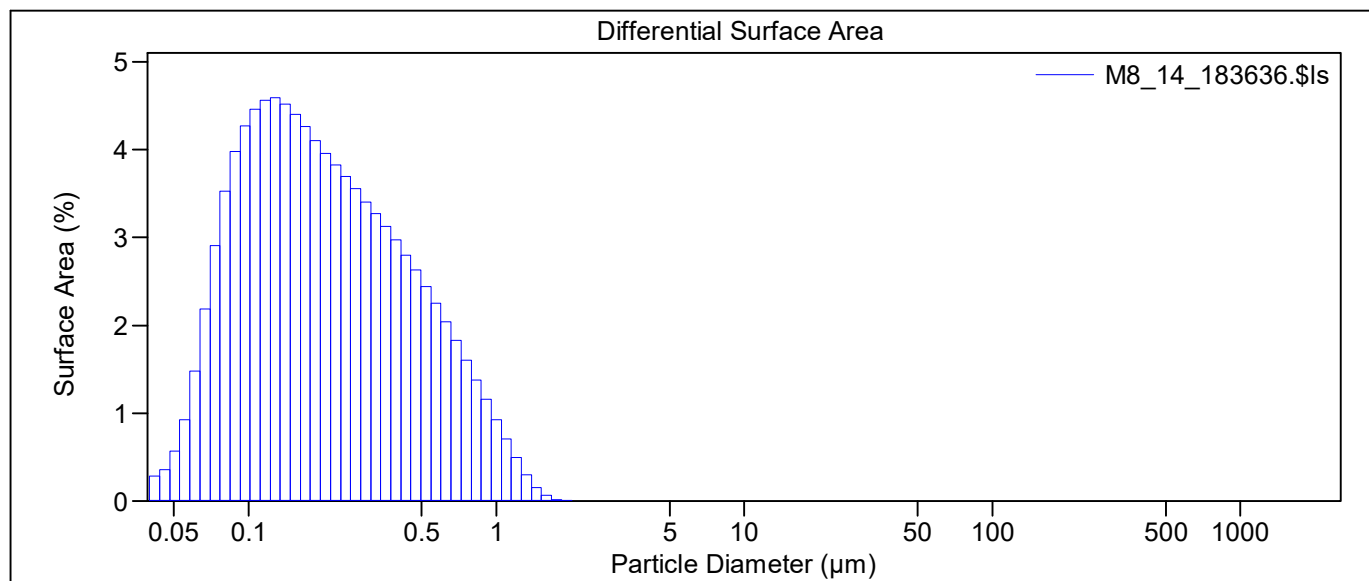
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_14_183636.\$ls		
	M8_14_183636.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.34%		
LS 13 320	Universal Liquid Module		
Start time:	18:34	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_14_183636.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.333 μm
Mean:	0.490 μm		Variance:	0.111 μm ²
Median:	0.413 μm		C.V.:	67.9%
Mean/Median ratio:	1.186		Skewness:	0.921 Right skewed
Mode:	0.571 μm		Kurtosis:	0.331 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.126 μm	0.218 μm	0.413 μm	0.694 μm	0.980 μm





M8.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.043	0.28	2.74
2	0.044	0.046	0.058	0.36	2.83
3	0.048	0.050	0.10	0.57	3.77
4	0.053	0.055	0.18	0.93	5.10
5	0.058	0.061	0.32	1.48	6.73
6	0.064	0.067	0.52	2.18	8.26
7	0.070	0.073	0.76	2.91	9.13
8	0.077	0.080	1.02	3.53	9.18
9	0.084	0.088	1.26	3.98	8.59
10	0.093	0.097	1.48	4.27	7.65
11	0.102	0.106	1.70	4.46	6.63
12	0.112	0.117	1.91	4.57	5.63
13	0.122	0.128	2.11	4.59	4.70
14	0.134	0.141	2.28	4.52	3.84
15	0.148	0.155	2.44	4.40	3.10
16	0.162	0.170	2.59	4.27	2.50
17	0.178	0.186	2.74	4.11	1.99

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	2.90	3.96	1.60
19	0.214	0.225	3.08	3.82	1.28
20	0.235	0.247	3.26	3.70	1.03
21	0.258	0.271	3.45	3.56	0.82
22	0.284	0.297	3.62	3.40	0.65
23	0.311	0.326	3.82	3.27	0.52
24	0.342	0.358	4.01	3.13	0.41
25	0.375	0.393	4.18	2.97	0.32
26	0.412	0.431	4.33	2.80	0.25
27	0.452	0.474	4.46	2.63	0.20
28	0.496	0.520	4.55	2.44	0.15
29	0.545	0.571	4.60	2.25	0.12
30	0.598	0.627	4.59	2.04	0.088
31	0.656	0.688	4.50	1.83	0.065
32	0.721	0.755	4.33	1.60	0.047
33	0.791	0.829	4.09	1.38	0.034
34	0.868	0.910	3.77	1.16	0.024
35	0.953	0.999	3.32	0.93	0.016
36	1.047	1.097	2.77	0.71	0.0099
37	1.149	1.204	2.14	0.50	0.0058
38	1.261	1.321	1.41	0.30	0.0029
39	1.385	1.451	0.80	0.15	0.0012
40	1.520	1.592	0.36	0.063	0.00042
41	1.668	1.748	0.11	0.018	0.00010
42	1.832	1.919	0.026	0.0038	0.000017
43	2.011	2.107	0.0027	0.00035	0.000001
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

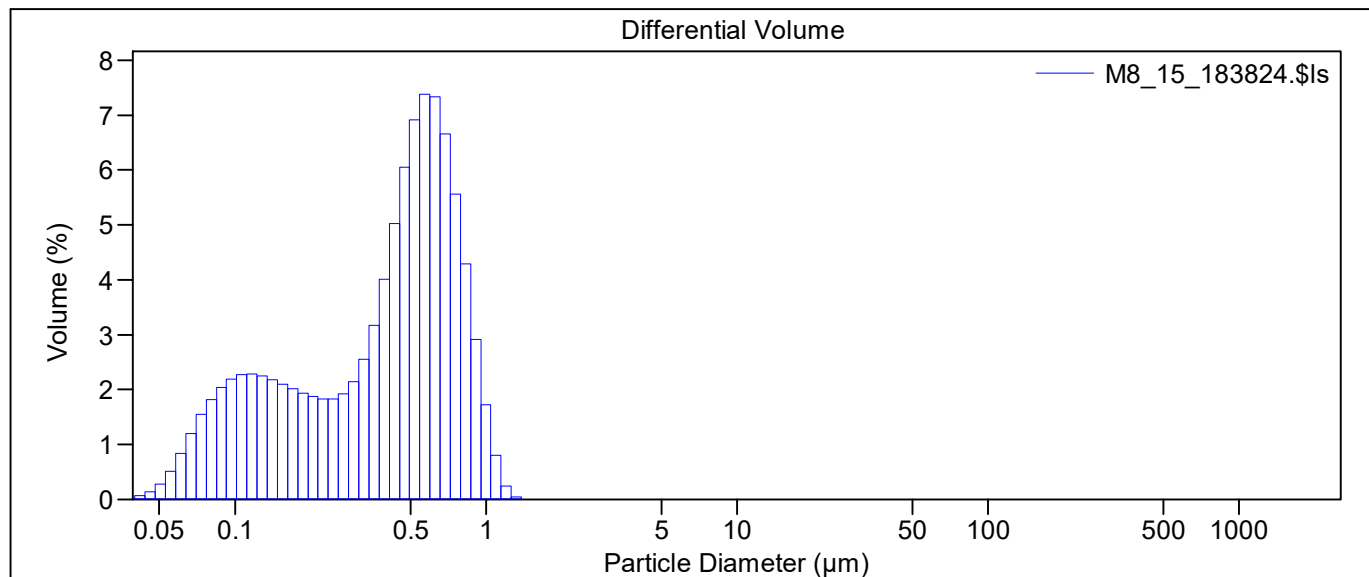
M8.\$av

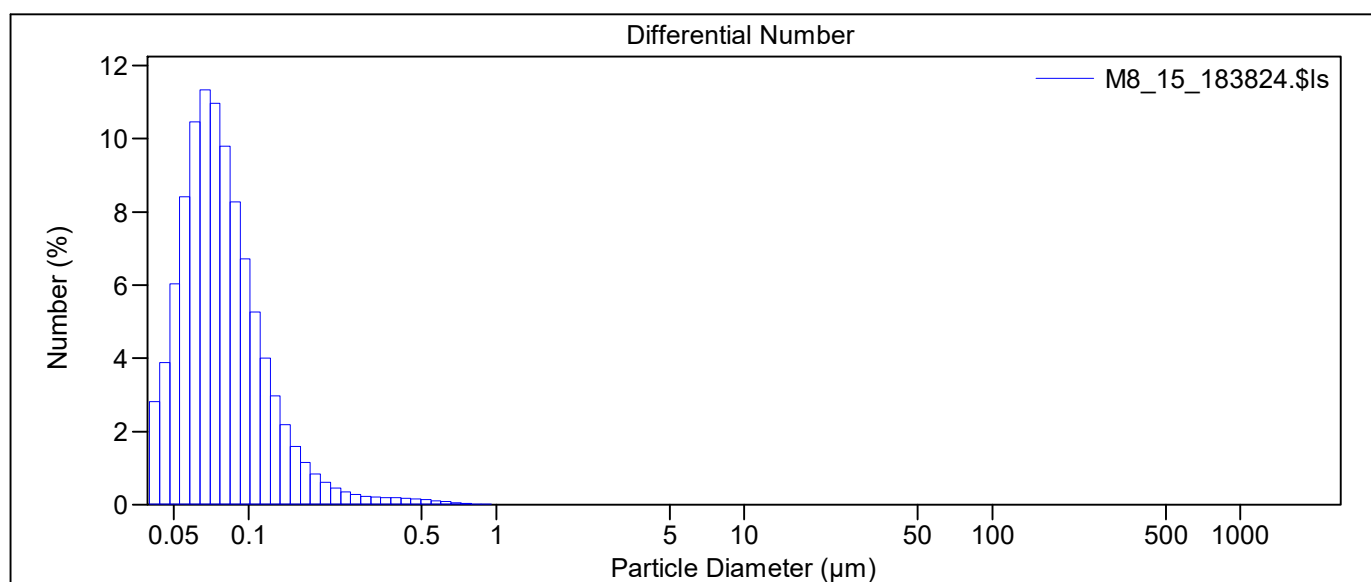
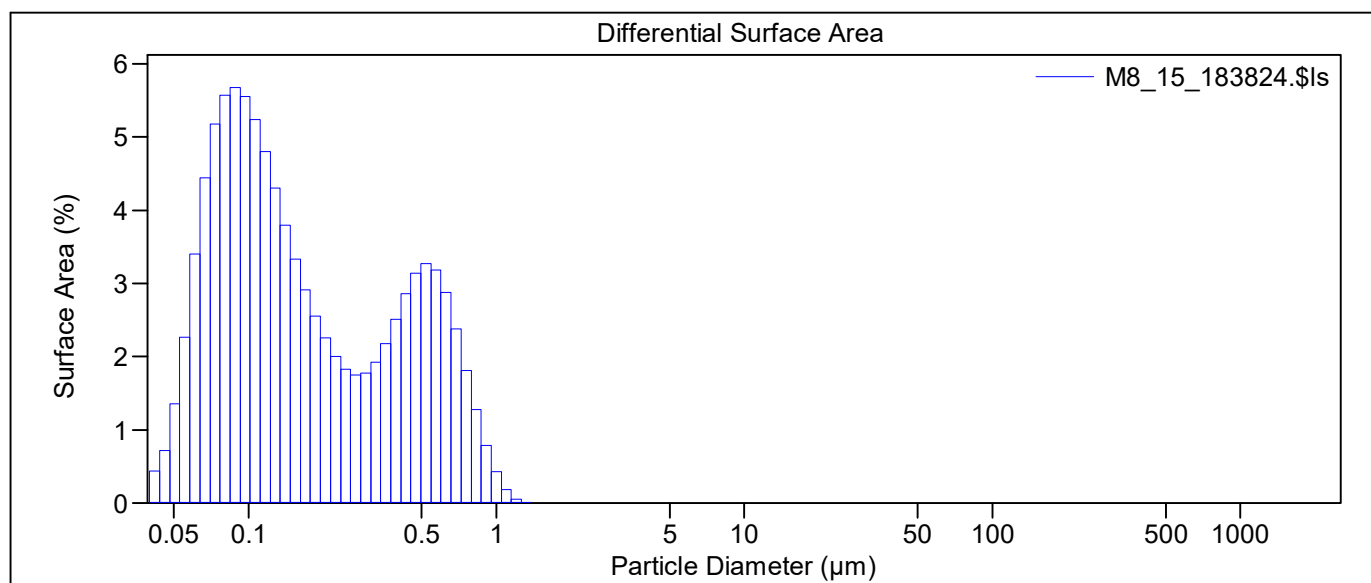
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M8\M8_15_183824.\$ls		
	M8_15_183824.\$ls		
File ID:	M8		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.85%		
LS 13 320	Universal Liquid Module		
Start time:	18:36	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M8_15_183824.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.263 μm
Mean:	0.443 μm		Variance:	0.069 μm ²
Median:	0.452 μm		C.V.:	59.3%
Mean/Median ratio:	0.981		Skewness:	0.283 Right skewed
Mode:	0.571 μm		Kurtosis:	-0.739 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.099 μm	0.189 μm	0.452 μm	0.635 μm	0.792 μm





M8.\$sav					
Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.074	0.43	2.82
2	0.044	0.046	0.13	0.72	3.88
3	0.048	0.050	0.28	1.35	6.04
4	0.053	0.055	0.51	2.27	8.42
5	0.058	0.061	0.84	3.40	10.5
6	0.064	0.067	1.21	4.44	11.3
7	0.070	0.073	1.55	5.18	11.0
8	0.077	0.080	1.82	5.57	9.79
9	0.084	0.088	2.04	5.68	8.28
10	0.093	0.097	2.19	5.55	6.72
11	0.102	0.106	2.27	5.24	5.26
12	0.112	0.117	2.28	4.80	4.00
13	0.122	0.128	2.25	4.30	2.97
14	0.134	0.141	2.18	3.80	2.18
15	0.148	0.155	2.10	3.33	1.59
16	0.162	0.170	2.01	2.92	1.15
17	0.178	0.186	1.94	2.56	0.84

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.88	2.25	0.61
19	0.214	0.225	1.83	2.01	0.45
20	0.235	0.247	1.84	1.83	0.34
21	0.258	0.271	1.93	1.75	0.27
22	0.284	0.297	2.15	1.78	0.23
23	0.311	0.326	2.55	1.92	0.21
24	0.342	0.358	3.17	2.18	0.19
25	0.375	0.393	4.02	2.51	0.19
26	0.412	0.431	5.02	2.86	0.18
27	0.452	0.474	6.05	3.14	0.16
28	0.496	0.520	6.92	3.27	0.14
29	0.545	0.571	7.39	3.18	0.11
30	0.598	0.627	7.34	2.88	0.083
31	0.656	0.688	6.65	2.38	0.057
32	0.721	0.755	5.56	1.81	0.036
33	0.791	0.829	4.29	1.27	0.021
34	0.868	0.910	2.91	0.79	0.011
35	0.953	0.999	1.73	0.43	0.0049
36	1.047	1.097	0.81	0.18	0.0017
37	1.149	1.204	0.24	0.049	0.00038
38	1.261	1.321	0.048	0.0090	0.000058
39	1.385	1.451	0.0036	0.00061	0.000003
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M8.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name: D:\KW\PROFARB\POMIARY\ TiO2\M9\M9.\$av M9.\$av

File ID: M9

Operator: KW

Optical model: TiO2_KW.rf780d PIDS included

LS 13 320 Universal Liquid Module

Pump speed: 50%

Fluid: water

Average of 15 files

D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_01_184831.\$ls D:\KW

\PROFARB\POMIARY\ TiO2\M9\M9_02_185019.\$ls D:\KW

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\PROFARB\POMIARY\ TiO2\M9\M9_15_195115.\$ls

Volume Statistics (Arithmetic) M9.\$av

Calculations from 0.040 μm to 2000 μm

Volume: 100%

Mean: 0.501 μm

S.D.: 0.363 μm

Median: 0.443 μm

Variance: 0.131 μm^2

Mean/Median ratio: 1.130

C.V.: 72.4%

Mode: 0.520 μm

Skewness: 1.799 Right skewed

Kurtosis: 4.858 Leptokurtic

<10%

<25%

<50%

<75%

<90%

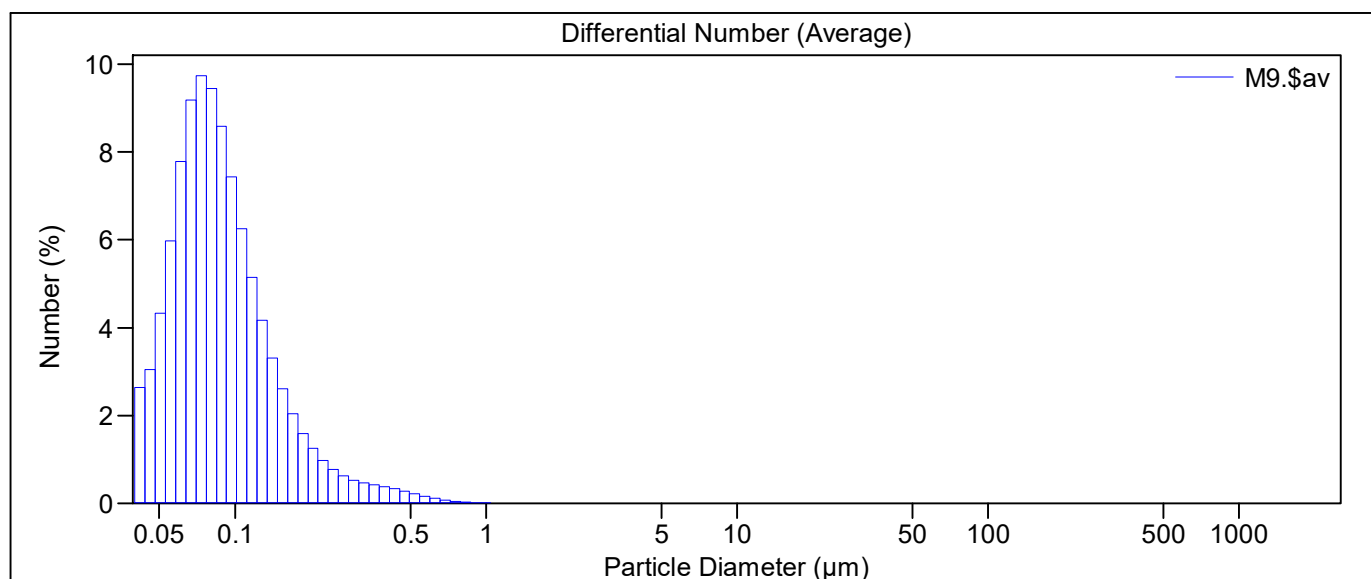
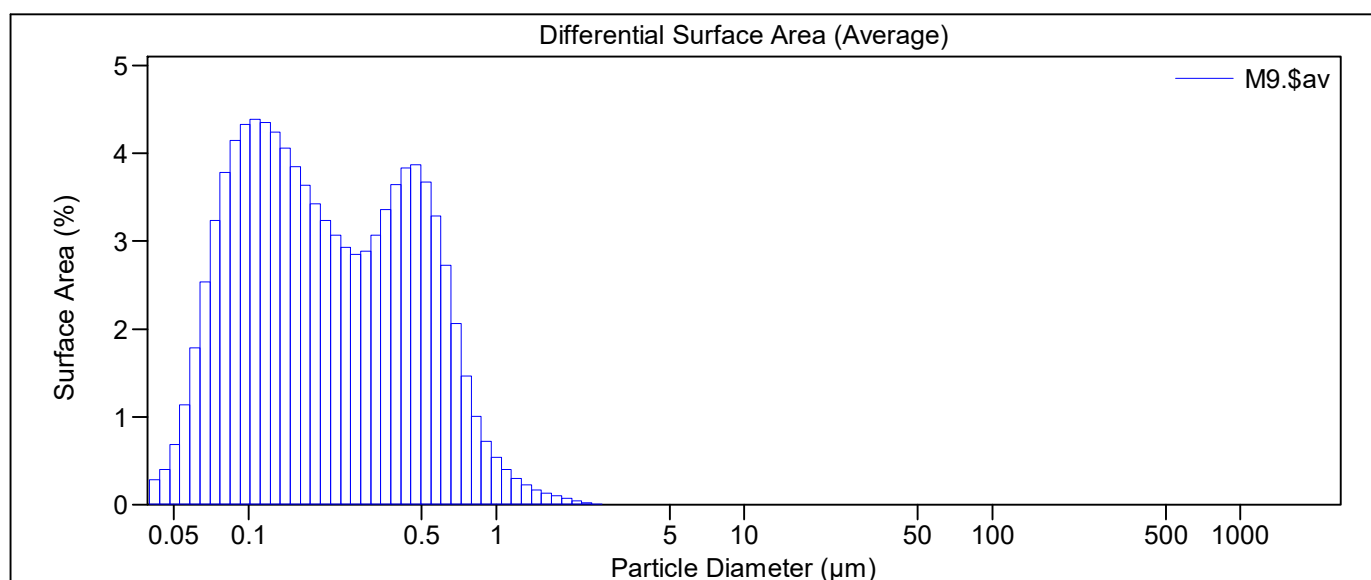
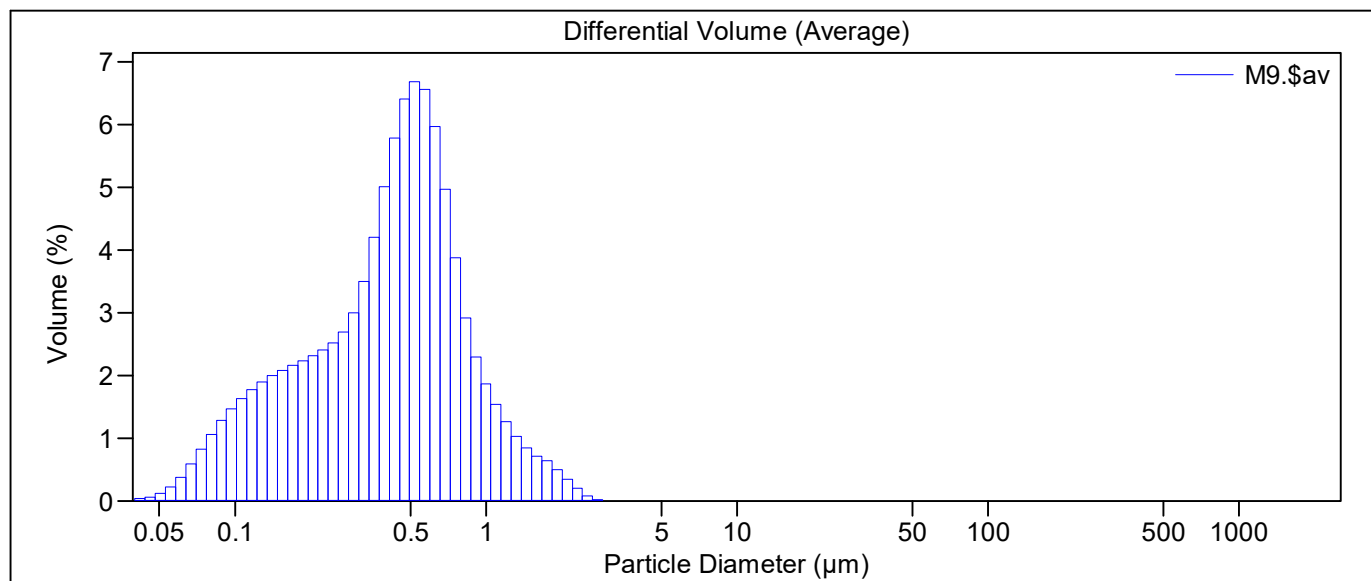
0.126 μm

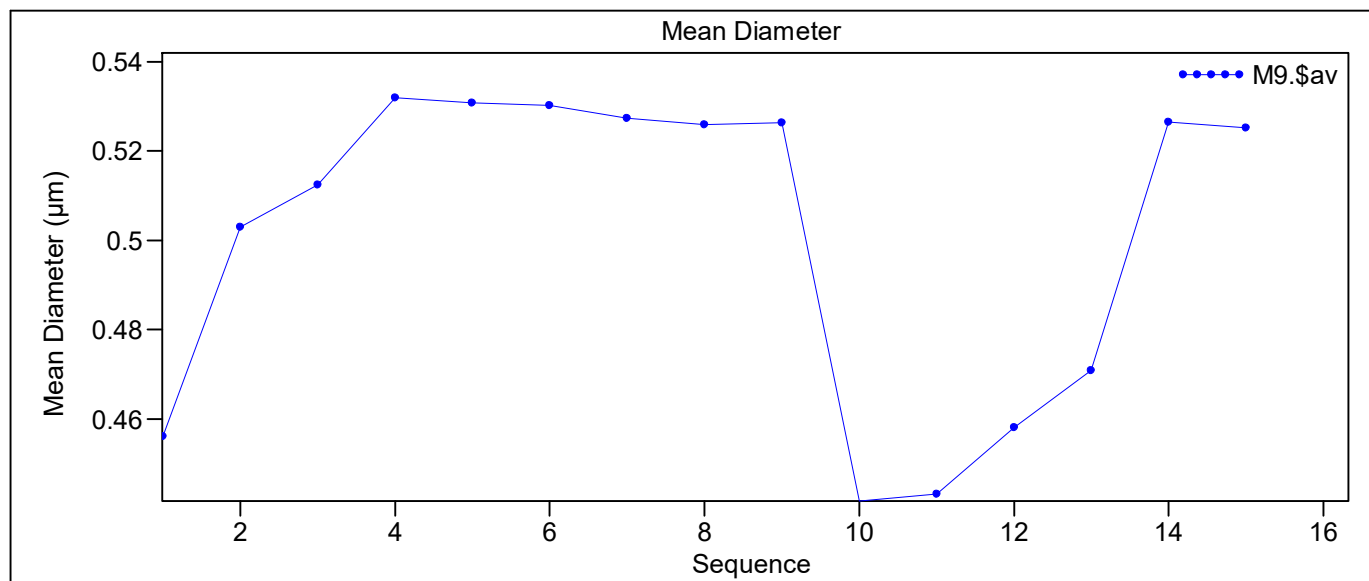
0.239 μm

0.443 μm

0.638 μm

0.919 μm





M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.042	0.29	2.64
2	0.044	0.046	0.064	0.40	3.05
3	0.048	0.050	0.12	0.68	4.33
4	0.053	0.055	0.22	1.14	5.97
5	0.058	0.061	0.38	1.78	7.79
6	0.064	0.067	0.59	2.53	9.18
7	0.070	0.073	0.83	3.24	9.74
8	0.077	0.080	1.06	3.78	9.44
9	0.084	0.088	1.28	4.15	8.59
10	0.093	0.097	1.47	4.33	7.44
11	0.102	0.106	1.63	4.39	6.25
12	0.112	0.117	1.78	4.35	5.15
13	0.122	0.128	1.90	4.24	4.16
14	0.134	0.141	2.00	4.06	3.31
15	0.148	0.155	2.08	3.85	2.60
16	0.162	0.170	2.16	3.64	2.04
17	0.178	0.186	2.23	3.43	1.60
18	0.195	0.205	2.31	3.23	1.25
19	0.214	0.225	2.41	3.07	0.98
20	0.235	0.247	2.52	2.93	0.78
21	0.258	0.271	2.69	2.85	0.63
22	0.284	0.297	3.00	2.88	0.53
23	0.311	0.326	3.50	3.07	0.47
24	0.342	0.358	4.20	3.36	0.42
25	0.375	0.393	5.01	3.65	0.38
26	0.412	0.431	5.78	3.83	0.33
27	0.452	0.474	6.41	3.87	0.28
28	0.496	0.520	6.68	3.68	0.22
29	0.545	0.571	6.56	3.29	0.16
30	0.598	0.627	5.97	2.73	0.11
31	0.656	0.688	4.97	2.07	0.071
32	0.721	0.755	3.87	1.47	0.042
33	0.791	0.829	2.92	1.01	0.024
34	0.868	0.910	2.30	0.72	0.014
35	0.953	0.999	1.87	0.54	0.0087
36	1.047	1.097	1.54	0.40	0.0054
37	1.149	1.204	1.26	0.30	0.0033
38	1.261	1.321	1.03	0.22	0.0021
39	1.385	1.451	0.85	0.17	0.0013
40	1.520	1.592	0.72	0.13	0.00082
41	1.668	1.748	0.64	0.10	0.00055

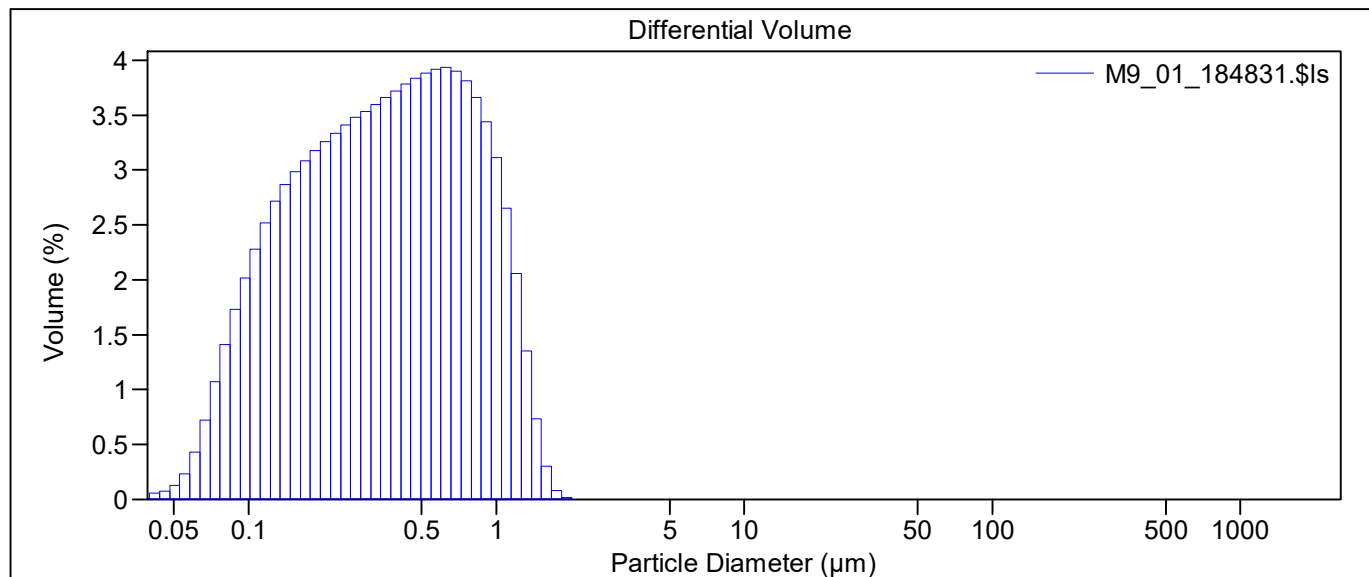
M9.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
42	1.832	1.919	0.50	0.074	0.00033
43	2.011	2.107	0.35	0.047	0.00017
44	2.207	2.313	0.20	0.025	0.000076
45	2.423	2.539	0.079	0.0088	0.000022
46	2.660	2.787	0.022	0.0023	0.000005
47	2.920	3.059	0.0034	0.00032	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0

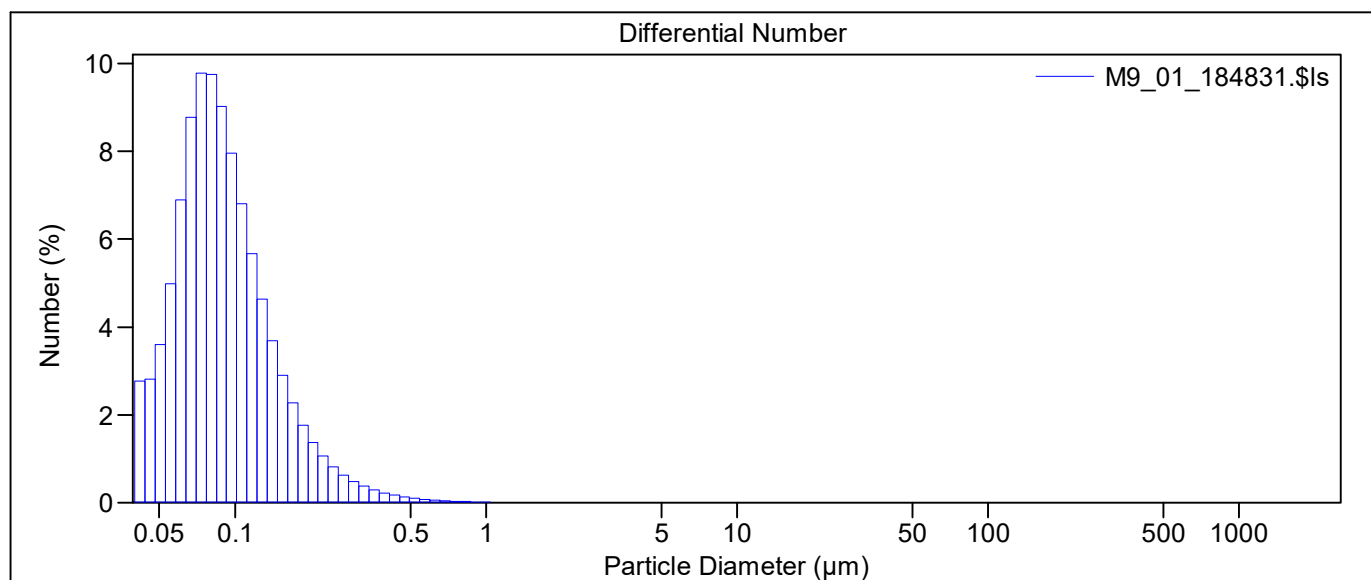
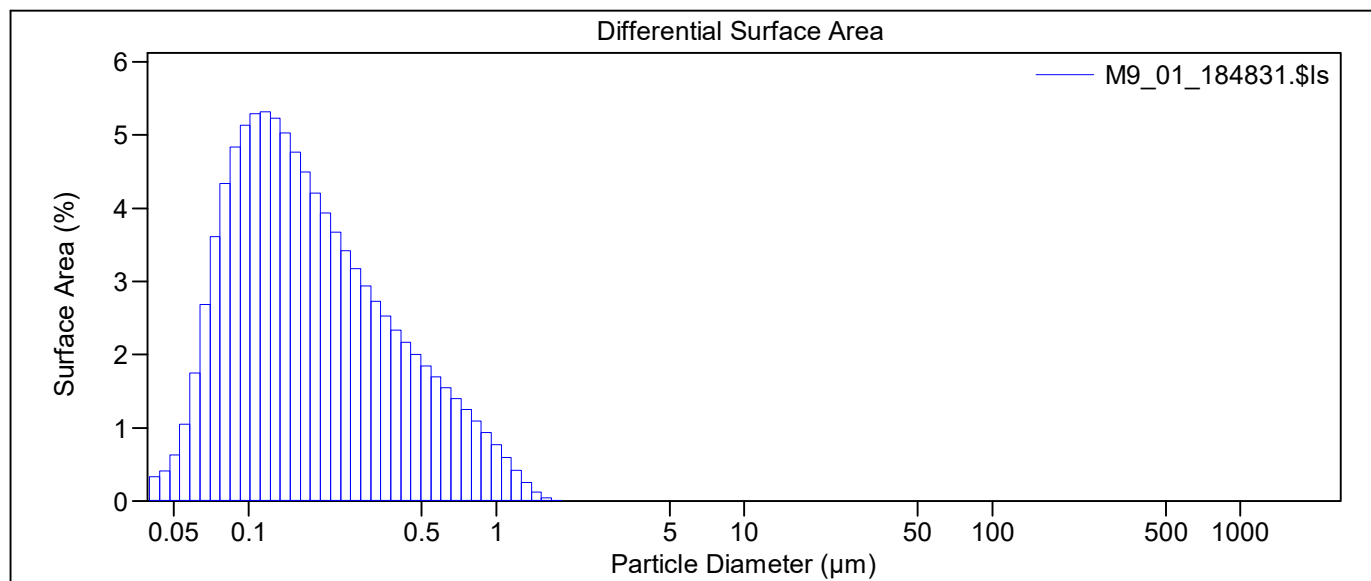
M9.\$av					
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
107	786.9	824.5	0	0	0
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_01_184831.\$ls		
	M9_01_184831.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	1		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.70%		
LS 13 320	Universal Liquid Module		
Start time:	18:46	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	9%	PIDS Obscur:	51%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_01_184831.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.336 μm
Mean:	0.456 μm		Variance:	0.113 μm ²
Median:	0.359 μm		C.V.:	73.6%
Mean/Median ratio:	1.271		Skewness:	1.013 Right skewed
Mode:	0.627 μm		Kurtosis:	0.384 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.111 μm	0.181 μm	0.359 μm	0.659 μm	0.963 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.057	0.33	2.77
2	0.044	0.046	0.076	0.41	2.81
3	0.048	0.050	0.13	0.63	3.60
4	0.053	0.055	0.24	1.05	4.99
5	0.058	0.061	0.43	1.75	6.89
6	0.064	0.067	0.73	2.68	8.77
7	0.070	0.073	1.07	3.61	9.78
8	0.077	0.080	1.41	4.33	9.75
9	0.084	0.088	1.73	4.84	9.03
10	0.093	0.097	2.02	5.14	7.96
11	0.102	0.106	2.28	5.29	6.80
12	0.112	0.117	2.52	5.32	5.67
13	0.122	0.128	2.72	5.23	4.63
14	0.134	0.141	2.87	5.03	3.69
15	0.148	0.155	2.98	4.76	2.90
16	0.162	0.170	3.09	4.49	2.27
17	0.178	0.186	3.18	4.21	1.77

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.26	3.94	1.37
19	0.214	0.225	3.34	3.67	1.06
20	0.235	0.247	3.41	3.42	0.82
21	0.258	0.271	3.48	3.18	0.63
22	0.284	0.297	3.53	2.94	0.48
23	0.311	0.326	3.60	2.72	0.37
24	0.342	0.358	3.66	2.52	0.29
25	0.375	0.393	3.72	2.34	0.22
26	0.412	0.431	3.78	2.17	0.17
27	0.452	0.474	3.84	2.00	0.13
28	0.496	0.520	3.88	1.85	0.099
29	0.545	0.571	3.92	1.69	0.076
30	0.598	0.627	3.94	1.55	0.058
31	0.656	0.688	3.90	1.40	0.043
32	0.721	0.755	3.81	1.25	0.032
33	0.791	0.829	3.66	1.09	0.023
34	0.868	0.910	3.44	0.93	0.016
35	0.953	0.999	3.11	0.77	0.011
36	1.047	1.097	2.65	0.60	0.0072
37	1.149	1.204	2.06	0.42	0.0043
38	1.261	1.321	1.35	0.25	0.0021
39	1.385	1.451	0.73	0.12	0.00087
40	1.520	1.592	0.31	0.047	0.00027
41	1.668	1.748	0.085	0.012	0.000057
42	1.832	1.919	0.016	0.0020	0.000008
43	2.011	2.107	0.0012	0.00014	4.7E-7
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

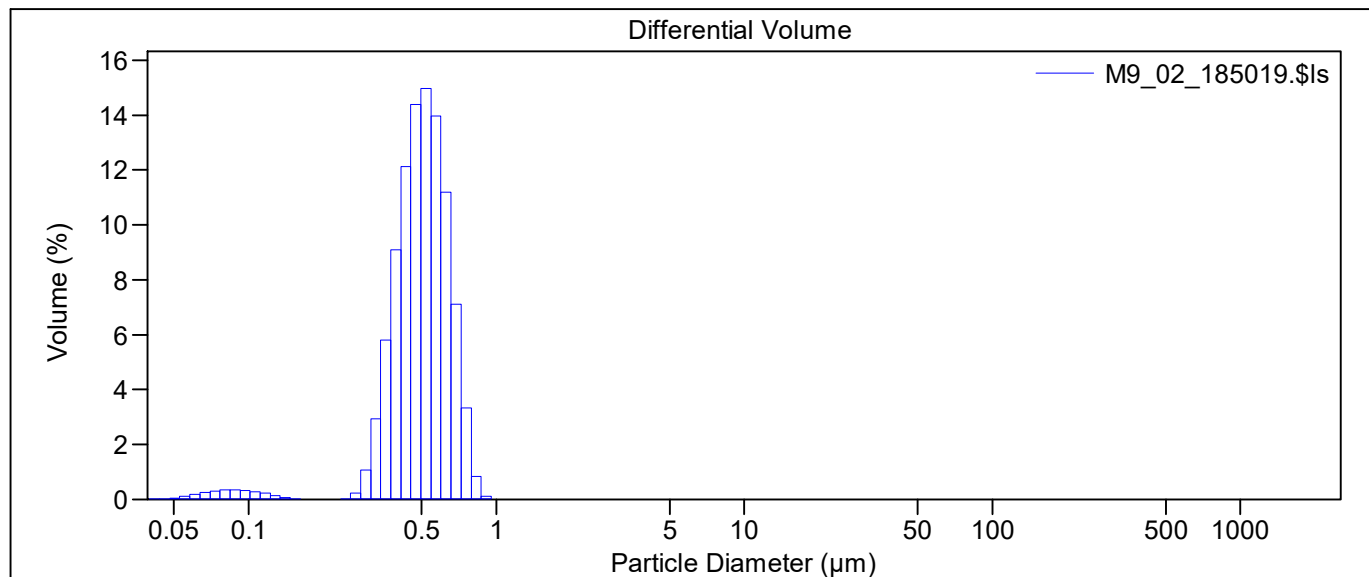
M9.\$av

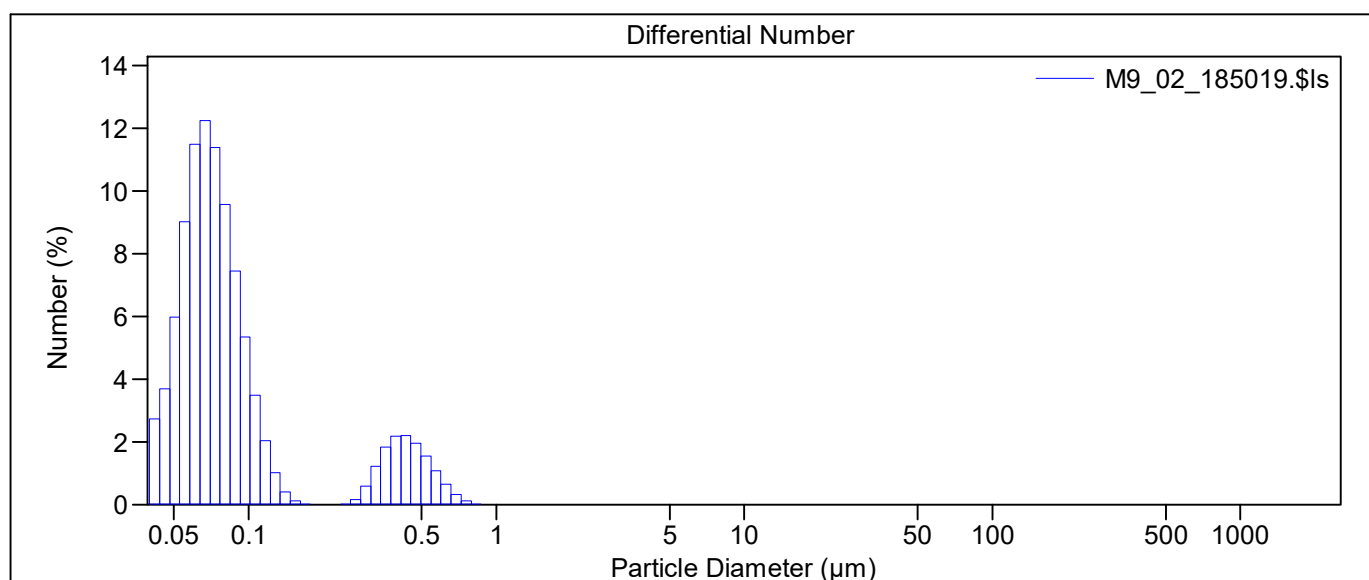
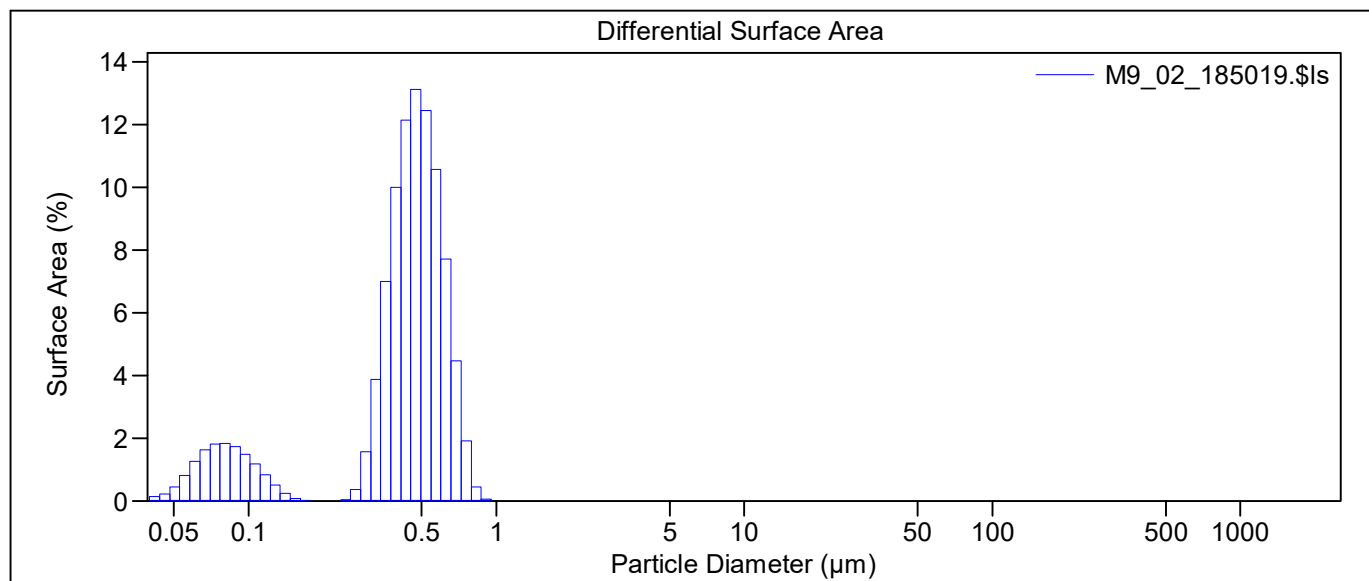
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_02_185019.\$ls		
	M9_02_185019.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	2		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.03%		
LS 13 320	Universal Liquid Module		
Start time:	18:48	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	52%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_02_185019.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.132 μm
Mean:	0.503 μm		Variance:	0.017 μm ²
Median:	0.501 μm		C.V.:	26.2%
Mean/Median ratio:	1.003		Skewness:	-0.431 Left skewed
Mode:	0.520 μm		Kurtosis:	1.305 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.359 μm	0.422 μm	0.501 μm	0.589 μm	0.669 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.014	0.14	2.74
2	0.044	0.046	0.025	0.23	3.70
3	0.048	0.050	0.053	0.45	5.98
4	0.053	0.055	0.11	0.82	9.03
5	0.058	0.061	0.18	1.27	11.5
6	0.064	0.067	0.25	1.62	12.2
7	0.070	0.073	0.31	1.82	11.4
8	0.077	0.080	0.34	1.84	9.58
9	0.084	0.088	0.35	1.73	7.45
10	0.093	0.097	0.34	1.49	5.34
11	0.102	0.106	0.29	1.17	3.48
12	0.112	0.117	0.22	0.83	2.04
13	0.122	0.128	0.15	0.50	1.03
14	0.134	0.141	0.080	0.25	0.42
15	0.148	0.155	0.032	0.089	0.12
16	0.162	0.170	0.0071	0.018	0.021
17	0.178	0.186	0.00088	0.0020	0.0020

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.000021	0.000045	0.000036
19	0.214	0.225	0.00059	0.0011	0.00076
20	0.235	0.247	0.026	0.046	0.025
21	0.258	0.271	0.23	0.36	0.17
22	0.284	0.297	1.08	1.57	0.60
23	0.311	0.326	2.93	3.88	1.23
24	0.342	0.358	5.80	6.99	1.84
25	0.375	0.393	9.10	10.00	2.18
26	0.412	0.431	12.1	12.1	2.19
27	0.452	0.474	14.4	13.1	1.97
28	0.496	0.520	15.0	12.4	1.55
29	0.545	0.571	14.0	10.6	1.09
30	0.598	0.627	11.2	7.71	0.66
31	0.656	0.688	7.12	4.47	0.32
32	0.721	0.755	3.35	1.91	0.11
33	0.791	0.829	0.84	0.44	0.022
34	0.868	0.910	0.12	0.057	0.0023
35	0.953	0.999	0.0031	0.0013	0.000045
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

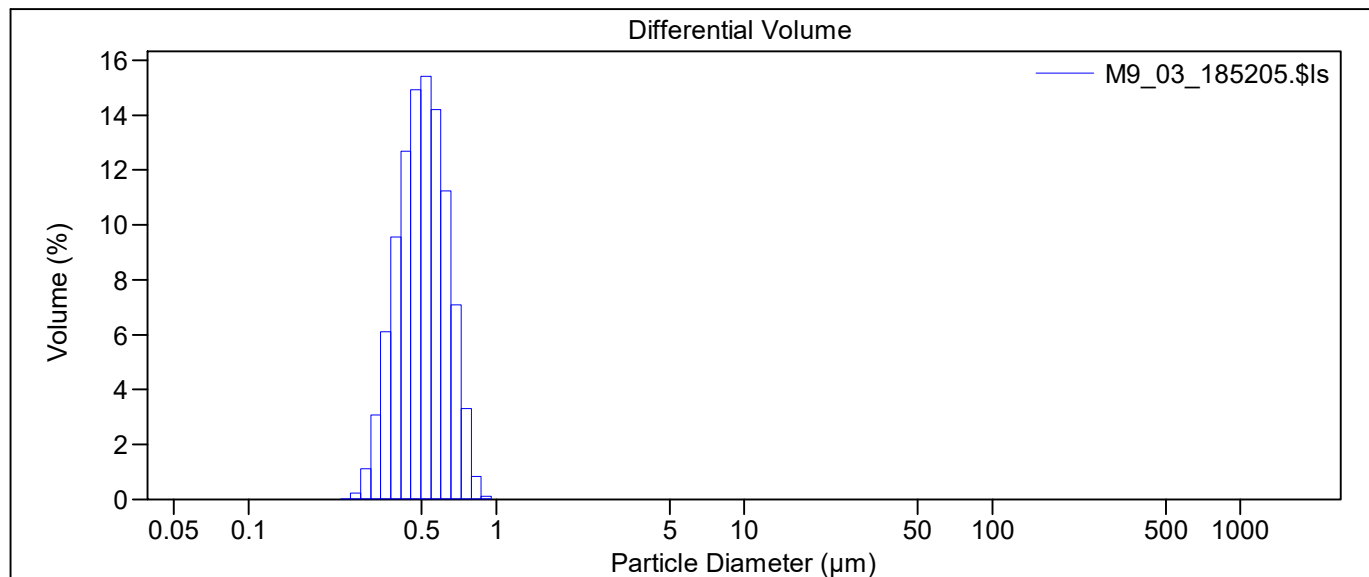
M9.\$av

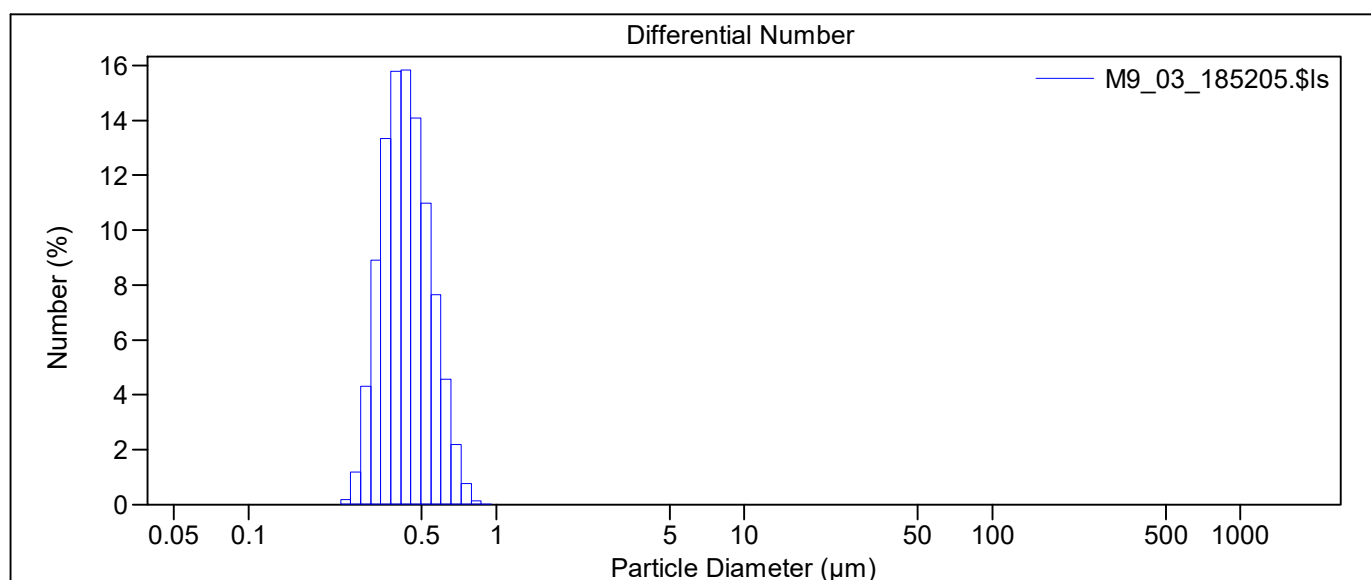
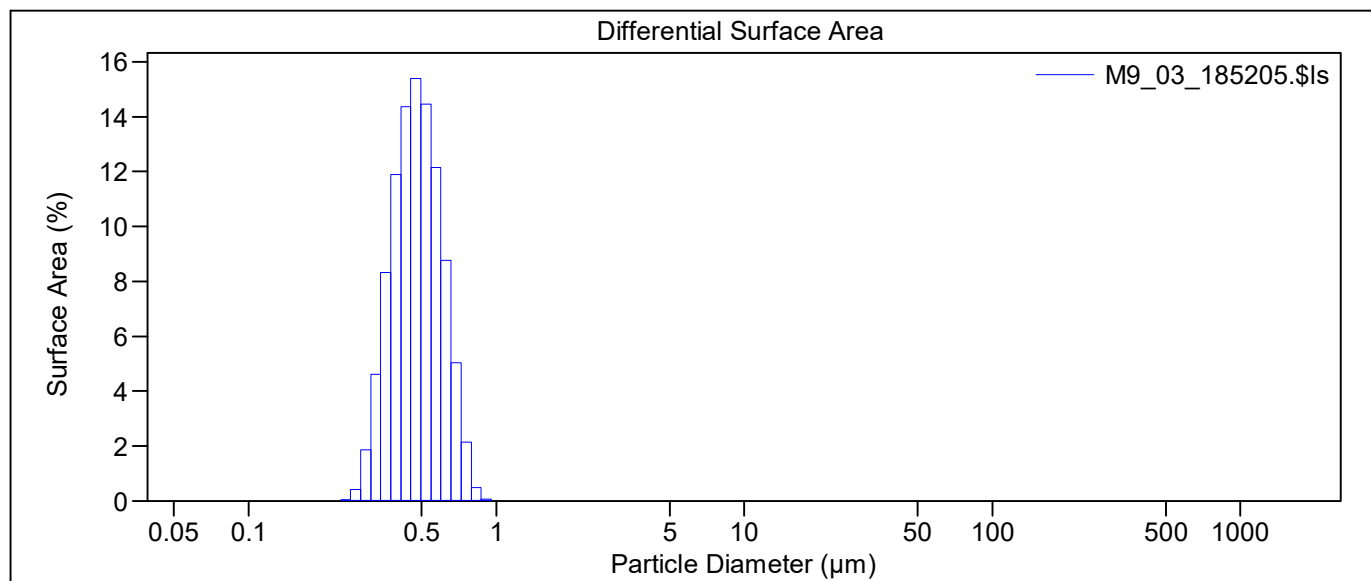
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_03_185205.\$ls		
	M9_03_185205.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	3		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.11%		
LS 13 320	Universal Liquid Module		
Start time:	18:50	Run length:	93 seconds
Pump speed:	50%		
Obscuration:	6%	PIDS Obscur:	52%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_03_185205.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.113 μm
Mean:	0.513 μm		Variance:	0.013 μm ²
Median:	0.503 μm		C.V.:	22.0%
Mean/Median ratio:	1.018		Skewness:	0.398 Right skewed
Mode:	0.520 μm		Kurtosis:	-0.244 Platykurtic
<10%	<25%	<50%	<75%	<90%
0.372 μm	0.427 μm	0.503 μm	0.589 μm	0.669 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0	0	0
2	0.044	0.046	0	0	0
3	0.048	0.050	0	0	0
4	0.053	0.055	0	0	0
5	0.058	0.061	0	0	0
6	0.064	0.067	0	0	0
7	0.070	0.073	0	0	0
8	0.077	0.080	0	0	0
9	0.084	0.088	0	0	0
10	0.093	0.097	0	0	0
11	0.102	0.106	0	0	0
12	0.112	0.117	0	0	0
13	0.122	0.128	0	0	0
14	0.134	0.141	0	0	0
15	0.148	0.155	0	0	0
16	0.162	0.170	0	0	0
17	0.178	0.186	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0	0	0
19	0.214	0.225	0.00060	0.0013	0.0053
20	0.235	0.247	0.027	0.053	0.18
21	0.258	0.271	0.24	0.43	1.19
22	0.284	0.297	1.13	1.86	4.32
23	0.311	0.326	3.08	4.61	8.91
24	0.342	0.358	6.11	8.33	13.3
25	0.375	0.393	9.57	11.9	15.8
26	0.412	0.431	12.7	14.4	15.8
27	0.452	0.474	14.9	15.4	14.1
28	0.496	0.520	15.4	14.5	11.0
29	0.545	0.571	14.2	12.1	7.66
30	0.598	0.627	11.3	8.76	4.58
31	0.656	0.688	7.09	5.03	2.18
32	0.721	0.755	3.30	2.14	0.77
33	0.791	0.829	0.83	0.49	0.15
34	0.868	0.910	0.12	0.063	0.016
35	0.953	0.999	0.0030	0.0015	0.00031
36	1.047	1.097	0	0	0
37	1.149	1.204	0	0	0
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

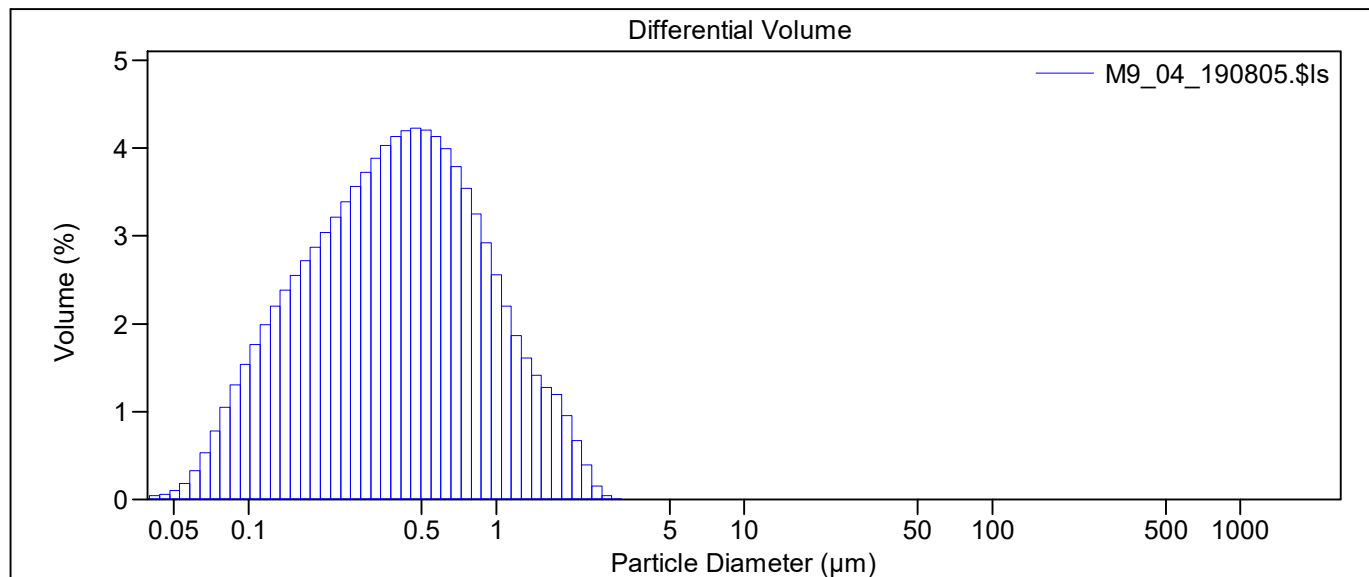
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Operator:	KW		
Run number:	4		
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Residual:	0.28%		
LS 13 320	Universal Liquid Module		
Start time:	19:06	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	-1%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

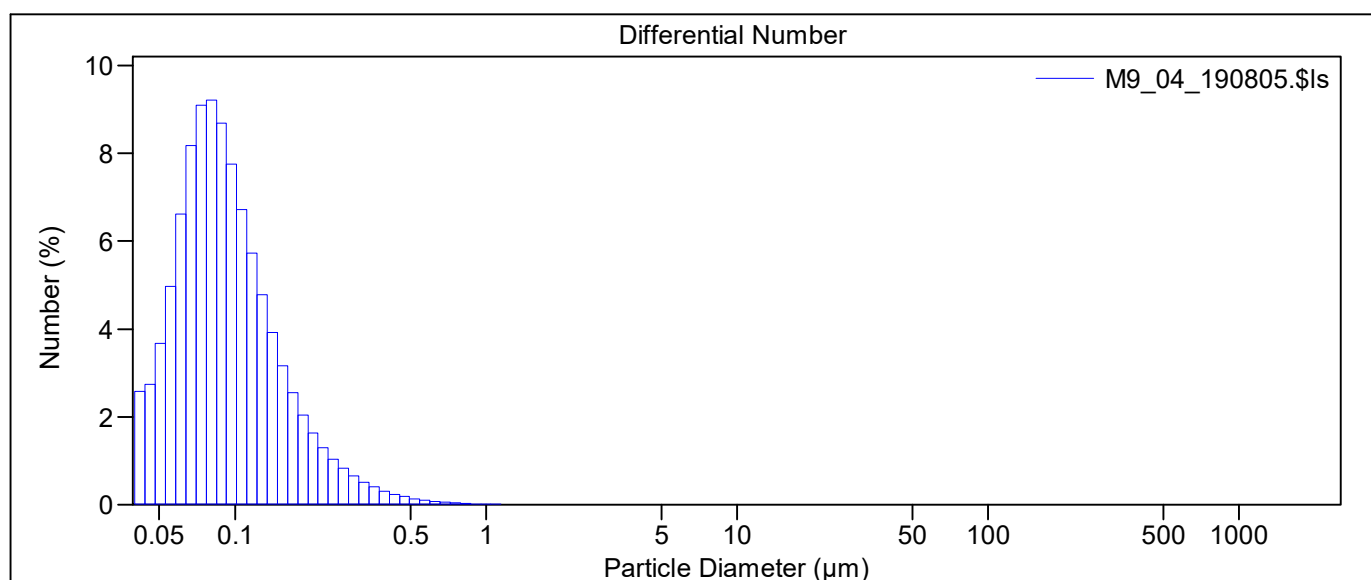
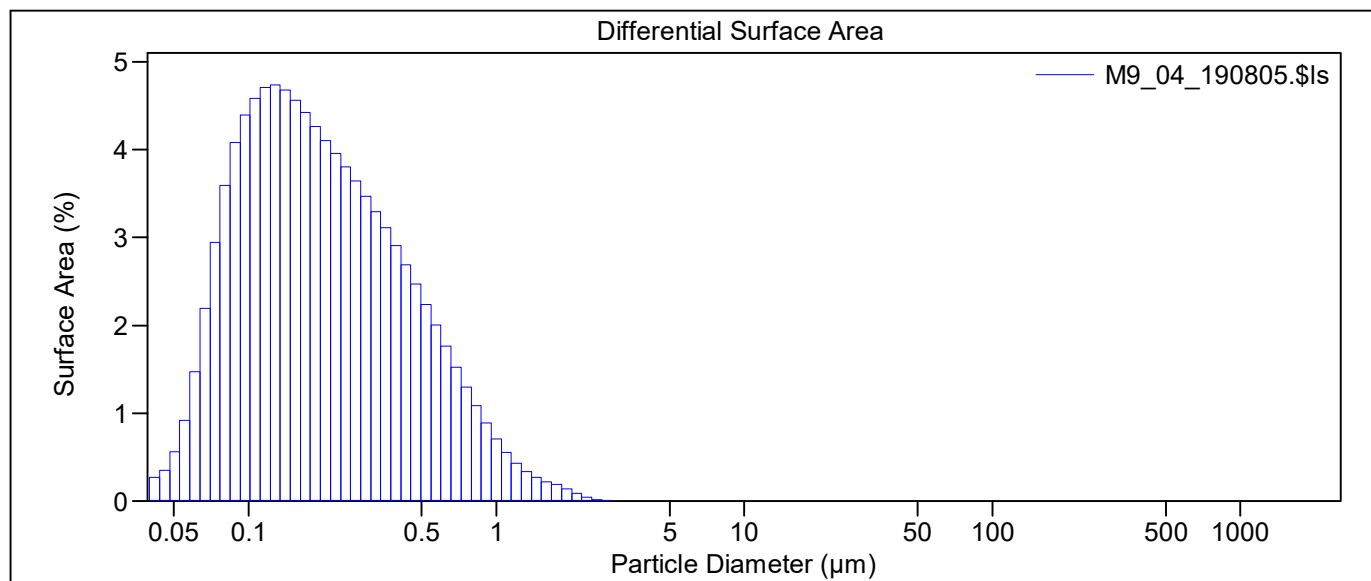
Volume Statistics (Arithmetic) M9_04_190805.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.442 µm
Mean:	0.532 µm	Variance:	0.196 µm ²
Median:	0.400 µm	C.V.:	83.2%
Mean/Median ratio:	1.332	Skewness:	1.659 Right skewed
Mode:	0.474 µm	Kurtosis:	2.991 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.124 µm	0.212 µm	0.400 µm	0.705 µm	1.129 µm





M9.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.041	0.27	2.59
2	0.044	0.046	0.058	0.35	2.74
3	0.048	0.050	0.10	0.56	3.67
4	0.053	0.055	0.18	0.92	4.97
5	0.058	0.061	0.32	1.48	6.62
6	0.064	0.067	0.53	2.20	8.17
7	0.070	0.073	0.78	2.94	9.10
8	0.077	0.080	1.05	3.59	9.21
9	0.084	0.088	1.31	4.08	8.69
10	0.093	0.097	1.54	4.39	7.76
11	0.102	0.106	1.77	4.59	6.72
12	0.112	0.117	1.99	4.71	5.72
13	0.122	0.128	2.20	4.74	4.78
14	0.134	0.141	2.38	4.68	3.92
15	0.148	0.155	2.55	4.56	3.17
16	0.162	0.170	2.72	4.42	2.55
17	0.178	0.186	2.87	4.26	2.04

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.04	4.11	1.63
19	0.214	0.225	3.21	3.96	1.30
20	0.235	0.247	3.39	3.80	1.04
21	0.258	0.271	3.56	3.64	0.83
22	0.284	0.297	3.73	3.47	0.65
23	0.311	0.326	3.89	3.29	0.51
24	0.342	0.358	4.03	3.11	0.40
25	0.375	0.393	4.14	2.91	0.31
26	0.412	0.431	4.20	2.69	0.24
27	0.452	0.474	4.23	2.47	0.18
28	0.496	0.520	4.21	2.24	0.14
29	0.545	0.571	4.13	2.00	0.10
30	0.598	0.627	3.99	1.76	0.075
31	0.656	0.688	3.79	1.52	0.054
32	0.721	0.755	3.55	1.30	0.038
33	0.791	0.829	3.25	1.08	0.026
34	0.868	0.910	2.92	0.89	0.018
35	0.953	0.999	2.56	0.71	0.012
36	1.047	1.097	2.20	0.55	0.0077
37	1.149	1.204	1.86	0.43	0.0049
38	1.261	1.321	1.61	0.34	0.0032
39	1.385	1.451	1.41	0.27	0.0021
40	1.520	1.592	1.28	0.22	0.0015
41	1.668	1.748	1.19	0.19	0.0010
42	1.832	1.919	0.95	0.14	0.00062
43	2.011	2.107	0.67	0.088	0.00033
44	2.207	2.313	0.40	0.047	0.00015
45	2.423	2.539	0.15	0.017	0.000043
46	2.660	2.787	0.044	0.0044	0.000009
47	2.920	3.059	0.0068	0.00061	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

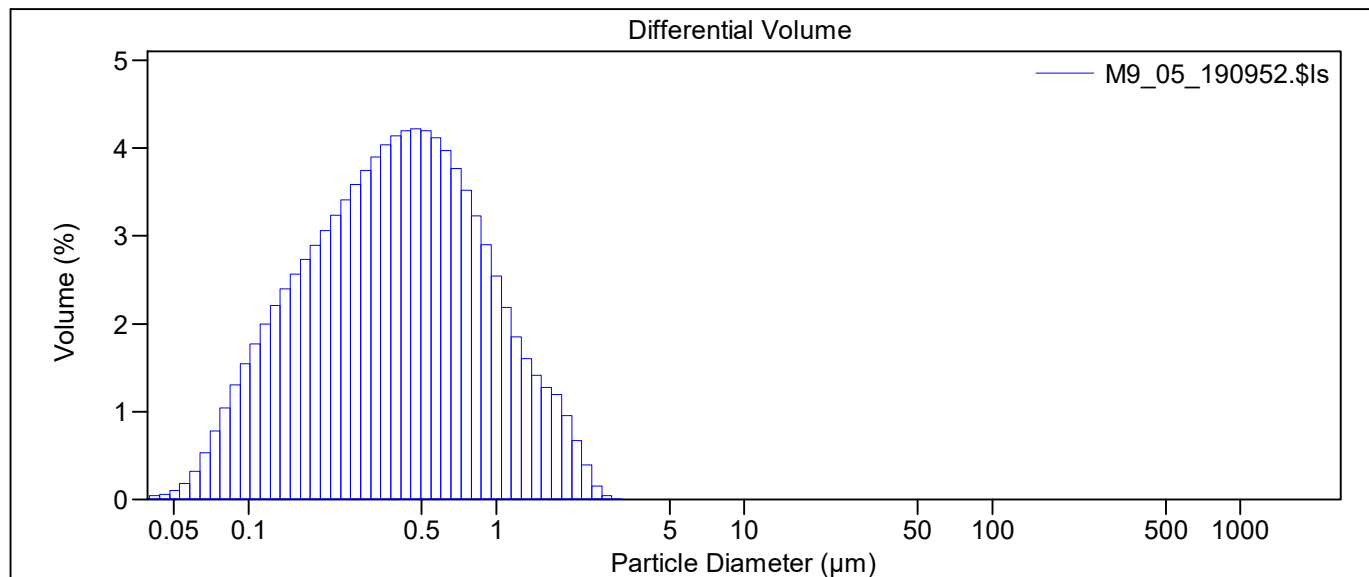
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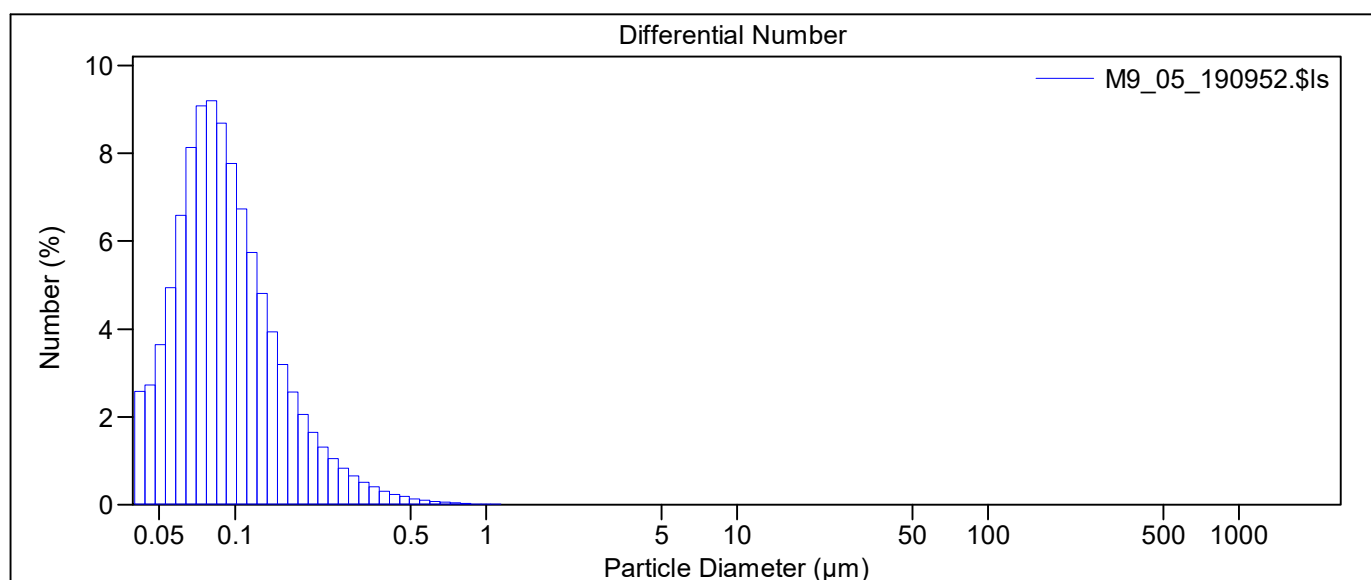
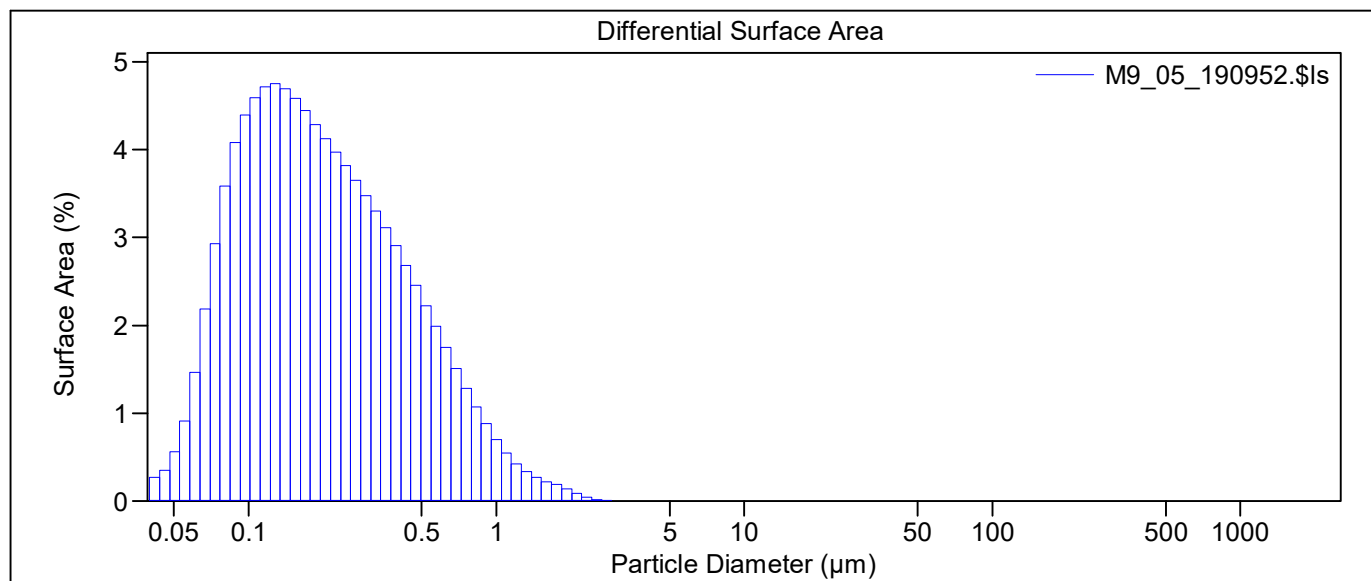
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_05_190952.\$ls		
	M9_05_190952.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	5		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.27%		
LS 13 320	Universal Liquid Module		
Start time:	19:08	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	-1%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_05_190952.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%		S.D.:	0.442 µm
Mean:	0.531 µm		Variance:	0.196 µm ²
Median:	0.398 µm		C.V.:	83.3%
Mean/Median ratio:	1.335		Skewness:	1.665 Right skewed
Mode:	0.474 µm		Kurtosis:	3.008 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.124 µm	0.211 µm	0.398 µm	0.703 µm	1.128 µm





M9.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.041	0.27	2.58
2	0.044	0.046	0.058	0.35	2.73
3	0.048	0.050	0.10	0.56	3.64
4	0.053	0.055	0.18	0.91	4.94
5	0.058	0.061	0.32	1.47	6.59
6	0.064	0.067	0.53	2.18	8.14
7	0.070	0.073	0.78	2.93	9.08
8	0.077	0.080	1.05	3.58	9.21
9	0.084	0.088	1.31	4.08	8.69
10	0.093	0.097	1.54	4.39	7.77
11	0.102	0.106	1.77	4.59	6.74
12	0.112	0.117	2.00	4.72	5.74
13	0.122	0.128	2.21	4.75	4.80
14	0.134	0.141	2.40	4.70	3.94
15	0.148	0.155	2.57	4.58	3.19
16	0.162	0.170	2.73	4.44	2.57
17	0.178	0.186	2.90	4.29	2.05

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.06	4.13	1.64
19	0.214	0.225	3.23	3.97	1.31
20	0.235	0.247	3.41	3.82	1.05
21	0.258	0.271	3.58	3.65	0.83
22	0.284	0.297	3.74	3.48	0.66
23	0.311	0.326	3.90	3.30	0.52
24	0.342	0.358	4.04	3.11	0.40
25	0.375	0.393	4.14	2.90	0.31
26	0.412	0.431	4.20	2.68	0.24
27	0.452	0.474	4.22	2.46	0.18
28	0.496	0.520	4.19	2.23	0.14
29	0.545	0.571	4.12	1.99	0.10
30	0.598	0.627	3.97	1.75	0.074
31	0.656	0.688	3.77	1.51	0.053
32	0.721	0.755	3.52	1.29	0.038
33	0.791	0.829	3.23	1.07	0.026
34	0.868	0.910	2.90	0.88	0.018
35	0.953	0.999	2.54	0.70	0.012
36	1.047	1.097	2.19	0.55	0.0076
37	1.149	1.204	1.85	0.42	0.0049
38	1.261	1.321	1.60	0.33	0.0032
39	1.385	1.451	1.41	0.27	0.0021
40	1.520	1.592	1.28	0.22	0.0014
41	1.668	1.748	1.19	0.19	0.0010
42	1.832	1.919	0.95	0.14	0.00062
43	2.011	2.107	0.67	0.088	0.00033
44	2.207	2.313	0.39	0.047	0.00015
45	2.423	2.539	0.15	0.017	0.000043
46	2.660	2.787	0.044	0.0044	0.000009
47	2.920	3.059	0.0068	0.00061	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

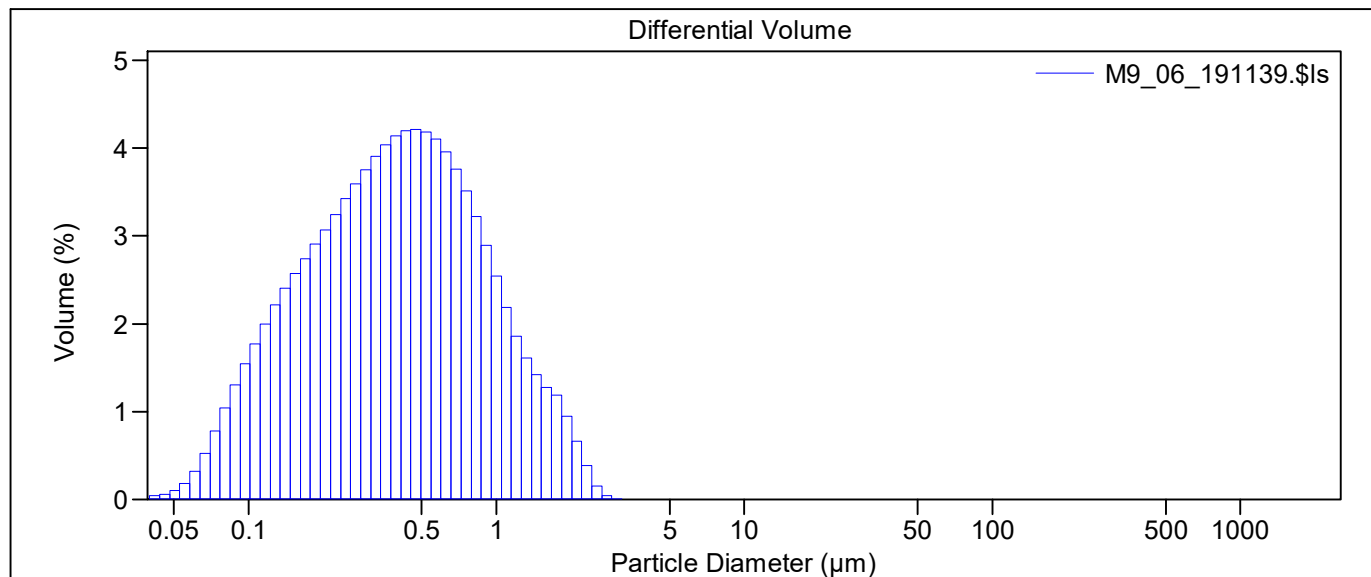
M9.\$av

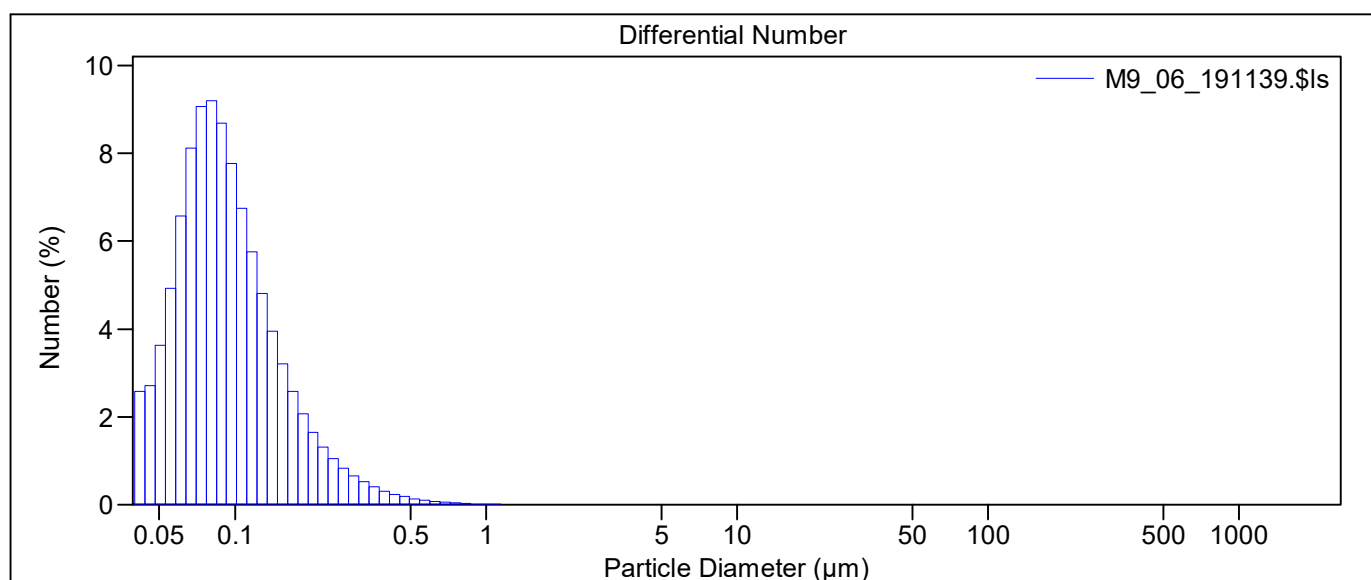
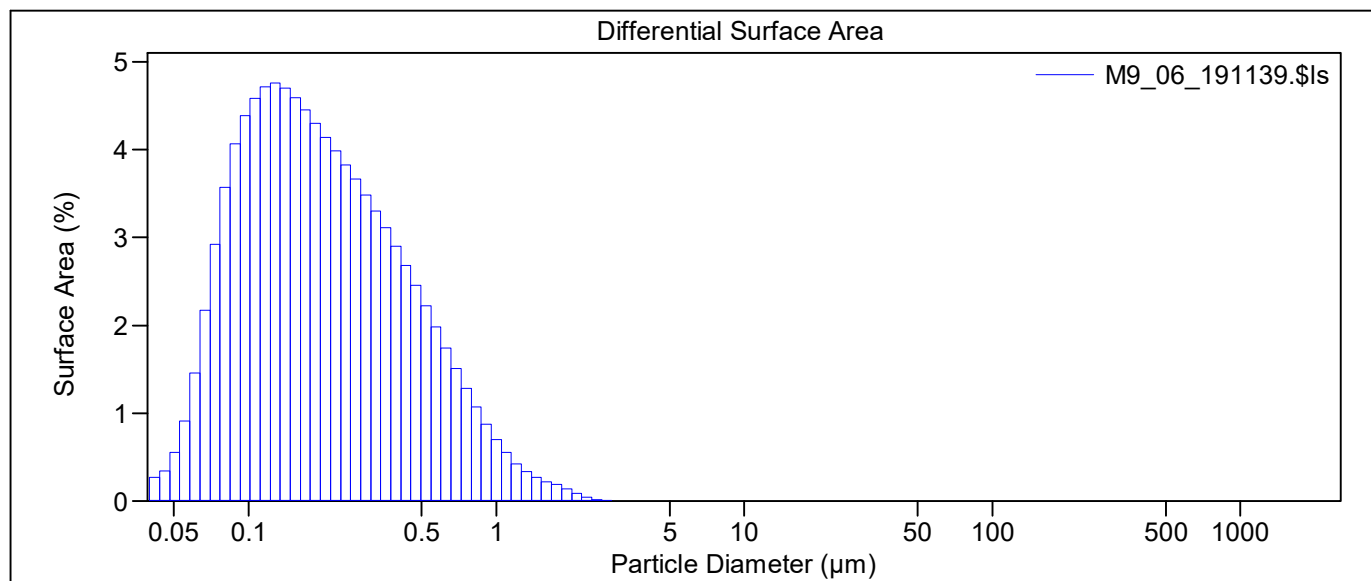
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_06_191139.\$ls		
	M9_06_191139.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	6		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.27%		
LS 13 320	Universal Liquid Module		
Start time:	19:09	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	2%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_06_191139.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.442 μm
Mean:	0.530 μm		Variance:	0.195 μm ²
Median:	0.397 μm		C.V.:	83.3%
Mean/Median ratio:	1.336		Skewness:	1.663 Right skewed
Mode:	0.474 μm		Kurtosis:	2.997 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.124 μm	0.211 μm	0.397 μm	0.702 μm	1.128 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.041	0.27	2.57
2	0.044	0.046	0.058	0.34	2.72
3	0.048	0.050	0.10	0.56	3.63
4	0.053	0.055	0.18	0.91	4.93
5	0.058	0.061	0.32	1.46	6.57
6	0.064	0.067	0.53	2.17	8.12
7	0.070	0.073	0.78	2.92	9.06
8	0.077	0.080	1.04	3.57	9.19
9	0.084	0.088	1.30	4.07	8.69
10	0.093	0.097	1.54	4.39	7.77
11	0.102	0.106	1.77	4.59	6.74
12	0.112	0.117	2.00	4.71	5.75
13	0.122	0.128	2.21	4.76	4.82
14	0.134	0.141	2.40	4.70	3.95
15	0.148	0.155	2.57	4.59	3.20
16	0.162	0.170	2.74	4.46	2.58
17	0.178	0.186	2.90	4.30	2.06

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.07	4.14	1.65
19	0.214	0.225	3.25	3.99	1.32
20	0.235	0.247	3.42	3.83	1.05
21	0.258	0.271	3.59	3.66	0.83
22	0.284	0.297	3.75	3.48	0.66
23	0.311	0.326	3.91	3.30	0.52
24	0.342	0.358	4.04	3.11	0.40
25	0.375	0.393	4.14	2.90	0.31
26	0.412	0.431	4.20	2.68	0.24
27	0.452	0.474	4.21	2.45	0.18
28	0.496	0.520	4.19	2.22	0.14
29	0.545	0.571	4.11	1.98	0.10
30	0.598	0.627	3.96	1.74	0.074
31	0.656	0.688	3.76	1.51	0.053
32	0.721	0.755	3.51	1.28	0.037
33	0.791	0.829	3.22	1.07	0.026
34	0.868	0.910	2.89	0.88	0.018
35	0.953	0.999	2.54	0.70	0.012
36	1.047	1.097	2.19	0.55	0.0076
37	1.149	1.204	1.86	0.43	0.0049
38	1.261	1.321	1.61	0.34	0.0032
39	1.385	1.451	1.42	0.27	0.0021
40	1.520	1.592	1.28	0.22	0.0015
41	1.668	1.748	1.19	0.19	0.0010
42	1.832	1.919	0.95	0.14	0.00062
43	2.011	2.107	0.66	0.087	0.00033
44	2.207	2.313	0.39	0.046	0.00014
45	2.423	2.539	0.15	0.016	0.000042
46	2.660	2.787	0.043	0.0043	0.000009
47	2.920	3.059	0.0066	0.00060	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

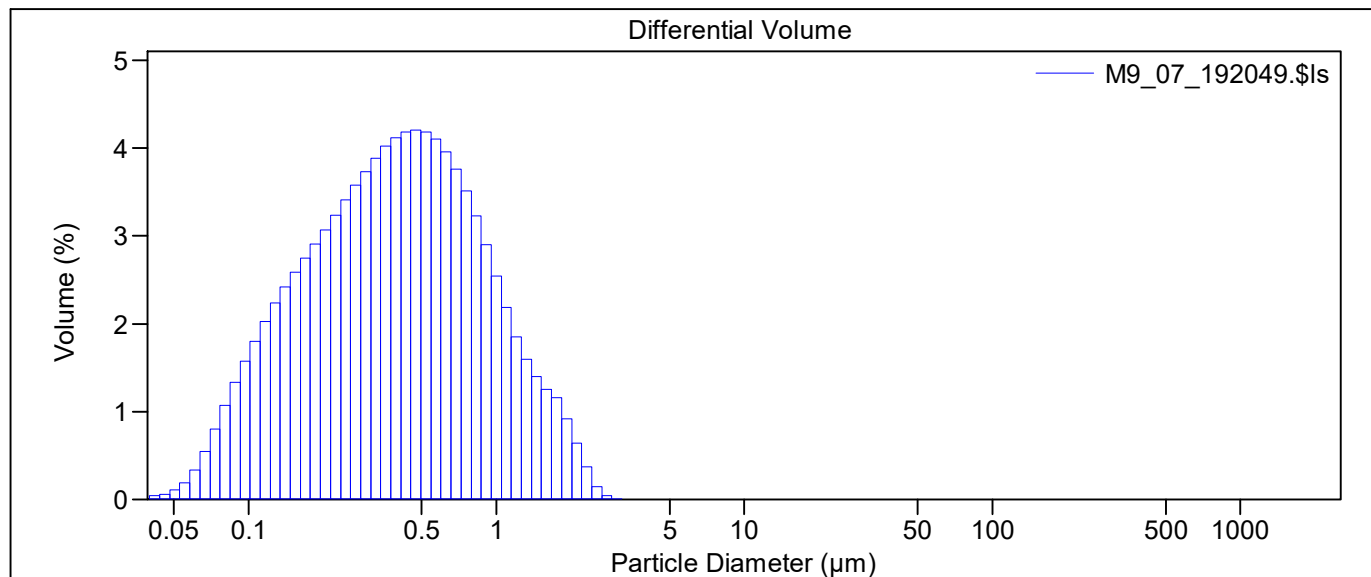
M9.\$av

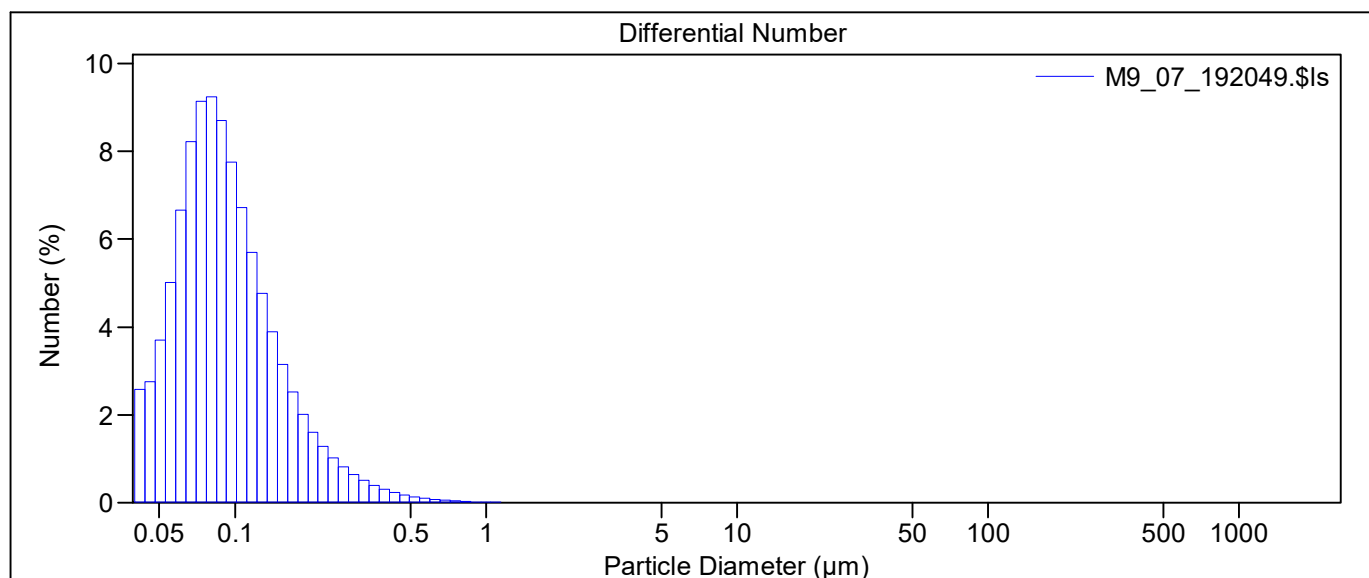
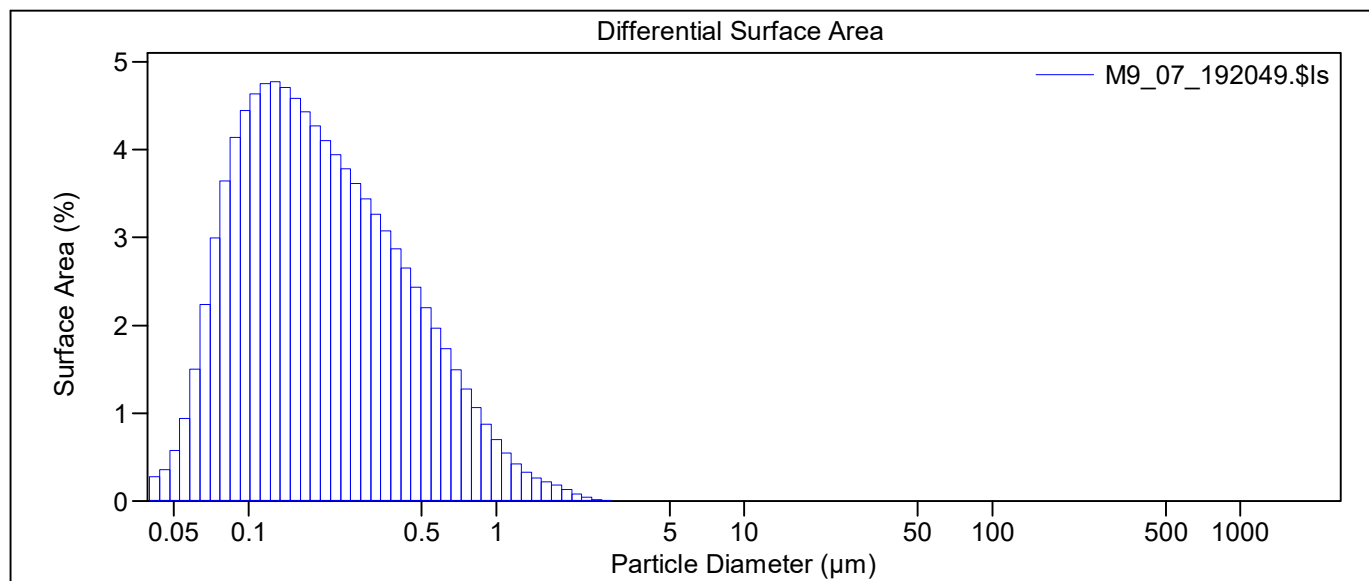
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_07_192049.\$ls		
	M9_07_192049.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	7		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.27%		
LS 13 320	Universal Liquid Module		
Start time:	19:19	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_07_192049.\$ls	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.439 μm
Mean:	0.527 μm		Variance:	0.193 μm ²
Median:	0.395 μm		C.V.:	83.3%
Mean/Median ratio:	1.334		Skewness:	1.662 Right skewed
Mode:	0.474 μm		Kurtosis:	3.015 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.123 μm	0.209 μm	0.395 μm	0.700 μm	1.121 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.042	0.28	2.58
2	0.044	0.046	0.059	0.35	2.75
3	0.048	0.050	0.11	0.57	3.70
4	0.053	0.055	0.19	0.94	5.01
5	0.058	0.061	0.33	1.50	6.67
6	0.064	0.067	0.55	2.24	8.23
7	0.070	0.073	0.80	2.99	9.14
8	0.077	0.080	1.07	3.65	9.24
9	0.084	0.088	1.34	4.14	8.71
10	0.093	0.097	1.58	4.45	7.76
11	0.102	0.106	1.80	4.64	6.71
12	0.112	0.117	2.03	4.75	5.71
13	0.122	0.128	2.24	4.78	4.76
14	0.134	0.141	2.42	4.71	3.89
15	0.148	0.155	2.59	4.58	3.15
16	0.162	0.170	2.75	4.43	2.53
17	0.178	0.186	2.91	4.27	2.02

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.06	4.10	1.61
19	0.214	0.225	3.24	3.94	1.28
20	0.235	0.247	3.41	3.79	1.02
21	0.258	0.271	3.58	3.62	0.81
22	0.284	0.297	3.73	3.44	0.64
23	0.311	0.326	3.89	3.26	0.50
24	0.342	0.358	4.02	3.07	0.39
25	0.375	0.393	4.12	2.87	0.31
26	0.412	0.431	4.18	2.65	0.23
27	0.452	0.474	4.21	2.43	0.18
28	0.496	0.520	4.18	2.20	0.13
29	0.545	0.571	4.10	1.97	0.099
30	0.598	0.627	3.96	1.73	0.072
31	0.656	0.688	3.76	1.50	0.052
32	0.721	0.755	3.52	1.28	0.037
33	0.791	0.829	3.23	1.07	0.025
34	0.868	0.910	2.90	0.87	0.017
35	0.953	0.999	2.54	0.70	0.011
36	1.047	1.097	2.18	0.55	0.0074
37	1.149	1.204	1.85	0.42	0.0048
38	1.261	1.321	1.60	0.33	0.0031
39	1.385	1.451	1.40	0.26	0.0021
40	1.520	1.592	1.26	0.22	0.0014
41	1.668	1.748	1.16	0.18	0.00098
42	1.832	1.919	0.92	0.13	0.00059
43	2.011	2.107	0.64	0.084	0.00031
44	2.207	2.313	0.37	0.044	0.00014
45	2.423	2.539	0.14	0.016	0.000040
46	2.660	2.787	0.041	0.0041	0.000009
47	2.920	3.059	0.0063	0.00056	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

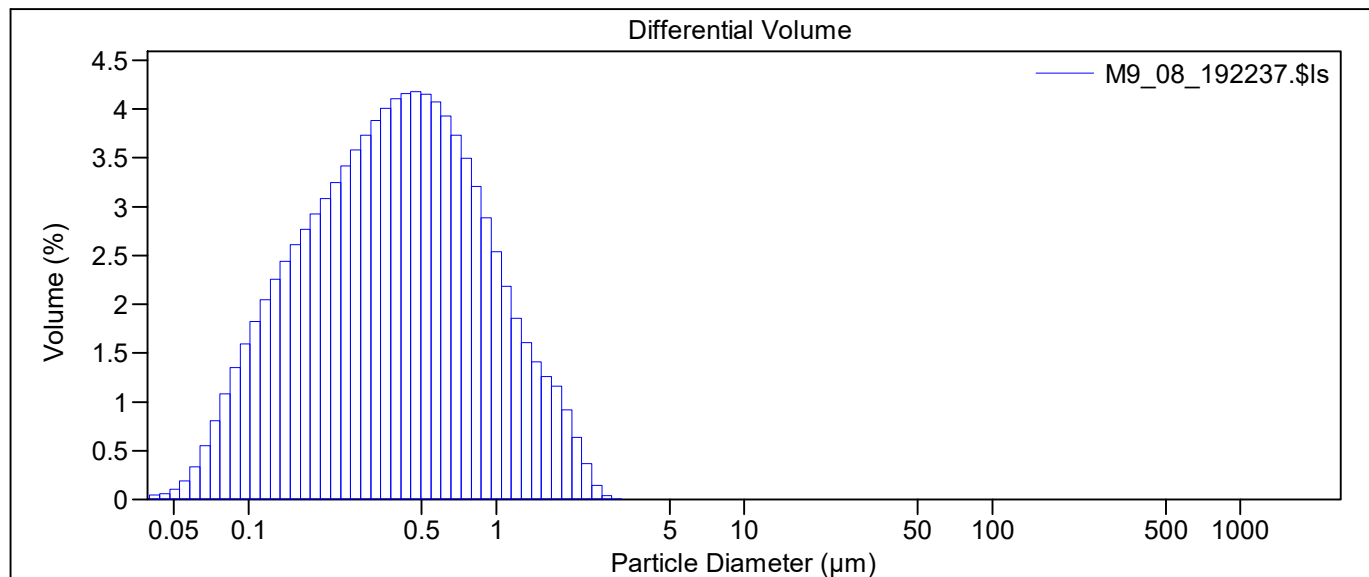
M9.\$av

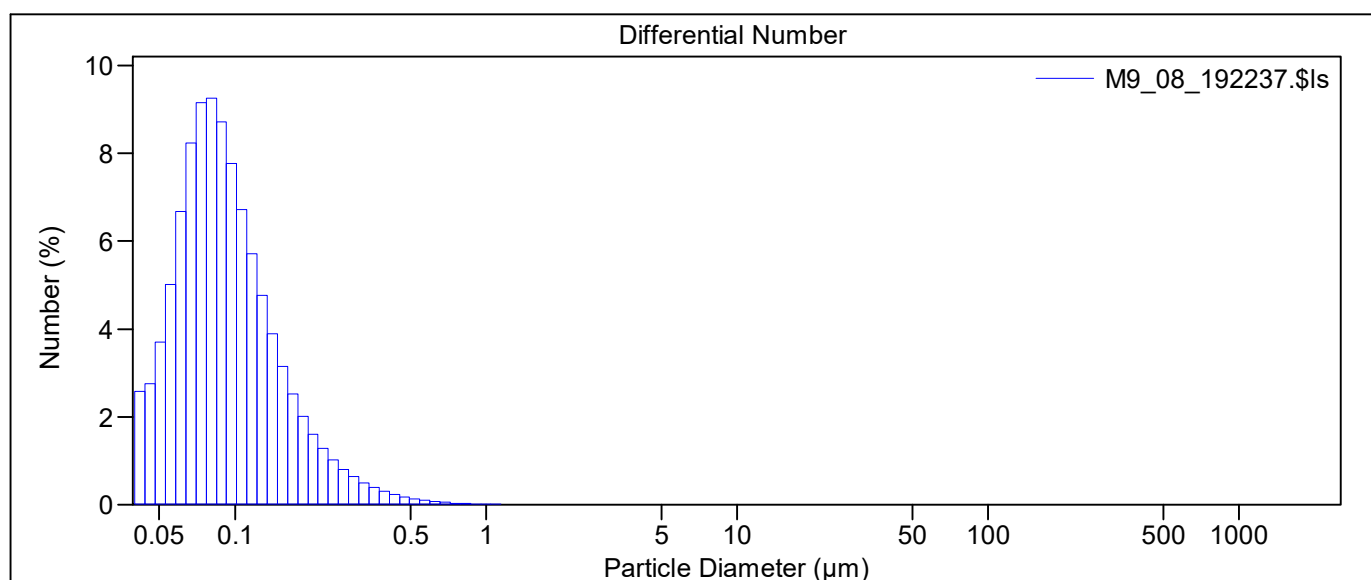
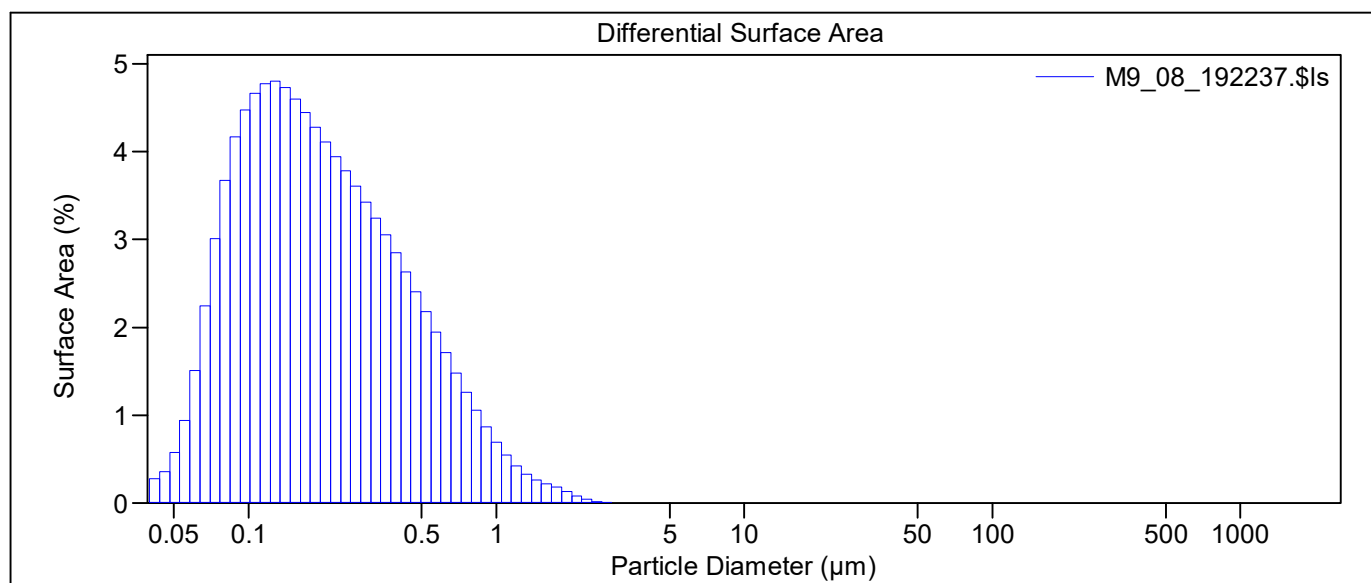
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_08_192237.\$ls		
	M9_08_192237.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	8		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.27%		
LS 13 320	Universal Liquid Module		
Start time:	19:20	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_08_192237.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.439 μm
Mean:	0.526 μm		Variance:	0.193 μm ²
Median:	0.393 μm		C.V.:	83.5%
Mean/Median ratio:	1.337		Skewness:	1.660 Right skewed
Mode:	0.474 μm		Kurtosis:	2.998 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.123 μm	0.208 μm	0.393 μm	0.698 μm	1.121 μm





M9.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.043	0.28	2.58
2	0.044	0.046	0.060	0.36	2.75
3	0.048	0.050	0.11	0.58	3.70
4	0.053	0.055	0.19	0.94	5.01
5	0.058	0.061	0.34	1.51	6.67
6	0.064	0.067	0.55	2.25	8.23
7	0.070	0.073	0.81	3.01	9.15
8	0.077	0.080	1.08	3.67	9.25
9	0.084	0.088	1.35	4.17	8.72
10	0.093	0.097	1.59	4.47	7.77
11	0.102	0.106	1.82	4.66	6.72
12	0.112	0.117	2.05	4.78	5.71
13	0.122	0.128	2.26	4.80	4.76
14	0.134	0.141	2.44	4.73	3.89
15	0.148	0.155	2.61	4.60	3.14
16	0.162	0.170	2.77	4.45	2.52
17	0.178	0.186	2.93	4.28	2.01

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.08	4.11	1.60
19	0.214	0.225	3.25	3.95	1.28
20	0.235	0.247	3.42	3.78	1.02
21	0.258	0.271	3.58	3.61	0.80
22	0.284	0.297	3.73	3.43	0.63
23	0.311	0.326	3.88	3.24	0.50
24	0.342	0.358	4.01	3.05	0.39
25	0.375	0.393	4.10	2.85	0.30
26	0.412	0.431	4.16	2.63	0.23
27	0.452	0.474	4.18	2.41	0.18
28	0.496	0.520	4.15	2.18	0.13
29	0.545	0.571	4.07	1.95	0.098
30	0.598	0.627	3.93	1.71	0.071
31	0.656	0.688	3.73	1.48	0.051
32	0.721	0.755	3.49	1.26	0.036
33	0.791	0.829	3.21	1.06	0.025
34	0.868	0.910	2.89	0.86	0.017
35	0.953	0.999	2.54	0.69	0.011
36	1.047	1.097	2.19	0.54	0.0074
37	1.149	1.204	1.86	0.42	0.0047
38	1.261	1.321	1.60	0.33	0.0031
39	1.385	1.451	1.41	0.26	0.0021
40	1.520	1.592	1.26	0.22	0.0014
41	1.668	1.748	1.16	0.18	0.00097
42	1.832	1.919	0.92	0.13	0.00058
43	2.011	2.107	0.64	0.082	0.00030
44	2.207	2.313	0.37	0.043	0.00013
45	2.423	2.539	0.14	0.015	0.000039
46	2.660	2.787	0.041	0.0040	0.000008
47	2.920	3.059	0.0061	0.00055	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

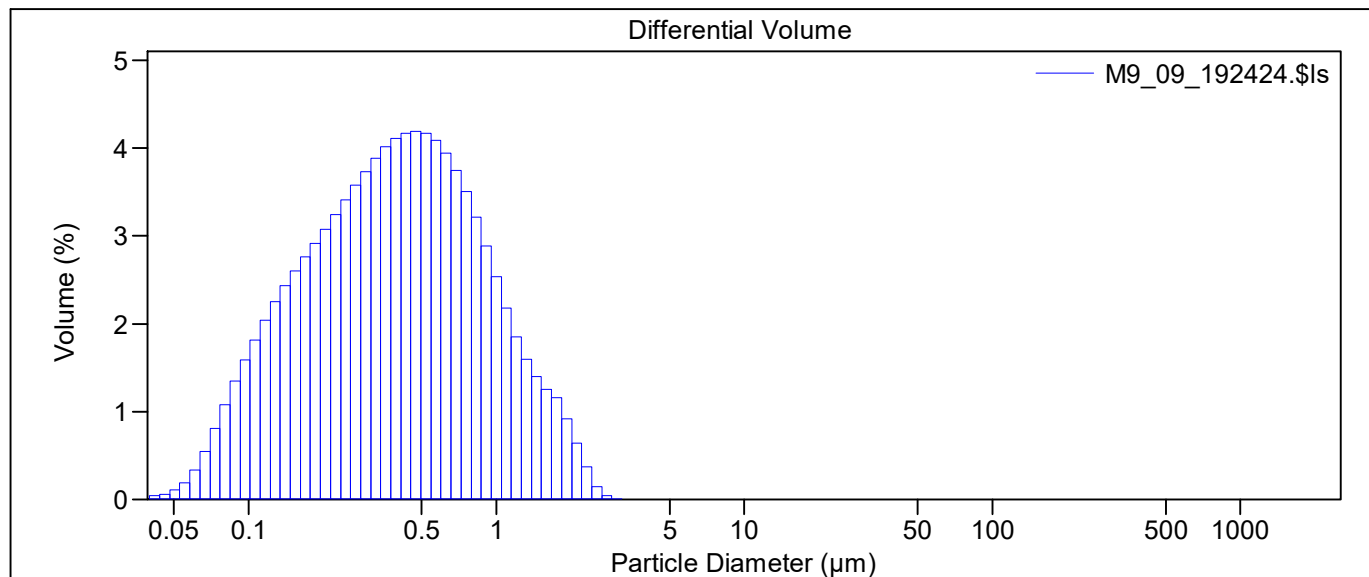
M9.\$av

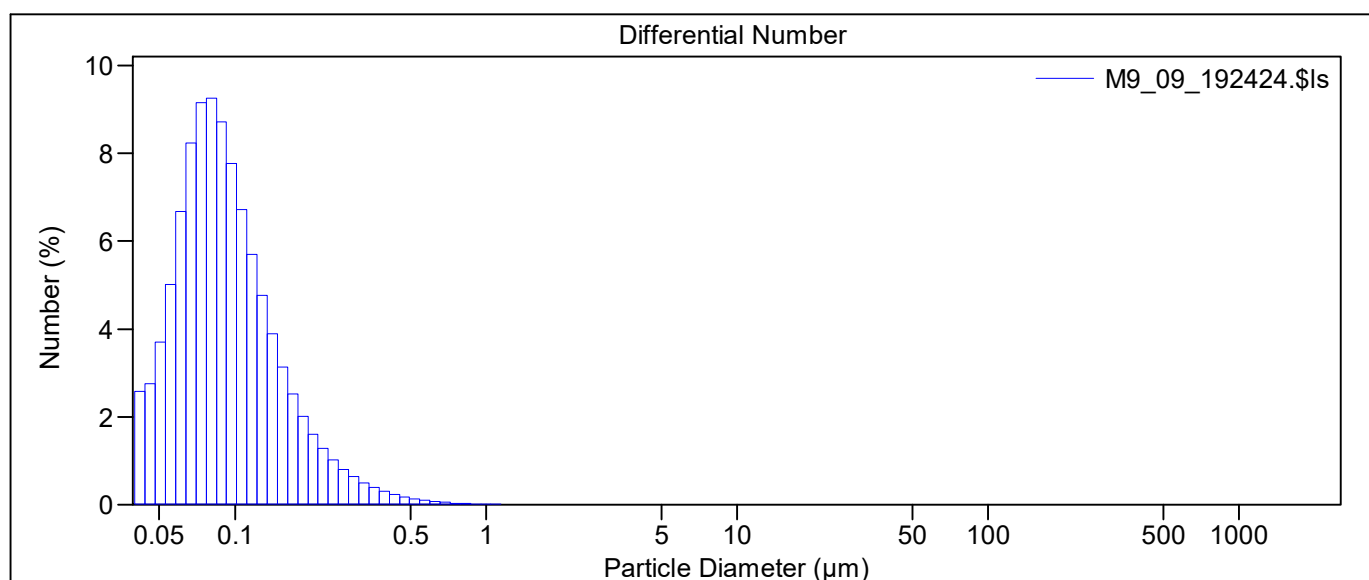
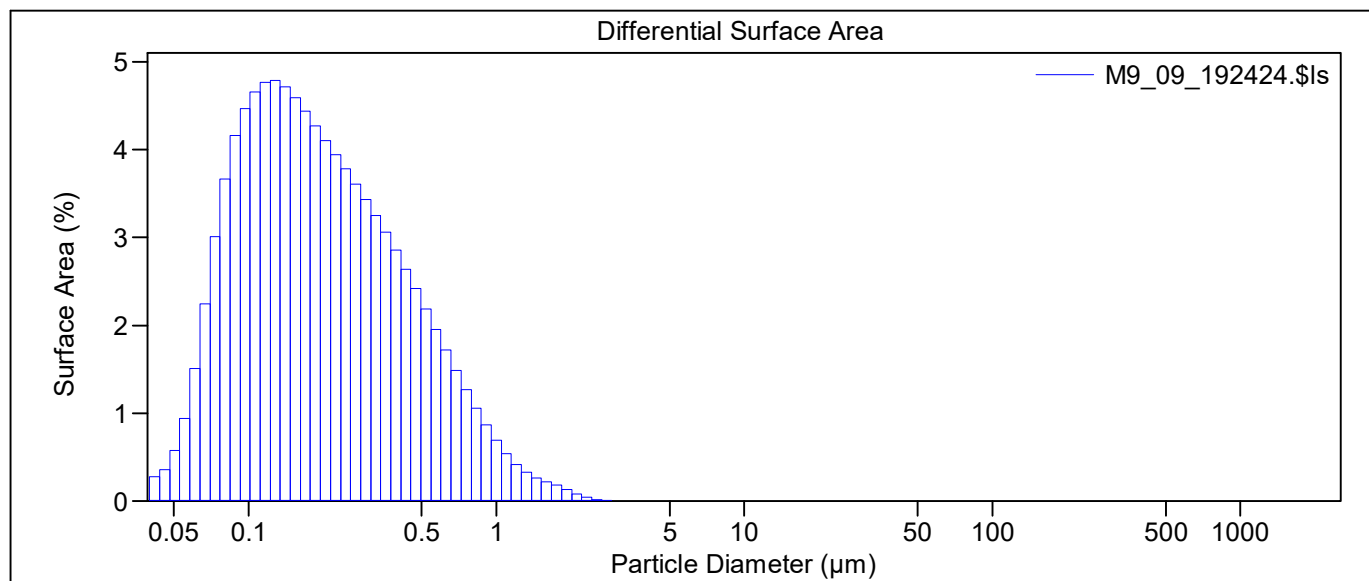
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_09_192424.\$ls		
	M9_09_192424.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	9		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.27%		
LS 13 320	Universal Liquid Module		
Start time:	19:22	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_09_192424.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.439 μm
Mean:	0.526 μm		Variance:	0.193 μm ²
Median:	0.394 μm		C.V.:	83.4%
Mean/Median ratio:	1.336		Skewness:	1.664 Right skewed
Mode:	0.474 μm		Kurtosis:	3.017 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.123 μm	0.208 μm	0.394 μm	0.699 μm	1.120 μm





M9.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.043	0.28	2.58
2	0.044	0.046	0.060	0.36	2.75
3	0.048	0.050	0.11	0.58	3.70
4	0.053	0.055	0.19	0.94	5.01
5	0.058	0.061	0.34	1.51	6.67
6	0.064	0.067	0.55	2.25	8.23
7	0.070	0.073	0.81	3.01	9.15
8	0.077	0.080	1.08	3.67	9.25
9	0.084	0.088	1.35	4.16	8.72
10	0.093	0.097	1.59	4.47	7.77
11	0.102	0.106	1.82	4.66	6.72
12	0.112	0.117	2.04	4.77	5.71
13	0.122	0.128	2.25	4.79	4.76
14	0.134	0.141	2.43	4.72	3.89
15	0.148	0.155	2.60	4.59	3.14
16	0.162	0.170	2.76	4.44	2.52
17	0.178	0.186	2.92	4.27	2.01

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.07	4.10	1.60
19	0.214	0.225	3.24	3.94	1.28
20	0.235	0.247	3.41	3.78	1.02
21	0.258	0.271	3.58	3.61	0.81
22	0.284	0.297	3.73	3.43	0.64
23	0.311	0.326	3.88	3.25	0.50
24	0.342	0.358	4.01	3.06	0.39
25	0.375	0.393	4.11	2.86	0.30
26	0.412	0.431	4.17	2.64	0.23
27	0.452	0.474	4.19	2.42	0.18
28	0.496	0.520	4.17	2.19	0.13
29	0.545	0.571	4.09	1.96	0.098
30	0.598	0.627	3.95	1.72	0.072
31	0.656	0.688	3.75	1.49	0.051
32	0.721	0.755	3.50	1.27	0.036
33	0.791	0.829	3.21	1.06	0.025
34	0.868	0.910	2.89	0.87	0.017
35	0.953	0.999	2.53	0.69	0.011
36	1.047	1.097	2.18	0.54	0.0074
37	1.149	1.204	1.85	0.42	0.0047
38	1.261	1.321	1.60	0.33	0.0031
39	1.385	1.451	1.40	0.26	0.0020
40	1.520	1.592	1.26	0.22	0.0014
41	1.668	1.748	1.16	0.18	0.00097
42	1.832	1.919	0.92	0.13	0.00058
43	2.011	2.107	0.64	0.083	0.00031
44	2.207	2.313	0.37	0.044	0.00013
45	2.423	2.539	0.14	0.016	0.000039
46	2.660	2.787	0.041	0.0040	0.000009
47	2.920	3.059	0.0062	0.00056	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

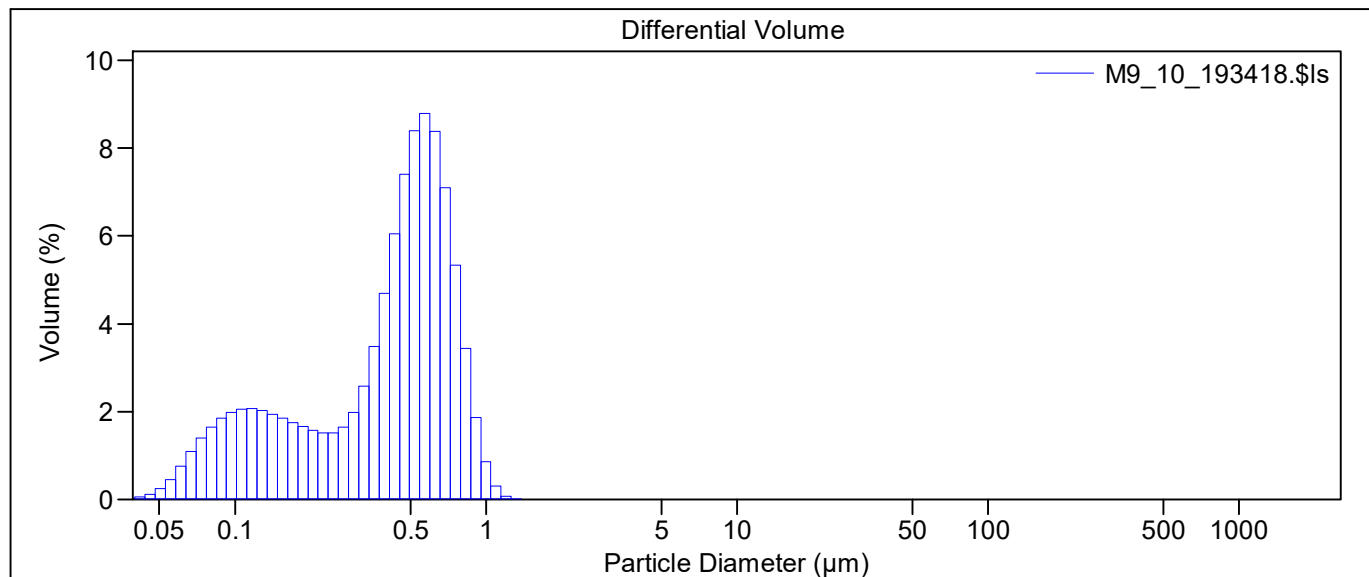
M9.\$av

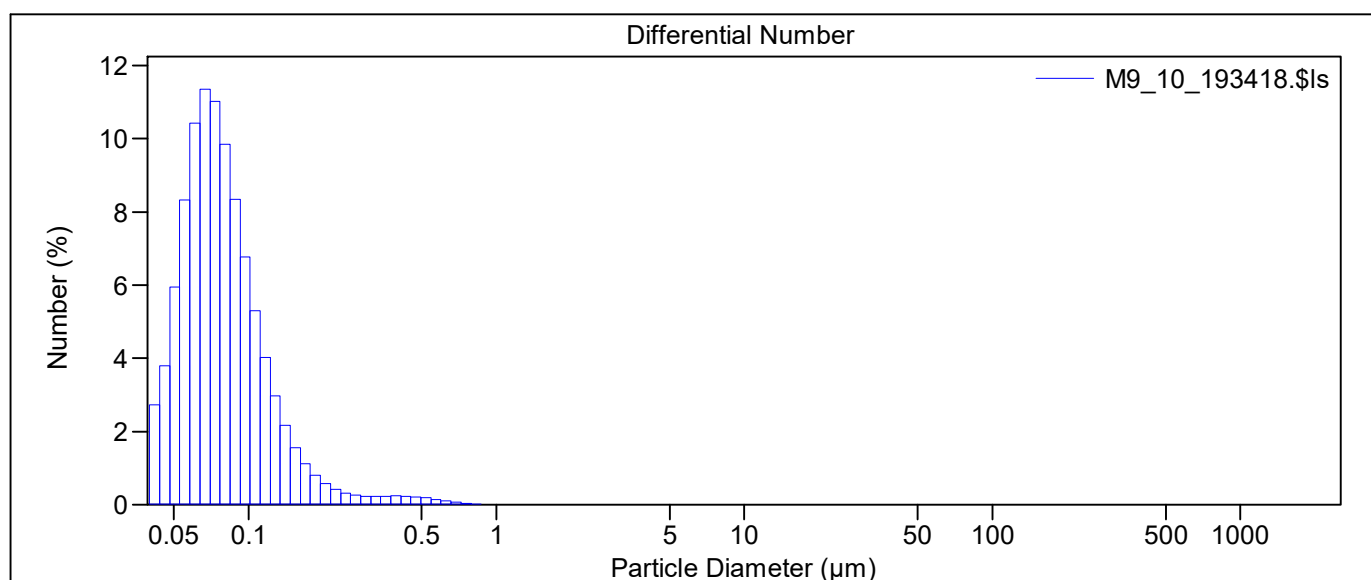
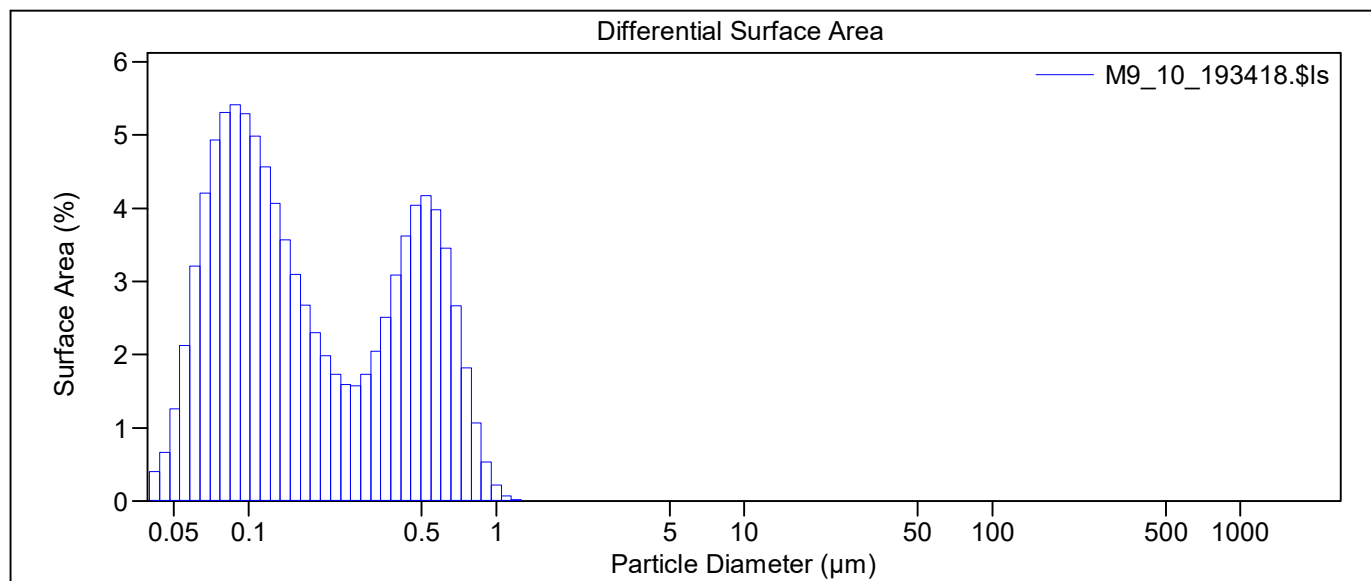
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_10_193418.\$ls		
	M9_10_193418.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	10		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.09%		
LS 13 320	Universal Liquid Module		
Start time:	19:32	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	47%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_10_193418.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%			
Mean:	0.442 μm	S.D.:	0.238 μm	
Median:	0.464 μm	Variance:	0.057 μm ²	
Mean/Median ratio:	0.952	C.V.:	54.0%	
Mode:	0.571 μm	Skewness:	0.083 Right skewed	
		Kurtosis:	-0.758 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.103 μm	0.221 μm	0.464 μm	0.615 μm	0.746 μm





M9.\$sav

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.065	0.40	2.73
2	0.044	0.046	0.12	0.67	3.79
3	0.048	0.050	0.25	1.26	5.94
4	0.053	0.055	0.46	2.13	8.33
5	0.058	0.061	0.76	3.21	10.4
6	0.064	0.067	1.09	4.21	11.3
7	0.070	0.073	1.40	4.93	11.0
8	0.077	0.080	1.65	5.31	9.85
9	0.084	0.088	1.85	5.41	8.34
10	0.093	0.097	1.99	5.30	6.77
11	0.102	0.106	2.06	4.99	5.29
12	0.112	0.117	2.06	4.56	4.02
13	0.122	0.128	2.02	4.07	2.97
14	0.134	0.141	1.94	3.56	2.16
15	0.148	0.155	1.85	3.10	1.56
16	0.162	0.170	1.76	2.67	1.12
17	0.178	0.186	1.66	2.30	0.80

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.57	1.98	0.57
19	0.214	0.225	1.51	1.74	0.41
20	0.235	0.247	1.52	1.59	0.32
21	0.258	0.271	1.65	1.58	0.26
22	0.284	0.297	1.99	1.73	0.24
23	0.311	0.326	2.59	2.05	0.23
24	0.342	0.358	3.48	2.51	0.24
25	0.375	0.393	4.70	3.09	0.24
26	0.412	0.431	6.05	3.62	0.23
27	0.452	0.474	7.40	4.04	0.22
28	0.496	0.520	8.40	4.17	0.19
29	0.545	0.571	8.79	3.98	0.15
30	0.598	0.627	8.38	3.46	0.11
31	0.656	0.688	7.10	2.66	0.068
32	0.721	0.755	5.33	1.82	0.038
33	0.791	0.829	3.44	1.07	0.019
34	0.868	0.910	1.87	0.53	0.0077
35	0.953	0.999	0.86	0.22	0.0027
36	1.047	1.097	0.30	0.071	0.00071
37	1.149	1.204	0.073	0.016	0.00013
38	1.261	1.321	0.012	0.0023	0.000016
39	1.385	1.451	0.00071	0.00013	0.000001
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

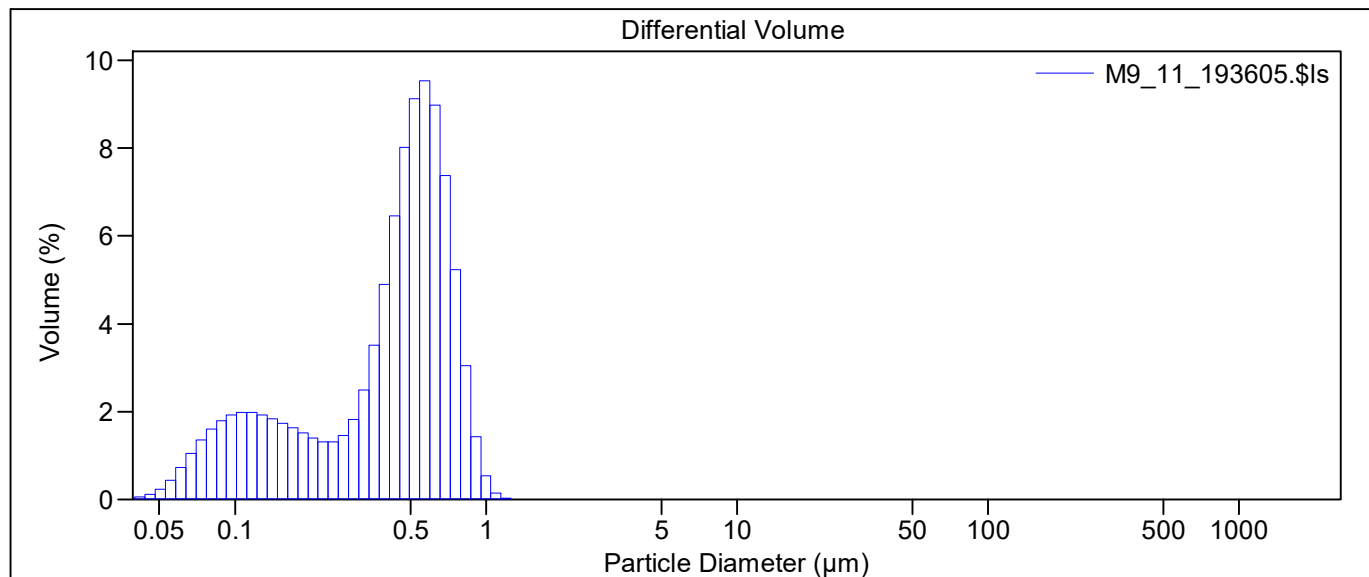
M9.\$av

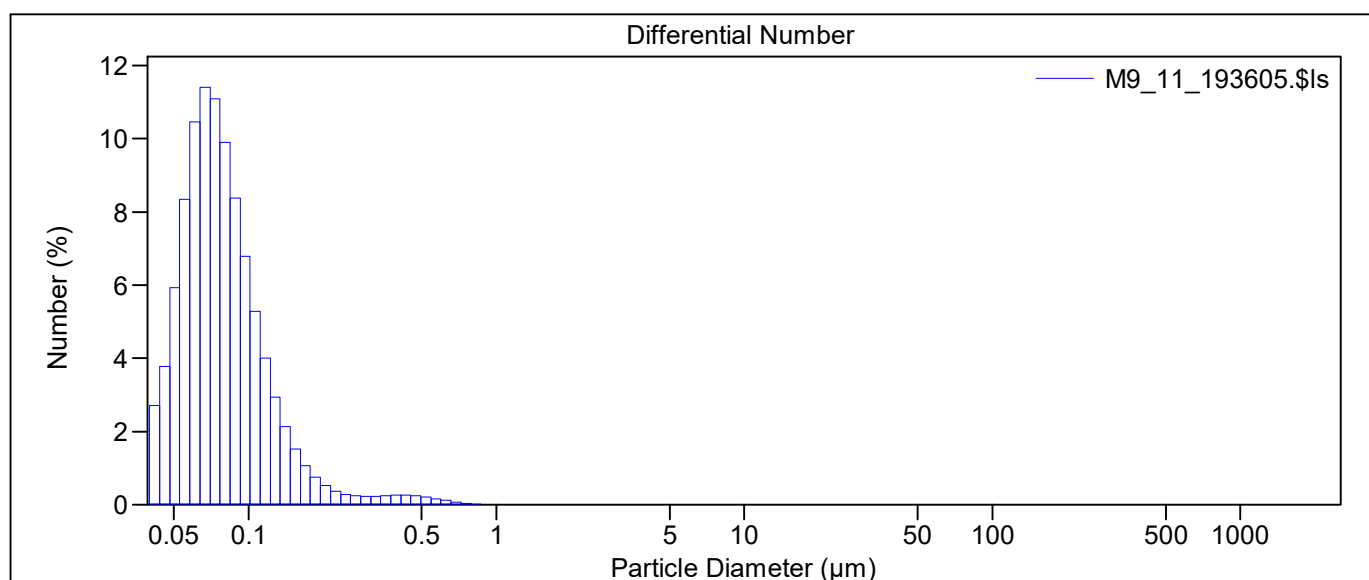
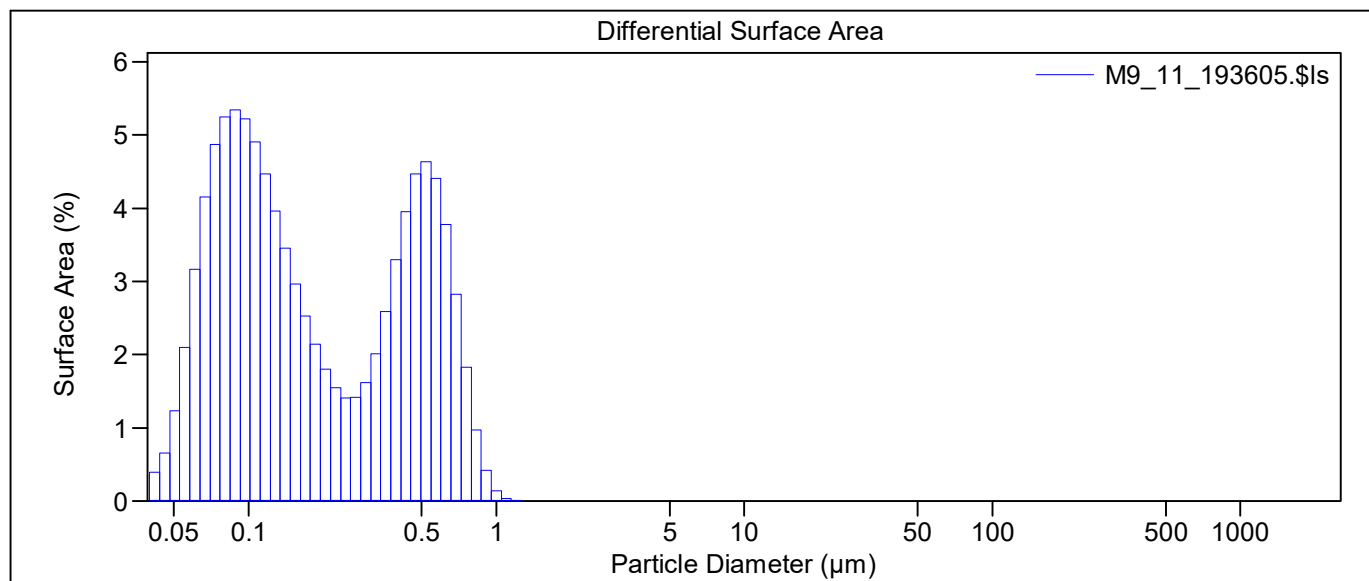
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_11_193605.\$ls		
	M9_11_193605.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	11		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	2.16%		
LS 13 320	Universal Liquid Module		
Start time:	19:34	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_11_193605.\$Is	
Calculations from 0.040 µm to 2000 µm				
Volume:	100%			
Mean:	0.443 µm	S.D.:	0.229 µm	
Median:	0.471 µm	Variance:	0.052 µm ²	
Mean/Median ratio:	0.941	C.V.:	51.6%	
Mode:	0.571 µm	Skewness:	-0.048 Left skewed	
		Kurtosis:	-0.799 Platykurtic	
<10%	<25%	<50%	<75%	<90%
0.105 µm	0.242 µm	0.471 µm	0.610 µm	0.726 µm





M9.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.062	0.39	2.71
2	0.044	0.046	0.11	0.65	3.78
3	0.048	0.050	0.24	1.24	5.93
4	0.053	0.055	0.44	2.09	8.34
5	0.058	0.061	0.73	3.17	10.5
6	0.064	0.067	1.05	4.16	11.4
7	0.070	0.073	1.35	4.88	11.1
8	0.077	0.080	1.60	5.24	9.90
9	0.084	0.088	1.79	5.35	8.37
10	0.093	0.097	1.92	5.22	6.79
11	0.102	0.106	1.98	4.91	5.29
12	0.112	0.117	1.98	4.47	4.00
13	0.122	0.128	1.93	3.97	2.94
14	0.134	0.141	1.84	3.45	2.13
15	0.148	0.155	1.74	2.97	1.52
16	0.162	0.170	1.63	2.53	1.07
17	0.178	0.186	1.51	2.14	0.75

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	1.40	1.80	0.53
19	0.214	0.225	1.32	1.55	0.37
20	0.235	0.247	1.32	1.41	0.28
21	0.258	0.271	1.45	1.42	0.24
22	0.284	0.297	1.82	1.62	0.22
23	0.311	0.326	2.49	2.01	0.23
24	0.342	0.358	3.51	2.59	0.25
25	0.375	0.393	4.90	3.29	0.26
26	0.412	0.431	6.46	3.95	0.26
27	0.452	0.474	8.01	4.47	0.24
28	0.496	0.520	9.13	4.64	0.21
29	0.545	0.571	9.53	4.41	0.17
30	0.598	0.627	8.97	3.78	0.12
31	0.656	0.688	7.37	2.83	0.073
32	0.721	0.755	5.24	1.83	0.039
33	0.791	0.829	3.05	0.97	0.017
34	0.868	0.910	1.43	0.42	0.0061
35	0.953	0.999	0.53	0.14	0.0017
36	1.047	1.097	0.15	0.035	0.00036
37	1.149	1.204	0.028	0.0061	0.000051
38	1.261	1.321	0.0034	0.00068	0.000005
39	1.385	1.451	0.00015	0.000027	1.58E-7
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

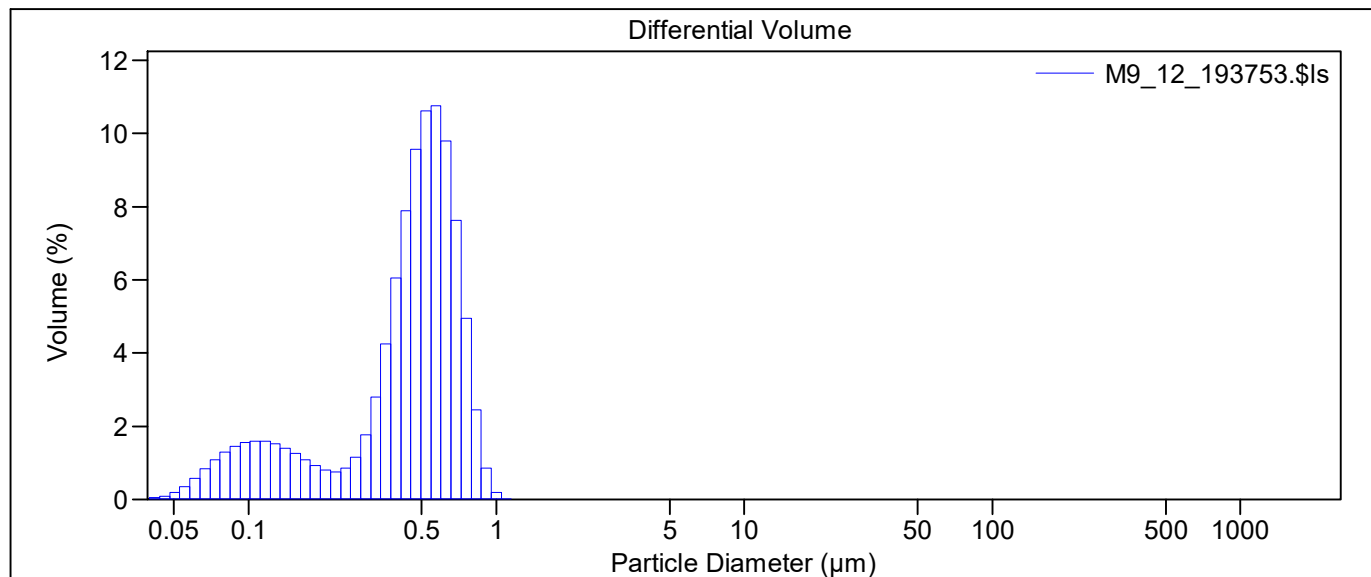
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	M9_12_193753.\$ls		
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Operator:	KW		
Run number:	12		
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Residual:	2.32%		
LS 13 320	Universal Liquid Module		
Start time:	19:36	Run length:	94 seconds
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Obscuration:	5%	PIDS Obscur:	48%
Fluid:	water		
Software:	6.01	Firmware:	2.02

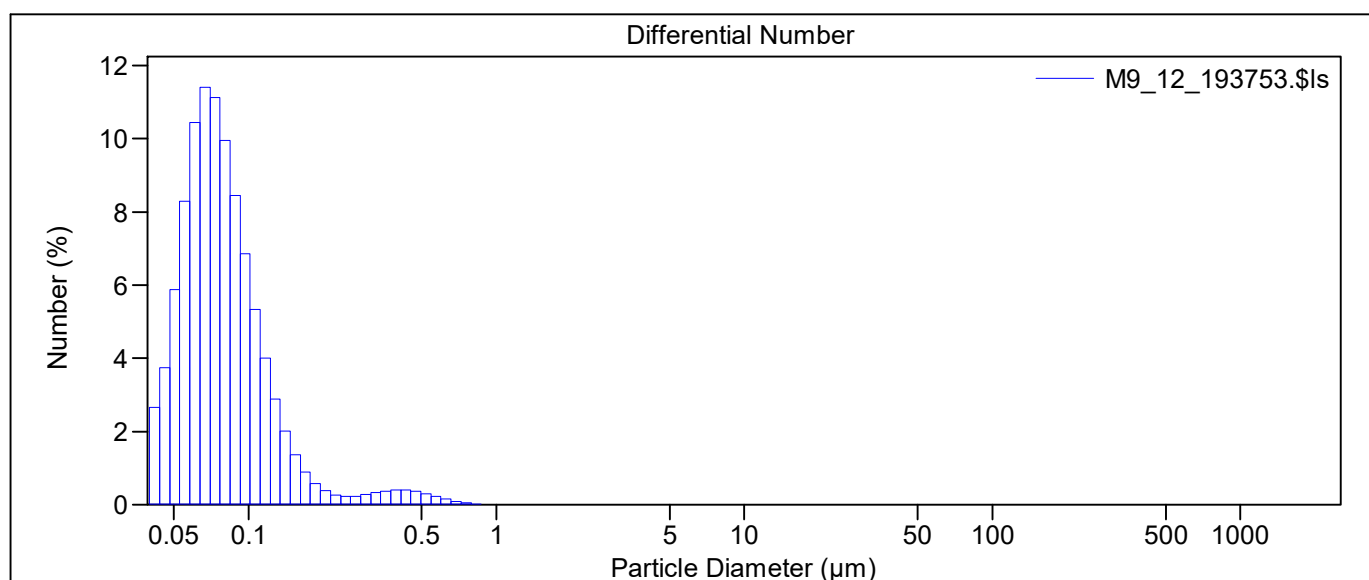
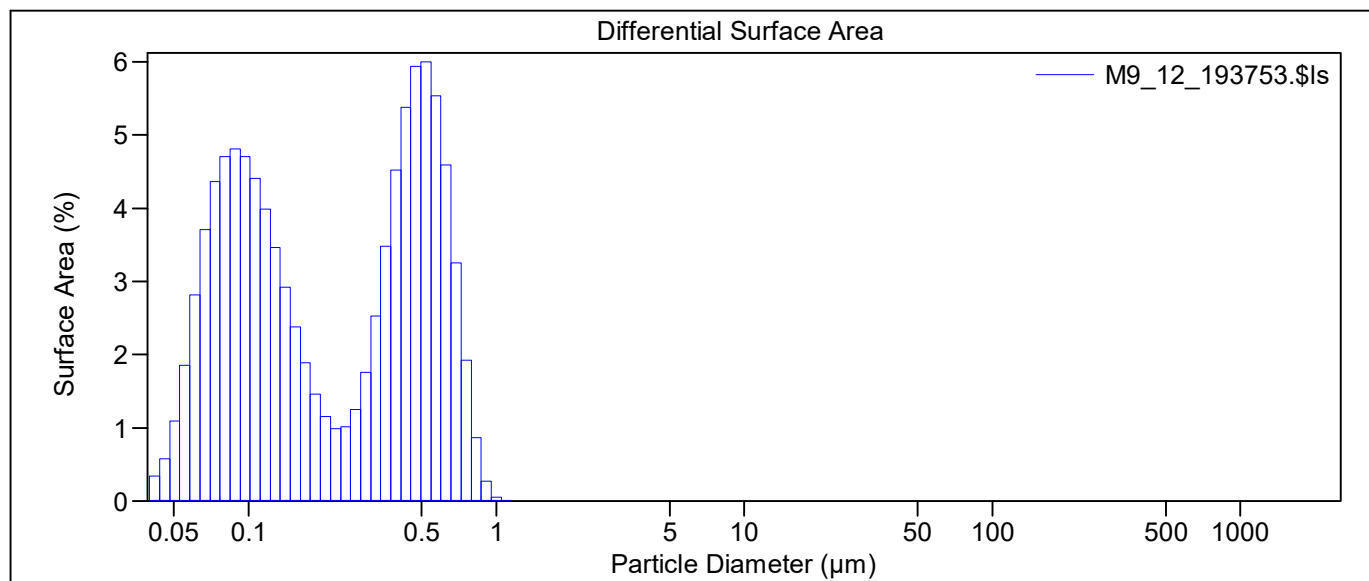
Volume Statistics (Arithmetic) M9_12_193753.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.206 µm
Mean:	0.458 µm	Variance:	0.043 µm ²
Median:	0.484 µm	C.V.:	45.0%
Mean/Median ratio:	0.948	Skewness:	-0.289 Left skewed
Mode:	0.571 µm	Kurtosis:	-0.565 Platykurtic

<10%	<25%	<50%	<75%	<90%
0.118 µm	0.342 µm	0.484 µm	0.603 µm	0.708 µm





M9.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.049	0.34	2.66
2	0.044	0.046	0.090	0.58	3.74
3	0.048	0.050	0.19	1.09	5.88
4	0.053	0.055	0.35	1.86	8.29
5	0.058	0.061	0.58	2.82	10.4
6	0.064	0.067	0.84	3.71	11.4
7	0.070	0.073	1.09	4.36	11.1
8	0.077	0.080	1.29	4.70	9.96
9	0.084	0.088	1.45	4.81	8.45
10	0.093	0.097	1.55	4.70	6.86
11	0.102	0.106	1.60	4.41	5.33
12	0.112	0.117	1.59	3.99	4.00
13	0.122	0.128	1.51	3.47	2.89
14	0.134	0.141	1.40	2.92	2.02
15	0.148	0.155	1.25	2.38	1.37
16	0.162	0.170	1.09	1.89	0.90
17	0.178	0.186	0.93	1.46	0.58

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	0.81	1.16	0.38
19	0.214	0.225	0.76	0.99	0.27
20	0.235	0.247	0.85	1.02	0.23
21	0.258	0.271	1.15	1.25	0.23
22	0.284	0.297	1.77	1.75	0.27
23	0.311	0.326	2.81	2.53	0.33
24	0.342	0.358	4.25	3.48	0.37
25	0.375	0.393	6.05	4.52	0.40
26	0.412	0.431	7.89	5.37	0.40
27	0.452	0.474	9.57	5.94	0.36
28	0.496	0.520	10.6	6.00	0.30
29	0.545	0.571	10.8	5.53	0.23
30	0.598	0.627	9.79	4.59	0.16
31	0.656	0.688	7.63	3.26	0.094
32	0.721	0.755	4.95	1.92	0.046
33	0.791	0.829	2.45	0.87	0.017
34	0.868	0.910	0.85	0.28	0.0046
35	0.953	0.999	0.19	0.056	0.00077
36	1.047	1.097	0.023	0.0061	0.000070
37	1.149	1.204	0.00084	0.00020	0.000002
38	1.261	1.321	0	0	0
39	1.385	1.451	0	0	0
40	1.520	1.592	0	0	0
41	1.668	1.748	0	0	0
42	1.832	1.919	0	0	0
43	2.011	2.107	0	0	0
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

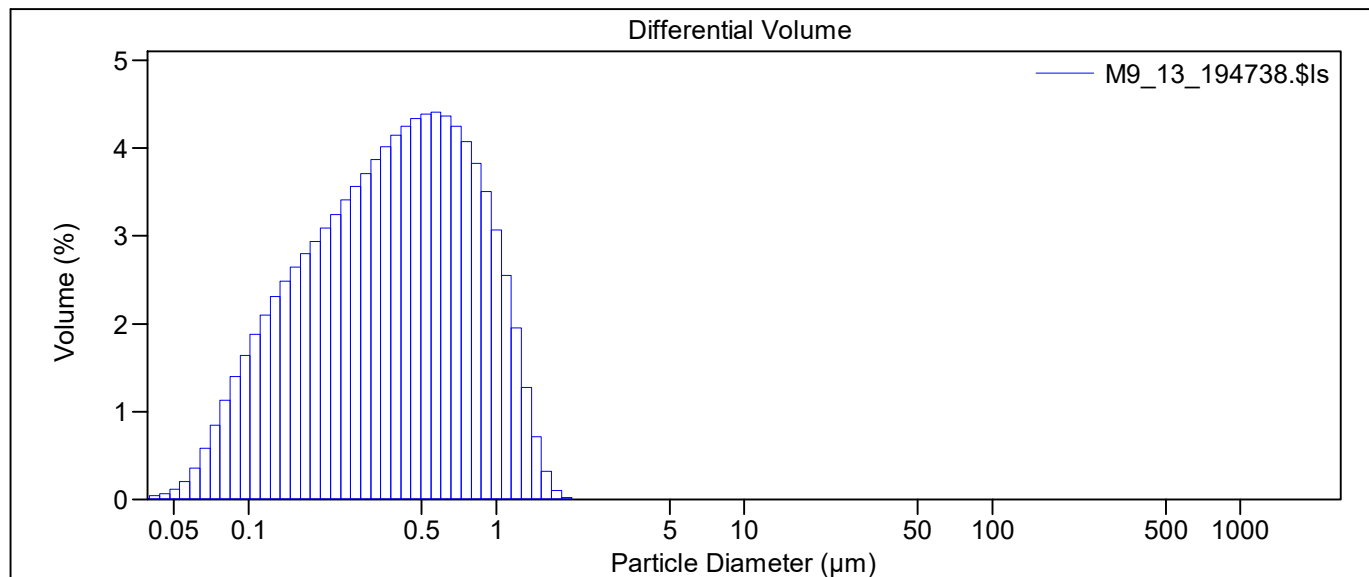
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Operator:	KW		
Run number:	13		
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Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	1.37%		
LS 13 320	Universal Liquid Module		
Start time:	19:45	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	44%
Fluid:	water		
Software:	6.01	Firmware:	2.02

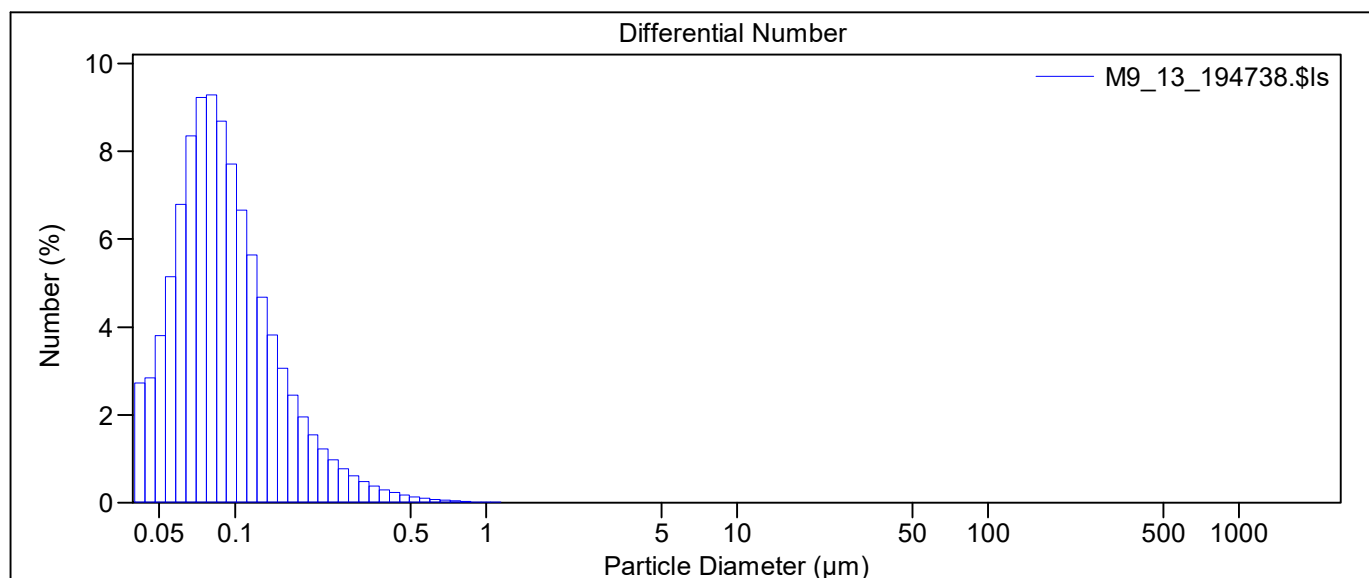
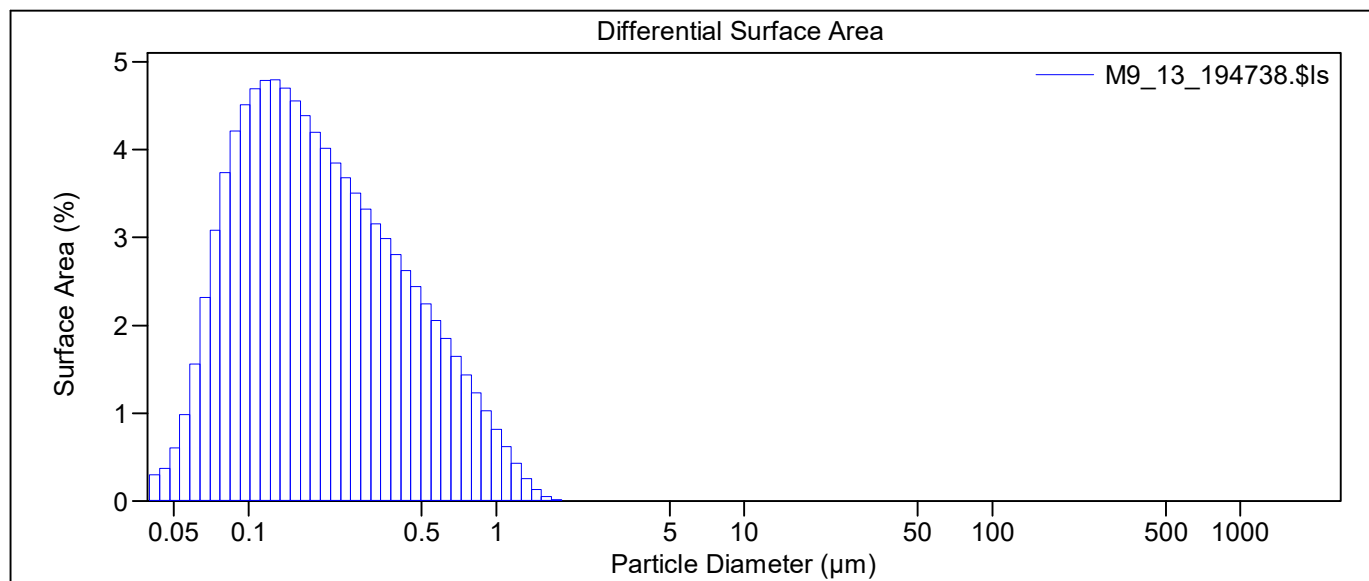
Volume Statistics (Arithmetic) M9_13_194738.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.328 µm
Mean:	0.471 µm	Variance:	0.108 µm ²
Median:	0.389 µm	C.V.:	69.7%
Mean/Median ratio:	1.211	Skewness:	0.985 Right skewed
Mode:	0.571 µm	Kurtosis:	0.471 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.121 µm	0.204 µm	0.389 µm	0.666 µm	0.954 µm





M9.\$av

Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.047	0.30	2.72
2	0.044	0.046	0.065	0.37	2.84
3	0.048	0.050	0.11	0.60	3.81
4	0.053	0.055	0.20	0.98	5.14
5	0.058	0.061	0.36	1.56	6.80
6	0.064	0.067	0.58	2.32	8.35
7	0.070	0.073	0.85	3.08	9.23
8	0.077	0.080	1.13	3.74	9.28
9	0.084	0.088	1.40	4.21	8.69
10	0.093	0.097	1.64	4.51	7.71
11	0.102	0.106	1.88	4.69	6.66
12	0.112	0.117	2.10	4.79	5.64
13	0.122	0.128	2.31	4.79	4.69
14	0.134	0.141	2.49	4.70	3.81
15	0.148	0.155	2.64	4.55	3.06
16	0.162	0.170	2.80	4.39	2.45
17	0.178	0.186	2.94	4.20	1.95

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.09	4.02	1.55
19	0.214	0.225	3.24	3.85	1.23
20	0.235	0.247	3.41	3.68	0.97
21	0.258	0.271	3.56	3.51	0.77
22	0.284	0.297	3.71	3.32	0.61
23	0.311	0.326	3.87	3.16	0.48
24	0.342	0.358	4.02	2.99	0.37
25	0.375	0.393	4.15	2.81	0.29
26	0.412	0.431	4.25	2.62	0.23
27	0.452	0.474	4.34	2.44	0.18
28	0.496	0.520	4.39	2.25	0.13
29	0.545	0.571	4.41	2.06	0.10
30	0.598	0.627	4.36	1.85	0.076
31	0.656	0.688	4.25	1.65	0.056
32	0.721	0.755	4.07	1.44	0.041
33	0.791	0.829	3.83	1.23	0.029
34	0.868	0.910	3.50	1.03	0.020
35	0.953	0.999	3.07	0.82	0.013
36	1.047	1.097	2.55	0.62	0.0083
37	1.149	1.204	1.95	0.43	0.0048
38	1.261	1.321	1.28	0.26	0.0024
39	1.385	1.451	0.71	0.13	0.0010
40	1.520	1.592	0.32	0.053	0.00034
41	1.668	1.748	0.100	0.015	0.000080
42	1.832	1.919	0.022	0.0031	0.000014
43	2.011	2.107	0.0022	0.00028	0.000001
44	2.207	2.313	0	0	0
45	2.423	2.539	0	0	0
46	2.660	2.787	0	0	0
47	2.920	3.059	0	0	0
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

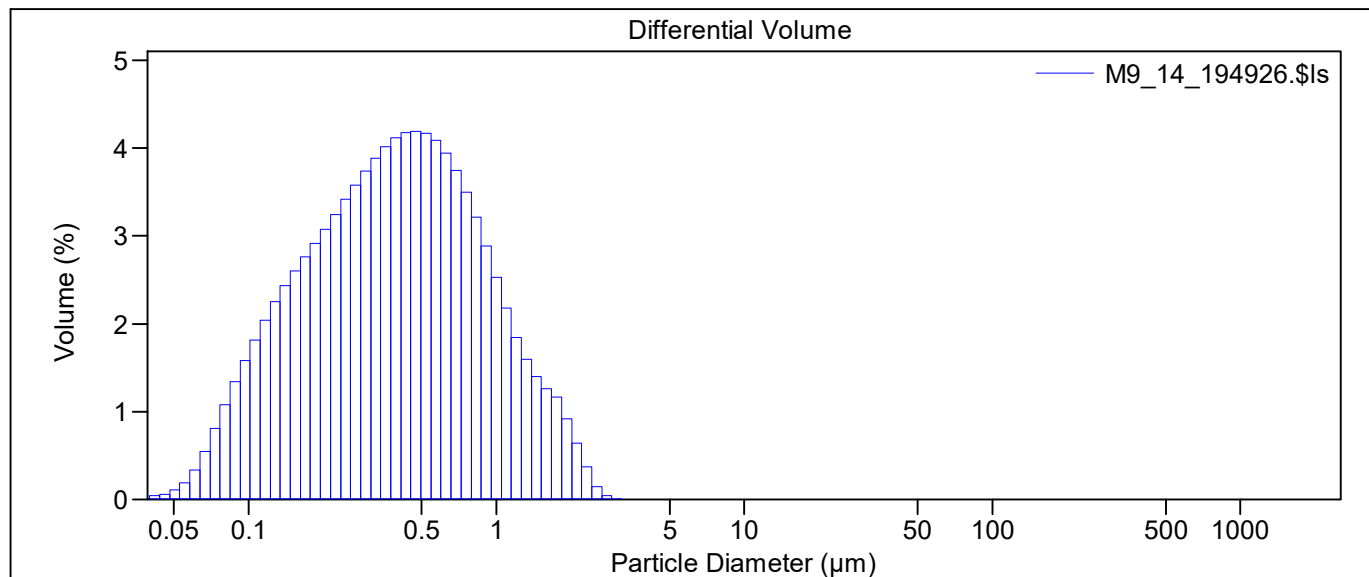
M9.\$av

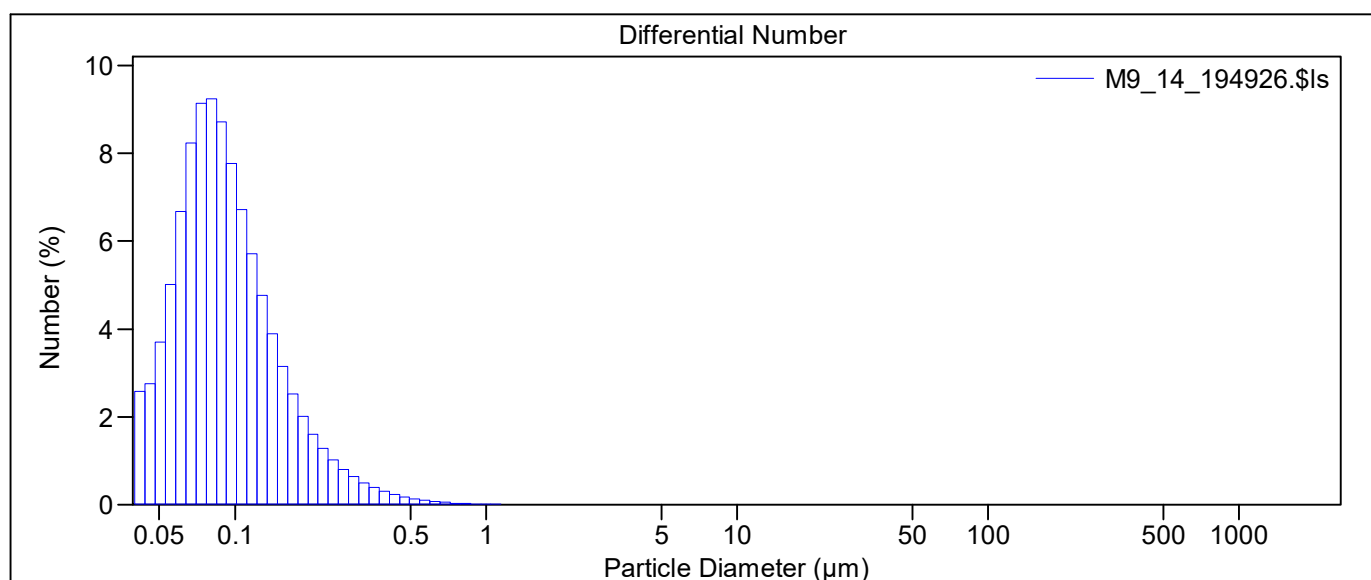
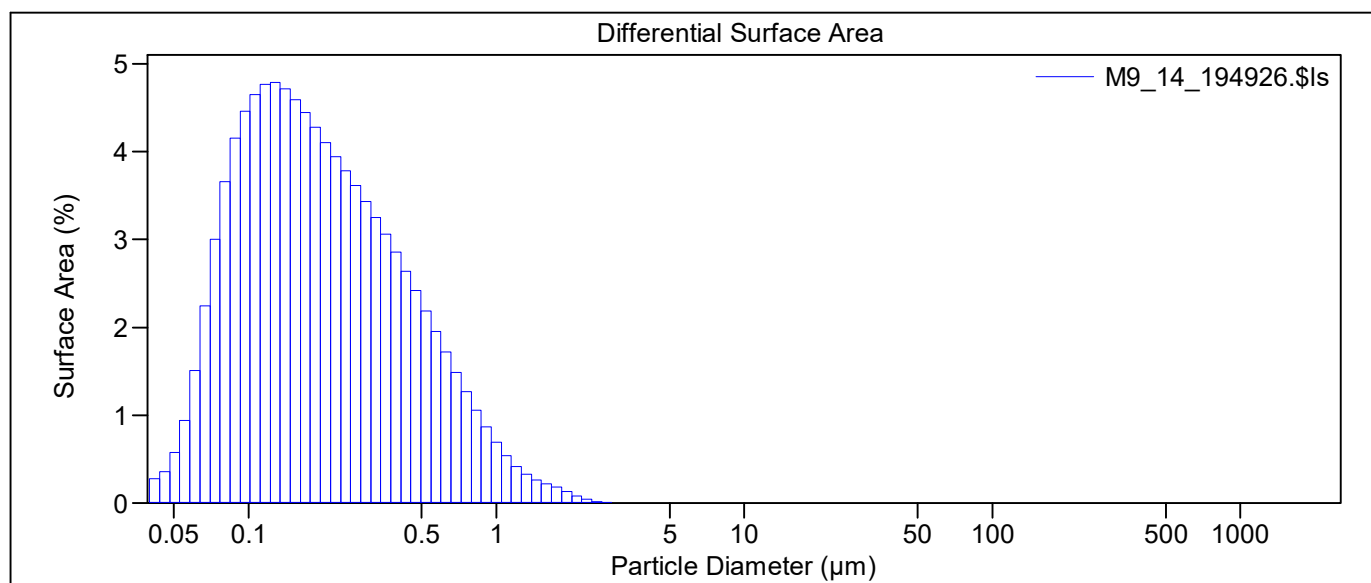
Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_14_194926.\$ls		
	M9_14_194926.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	14		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.27%		
LS 13 320	Universal Liquid Module		
Start time:	19:47	Run length:	94 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

Volume Statistics (Arithmetic)			M9_14_194926.\$Is	
Calculations from 0.040 μm to 2000 μm				
Volume:	100%		S.D.:	0.439 μm
Mean:	0.526 μm		Variance:	0.193 μm ²
Median:	0.394 μm		C.V.:	83.4%
Mean/Median ratio:	1.336		Skewness:	1.665 Right skewed
Mode:	0.474 μm		Kurtosis:	3.018 Leptokurtic
<10%	<25%	<50%	<75%	<90%
0.123 μm	0.208 μm	0.394 μm	0.698 μm	1.120 μm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.042	0.28	2.58
2	0.044	0.046	0.060	0.36	2.75
3	0.048	0.050	0.11	0.58	3.70
4	0.053	0.055	0.19	0.94	5.01
5	0.058	0.061	0.34	1.51	6.67
6	0.064	0.067	0.55	2.24	8.23
7	0.070	0.073	0.81	3.00	9.14
8	0.077	0.080	1.08	3.66	9.25
9	0.084	0.088	1.34	4.16	8.71
10	0.093	0.097	1.59	4.46	7.76
11	0.102	0.106	1.81	4.65	6.72
12	0.112	0.117	2.04	4.76	5.71
13	0.122	0.128	2.25	4.79	4.76
14	0.134	0.141	2.43	4.72	3.89
15	0.148	0.155	2.60	4.59	3.14
16	0.162	0.170	2.76	4.44	2.52
17	0.178	0.186	2.92	4.28	2.02

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.08	4.11	1.61
19	0.214	0.225	3.24	3.95	1.28
20	0.235	0.247	3.42	3.78	1.02
21	0.258	0.271	3.58	3.61	0.81
22	0.284	0.297	3.74	3.43	0.64
23	0.311	0.326	3.89	3.25	0.50
24	0.342	0.358	4.02	3.06	0.39
25	0.375	0.393	4.11	2.86	0.30
26	0.412	0.431	4.17	2.64	0.23
27	0.452	0.474	4.19	2.42	0.18
28	0.496	0.520	4.17	2.19	0.13
29	0.545	0.571	4.09	1.96	0.098
30	0.598	0.627	3.95	1.72	0.072
31	0.656	0.688	3.75	1.49	0.051
32	0.721	0.755	3.50	1.27	0.036
33	0.791	0.829	3.21	1.06	0.025
34	0.868	0.910	2.89	0.87	0.017
35	0.953	0.999	2.53	0.69	0.011
36	1.047	1.097	2.18	0.54	0.0074
37	1.149	1.204	1.85	0.42	0.0047
38	1.261	1.321	1.59	0.33	0.0031
39	1.385	1.451	1.40	0.26	0.0021
40	1.520	1.592	1.26	0.22	0.0014
41	1.668	1.748	1.16	0.18	0.00097
42	1.832	1.919	0.92	0.13	0.00058
43	2.011	2.107	0.64	0.083	0.00031
44	2.207	2.313	0.37	0.044	0.00014
45	2.423	2.539	0.14	0.016	0.000039
46	2.660	2.787	0.041	0.0040	0.000009
47	2.920	3.059	0.0062	0.00056	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				

Beckman Coulter LS13320

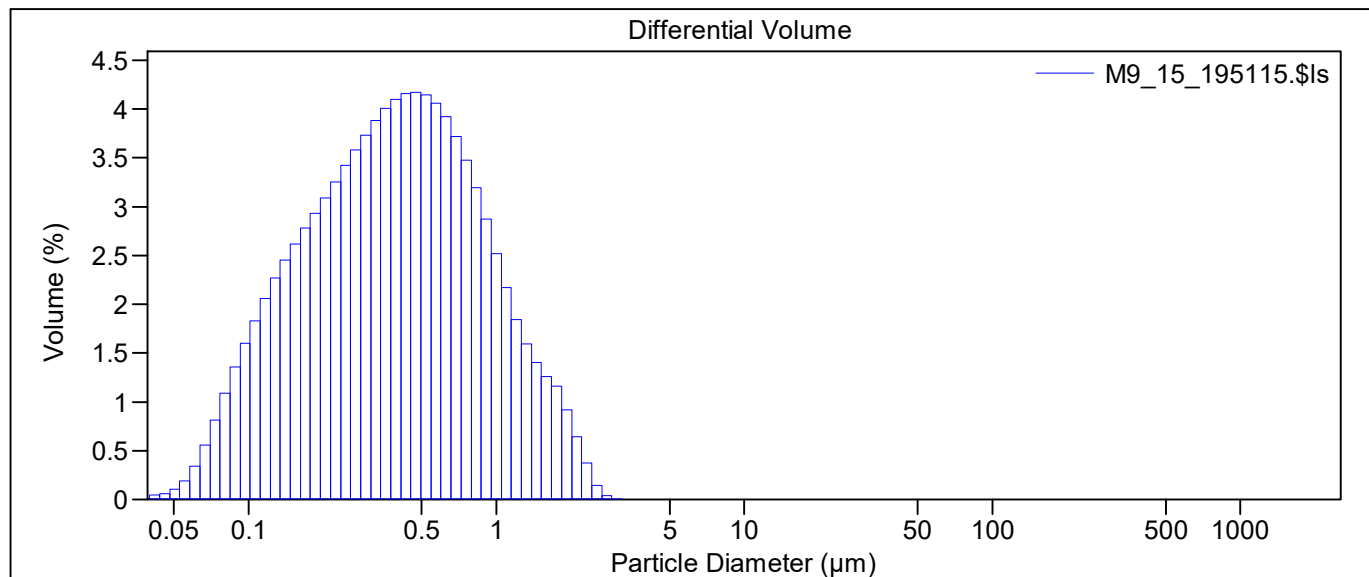
File name:	D:\KW\PROFARB\POMIARY\ TiO2\M9\M9_15_195115.\$ls		
	M9_15_195115.\$ls		
File ID:	M9		
Operator:	KW		
Run number:	15		
Optical model:	TiO2_KW.rf780d PIDS included		
Fluid R.I.:	1.333	Sample R.I.:	2.8 i0
Residual:	0.27%		
LS 13 320	Universal Liquid Module		
Start time:	19:49	Run length:	95 seconds
Pump speed:	50%		
Obscuration:	5%	PIDS Obscur:	45%
Fluid:	water		
Software:	6.01	Firmware:	2.02

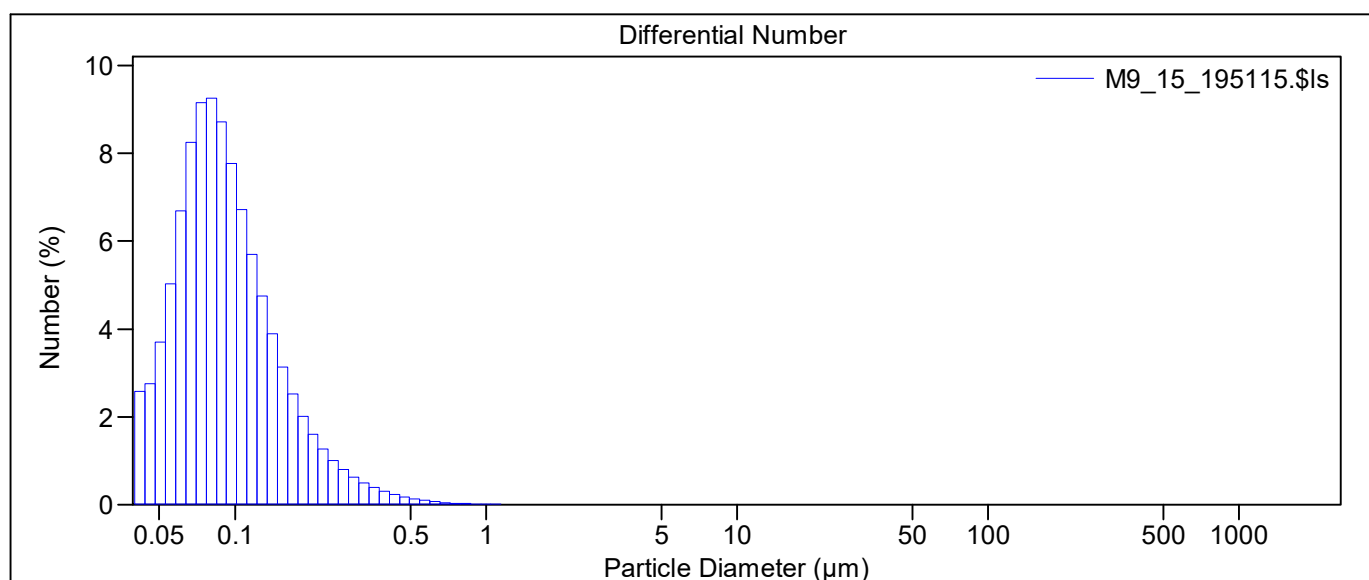
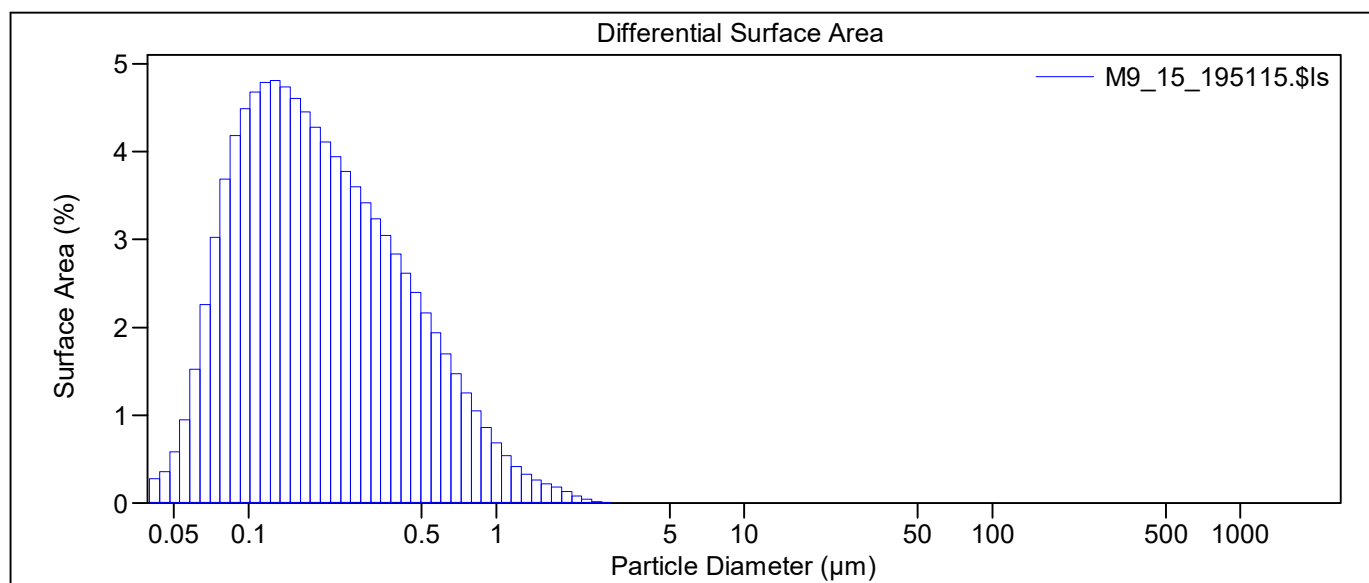
Volume Statistics (Arithmetic) M9_15_195115.\$ls

Calculations from 0.040 µm to 2000 µm

Volume:	100%	S.D.:	0.439 µm
Mean:	0.525 µm	Variance:	0.193 µm ²
Median:	0.392 µm	C.V.:	83.7%
Mean/Median ratio:	1.339	Skewness:	1.666 Right skewed
Mode:	0.474 µm	Kurtosis:	3.015 Leptokurtic

<10%	<25%	<50%	<75%	<90%
0.122 µm	0.207 µm	0.392 µm	0.697 µm	1.120 µm





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Channel Number	Channel Diameter (Lower) μm	Channel Diameter (Center) μm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
1	0.040	0.042	0.043	0.28	2.59
2	0.044	0.046	0.061	0.36	2.75
3	0.048	0.050	0.11	0.58	3.71
4	0.053	0.055	0.19	0.95	5.02
5	0.058	0.061	0.34	1.52	6.69
6	0.064	0.067	0.55	2.26	8.25
7	0.070	0.073	0.82	3.02	9.16
8	0.077	0.080	1.09	3.68	9.26
9	0.084	0.088	1.36	4.18	8.72
10	0.093	0.097	1.60	4.49	7.77
11	0.102	0.106	1.83	4.68	6.72
12	0.112	0.117	2.06	4.79	5.71
13	0.122	0.128	2.27	4.81	4.76
14	0.134	0.141	2.45	4.74	3.89
15	0.148	0.155	2.62	4.61	3.14
16	0.162	0.170	2.78	4.45	2.52
17	0.178	0.186	2.93	4.28	2.01

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
18	0.195	0.205	3.09	4.11	1.60
19	0.214	0.225	3.26	3.94	1.27
20	0.235	0.247	3.42	3.78	1.01
21	0.258	0.271	3.58	3.60	0.80
22	0.284	0.297	3.74	3.42	0.63
23	0.311	0.326	3.88	3.24	0.50
24	0.342	0.358	4.01	3.04	0.39
25	0.375	0.393	4.10	2.84	0.30
26	0.412	0.431	4.16	2.62	0.23
27	0.452	0.474	4.17	2.40	0.17
28	0.496	0.520	4.14	2.17	0.13
29	0.545	0.571	4.06	1.94	0.097
30	0.598	0.627	3.92	1.70	0.071
31	0.656	0.688	3.72	1.47	0.051
32	0.721	0.755	3.48	1.25	0.036
33	0.791	0.829	3.19	1.05	0.025
34	0.868	0.910	2.87	0.86	0.017
35	0.953	0.999	2.52	0.69	0.011
36	1.047	1.097	2.17	0.54	0.0073
37	1.149	1.204	1.84	0.42	0.0047
38	1.261	1.321	1.60	0.33	0.0031
39	1.385	1.451	1.40	0.26	0.0020
40	1.520	1.592	1.26	0.22	0.0014
41	1.668	1.748	1.16	0.18	0.00097
42	1.832	1.919	0.92	0.13	0.00058
43	2.011	2.107	0.64	0.083	0.00030
44	2.207	2.313	0.37	0.044	0.00013
45	2.423	2.539	0.14	0.015	0.000039
46	2.660	2.787	0.041	0.0040	0.000008
47	2.920	3.059	0.0062	0.00055	0.000001
48	3.205	3.358	0	0	0
49	3.519	3.687	0	0	0
50	3.863	4.047	0	0	0
51	4.240	4.443	0	0	0
52	4.655	4.877	0	0	0
53	5.110	5.354	0	0	0
54	5.610	5.878	0	0	0
55	6.158	6.452	0	0	0
56	6.760	7.083	0	0	0
57	7.421	7.775	0	0	0
58	8.147	8.536	0	0	0
59	8.943	9.370	0	0	0
60	9.817	10.29	0	0	0
61	10.78	11.29	0	0	0
62	11.83	12.40	0	0	0

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Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
63	12.99	13.61	0	0	0
64	14.26	14.94	0	0	0
65	15.65	16.40	0	0	0
66	17.18	18.00	0	0	0
67	18.86	19.76	0	0	0
68	20.70	21.69	0	0	0
69	22.73	23.81	0	0	0
70	24.95	26.14	0	0	0
71	27.39	28.70	0	0	0
72	30.07	31.50	0	0	0
73	33.01	34.58	0	0	0
74	36.24	37.97	0	0	0
75	39.78	41.68	0	0	0
76	43.67	45.75	0	0	0
77	47.94	50.22	0	0	0
78	52.62	55.13	0	0	0
79	57.77	60.52	0	0	0
80	63.41	66.44	0	0	0
81	69.61	72.94	0	0	0
82	76.42	80.07	0	0	0
83	83.89	87.90	0	0	0
84	92.09	96.49	0	0	0
85	101.1	105.9	0	0	0
86	111.0	116.3	0	0	0
87	121.8	127.6	0	0	0
88	133.7	140.1	0	0	0
89	146.8	153.8	0	0	0
90	161.2	168.9	0	0	0
91	176.9	185.4	0	0	0
92	194.2	203.5	0	0	0
93	213.2	223.4	0	0	0
94	234.1	245.2	0	0	0
95	256.9	269.2	0	0	0
96	282.1	295.5	0	0	0
97	309.6	324.4	0	0	0
98	339.9	356.1	0	0	0
99	373.1	390.9	0	0	0
100	409.6	429.2	0	0	0
101	449.7	471.1	0	0	0
102	493.6	517.2	0	0	0
103	541.9	567.7	0	0	0
104	594.9	623.3	0	0	0
105	653.0	684.2	0	0	0
106	716.8	751.1	0	0	0
107	786.9	824.5	0	0	0

M9.\$av

Channel Number	Channel Diameter (Lower) µm	Channel Diameter (Center) µm	Diff. Volume %	Diff. Surface Area %	Diff. Number %
108	863.9	905.1	0	0	0
109	948.3	993.6	0	0	0
110	1041	1091	0	0	0
111	1143	1197	0	0	0
112	1255	1314	0	0	0
113	1377	1443	0	0	0
114	1512	1584	0	0	0
115	1660	1739	0	0	0
116	1822	1909	0	0	0
	2000				