

General data

Description:

Project number: ELN_0634

Done by: Date: 12/1/2017

Specification: PA_01_5x

Contact data

Company: Contact: Adress:

ZIP: City:

Component data

Component no.: Component name:

Comment:

System data

Manufacturer: Carl Zeiss Microscopy GmbH

Microscope: Axio Imager.M2

Objective: EC Epiplan 5x/0.13 HD M27

Pixel scaling: 1.43 µm/Pixel

Camera: Axiocam 503 color Resolution: 1936 x 1460 Pixel

Software: AxioVision Particle Analyzer Release: 4.9.1 (08-2013)

Gravimetry

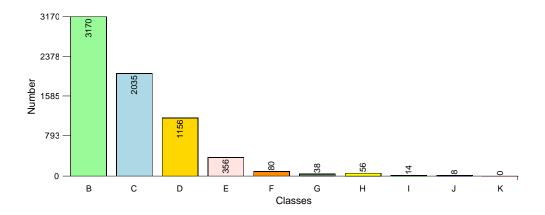
Membrane filter weight Results

Before filtration: mg Blank value: G = mgAfter filtration: mg Cleanliness value: G = mg

Residue weight: mg

Evaluation of all particles

Class distribution (by count)

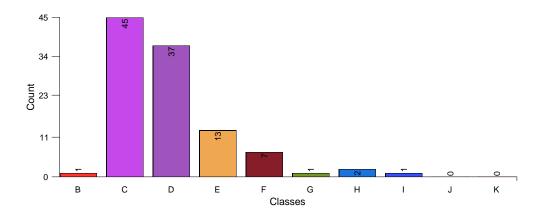


Particle size distribution

Class	>=	<	Absolute number of particles	Normalized particle count per N	
В	5	15	3170	3170	
С	15	25	2035	2035	
D	25	50	1156	1156	
E	50	100	356	356	
F	100	150	80	80	
G	150	200	38	38	
Н	200	400	56	56	
I	400	600	14	14	
J	600	1000	8	8	
К	1000		0	0	

Evaluation of reflective particles

Class distribution (by count)

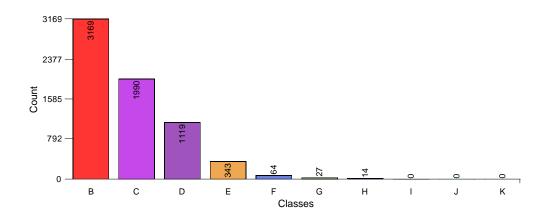


Non-reflective particle size distribution

Class	>=	<	Absolute number of particles	Normalized particle count per N	
В	5	15	1	1	
С	15	25	45	45	
D	25	50	37	37	
E	50	100	13	13	
F	100	150	7	7	
G	150	200	1	1	
Н	200	400	2	2	
I	400	600	1	1	
J	600	1000	0	0	
K	1000		0	0	

Evaluation of non-reflective particles

Class distribution (by count)

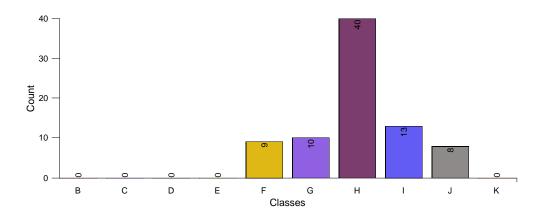


Non-reflective particle size distribution

Class	>=	<	Absolute number of particles	Normalized particle count per N	
В	5	15	3169	3169	
С	15	25	1990	1990	
D	25	50	1119	1119	
E	50	100	343	343	
F	100	150	64	64	
G	150	200	27	27	
Н	200	400	14	14	
I	400	600	0	0	
J	600	1000	0	0	
K	1000		0	0	

Evaluation of fibrous particles

Class distribution (by count)



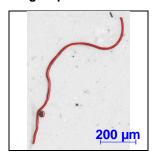
Fibrous particle size distribution

Class	>=	<	Absolute number of particles	Normalized particle count per N	
В	5	15	0	0	
С	15	25	0	0	
D	25	50	0	0	
Е	50	100	0	0	
F	100	150	9	9	
G	150	200	10	10	
Н	200	400	40	40	
I	400	600	13	13	
J	600	1000	8	8	
K	1000		0	0	

Evaluation of particle height

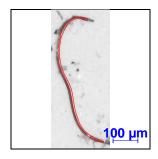
IndexRegio	Feretmaximum	Feretminimum	Maximuminscribedcircle	ParticleTyp	Z value
n	[µm]	[µm]	[µm]	е	Z value

Largest particle



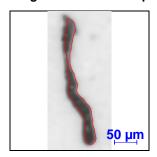
Particle ID: 263 Length [µm]: 866.41 Particle type: fibrous

Largest reflective particle



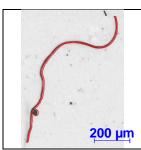
Particle ID: 2680 Length [µm]: 516.83

Largest non-reflective particle



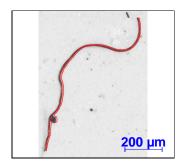
Particle ID: 6655 **Length [μm]:** 287.91

Largest fibrous particle

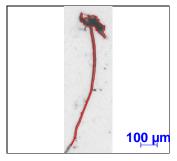


Particle ID: 263 Length [µm]: 866.41

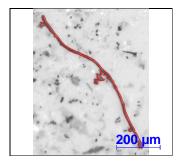
Gallery of all particles



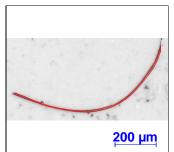
Particle ID: 263 Length [µm]: 866.41 Particle type: fibrous



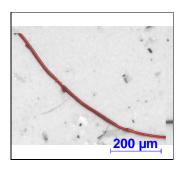
Particle ID: 2816 Length [µm]: 815.50 Particle type: fibrous



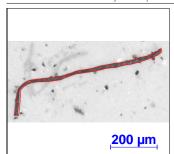
Particle ID: 3535 Length [µm]: 760.24 Particle type: fibrous



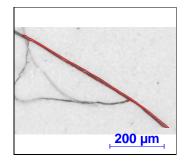
Particle ID: 5471 Length [µm]: 755.87 Particle type: fibrous



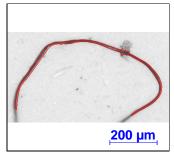
Particle ID: 2625 Length [µm]: 711.81 Particle type: fibrous



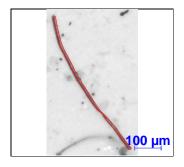
Particle ID: 2573 Length [µm]: 690.88 Particle type: fibrous



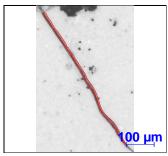
Particle ID: 528 Length [µm]: 643.77 Particle type: fibrous



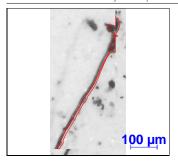
Particle ID: 191 Length [µm]: 627.68 Particle type: fibrous



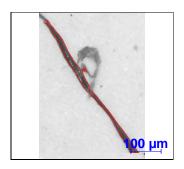
Particle ID: 2199 Length [µm]: 587.88 Particle type: fibrous



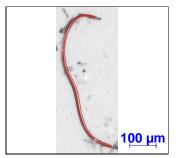
Particle ID: 1423 Length [µm]: 570.20 Particle type: fibrous



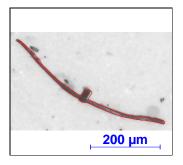
Particle ID: 1158 Length [µm]: 550.08 Particle type: fibrous



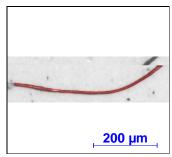
Particle ID: 4749 Length [µm]: 529.41 Particle type: fibrous



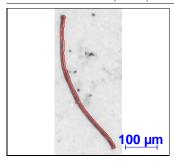
Particle ID: 2680 Length [µm]: 516.83 Particle type: reflective



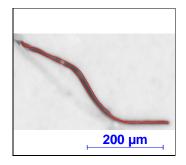
Particle ID: 2316 Length [µm]: 483.70 Particle type: fibrous



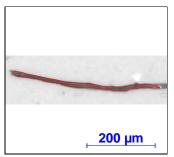
Particle ID: 4771 Length [µm]: 465.66 Particle type: fibrous



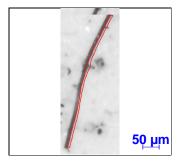
Particle ID: 2654 Length [µm]: 451.80 Particle type: fibrous



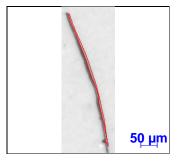
Particle ID: 4853 Length [µm]: 440.76 Particle type: fibrous



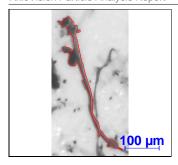
Particle ID: 6910 Length [µm]: 435.97 Particle type: fibrous



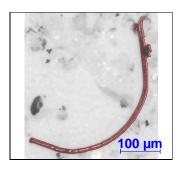
Particle ID: 1230 Length [µm]: 429.99 Particle type: fibrous



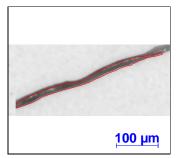
Particle ID: 965 Length [µm]: 427.45 Particle type: fibrous



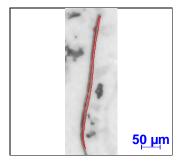
Particle ID: 3956 Length [µm]: 425.79 Particle type: fibrous



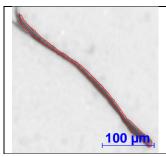
Particle ID: 2412 Length [µm]: 415.72 Particle type: fibrous



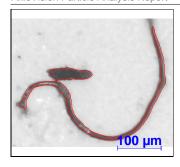
Particle ID: 6372 Length [µm]: 377.19 Particle type: fibrous



Particle ID: 718 Length [µm]: 365.78 Particle type: fibrous



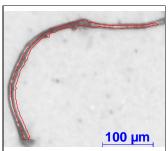
Particle ID: 948 Length [µm]: 358.79 Particle type: fibrous



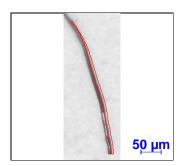
Particle ID: 3651 Length [µm]: 358.35 Particle type: fibrous



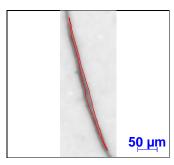
Particle ID: 568 Length [µm]: 355.83 Particle type: fibrous



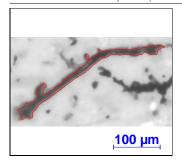
Particle ID: 1608 Length [µm]: 351.86 Particle type: fibrous



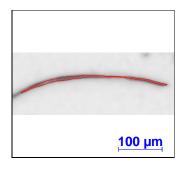
Particle ID: 4746 Length [µm]: 351.58 Particle type: fibrous



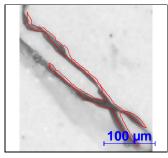
Particle ID: 486 Length [µm]: 350.85 Particle type: fibrous



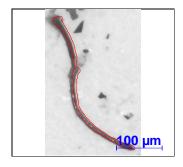
Particle ID: 4464 Length [µm]: 348.67 Particle type: fibrous



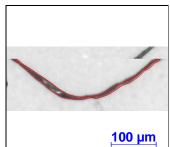
Particle ID: 6215 Length [µm]: 341.40 Particle type: fibrous



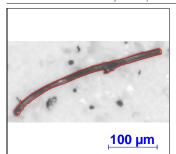
Particle ID: 1581 Length [µm]: 339.80 Particle type: fibrous



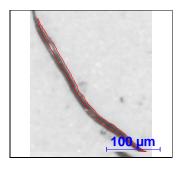
Particle ID: 6079 Length [µm]: 339.32 Particle type: fibrous



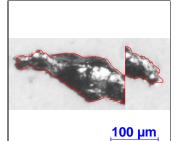
Particle ID: 3298 Length [µm]: 326.40 Particle type: fibrous



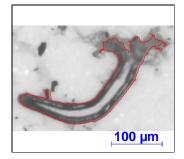
Particle ID: 5989 Length [µm]: 324.32 Particle type: fibrous



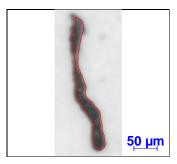
Particle ID: 3245 Length [µm]: 322.11 Particle type: fibrous



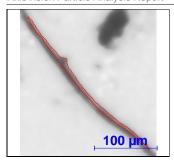
Particle ID: 294 Length [µm]: 317.97 Particle type: reflective



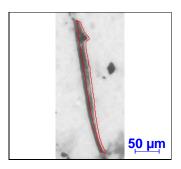
Particle ID: 2894 Length [µm]: 314.98 Particle type: fibrous



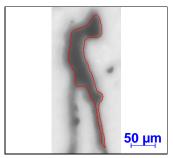
Particle ID: 6655 Length [μm]: 287.91 Particle type: non-reflective



Particle ID: 866 Length [µm]: 286.48 Particle type: fibrous

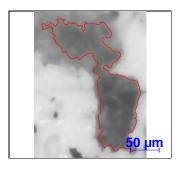


Particle ID: 1315 Length [µm]: 282.91 Particle type: fibrous

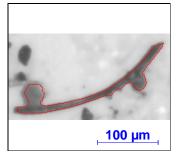


Particle ID: 1090 Length [μm]: 275.91

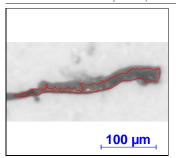
Particle type: non-reflective



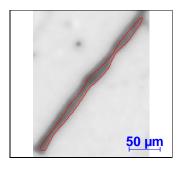
Particle ID: 3674 Length [µm]: 273.10 Particle type: non-reflective



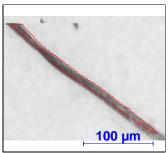
Particle ID: 3404 Length [µm]: 270.37 Particle type: fibrous



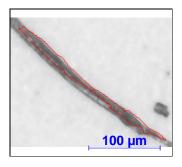
Particle ID: 6909 Length [µm]: 270.16 Particle type: fibrous



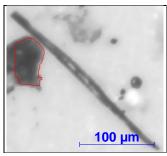
Particle ID: 1147 Length [µm]: 267.39 Particle type: fibrous



Particle ID: 543 Length [µm]: 262.83 Particle type: fibrous

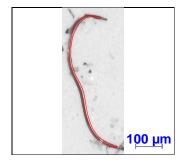


Particle ID: 2135 Length [µm]: 261.39 Particle type: fibrous

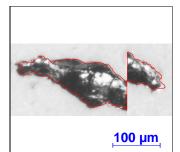


Particle ID: 3195 Length [µm]: 260.31 Particle type: fibrous

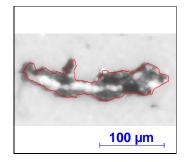
Gallery of reflective particles



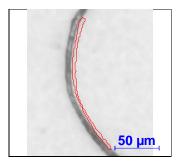
Particle ID: 2680 Length [µm]: 516.83



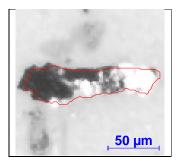
Particle ID: 294 Length [µm]: 317.97



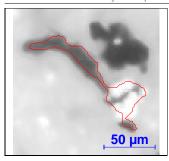
Particle ID: 1882 Length [μm]: 229.83



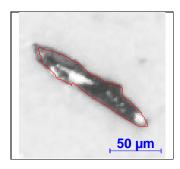
Particle ID: 2333 **Length [μm]:** 154.91



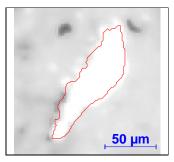
Particle ID: 2151 **Length [μm]:** 135.07



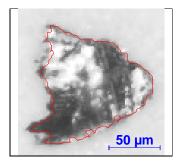
Particle ID: 3701 **Length [μm]:** 134.26



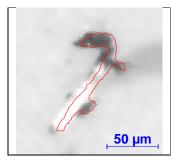
Particle ID: 1719 Length [μm]: 132.88



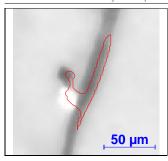
Particle ID: 3851 Length [μm]: 131.02



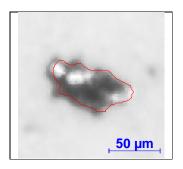
Particle ID: 6686 Length [µm]: 130.83



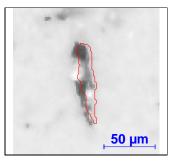
Particle ID: 1743 **Length [μm]:** 109.79



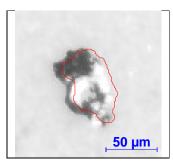
Particle ID: 438 Length [µm]: 100.10



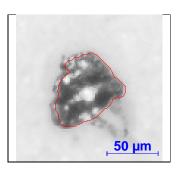
Particle ID: 1041 Length [µm]: 83.91



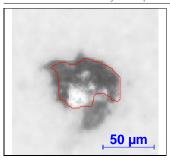
Particle ID: 5491 Length [µm]: 81.63



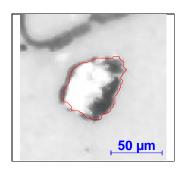
Particle ID: 621 Length [µm]: 79.74



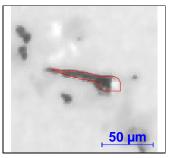
Particle ID: 6465 Length [µm]: 78.91



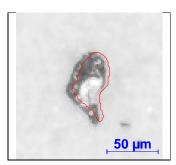
Particle ID: 3716 Length [µm]: 75.86



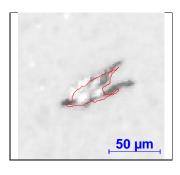
Particle ID: 3753 Length [µm]: 72.74



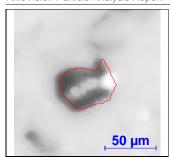
Particle ID: 3351 Length [µm]: 72.12



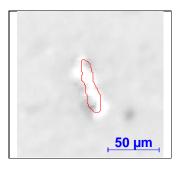
Particle ID: 1771 Length [µm]: 68.95



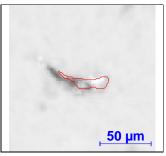
Particle ID: 2770 Length [µm]: 65.28



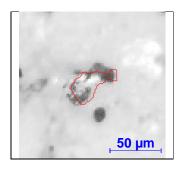
Particle ID: 5016 Length [µm]: 56.24



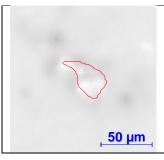
Particle ID: 6885 Length [µm]: 55.44



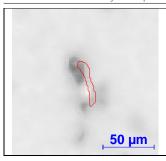
Particle ID: 6892 Length [μm]: 51.51



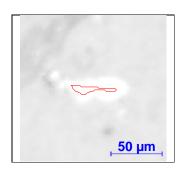
Particle ID: 2585 Length [µm]: 51.39



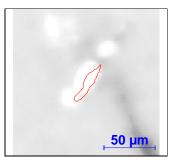
Particle ID: 5904 Length [µm]: 49.47



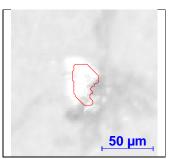
Particle ID: 1047 Length [µm]: 47.38



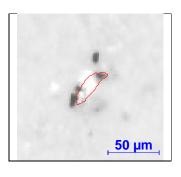
Particle ID: 6610 Length [µm]: 45.96



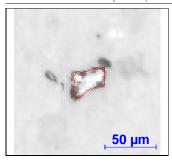
Particle ID: 6178 Length [µm]: 45.07



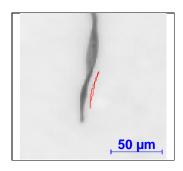
Particle ID: 380 Length [µm]: 44.73



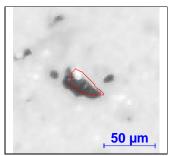
Particle ID: 4216 Length [µm]: 44.35



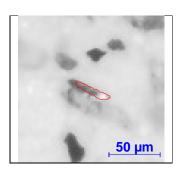
Particle ID: 6652 Length [µm]: 43.35



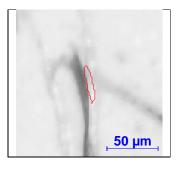
Particle ID: 696 Length [µm]: 42.88



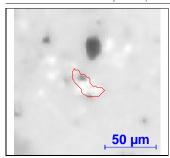
Particle ID: 808 Length [µm]: 39.93



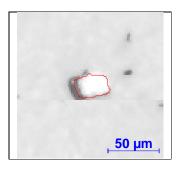
Particle ID: 2219 Length [µm]: 39.52



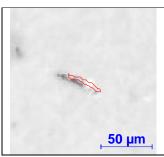
Particle ID: 575 Length [µm]: 39.14



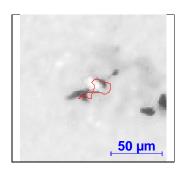
Particle ID: 2931 Length [µm]: 38.77



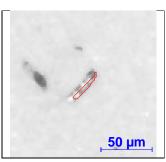
Particle ID: 1449 Length [µm]: 38.38



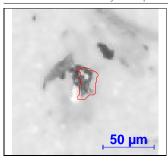
Particle ID: 1518 Length [µm]: 37.66



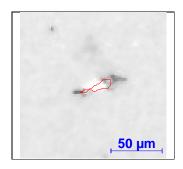
Particle ID: 1015 Length [µm]: 36.34



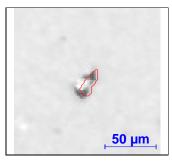
Particle ID: 1442 Length [µm]: 36.34



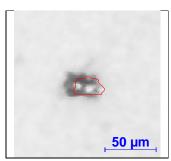
Particle ID: 1833 Length [µm]: 34.94



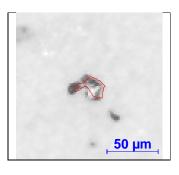
Particle ID: 1421 Length [µm]: 34.44



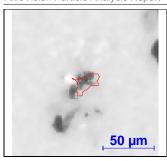
Particle ID: 2366 Length [µm]: 31.87



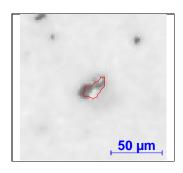
Particle ID: 475 Length [µm]: 31.87



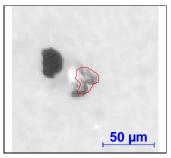
Particle ID: 3758 Length [µm]: 31.87



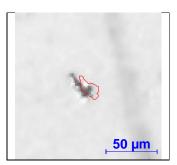
Particle ID: 3961 Length [µm]: 31.39



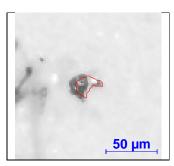
Particle ID: 3638 Length [µm]: 30.50



Particle ID: 2783 Length [µm]: 30.30

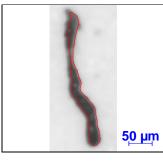


Particle ID: 1034 Length [µm]: 30.07

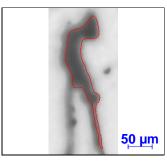


Particle ID: 6087 Length [µm]: 29.97

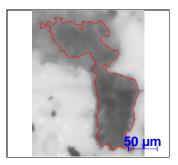
Gallery of non-reflective particles



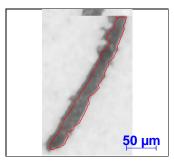
Particle ID: 6655 Length [μm]: 287.91



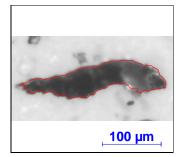
Particle ID: 1090 Length [μm]: 275.91



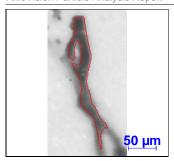
Particle ID: 3674 **Length [μm]:** 273.10



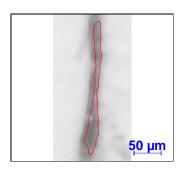
Particle ID: 3367 Length [μm]: 259.17



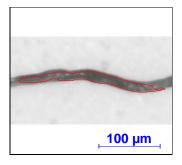
Particle ID: 4040 Length [μm]: 250.92



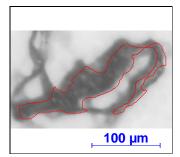
Particle ID: 2401 **Length [μm]:** 245.15



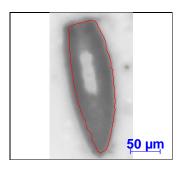
Particle ID: 427 Length [µm]: 243.11



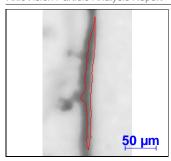
Particle ID: 6358 Length [µm]: 241.38



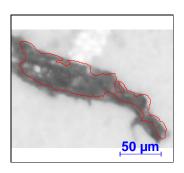
Particle ID: 615 **Length [μm]:** 233.30



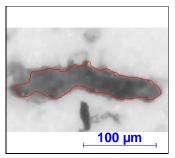
Particle ID: 5572 **Length [μm]:** 229.19



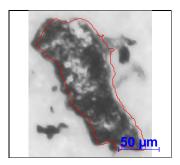
Particle ID: 1146 Length [µm]: 214.17



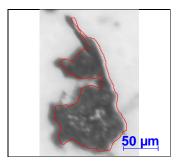
Particle ID: 4678 Length [µm]: 211.89



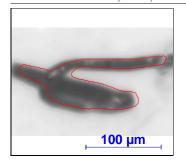
Particle ID: 2127 Length [μm]: 202.57



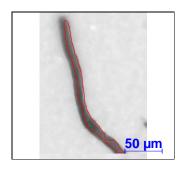
Particle ID: 4315 Length [μm]: 200.98



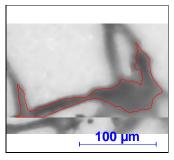
Particle ID: 497 Length [µm]: 199.32



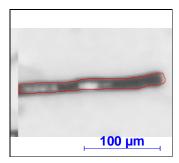
Particle ID: 650 Length [µm]: 196.59



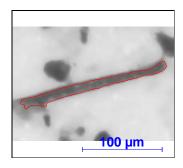
Particle ID: 4136 Length [μm]: 195.80



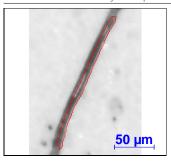
Particle ID: 2444
Length [μm]: 195.68



Particle ID: 639 Length [µm]: 195.18



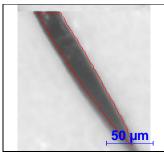
Particle ID: 3330 **Length [μm]:** 191.51



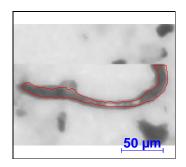
Particle ID: 4975 **Length [μm]:** 184.52



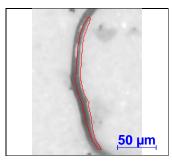
Particle ID: 1583 **Length [μm]:** 182.57



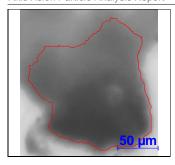
Particle ID: 4786 Length [μm]: 177.61



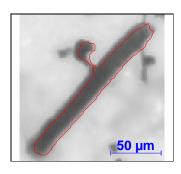
Particle ID: 3271 **Length [μm]:** 175.89



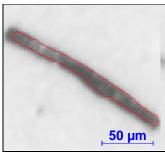
Particle ID: 6474 Length [µm]: 174.73



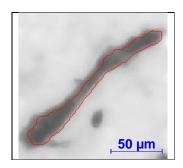
Particle ID: 3655 **Length [μm]:** 174.73



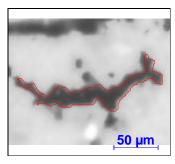
Particle ID: 2924 Length [μm]: 171.62



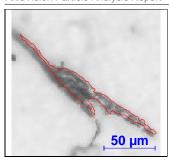
Particle ID: 46 Length [µm]: 170.42



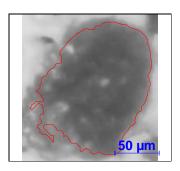
Particle ID: 4961 Length [μm]: 170.08



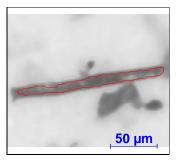
Particle ID: 4443 **Length [μm]:** 166.91



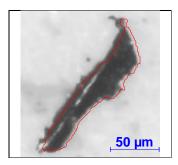
Particle ID: 3678 Length [µm]: 166.20



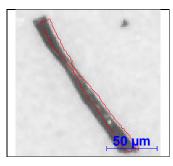
Particle ID: 3106 Length [µm]: 164.53



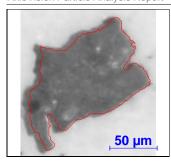
Particle ID: 3337 **Length [μm]**: 161.91



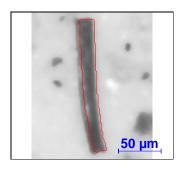
Particle ID: 2191 **Length [μm]:** 161.35



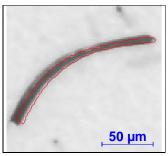
Particle ID: 6862 **Length [μm]:** 160.77



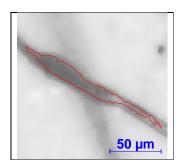
Particle ID: 6026 Length [µm]: 160.73



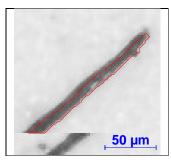
Particle ID: 3547 Length [µm]: 159.64



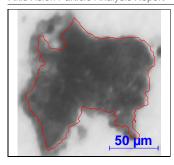
Particle ID: 2330 Length [μm]: 159.64



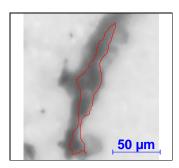
Particle ID: 4950 **Length [μm]:** 157.91



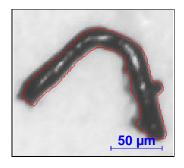
Particle ID: 4747 **Length [μm]:** 153.14



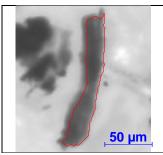
Particle ID: 571 Length [µm]: 151.51



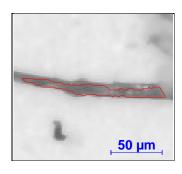
Particle ID: 1796 **Length [μm]:** 149.19



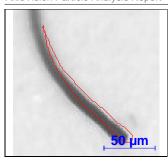
Particle ID: 6745 **Length [μm]:** 148.01



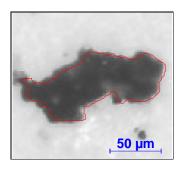
Particle ID: 3212 **Length [μm]:** 147.03



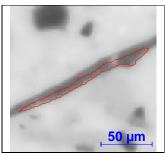
Particle ID: 1965 Length [μm]: 144.13



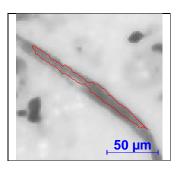
Particle ID: 215 Length [µm]: 143.67



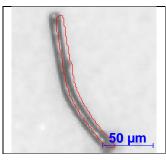
Particle ID: 1325 **Length [μm]:** 143.55



Particle ID: 1351 **Length [μm]**: 143.42

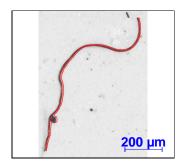


Particle ID: 3016 Length [μm]: 142.83

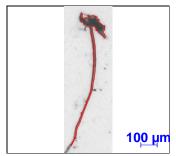


Particle ID: 1951 **Length [μm]:** 142.65

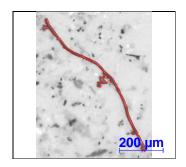
Gallery of fibrous particles



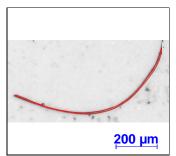
Particle ID: 263 Length [µm]: 866.41



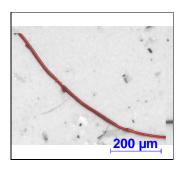
Particle ID: 2816 Length [μm]: 815.50



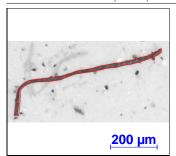
Particle ID: 3535 **Length [μm]:** 760.24



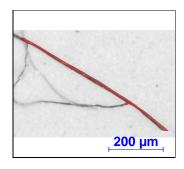
Particle ID: 5471 **Length [μm]:** 755.87



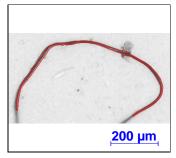
Particle ID: 2625 **Length [μm]:** 711.81



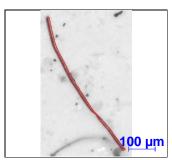
Particle ID: 2573 Length [μm]: 690.88



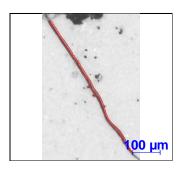
Particle ID: 528 Length [µm]: 643.77



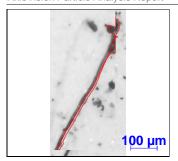
Particle ID: 191 Length [µm]: 627.68



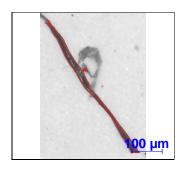
Particle ID: 2199 **Length [μm]:** 587.88



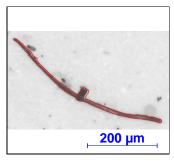
Particle ID: 1423 Length [μm]: 570.20



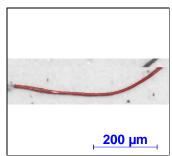
Particle ID: 1158 Length [µm]: 550.08



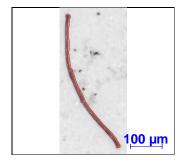
Particle ID: 4749 Length [μm]: 529.41



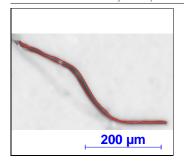
Particle ID: 2316 Length [μm]: 483.70



Particle ID: 4771 **Length [μm]:** 465.66



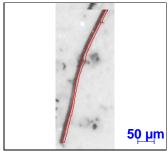
Particle ID: 2654 Length [μm]: 451.80



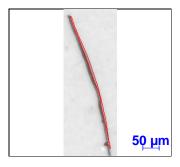
Particle ID: 4853 Length [μm]: 440.76



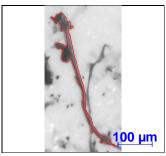
Particle ID: 6910 Length [μm]: 435.97



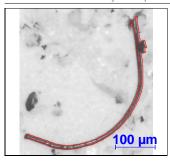
Particle ID: 1230 Length [μm]: 429.99



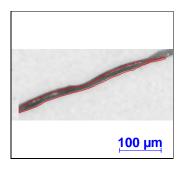
Particle ID: 965 **Length [μm]:** 427.45



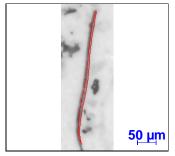
Particle ID: 3956 Length [μm]: 425.79



Particle ID: 2412 **Length [μm]:** 415.72



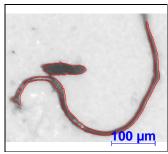
Particle ID: 6372 Length [μm]: 377.19



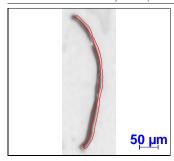
Particle ID: 718 Length [µm]: 365.78



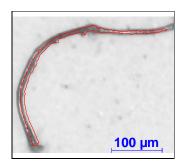
Particle ID: 948 Length [µm]: 358.79



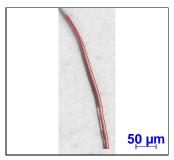
Particle ID: 3651 Length [μm]: 358.35



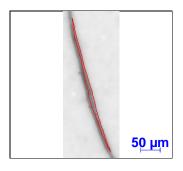
Particle ID: 568 Length [µm]: 355.83



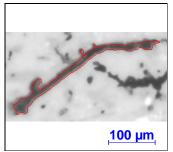
Particle ID: 1608 Length [µm]: 351.86



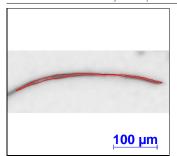
Particle ID: 4746 Length [μm]: 351.58



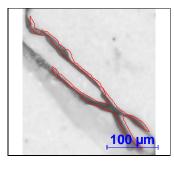
Particle ID: 486 Length [µm]: 350.85



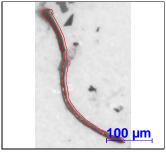
Particle ID: 4464 Length [μm]: 348.67



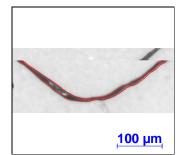
Particle ID: 6215 Length [μm]: 341.40



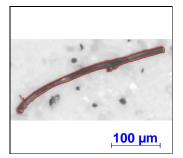
Particle ID: 1581 Length [µm]: 339.80



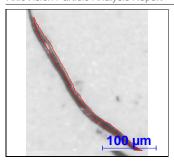
Particle ID: 6079 Length [μm]: 339.32



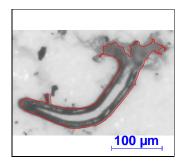
Particle ID: 3298 Length [μm]: 326.40



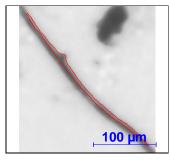
Particle ID: 5989 Length [µm]: 324.32



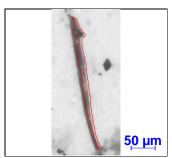
Particle ID: 3245 Length [μm]: 322.11



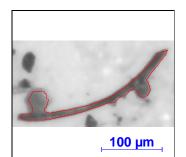
Particle ID: 2894 Length [µm]: 314.98



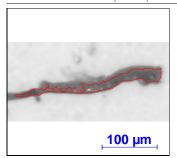
Particle ID: 866 Length [µm]: 286.48



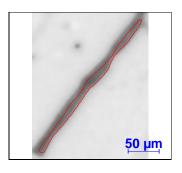
Particle ID: 1315 Length [μm]: 282.91



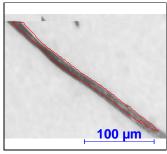
Particle ID: 3404 Length [µm]: 270.37



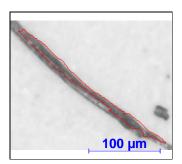
Particle ID: 6909 Length [μm]: 270.16



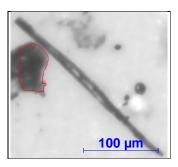
Particle ID: 1147 Length [µm]: 267.39



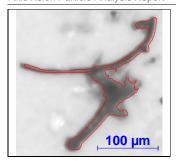
Particle ID: 543 Length [µm]: 262.83



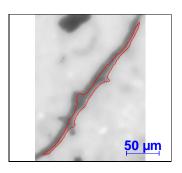
Particle ID: 2135 Length [μm]: 261.39



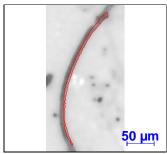
Particle ID: 3195 Length [μm]: 260.31



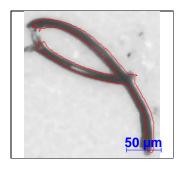
Particle ID: 4674 Length [µm]: 260.11



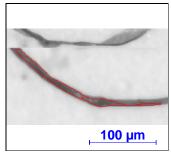
Particle ID: 1338 Length [µm]: 252.86



Particle ID: 762 Length [µm]: 250.63



Particle ID: 1696 Length [µm]: 250.46



Particle ID: 4173 Length [μm]: 235.87

Membrane filter

