

PERICOLUL DIN AER  
PARTICULE MAGNETIZABILE  
-CARBURĂ DE SILICIU, METALE-

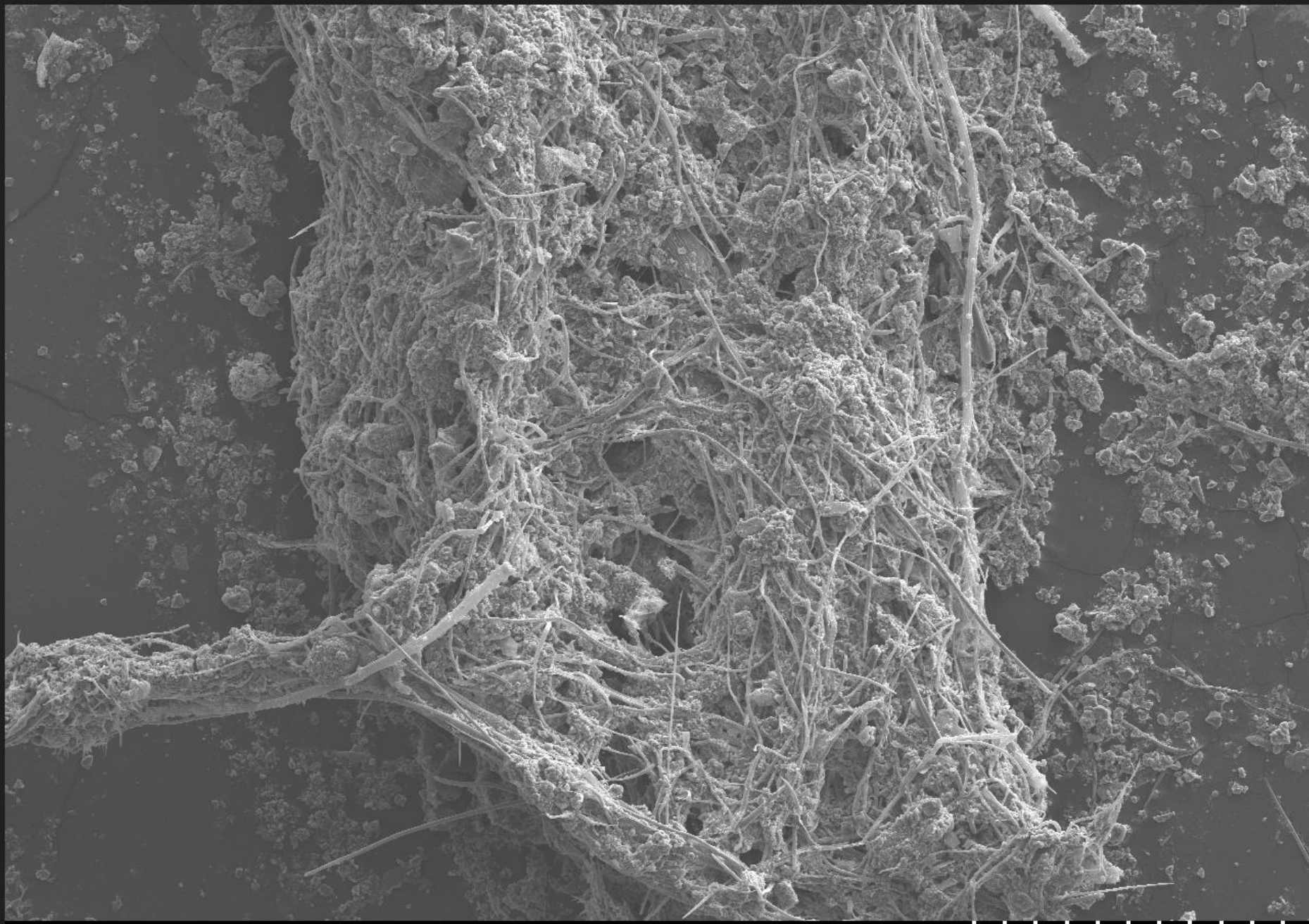
Dr. Geanina Hagimă

# APĂ DE PLOAIE CU SEDIMENT MAGNETIZABIL INTEGRAL



# ANALIZA CU MICROSCOPUL ELECTRONIC A SEDIMENTULUI DIN APA DE PLOAIE

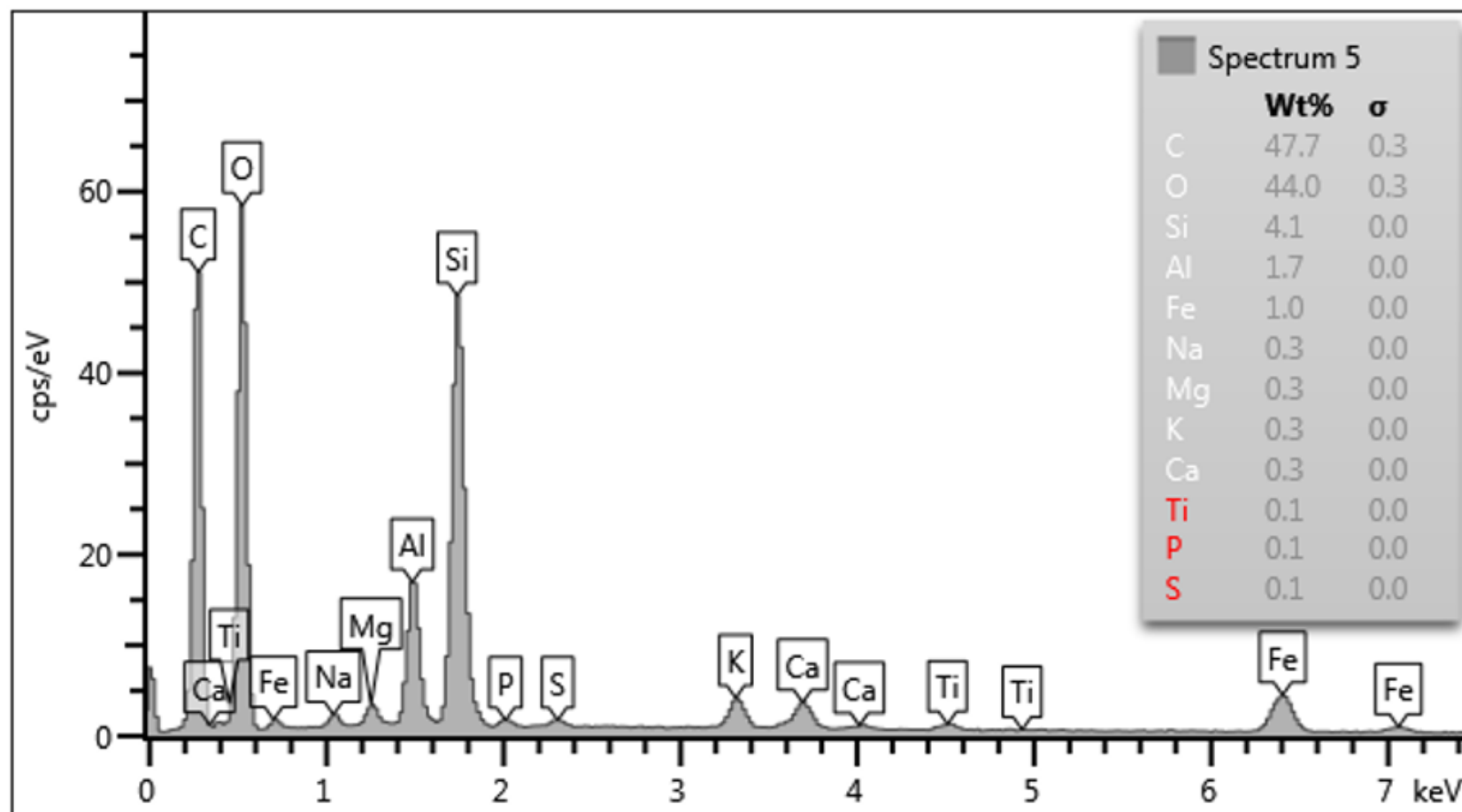
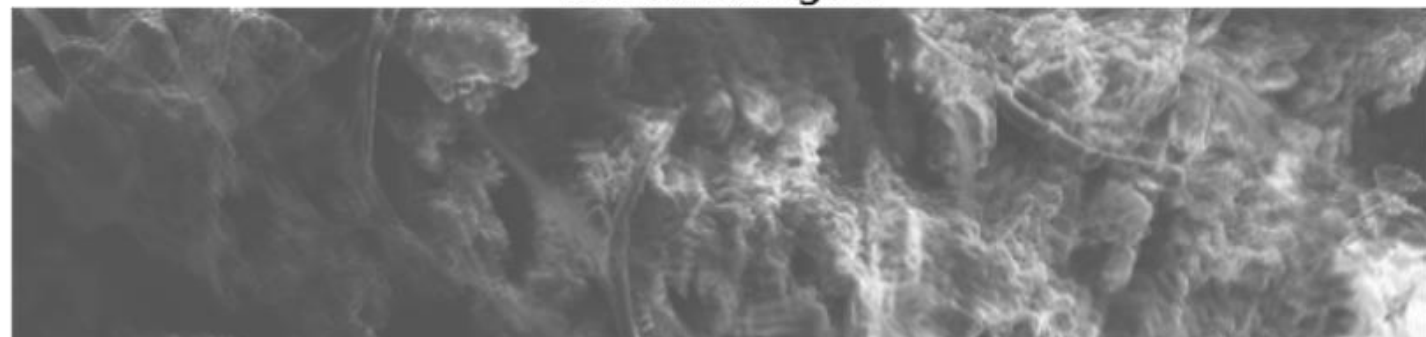
microscopie electronica prin transmisie cu scanare ,  
spectroscopie cu raze X prin dispersie energetica - Energy-dispersive X ray spectroscopy (EDS)

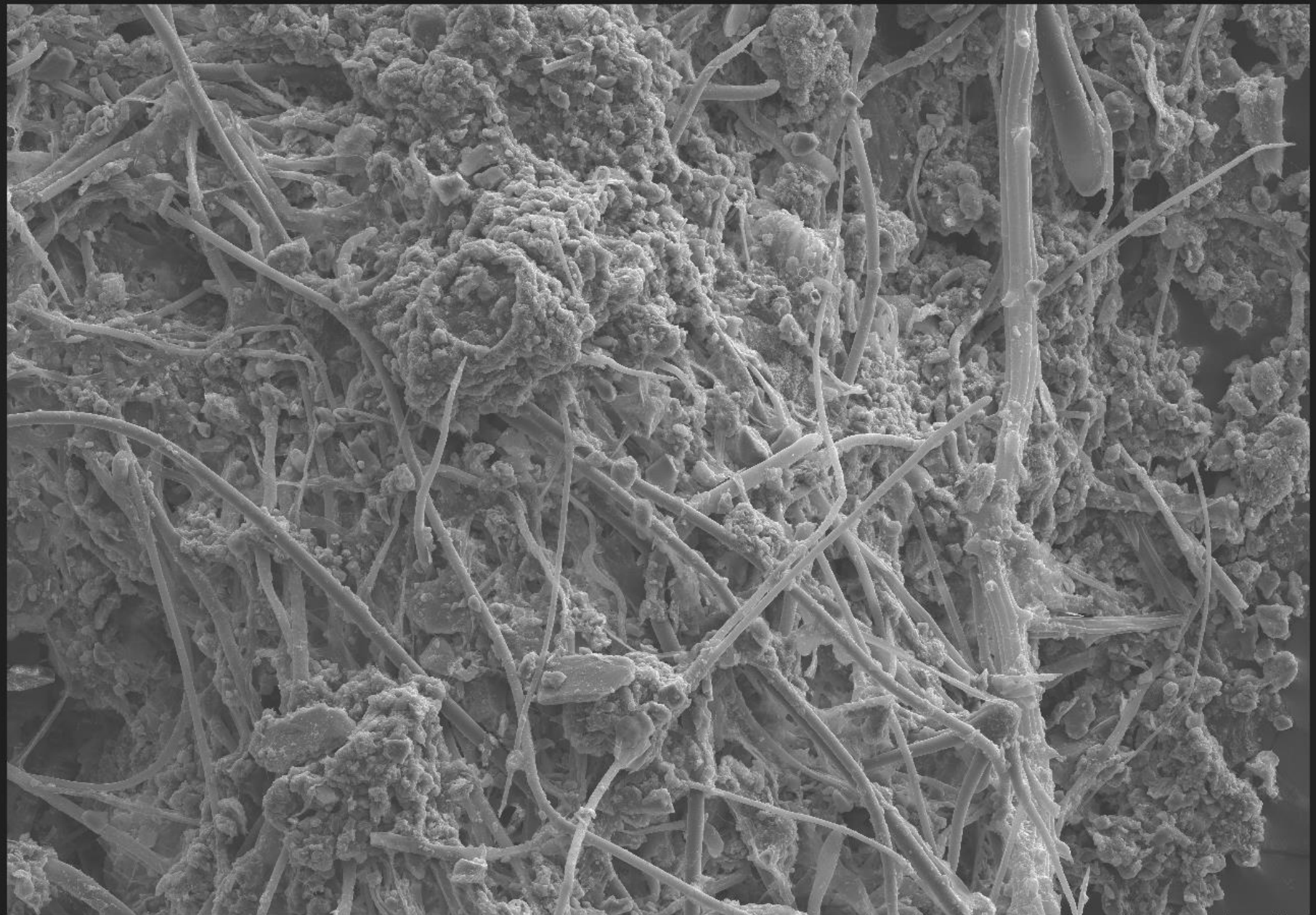


LBT 30.0kV 11.2mm x30 LM(UL)

1.00mm

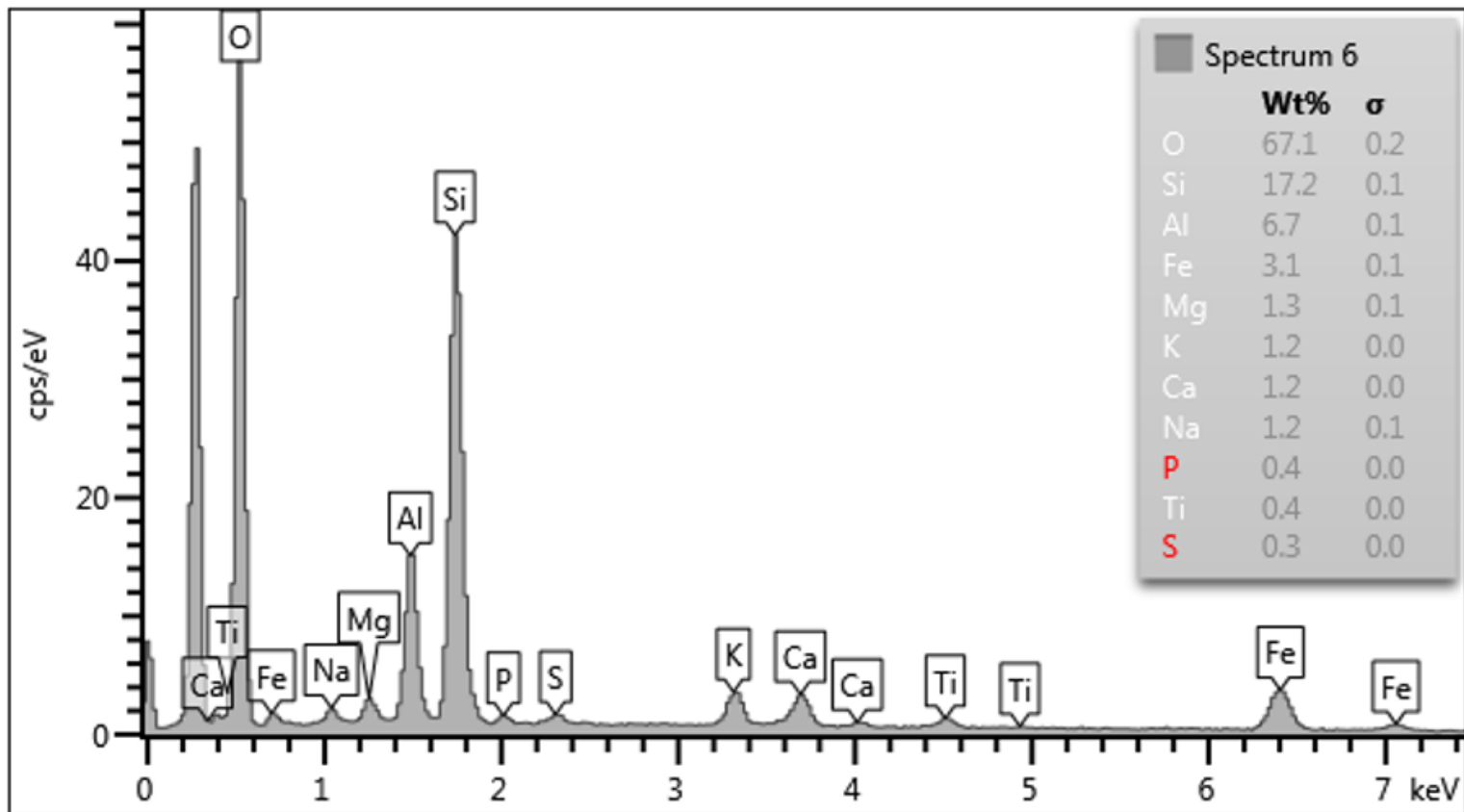
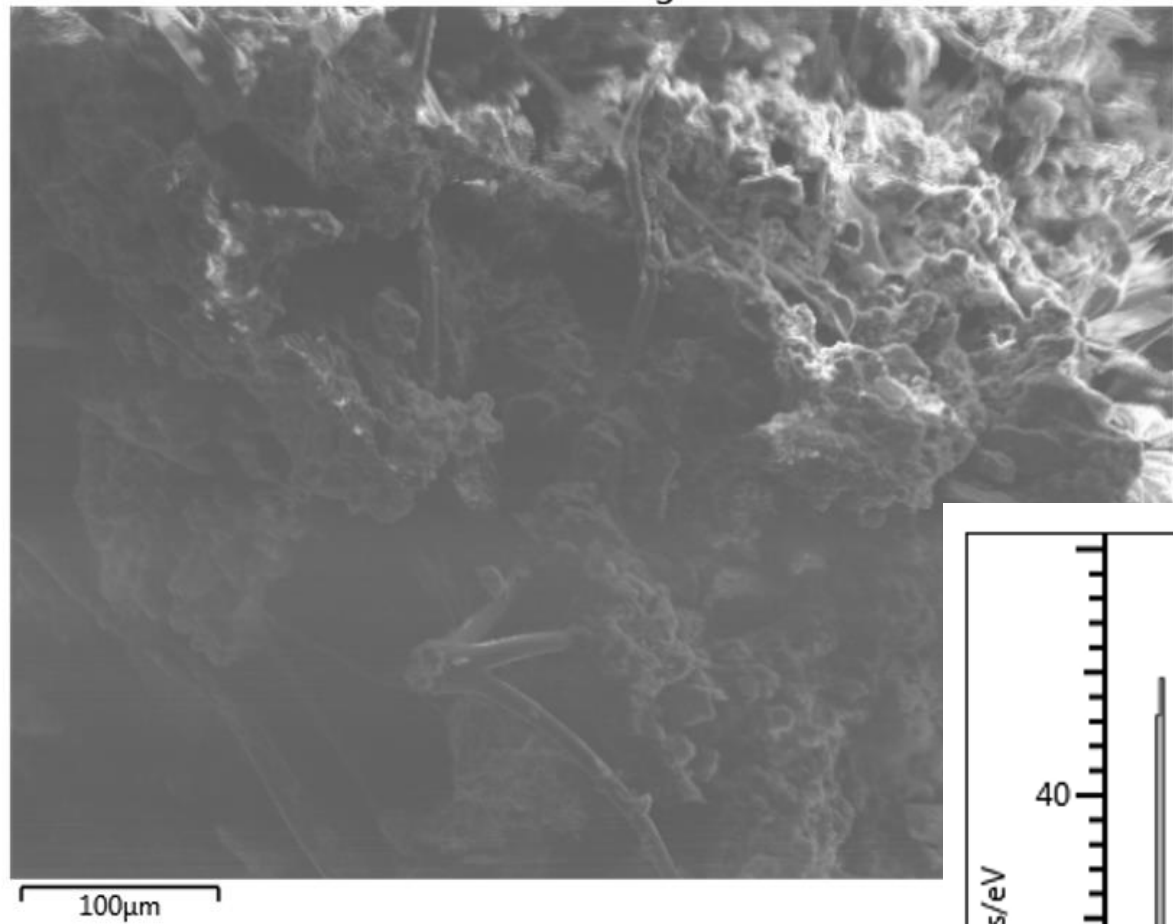
Electron Image 8

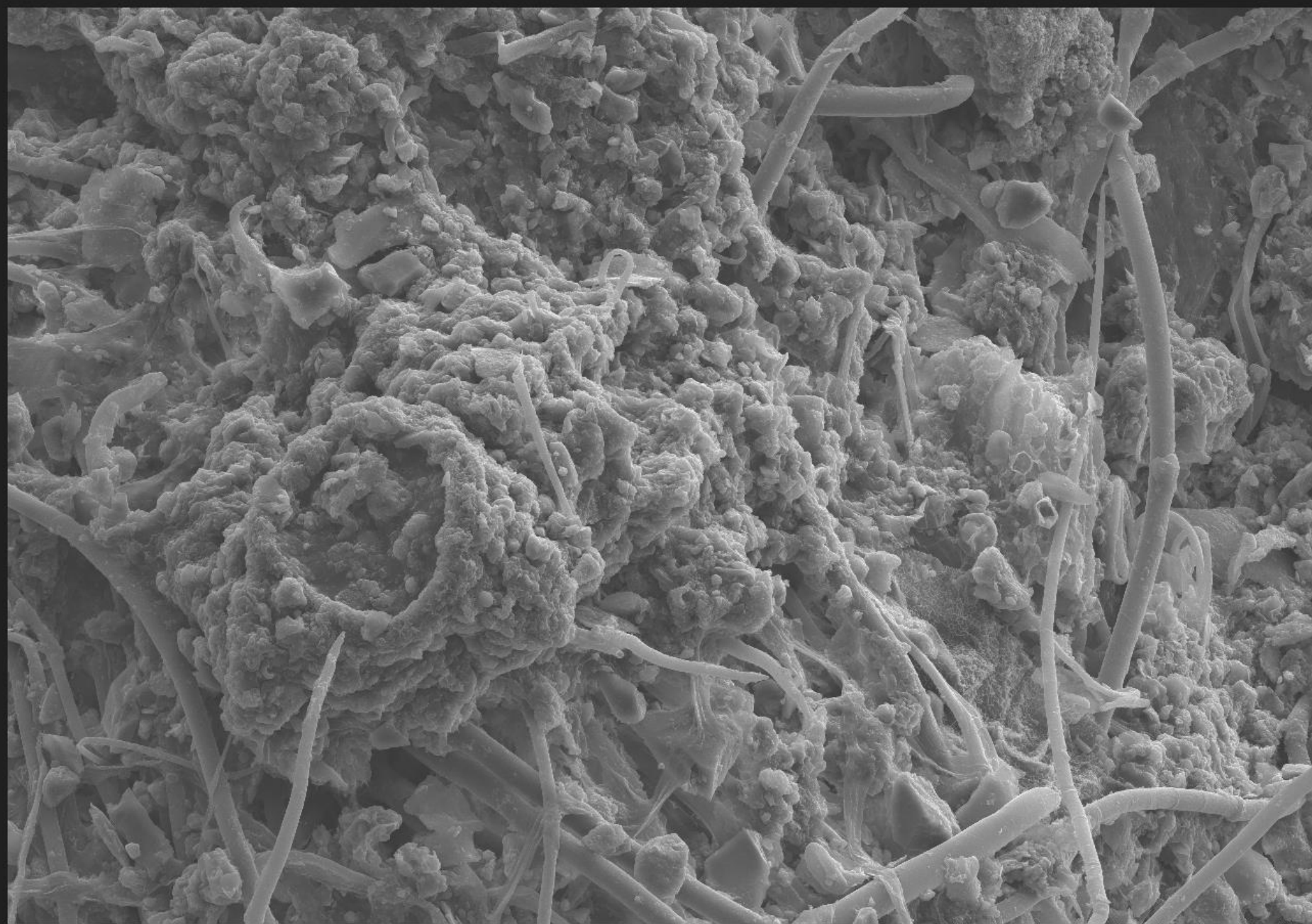




LBT 30.0kV 11.2mm x100 LM(UL)

500μm

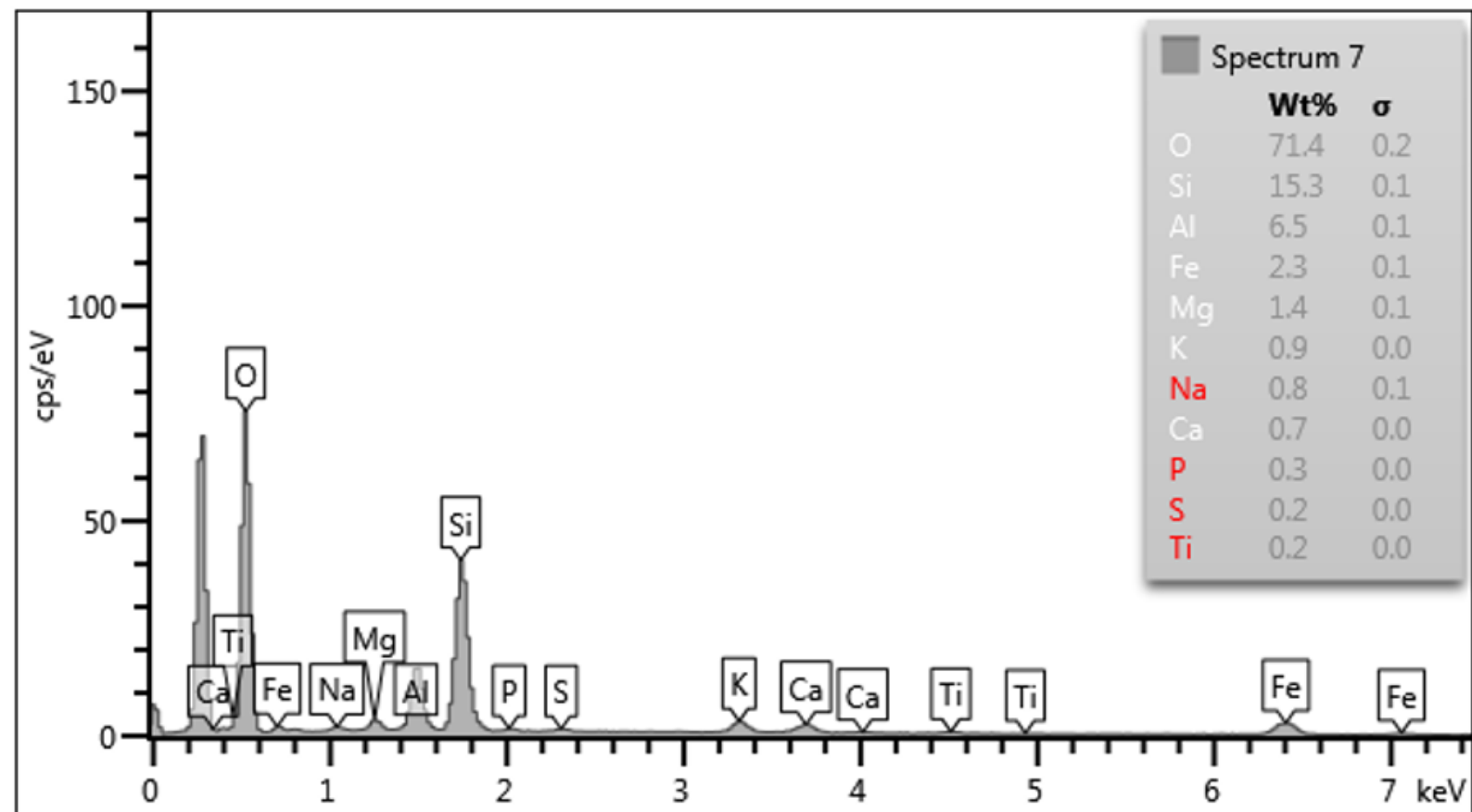
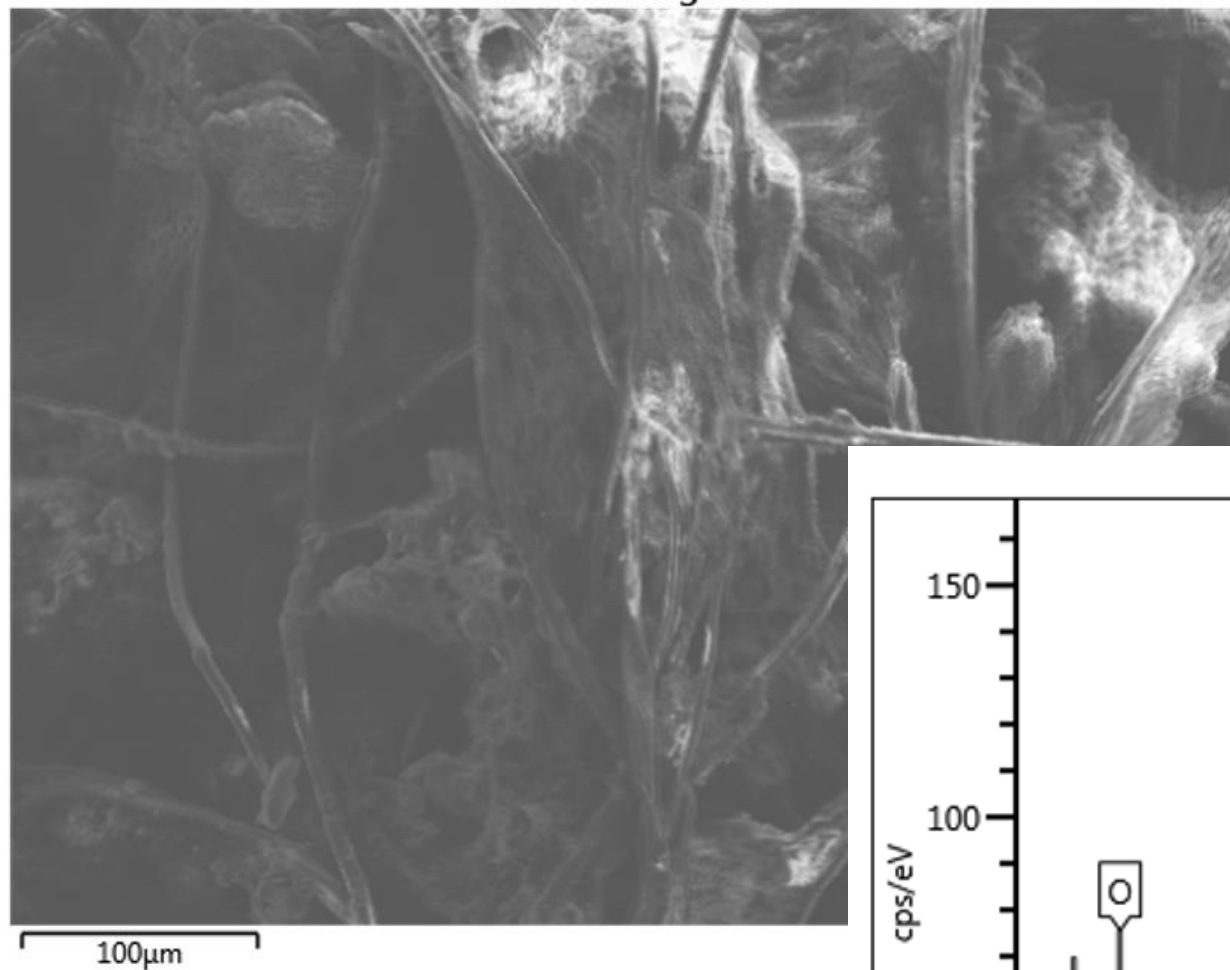


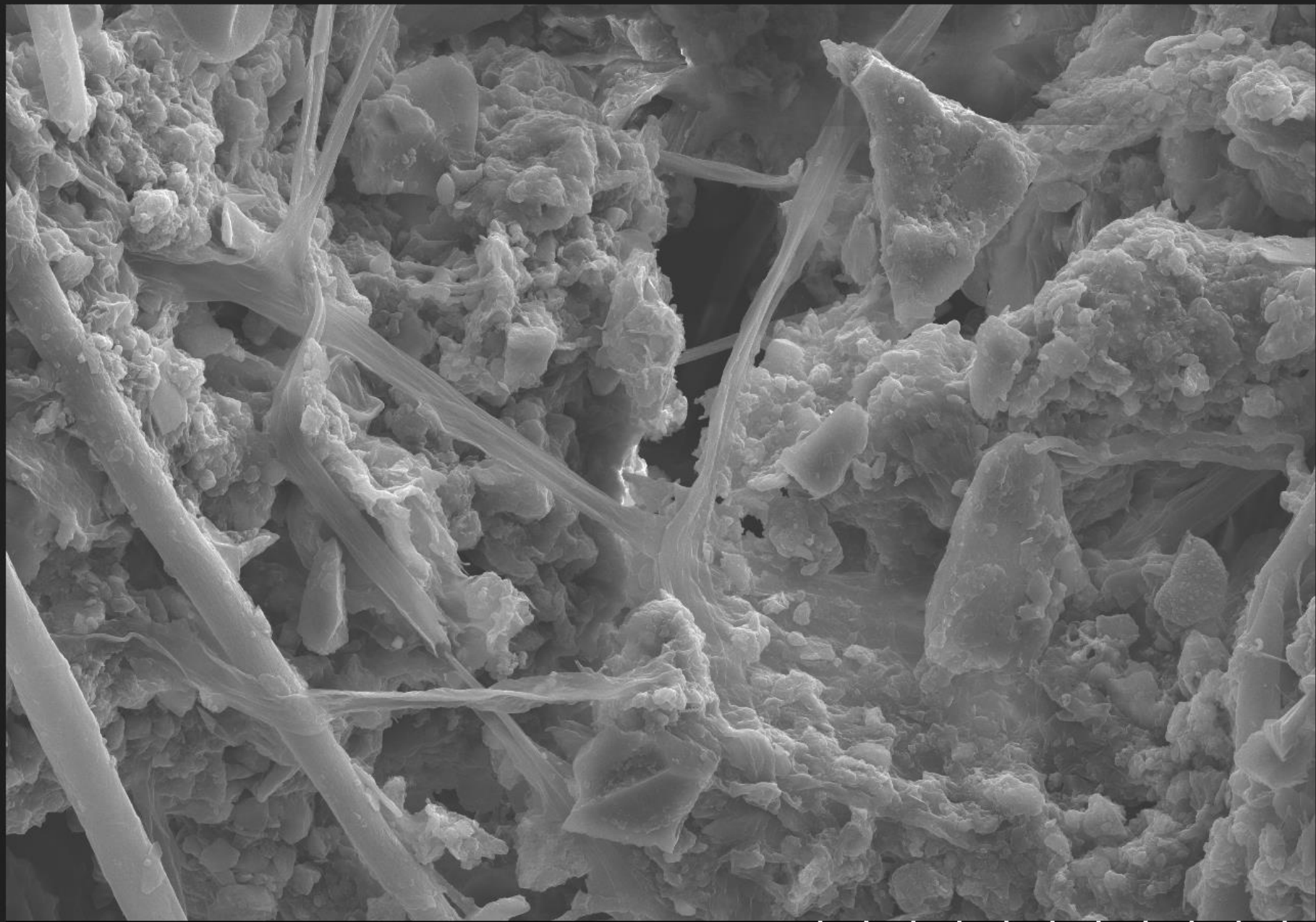


LBT 30.0kV 11.2mm x200 LM(UL)

200μm

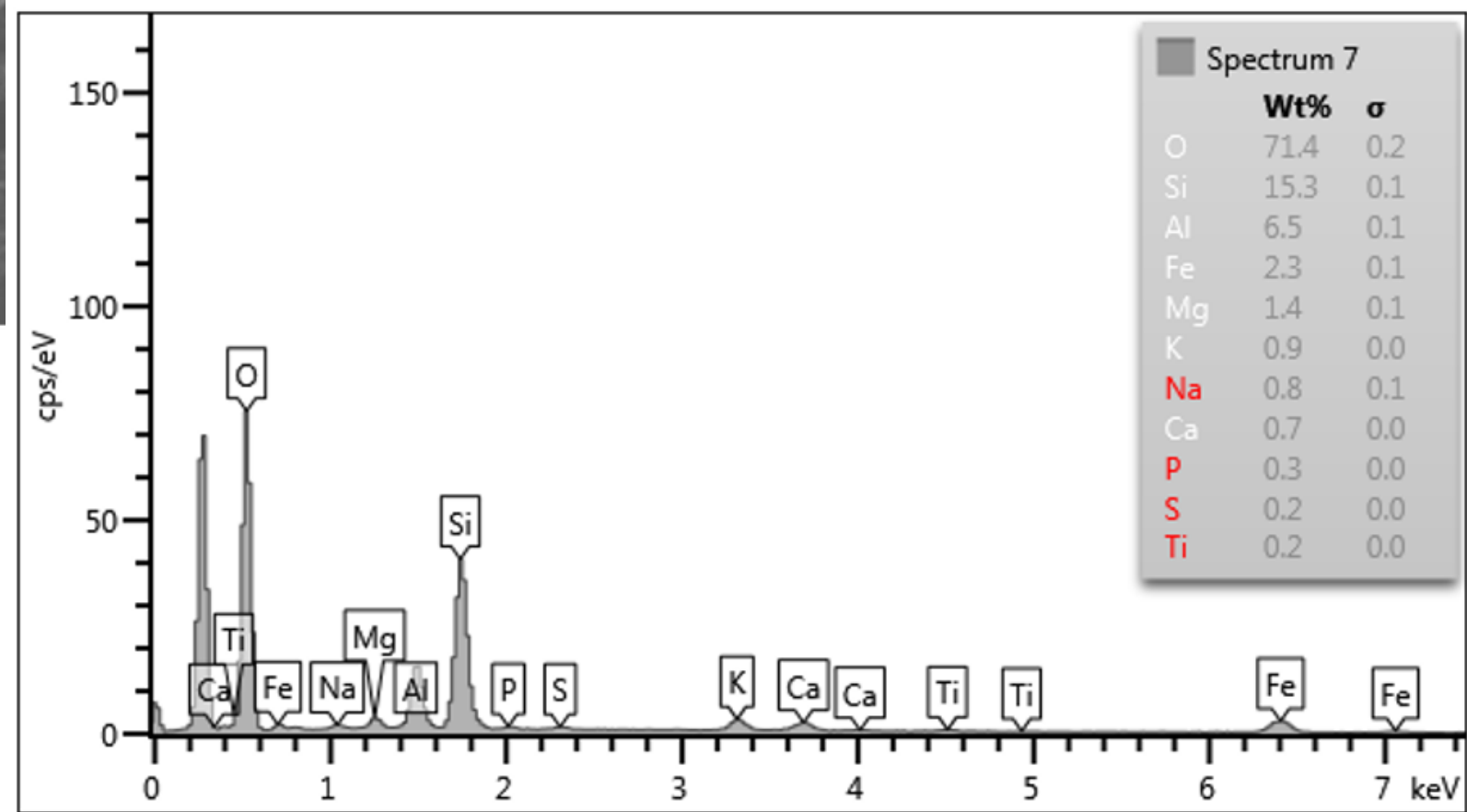
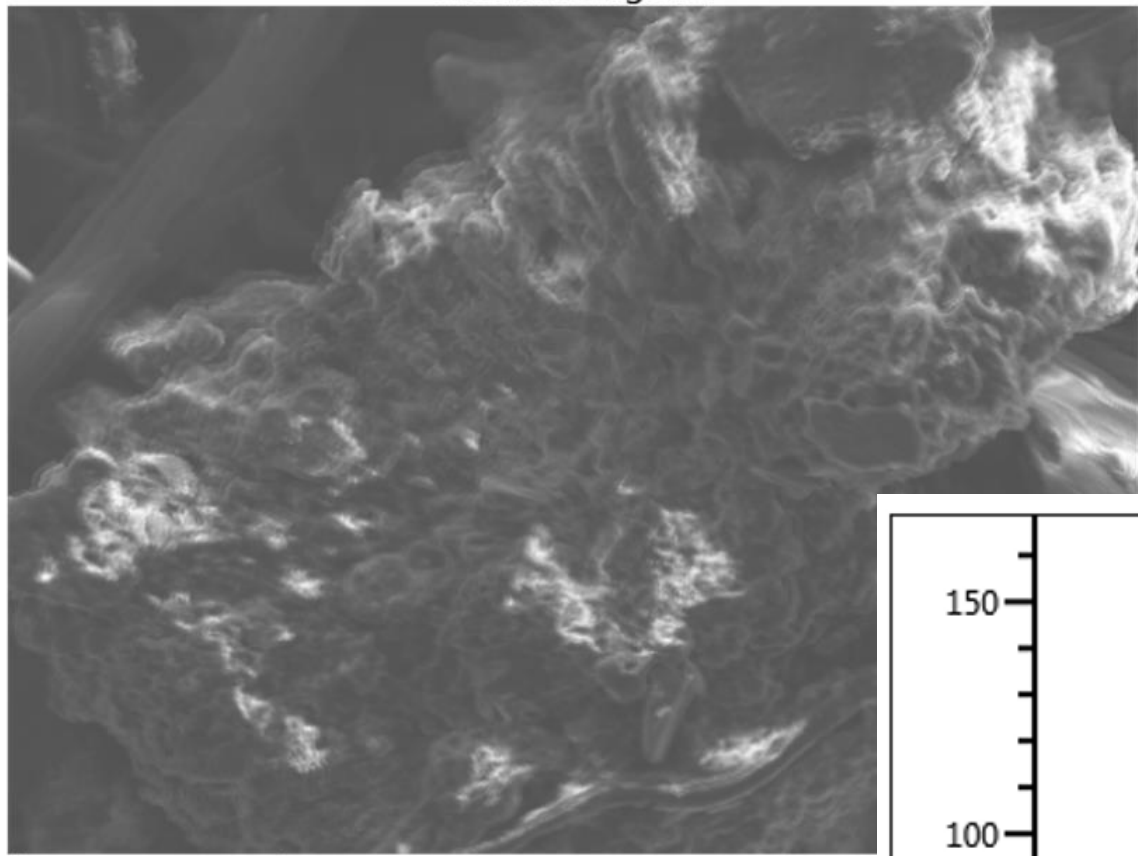


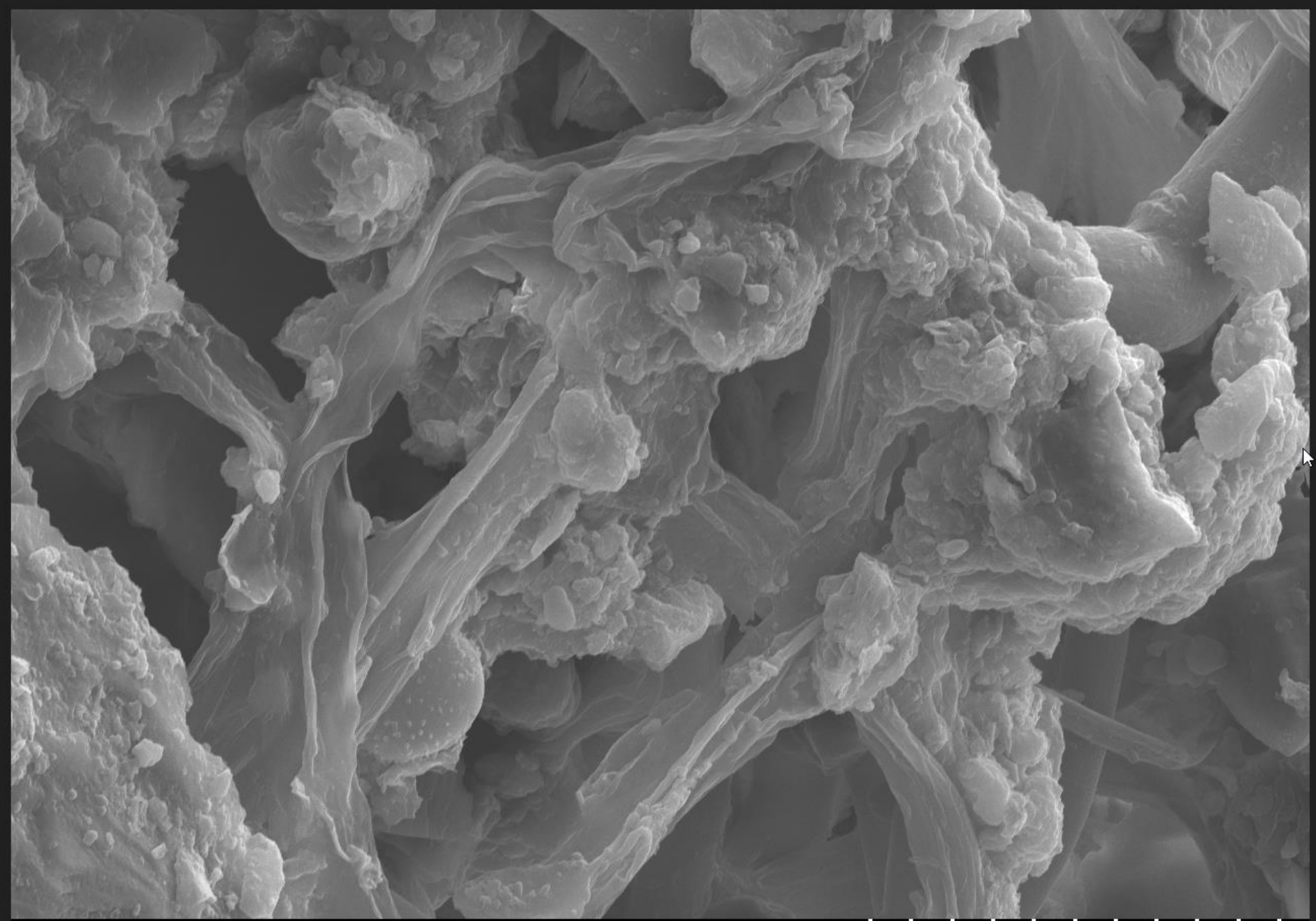




LBT 30.0kV 11.2mm x450 LM(UL)

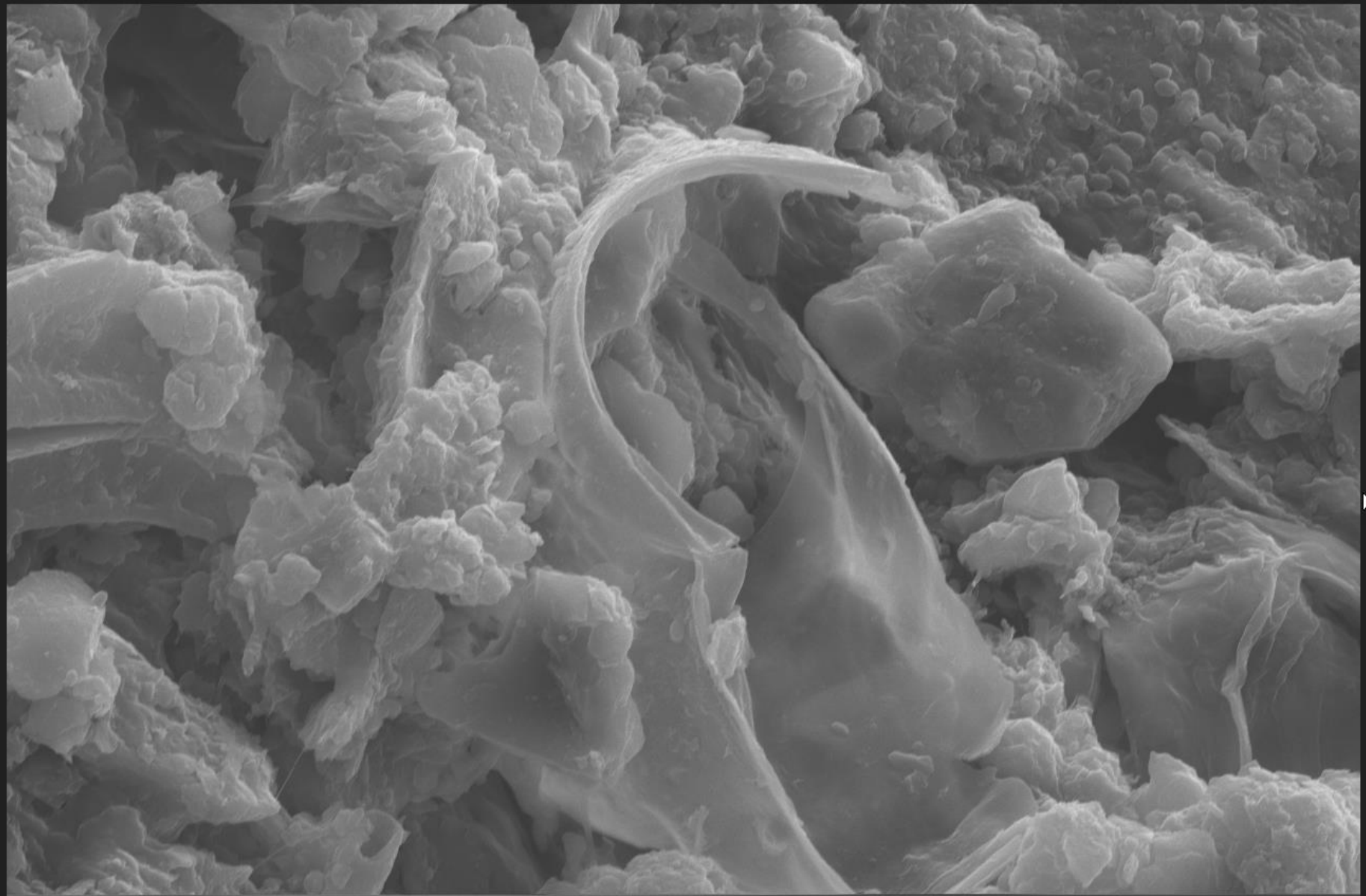
100μm





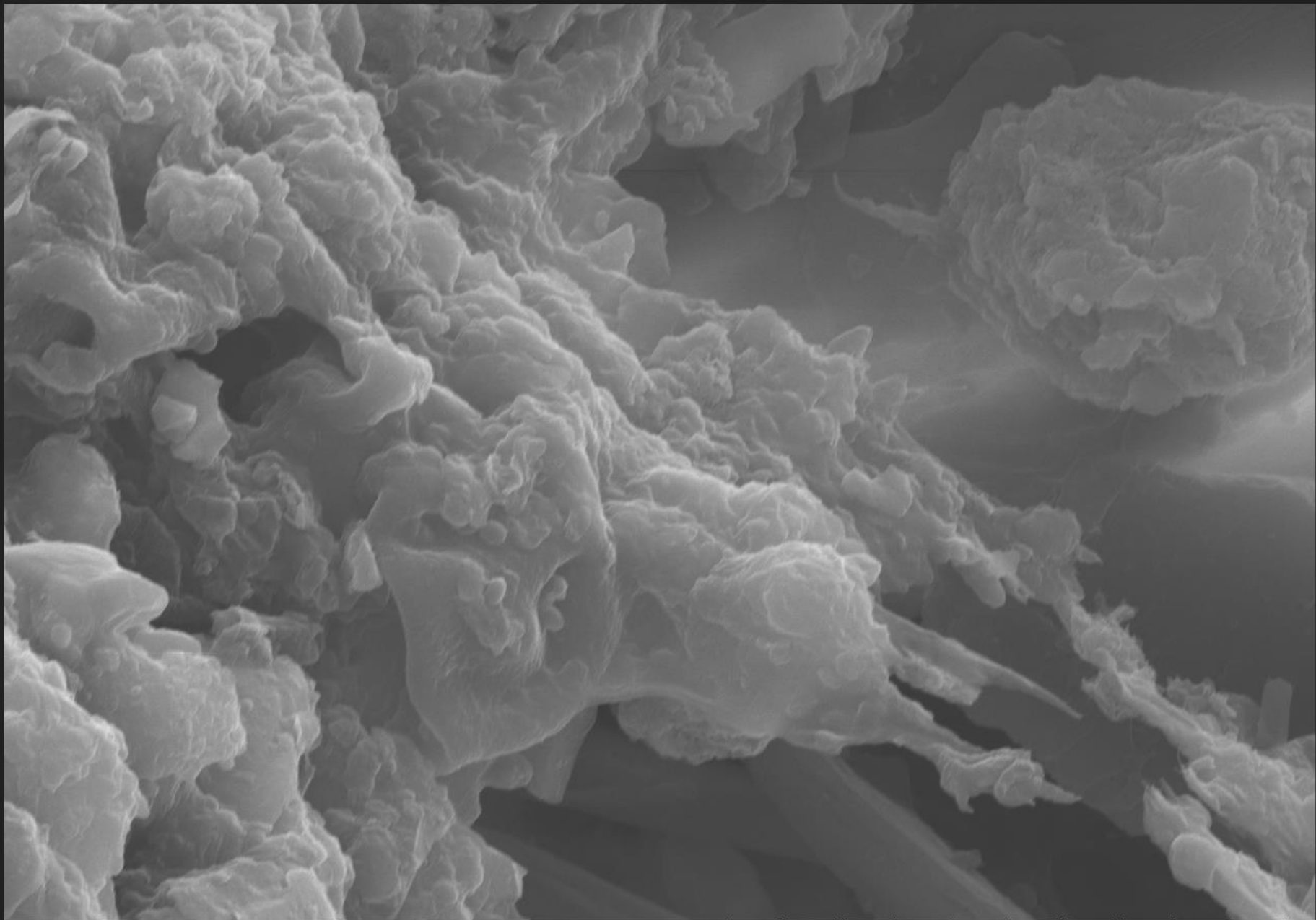
LBT 30.0kV 11.2mm x800 LM(UL)

50.0μm



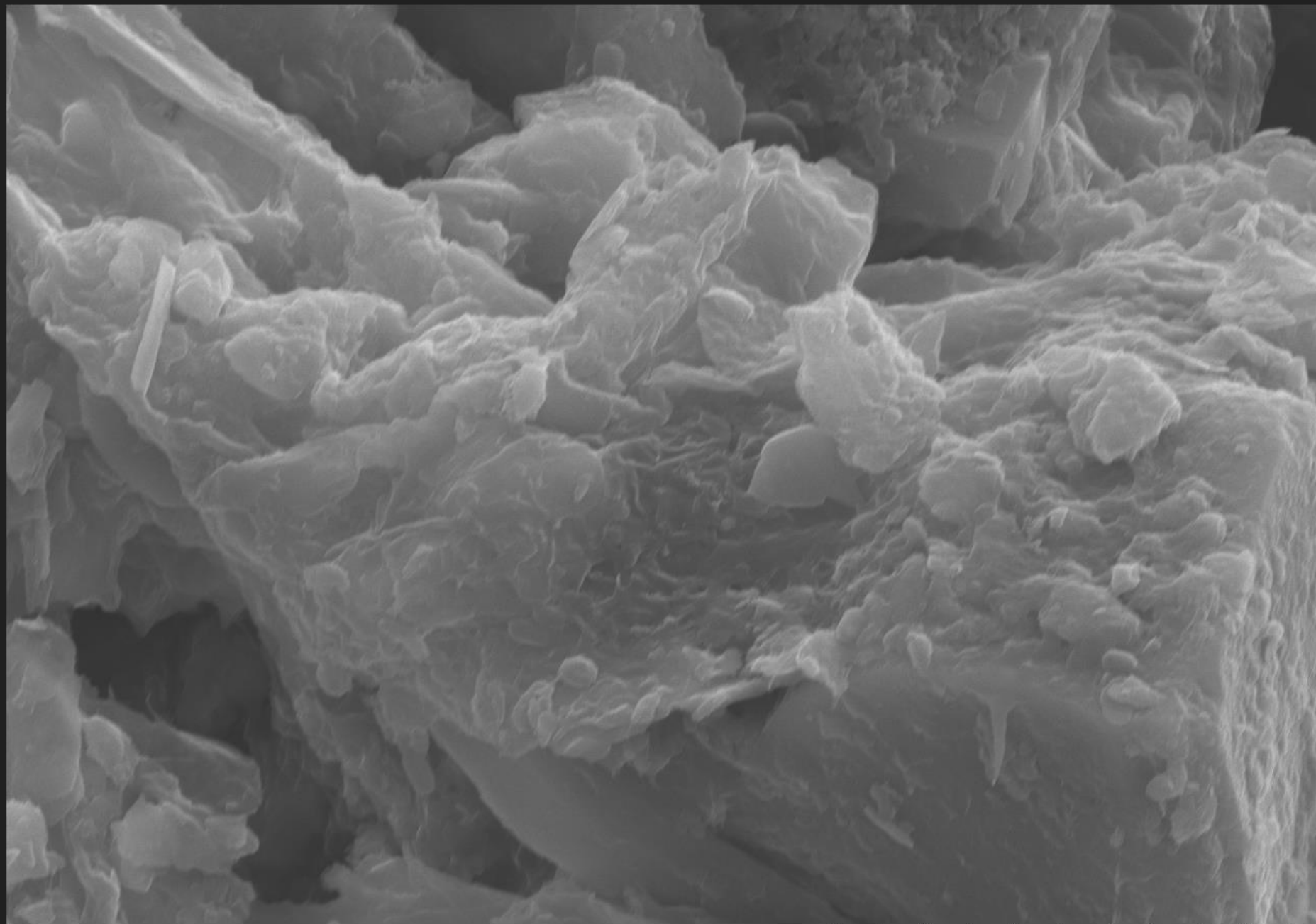
LBT 0.0kV 11.2mm x1.10k LM(UL)

50.0μm



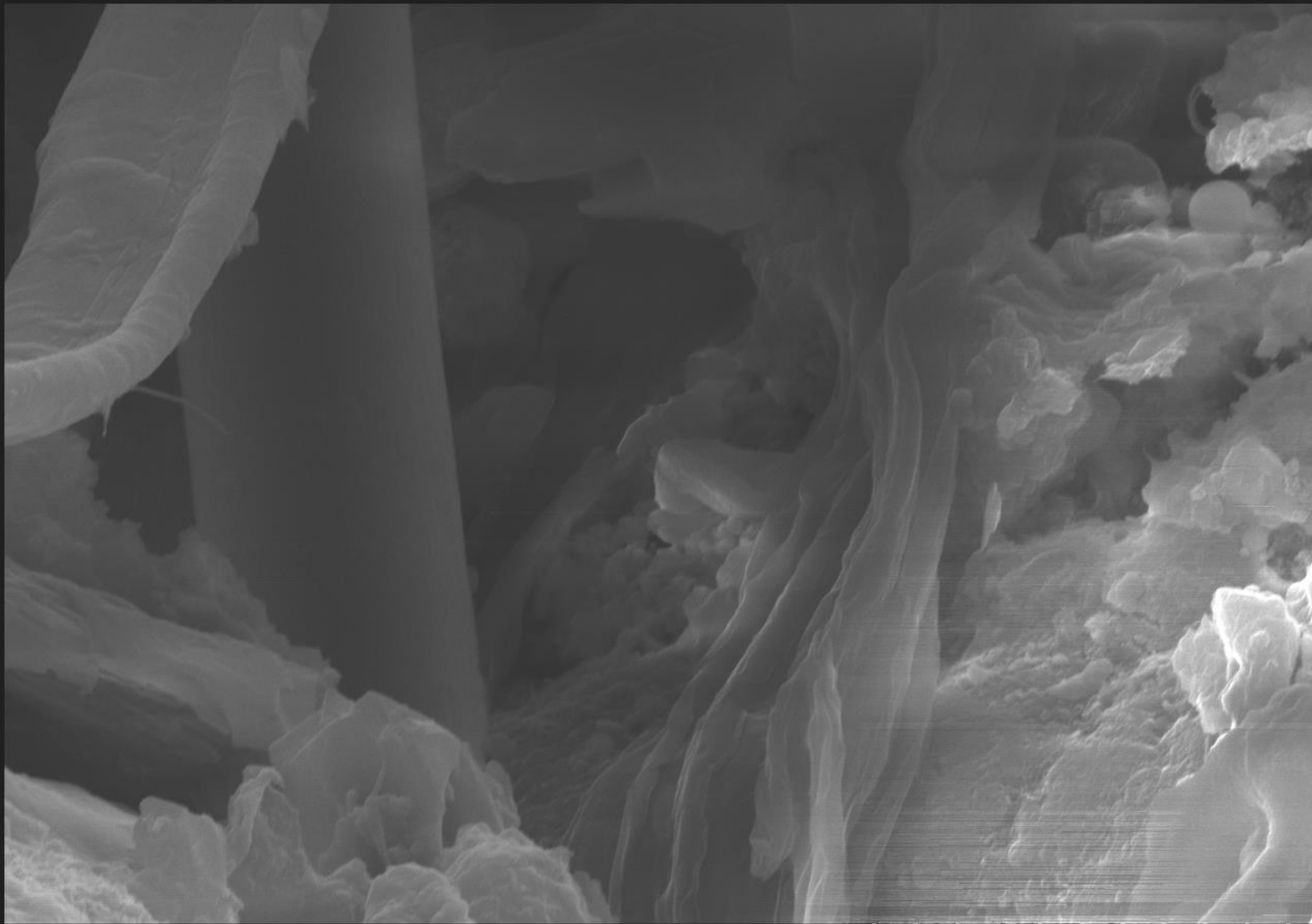
LBT 30.0kV 11.2mm x1.80k LM(UL)

30.0μm



LBT 30.0kV 11.2mm x2.20k LM(UL)

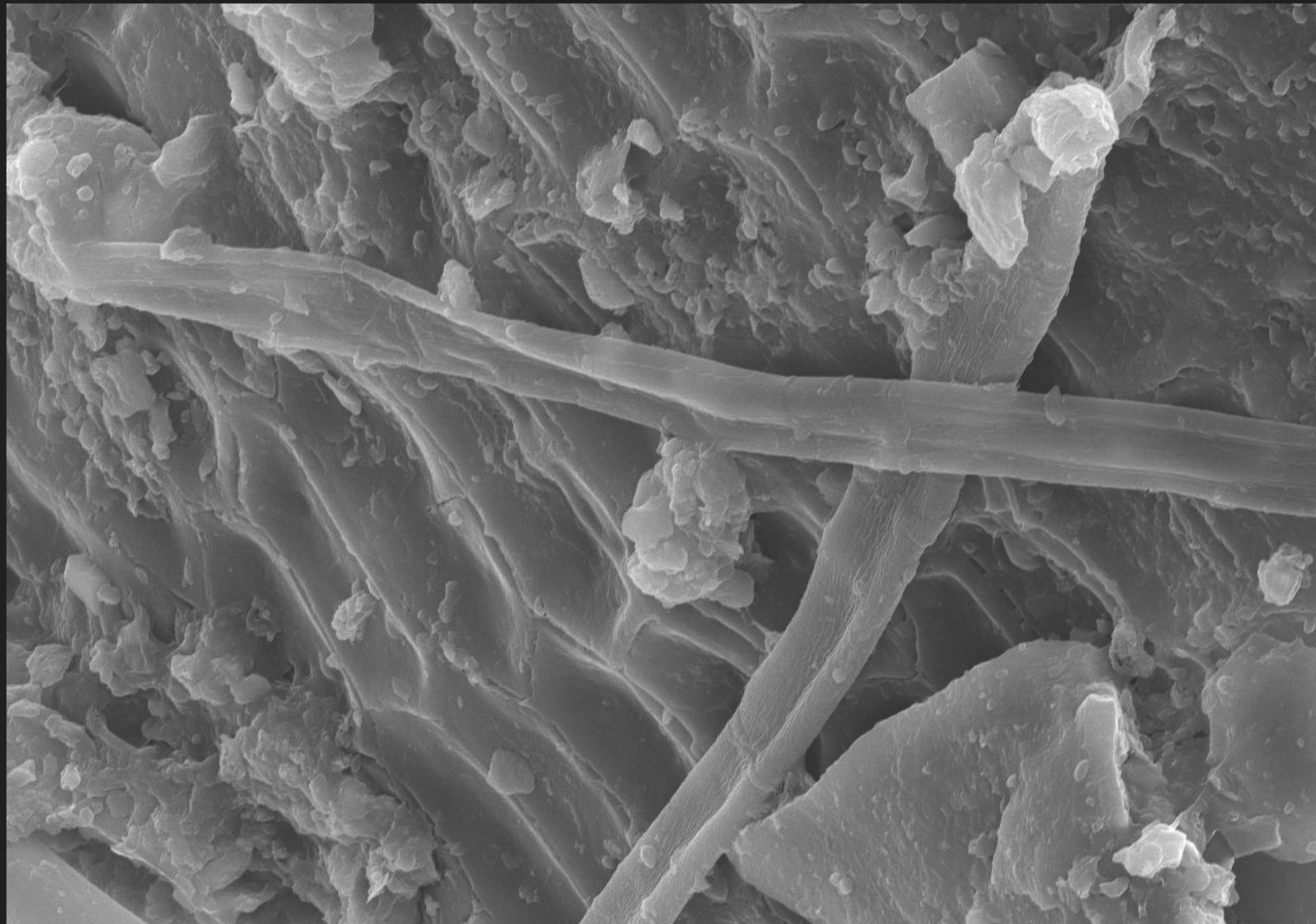
20.0μm



LBT 30.0kV 11.2mm x2.00k LM(UL)

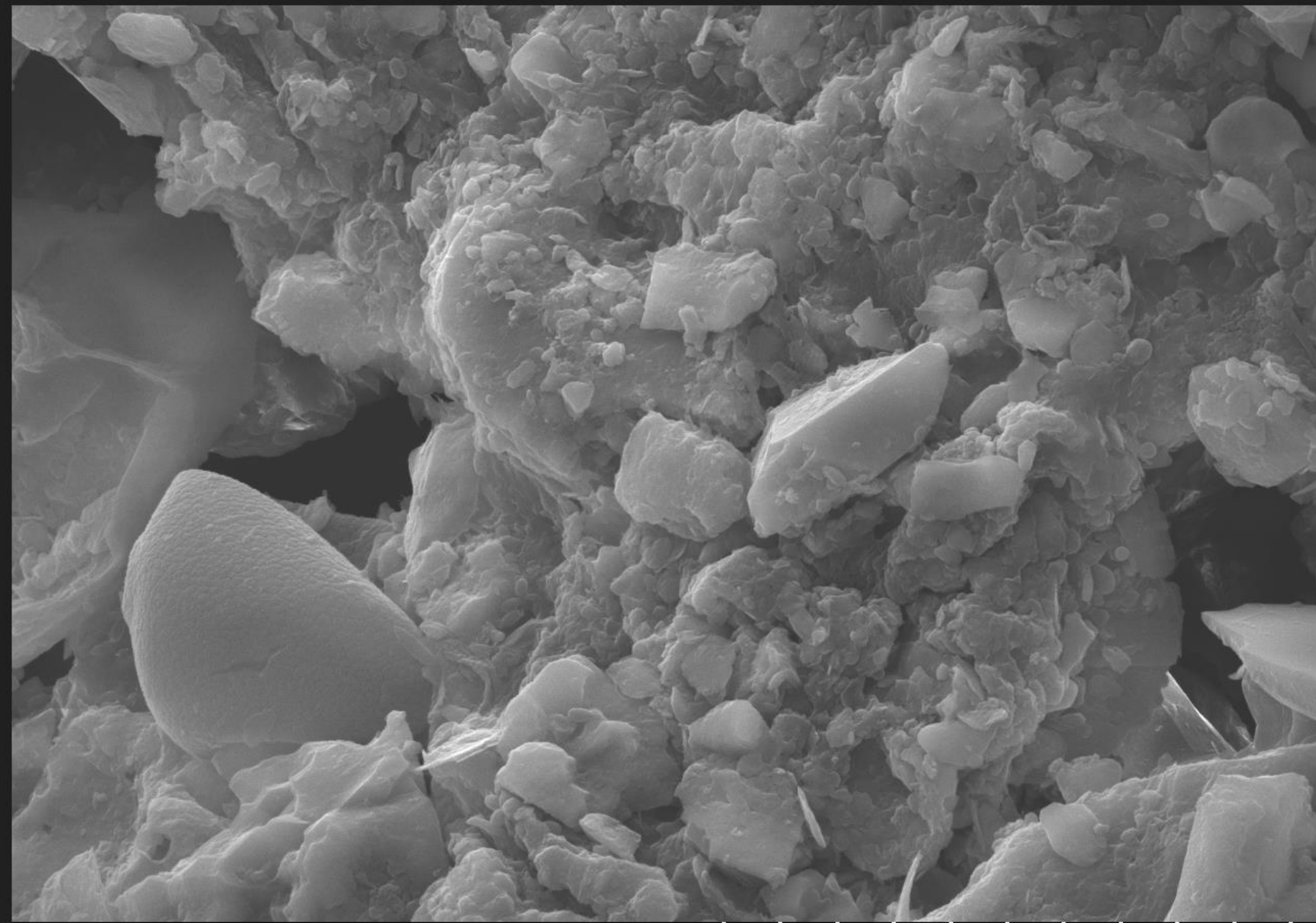
20.0μm





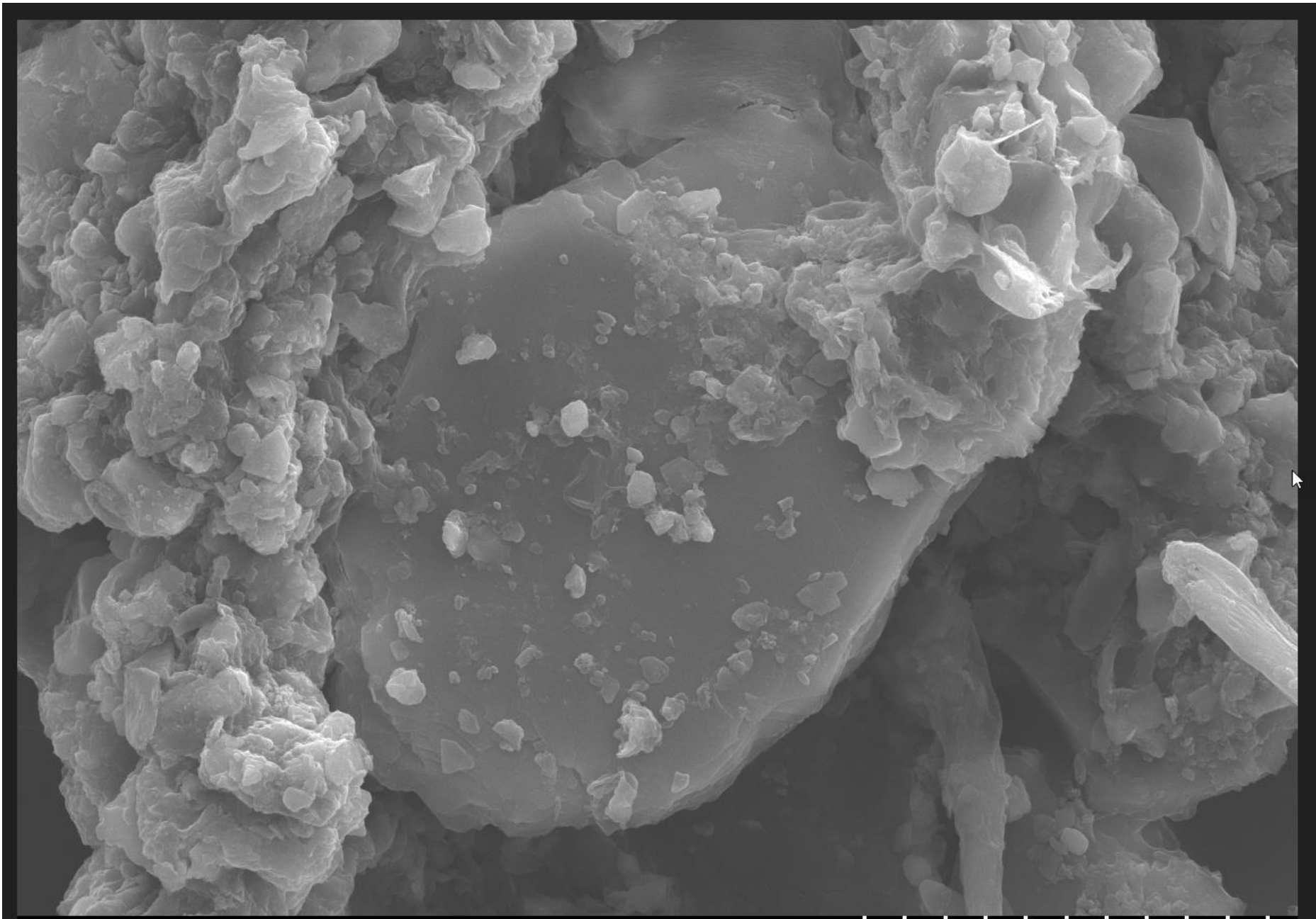
LBT 30.0kV 11.2mm x1.00k LM(UL)

50.0μm



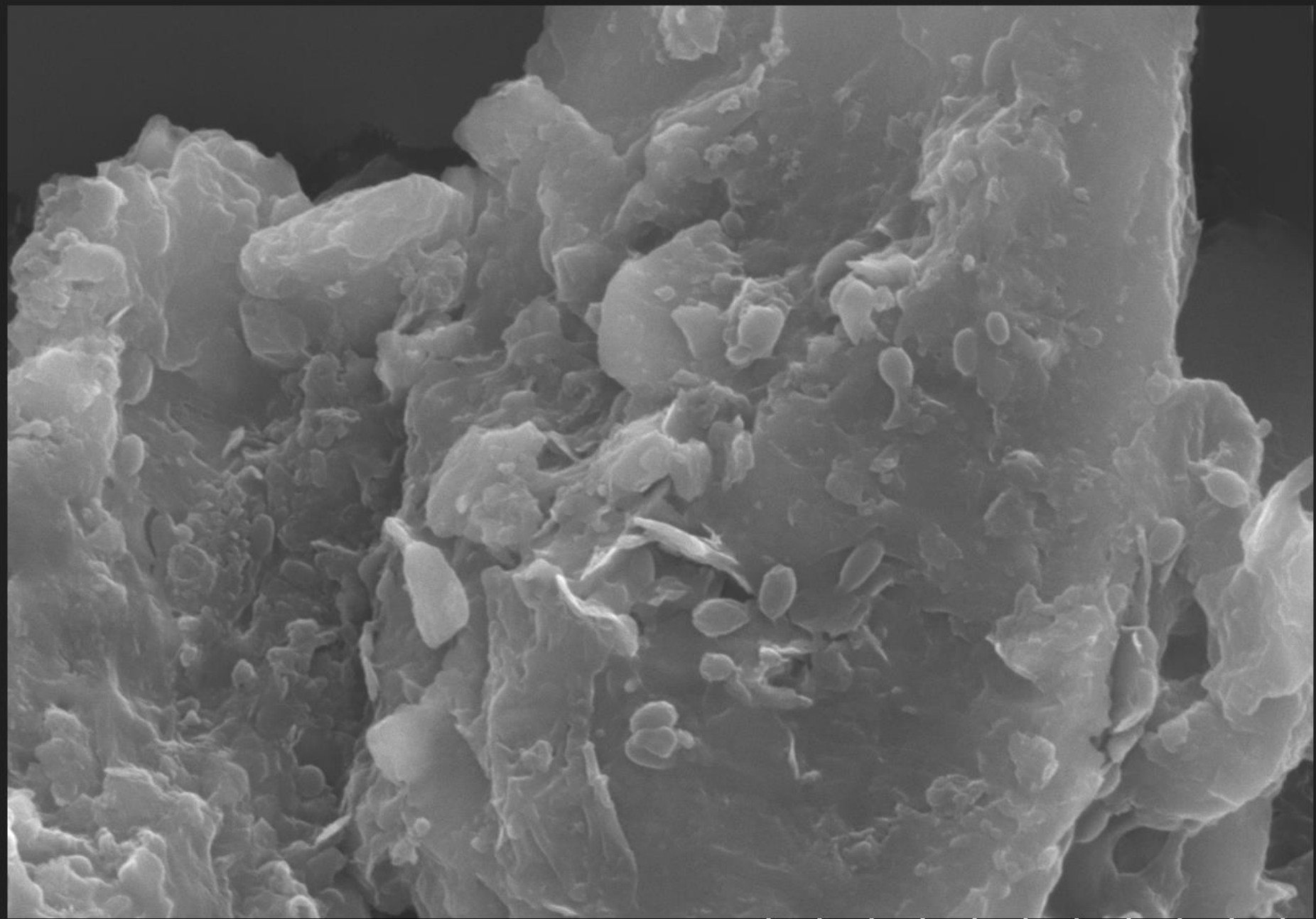
LBT 30.0kV 11.2mm x1.10k LM(UL)

50.0μm



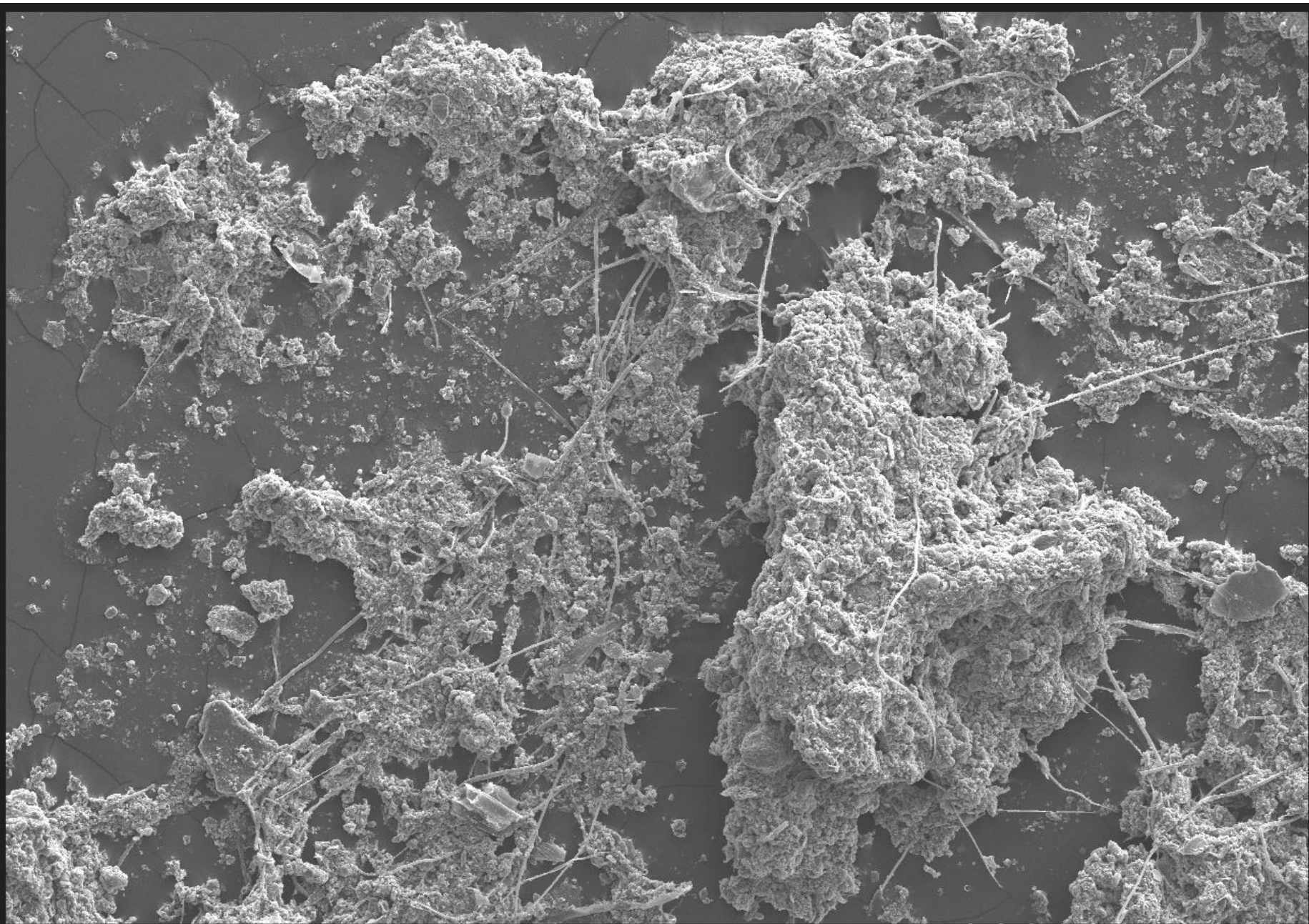
LBT 30.0kV 11.2mm x800 LM(UL)

50.0μm



LBT 30.0kV 11.2mm x2.50k LM(UL)

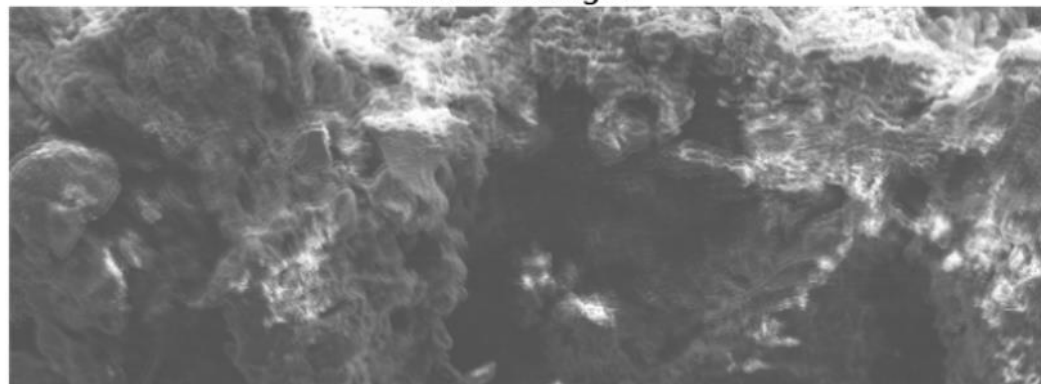
20.0μm



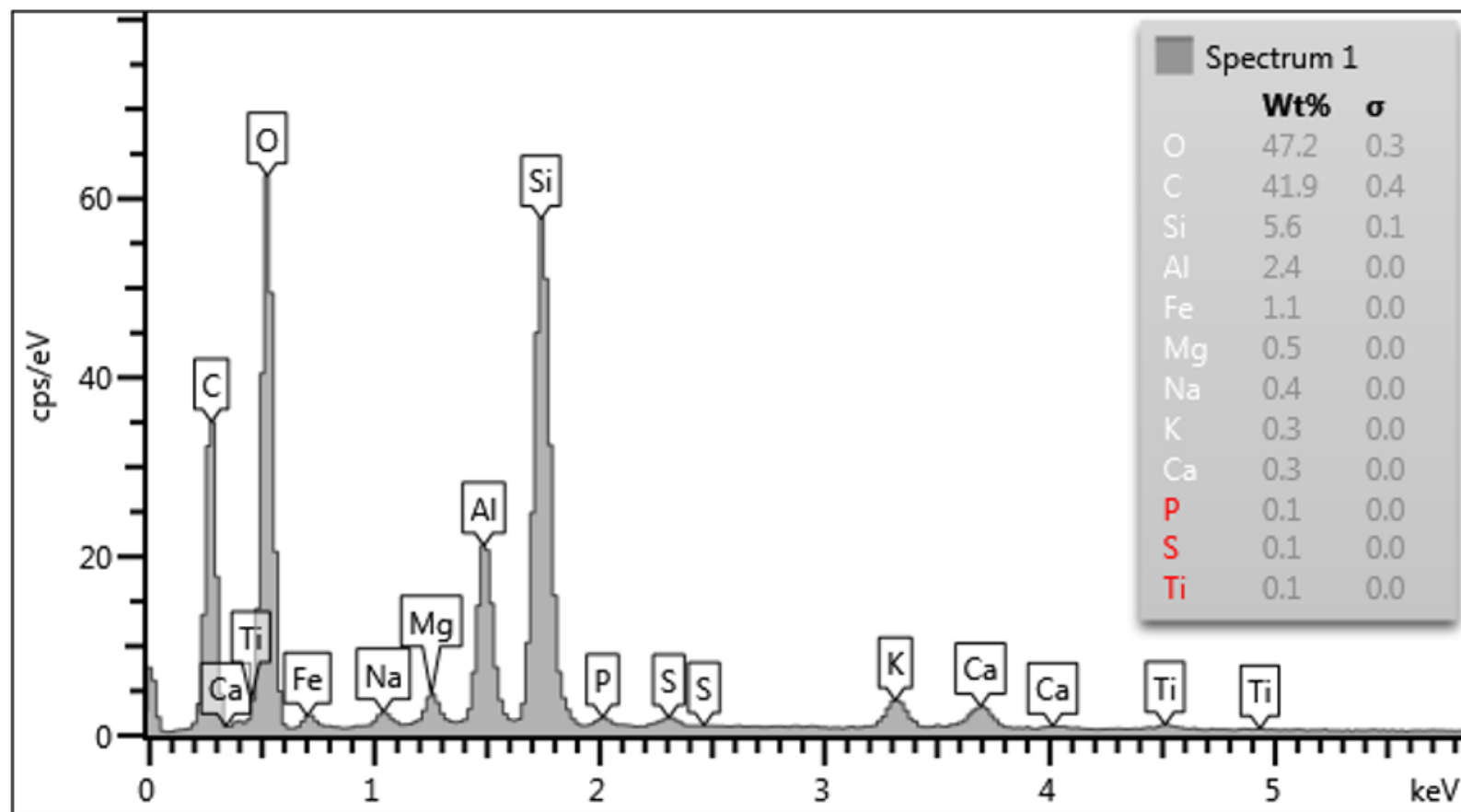
LBT 30.0kV 11.2mm x30 LM(UL)

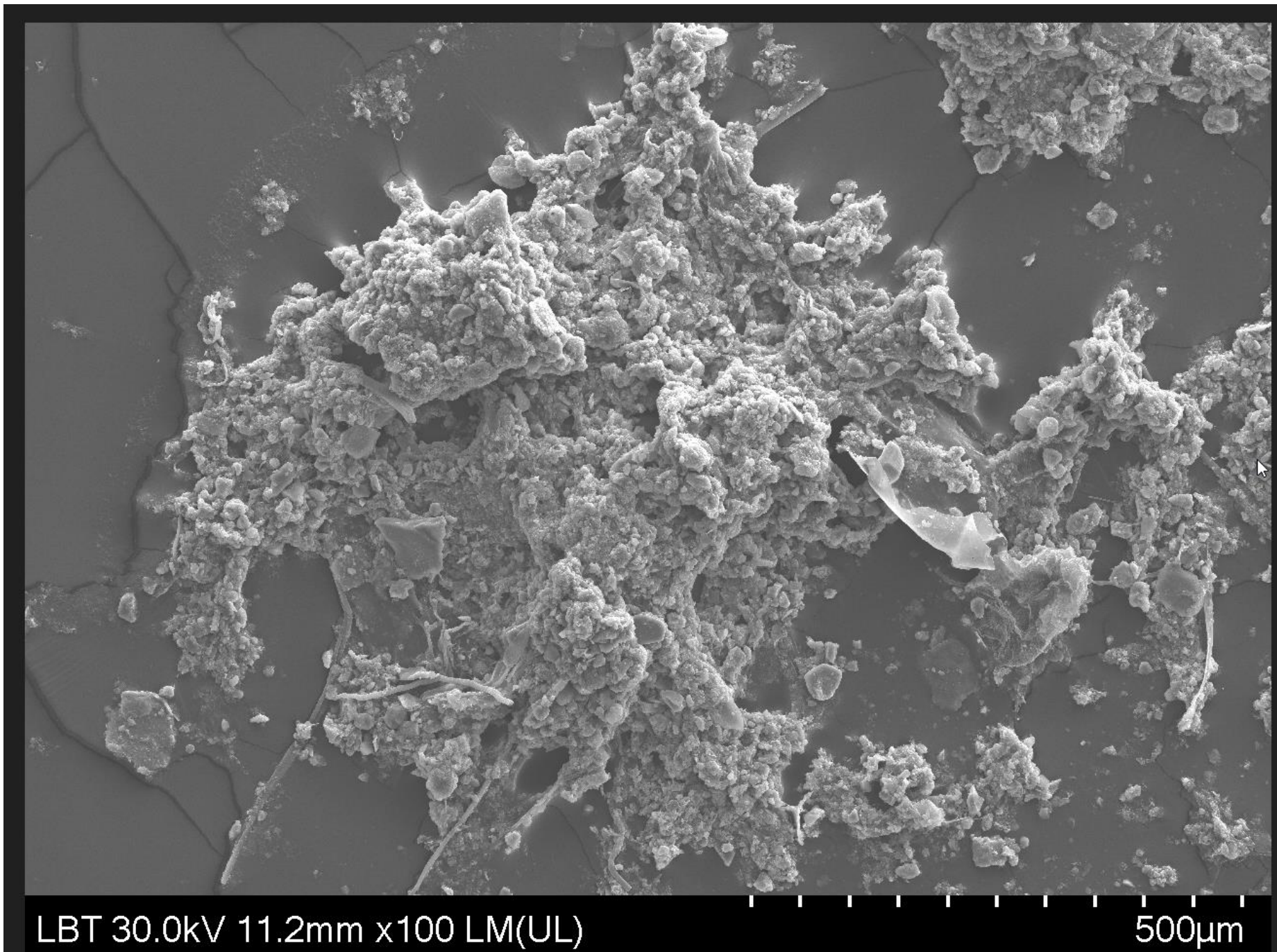
1.00mm

Electron image 1



250µm

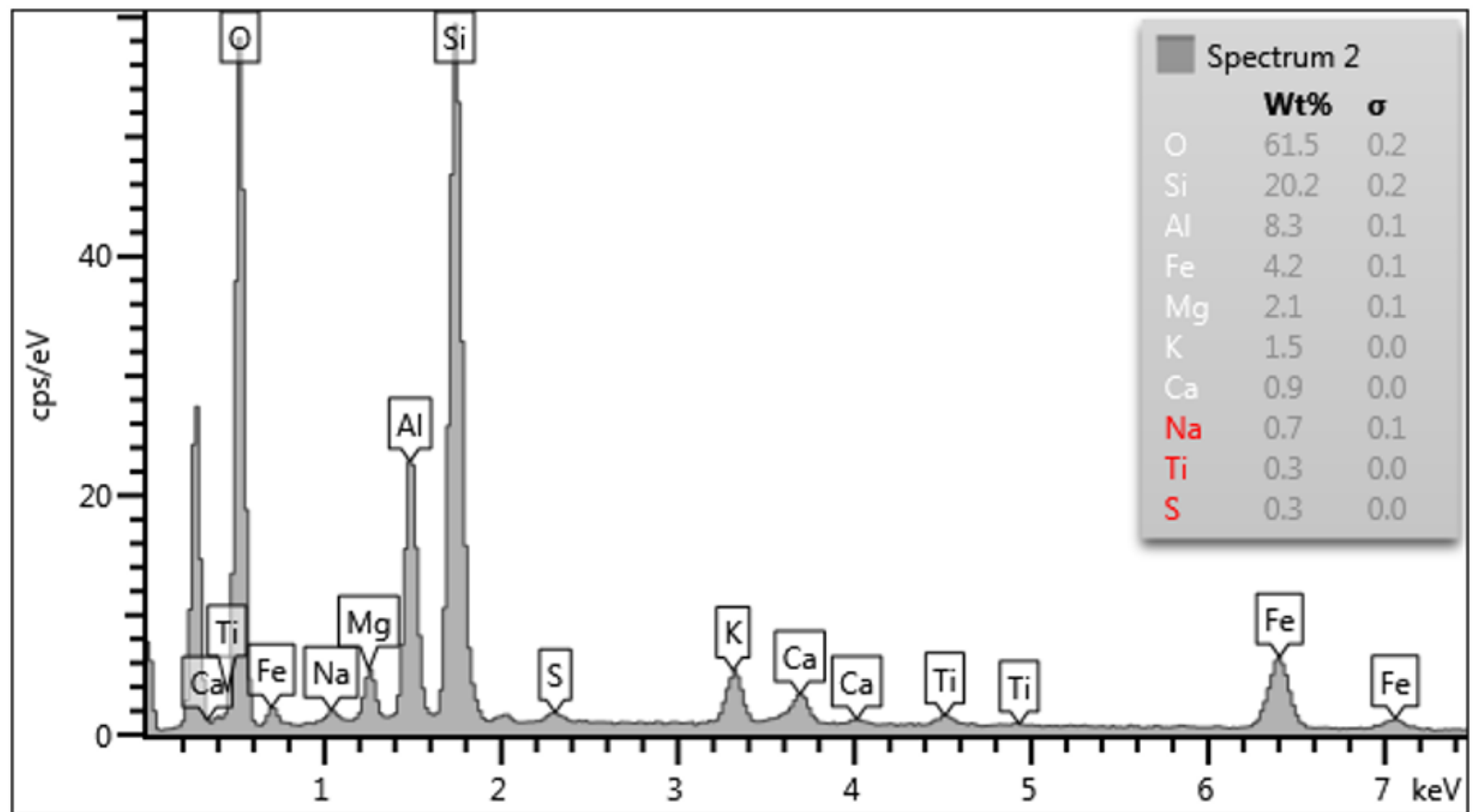
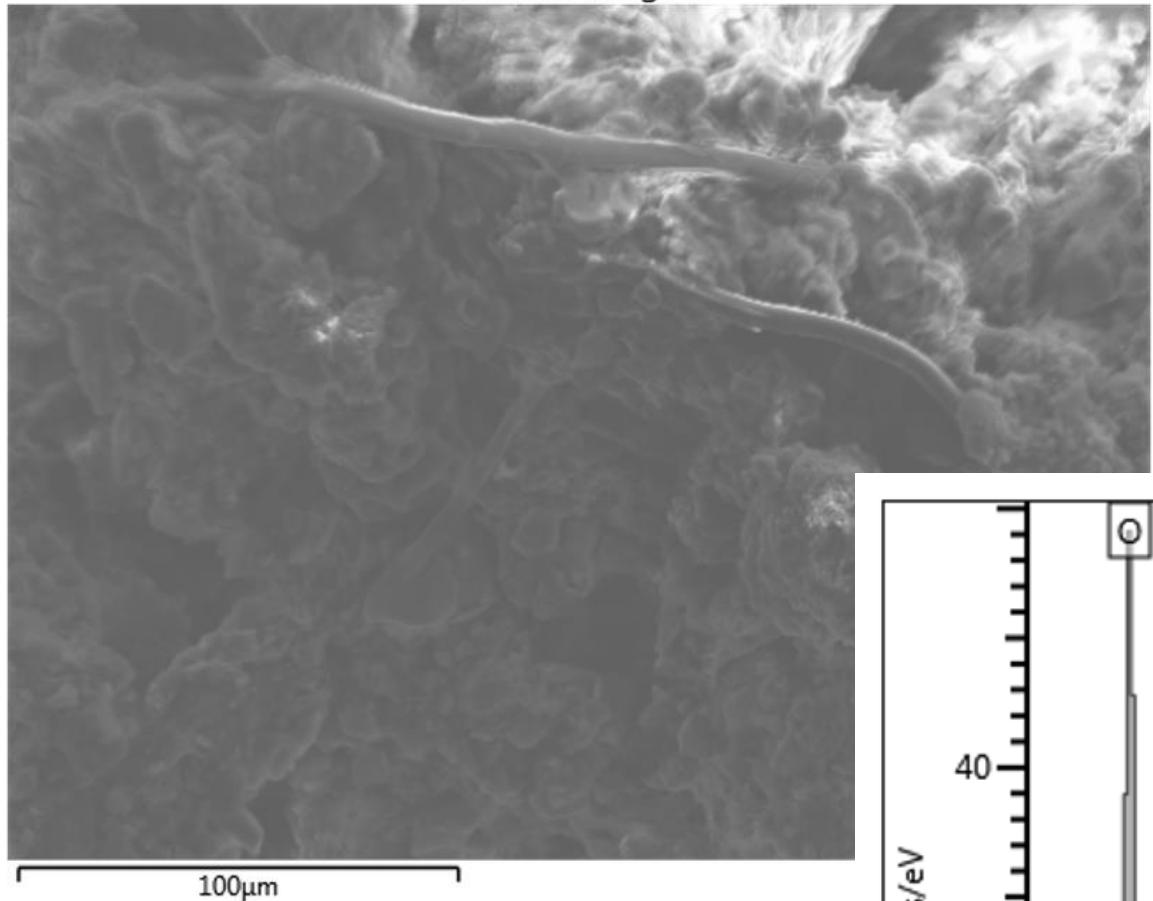




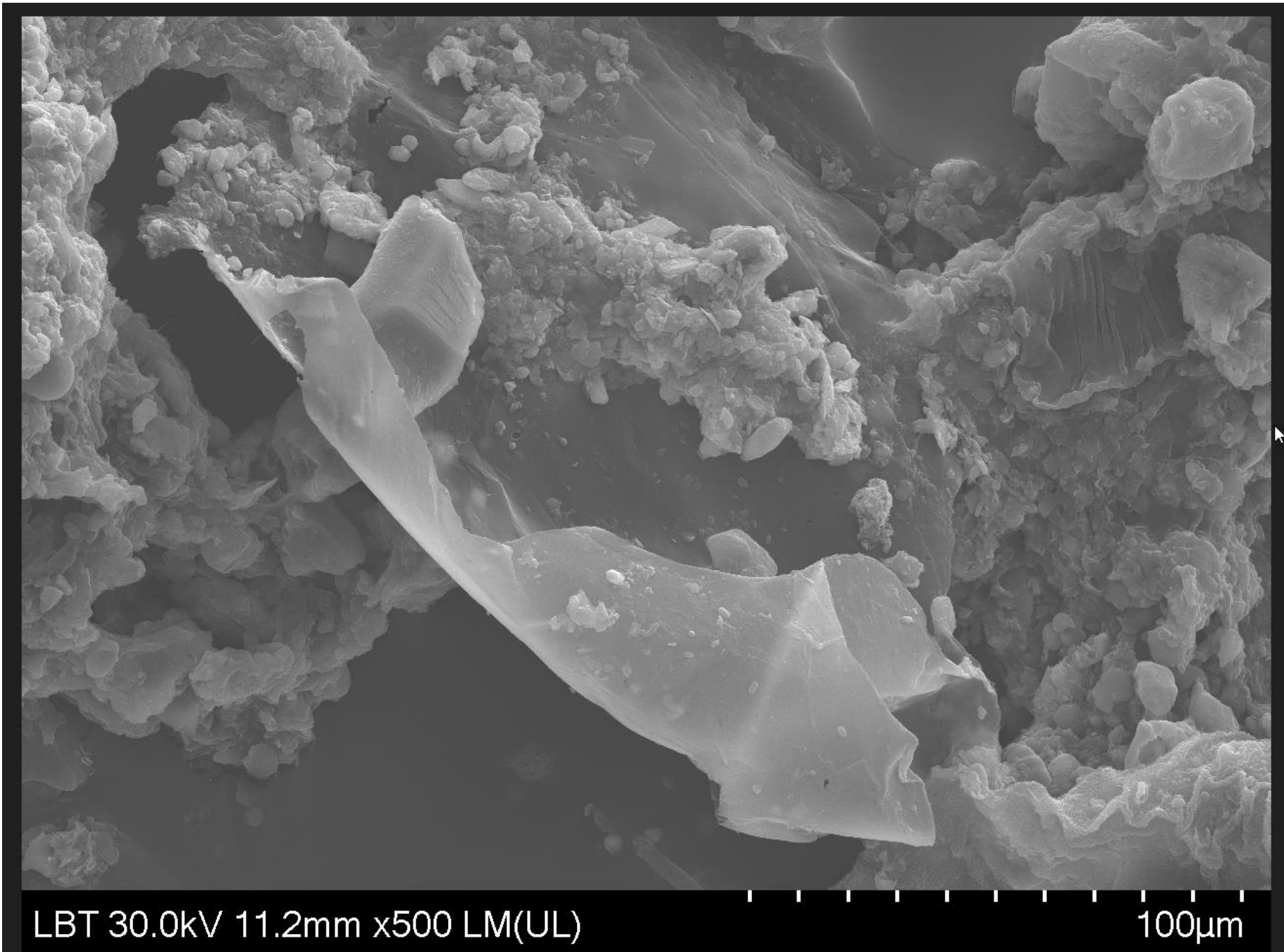
LBT 30.0kV 11.2mm x100 LM(UL)

500µm

Electron Image 2

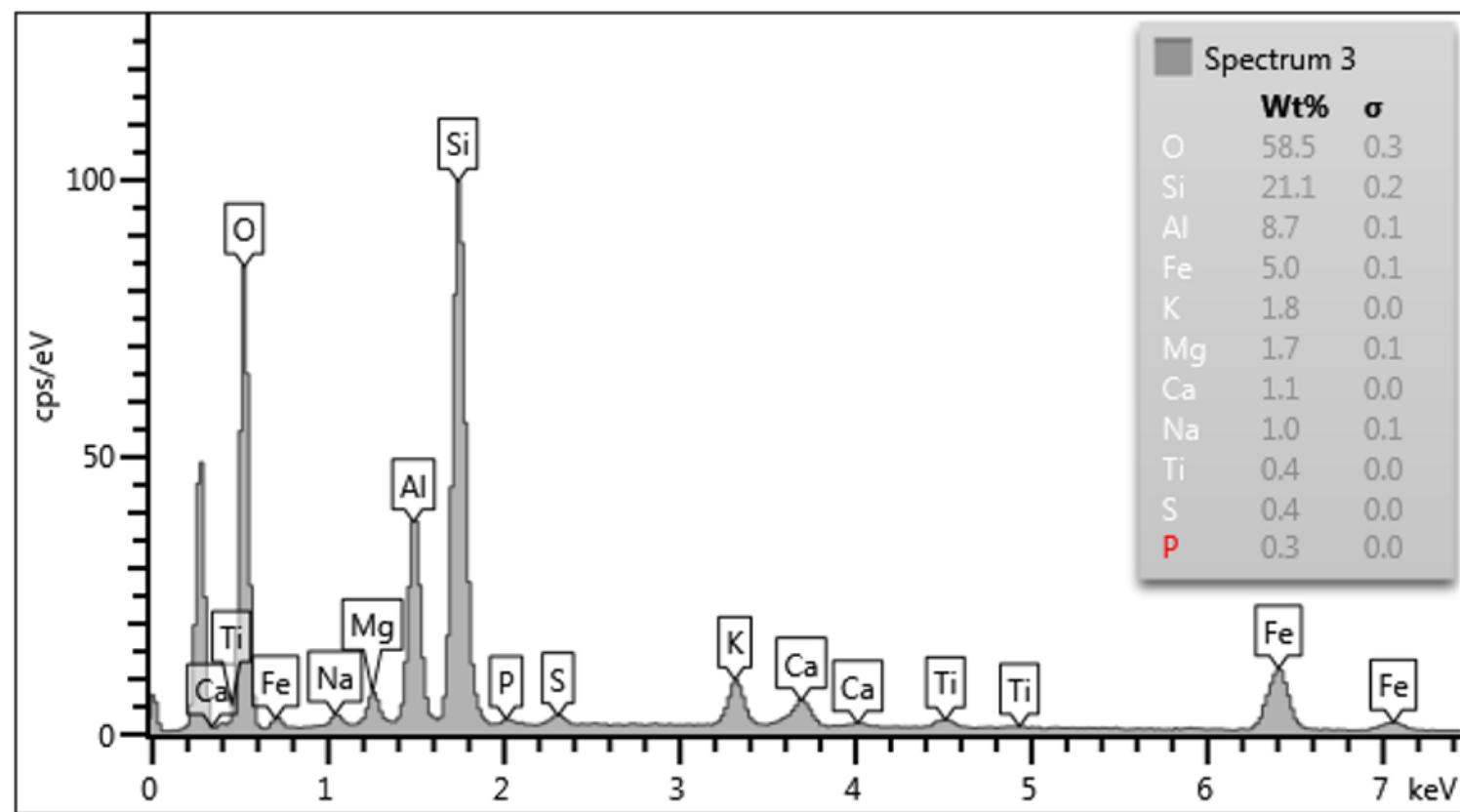
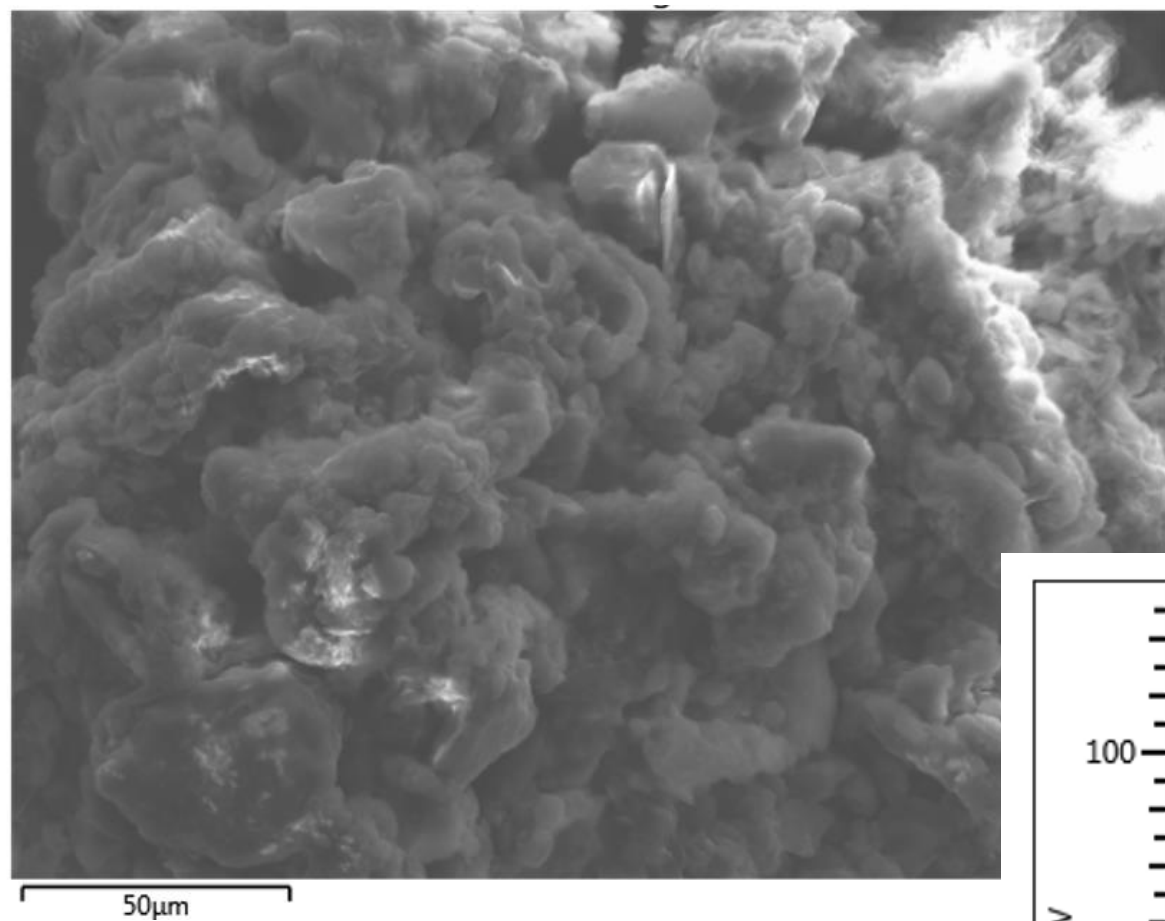


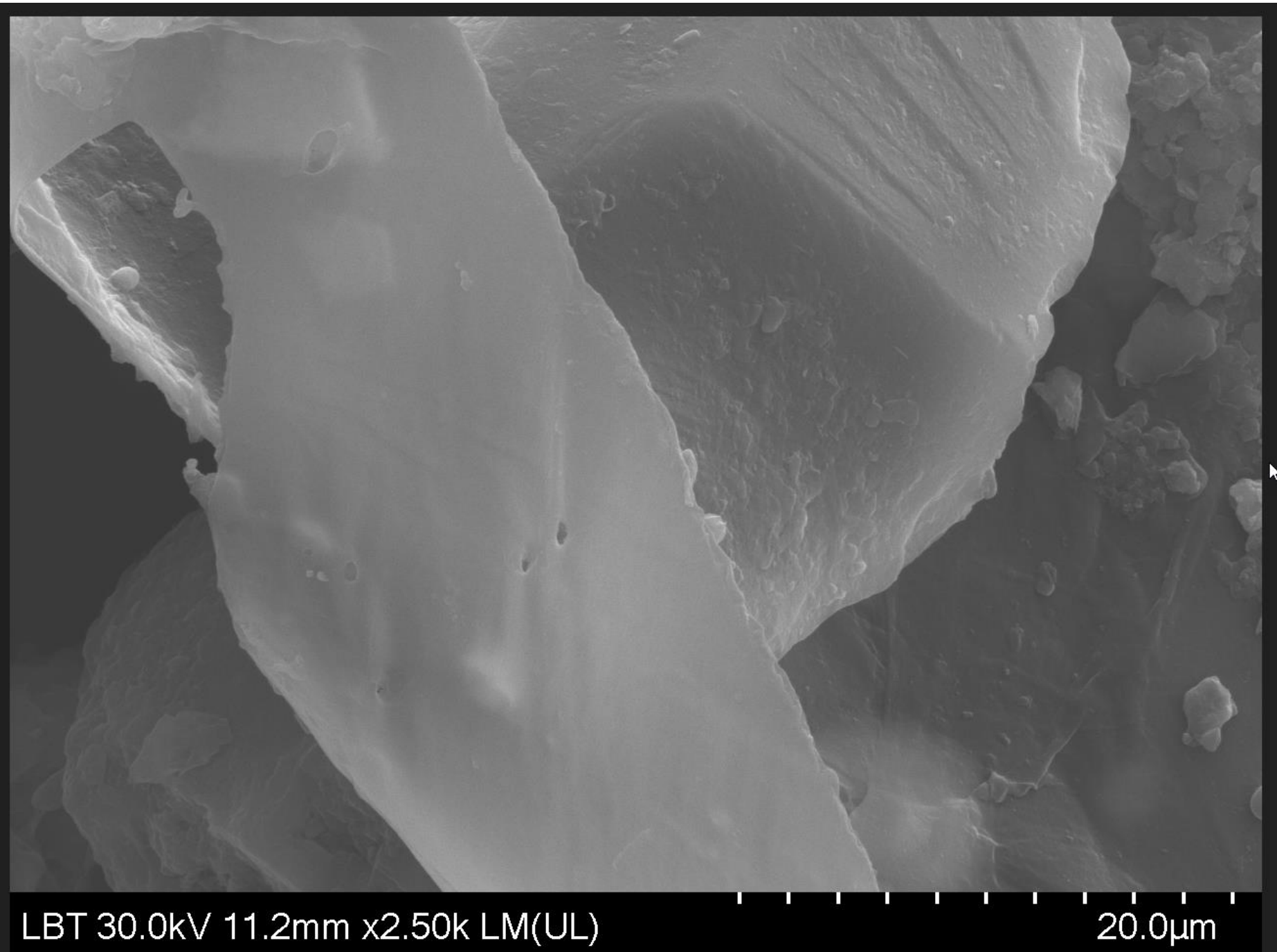




LBT 30.0kV 11.2mm x500 LM(UL)

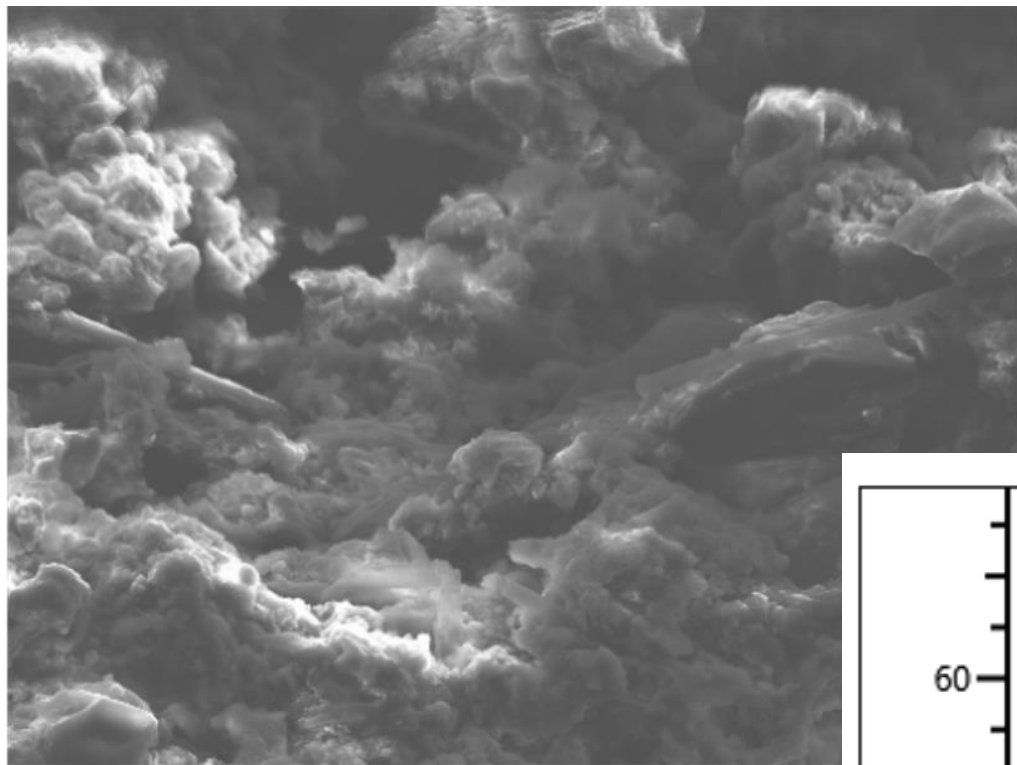
100µm



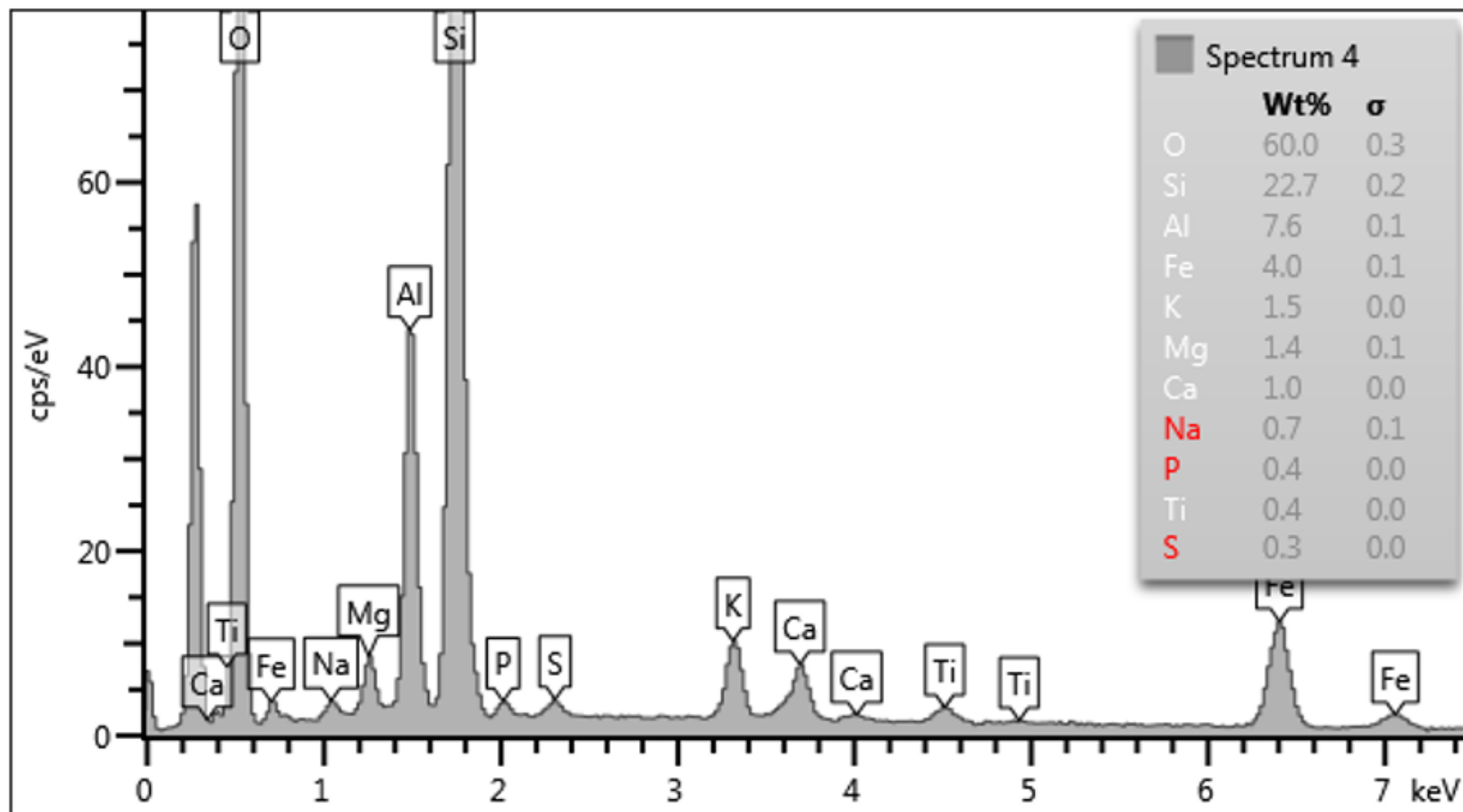


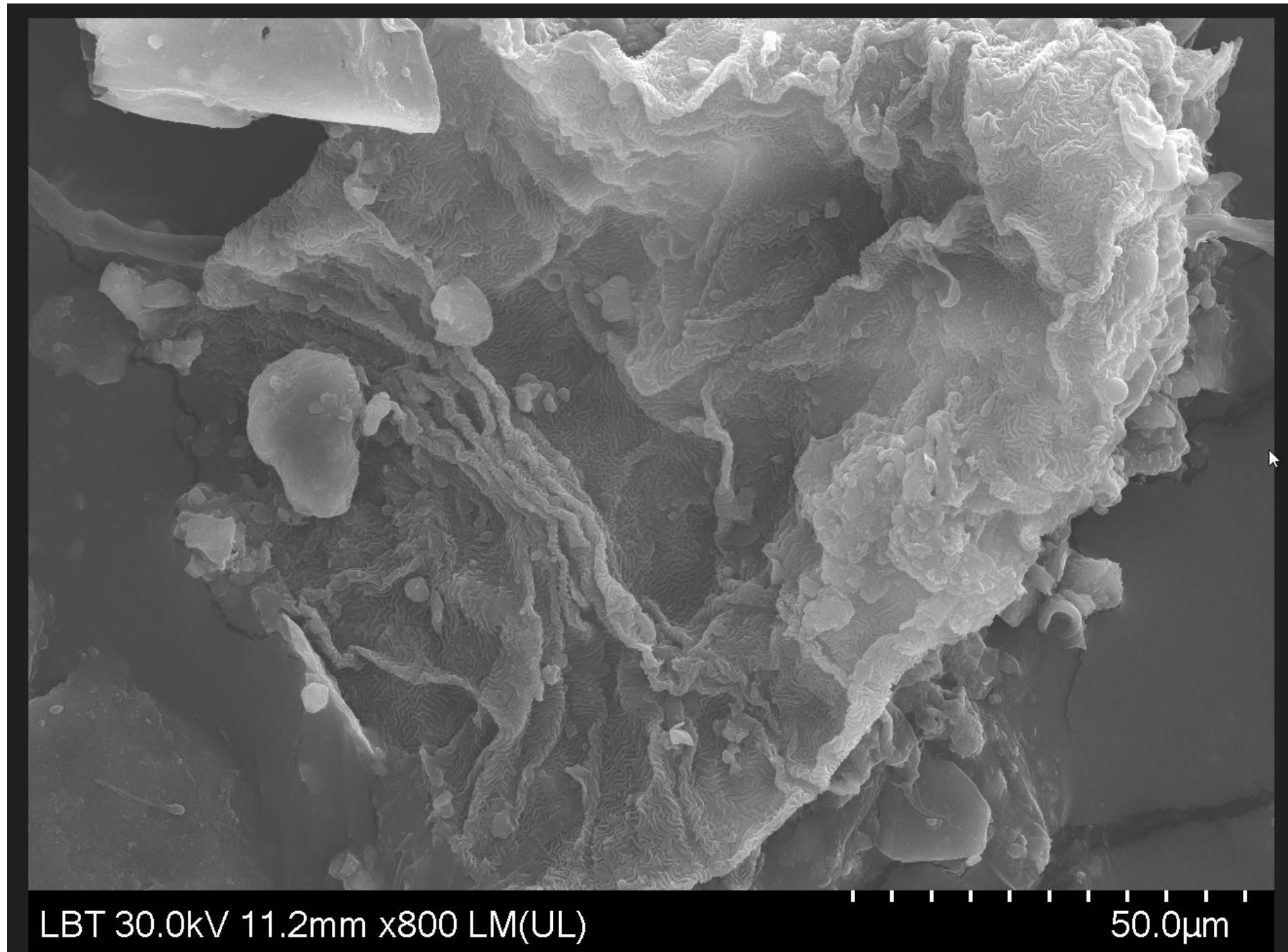
LBT 30.0kV 11.2mm x2.50k LM(UL)

20.0µm



100µm

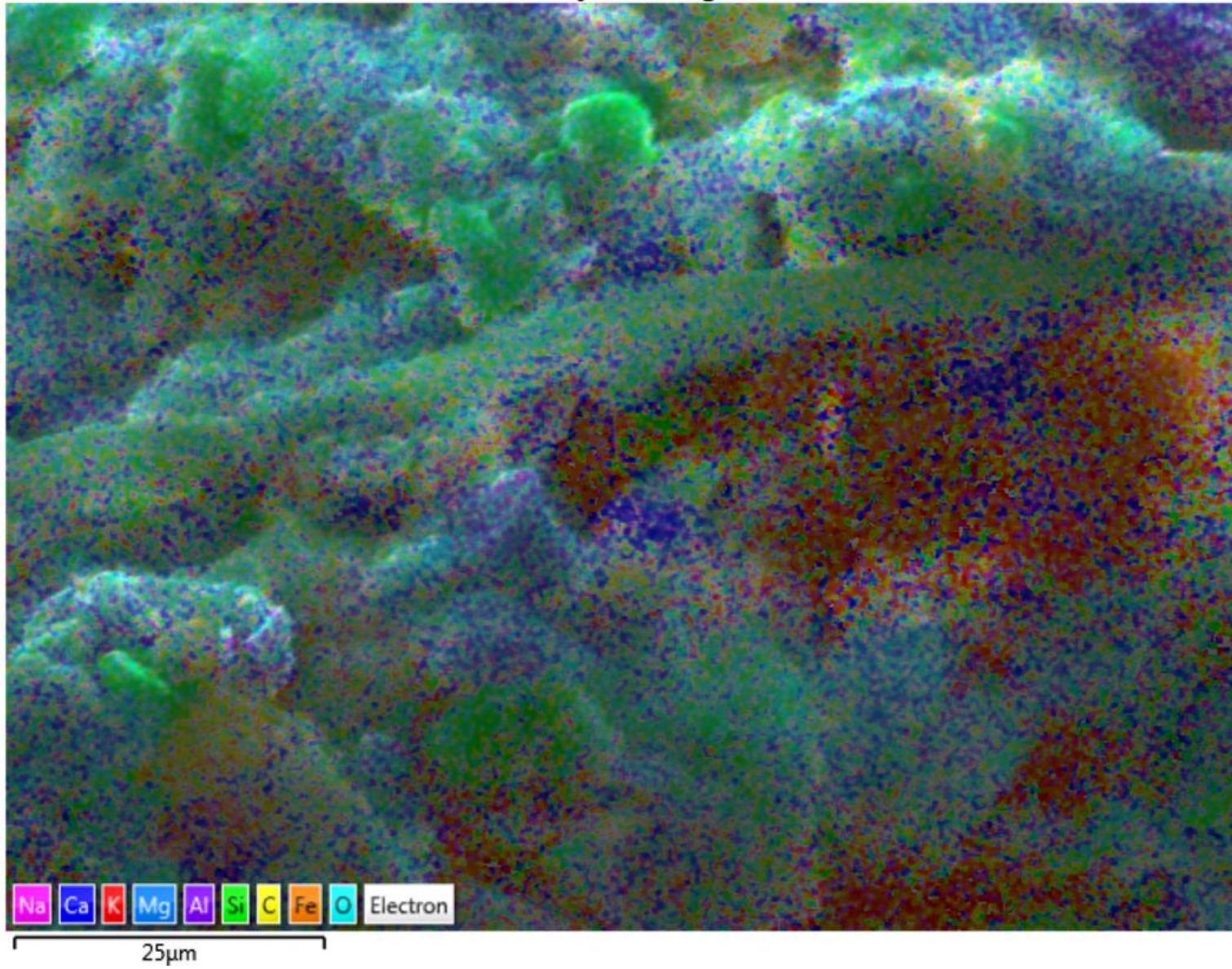




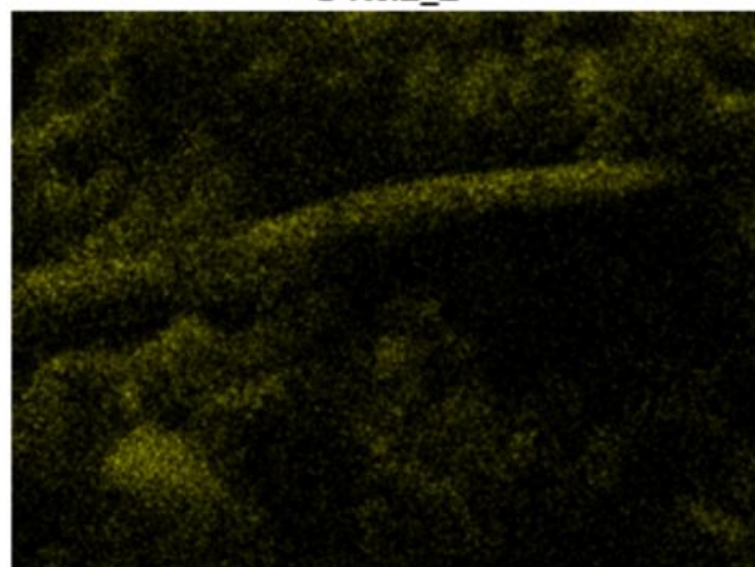
LBT 30.0kV 11.2mm x800 LM(UL)

50.0μm

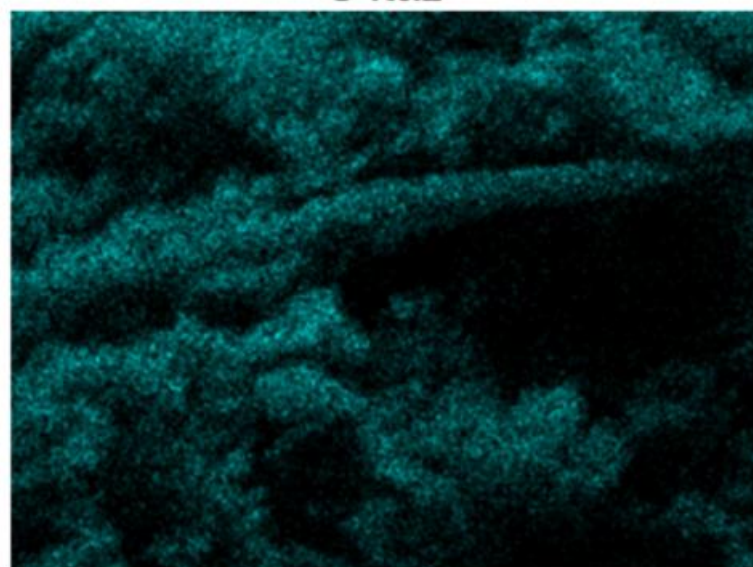
EDS Layered Image 1



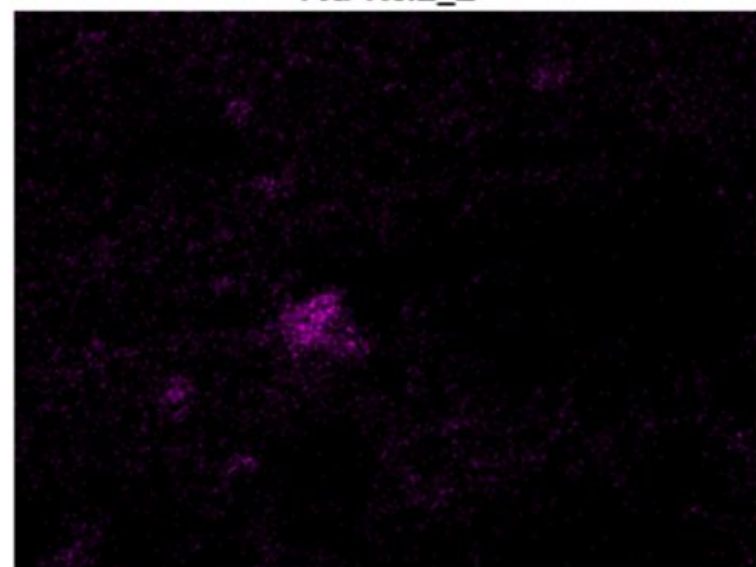
C K $\alpha$ 1\_2



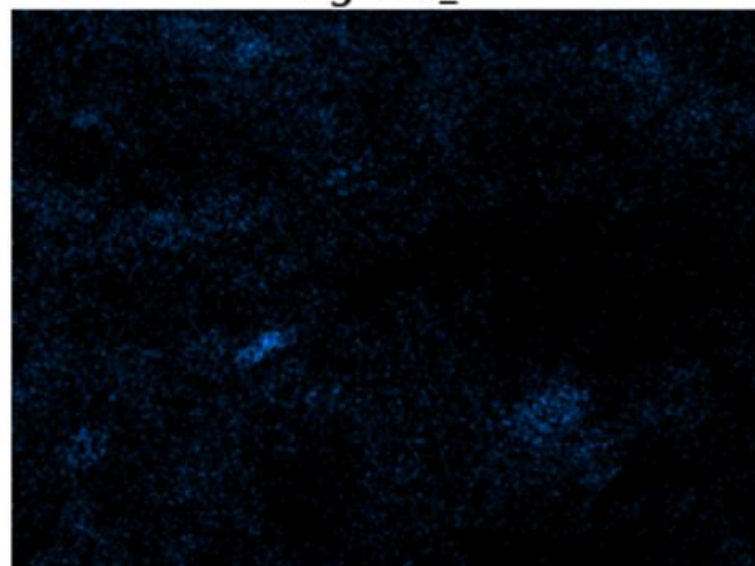
O K $\alpha$ 1



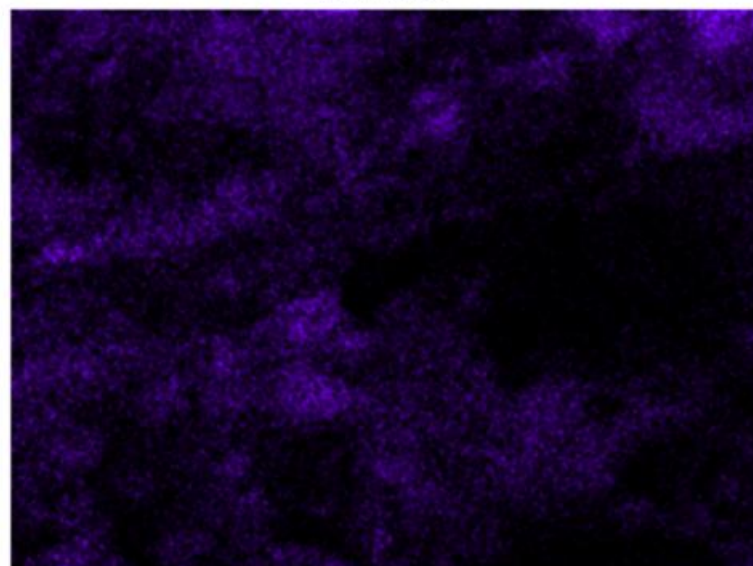
Na K $\alpha$ 1\_2



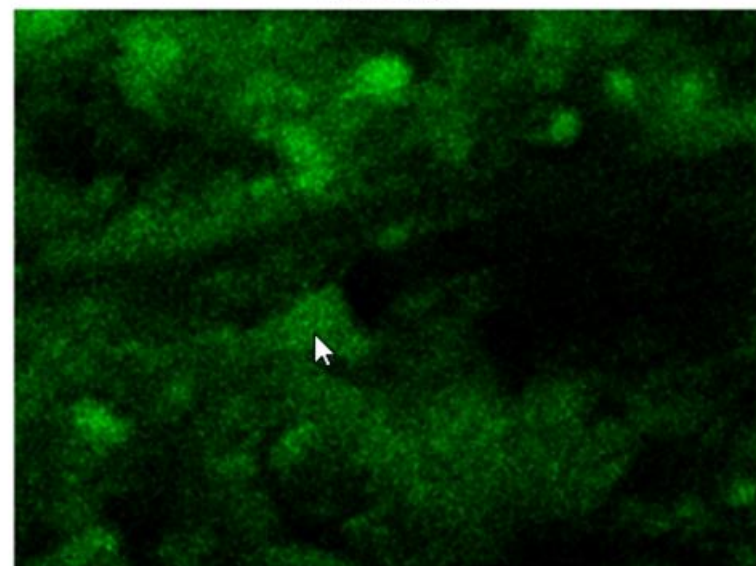
Mg K $\alpha$ 1\_2



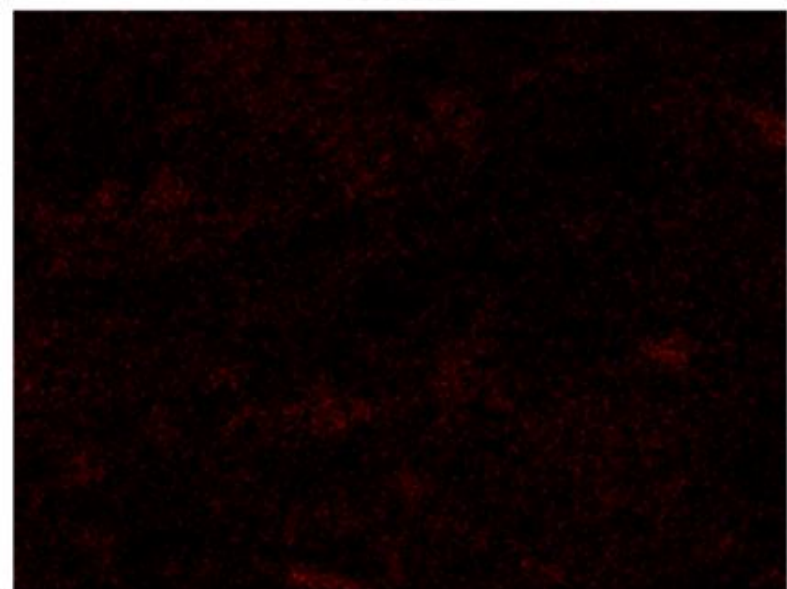
Al K $\alpha$ 1



Si K $\alpha$ 1

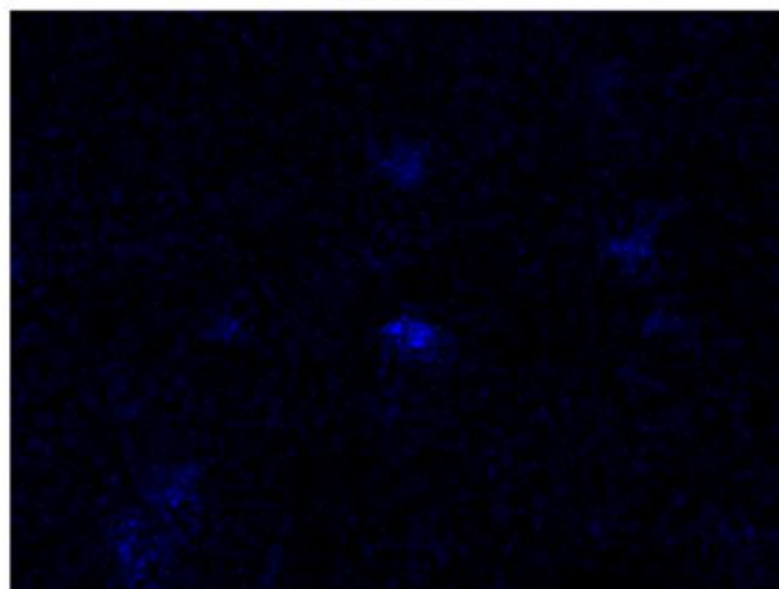


K K $\alpha$ 1



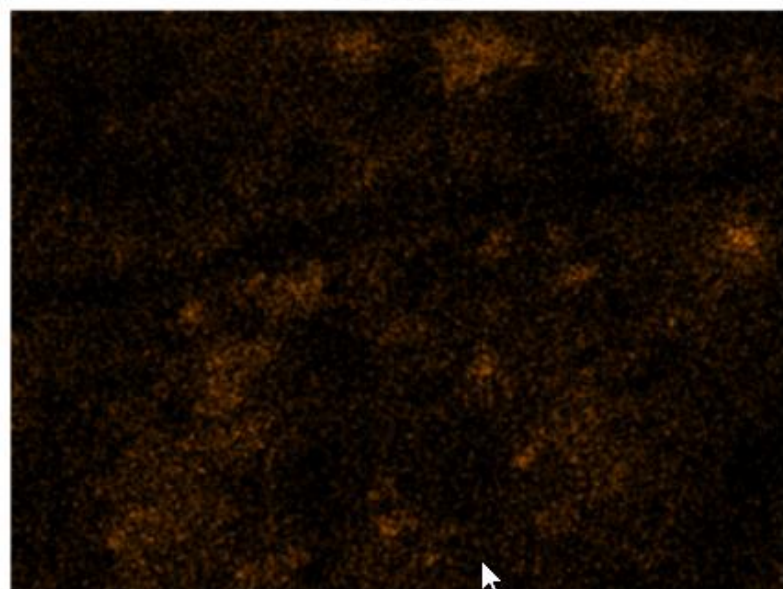
25 $\mu$ m

Ca K $\alpha$ 1



25 $\mu$ m

Fe K $\alpha$ 1

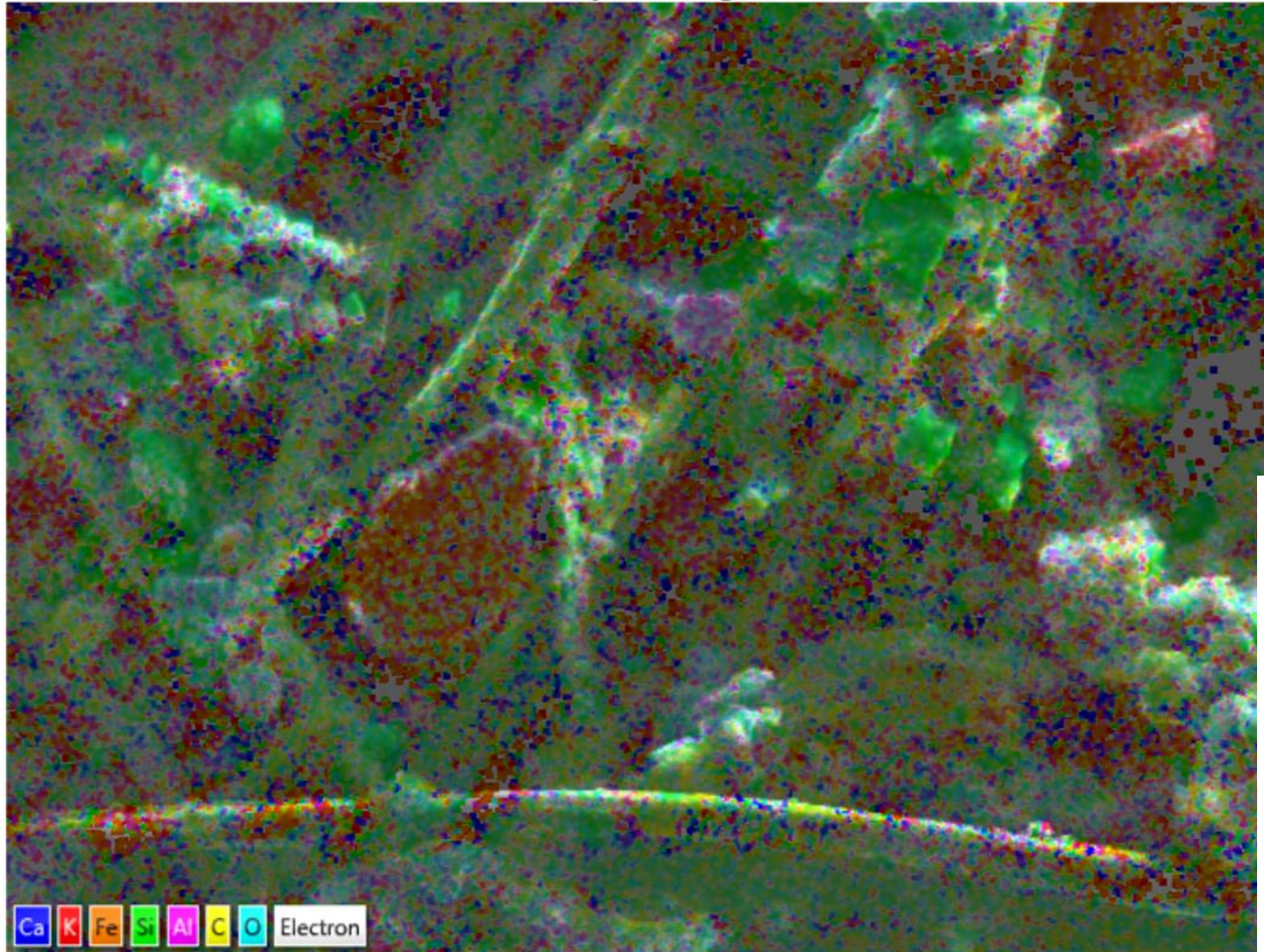


25 $\mu$ m

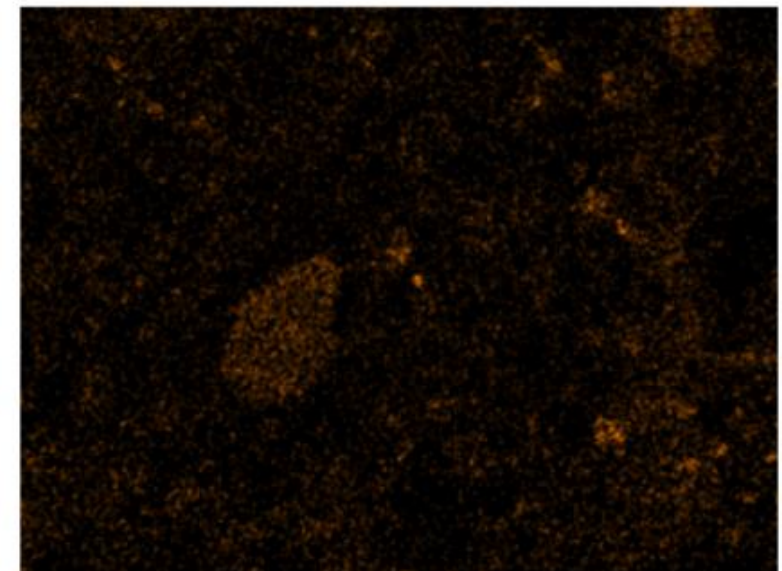




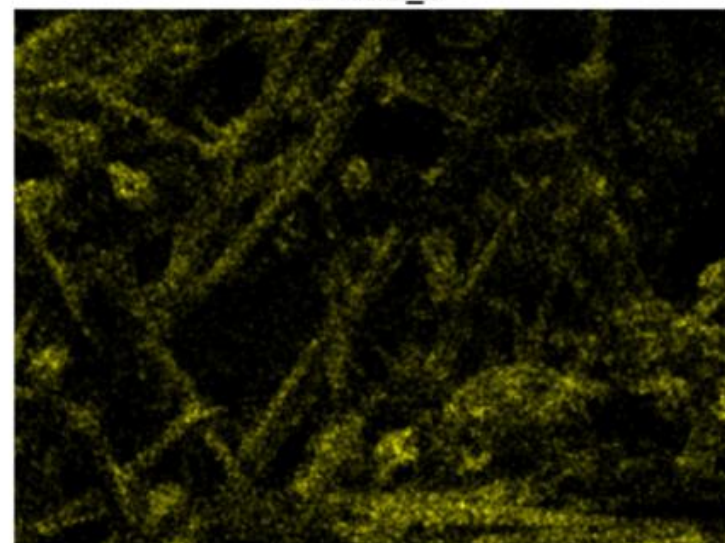
EDS Layered Image 2



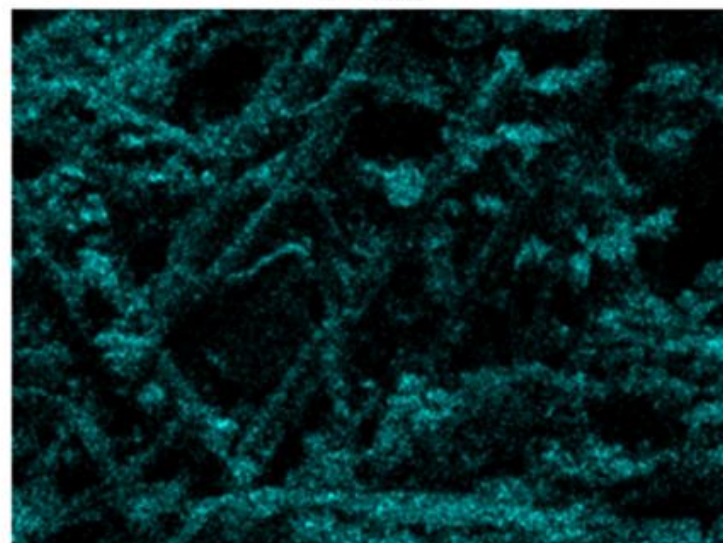
Fe K $\alpha$ 1



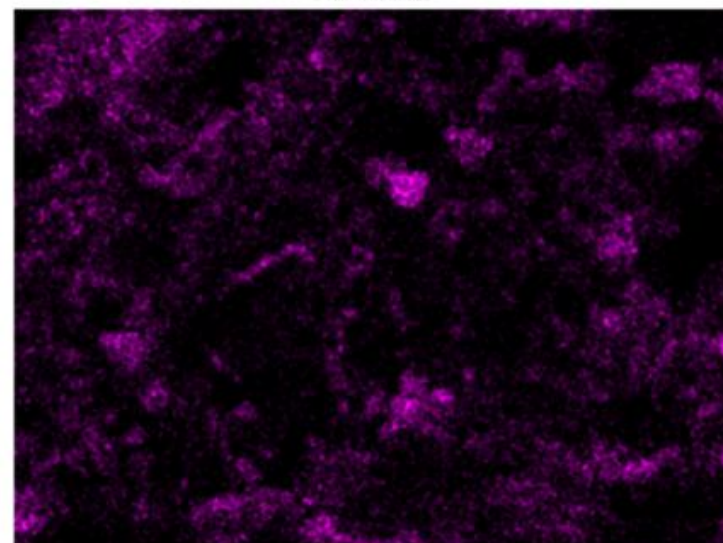
C K $\alpha$ \_2



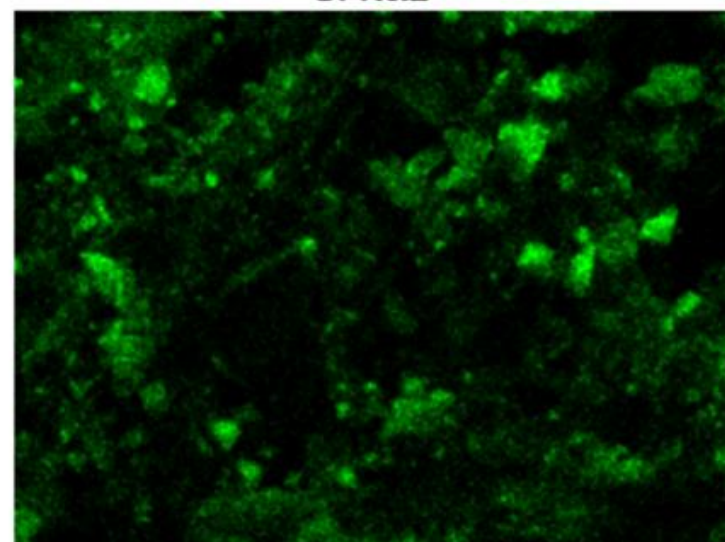
O K $\alpha$ 1



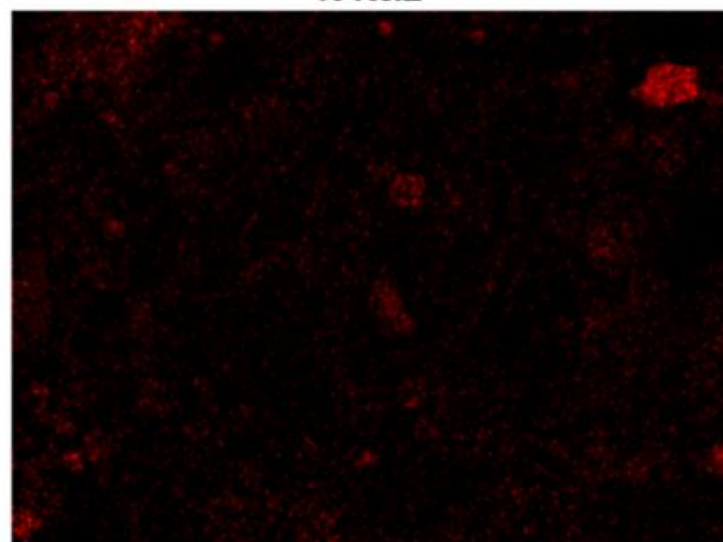
Al K $\alpha$ 1



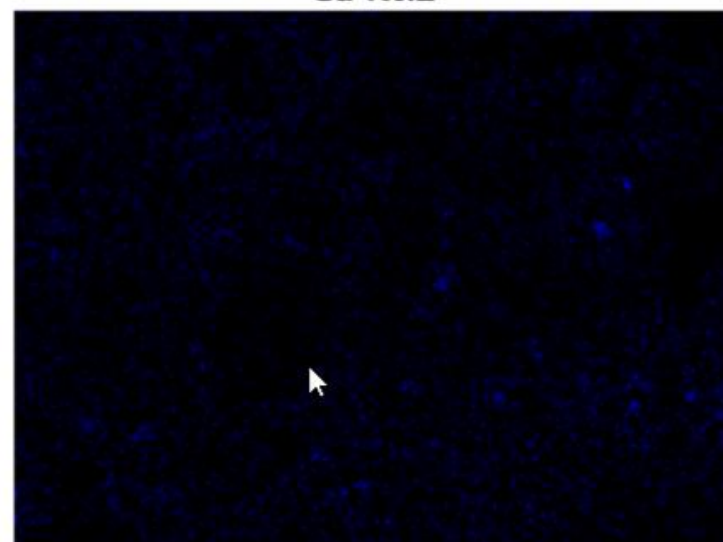
Si K $\alpha$ 1

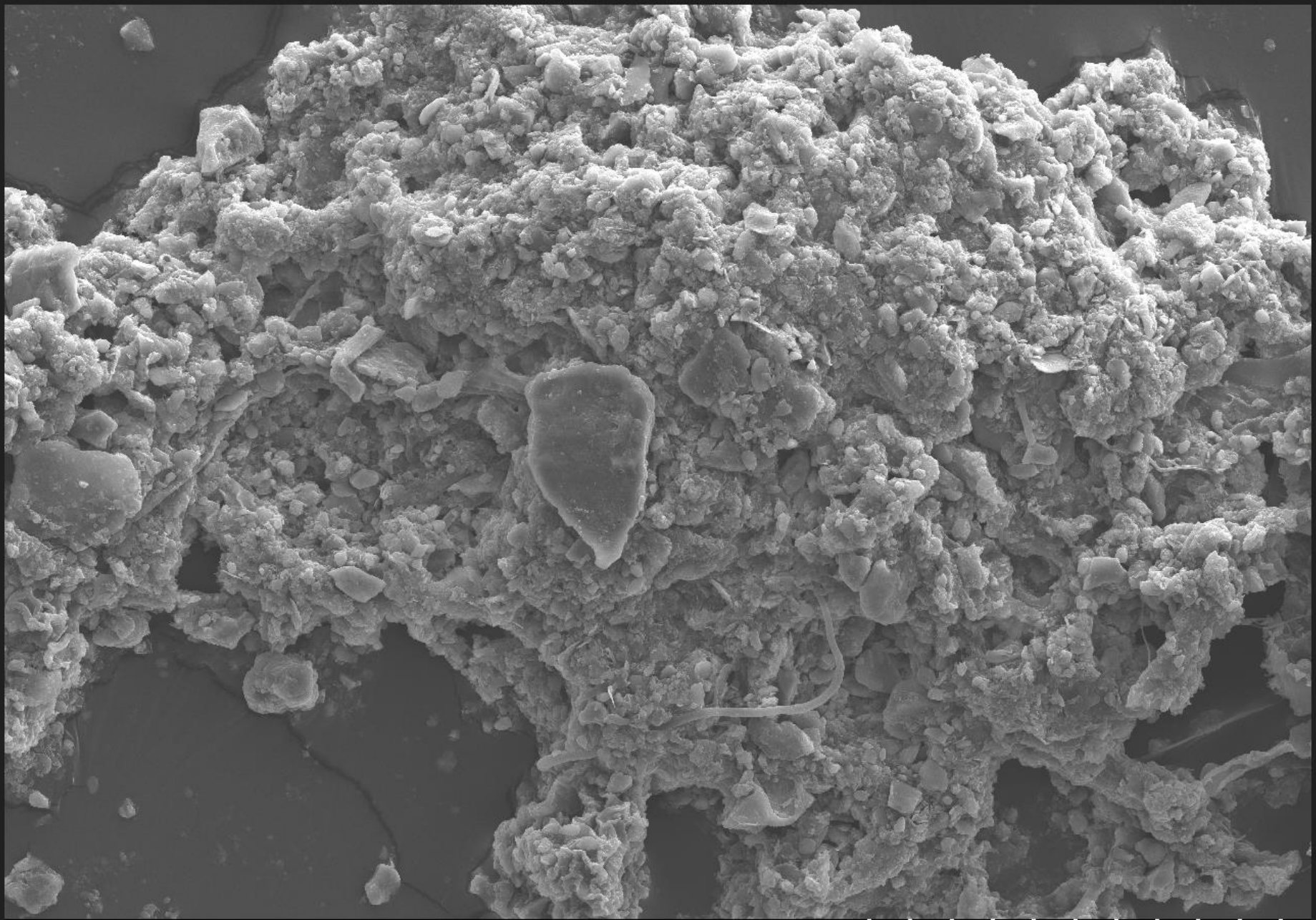


K K $\alpha$ 1



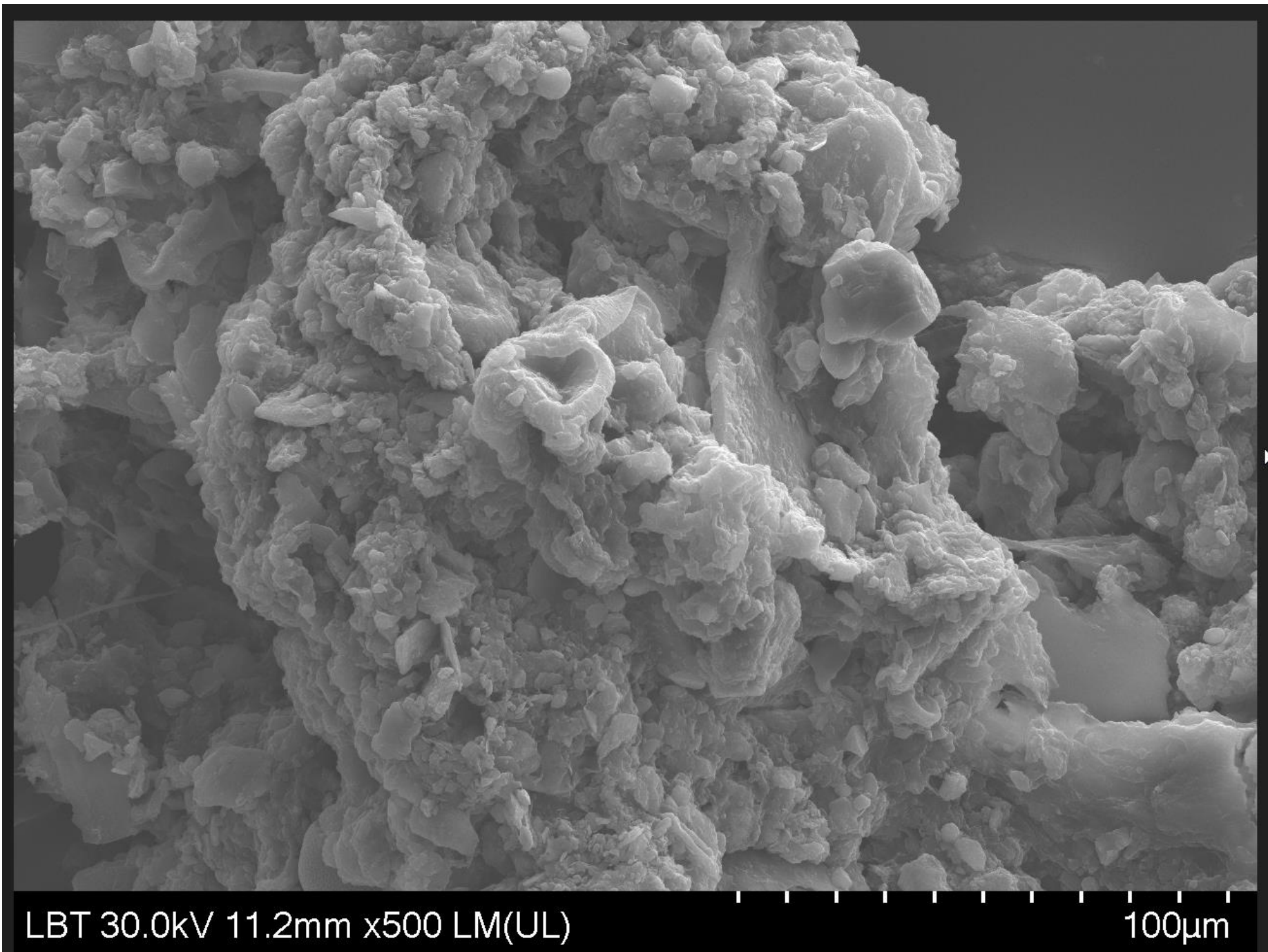
Ca K $\alpha$ 1





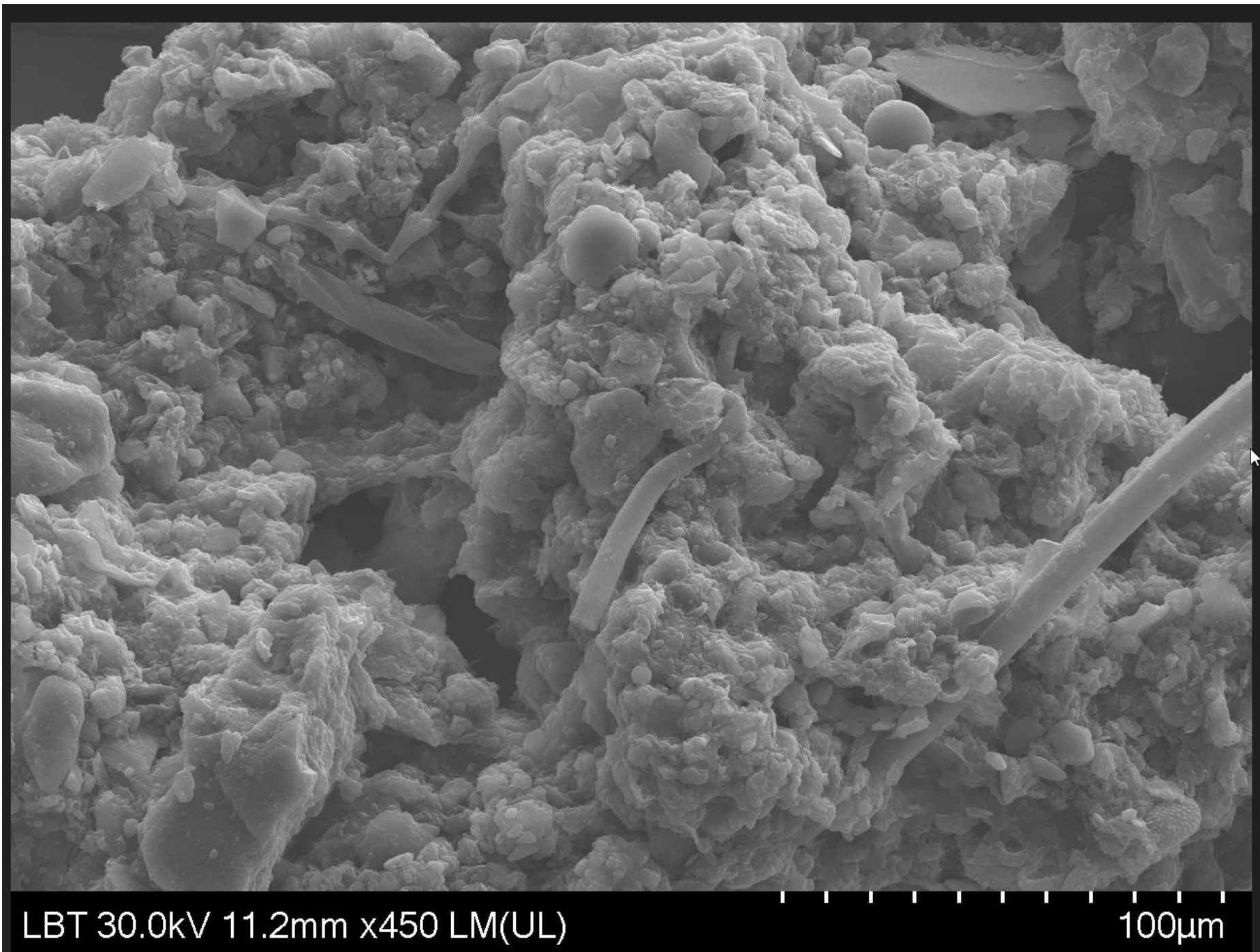
LBT 30.0kV 11.2mm x200 LM(UL)

200 $\mu$ m



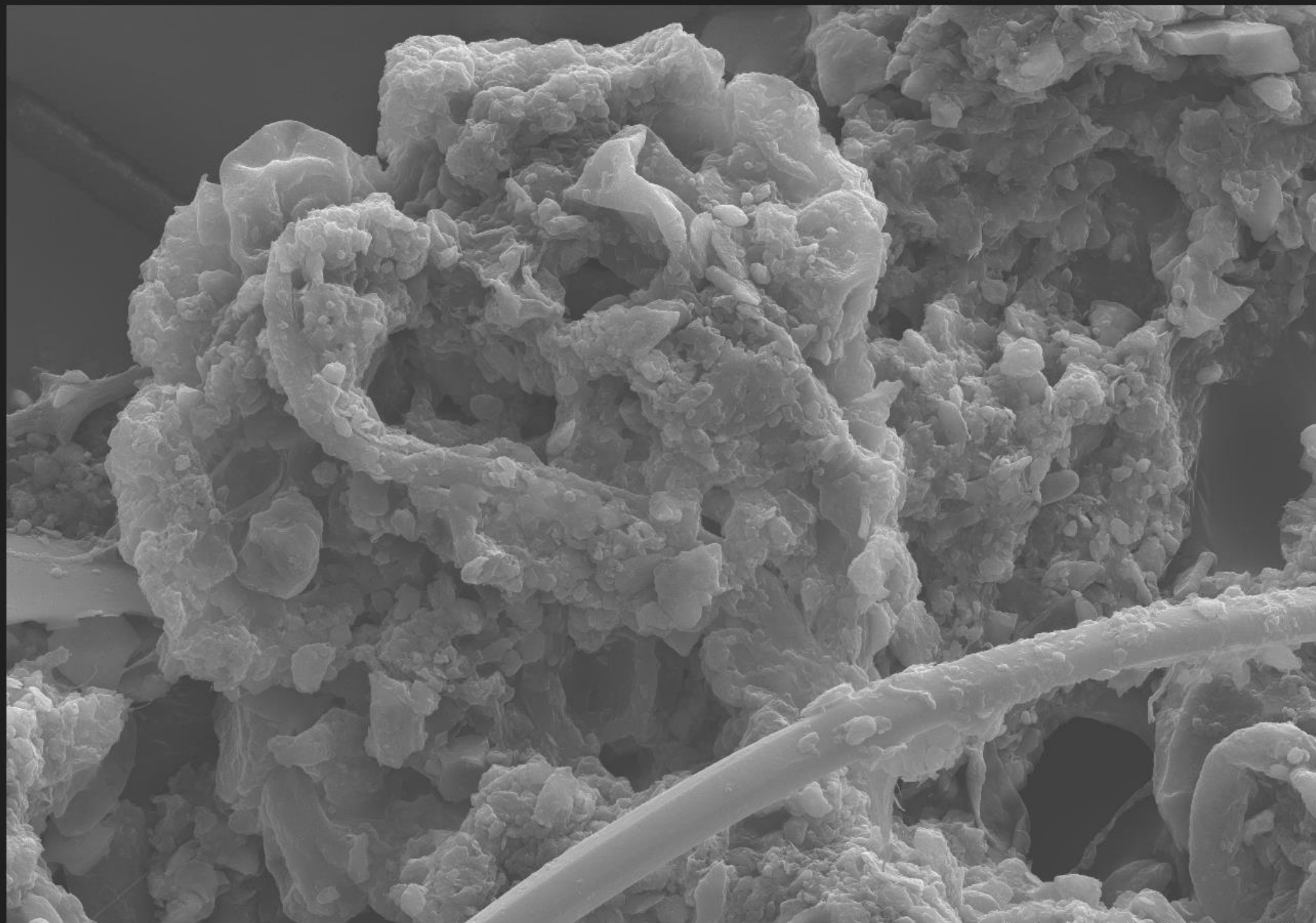
LBT 30.0kV 11.2mm x500 LM(UL)

100μm



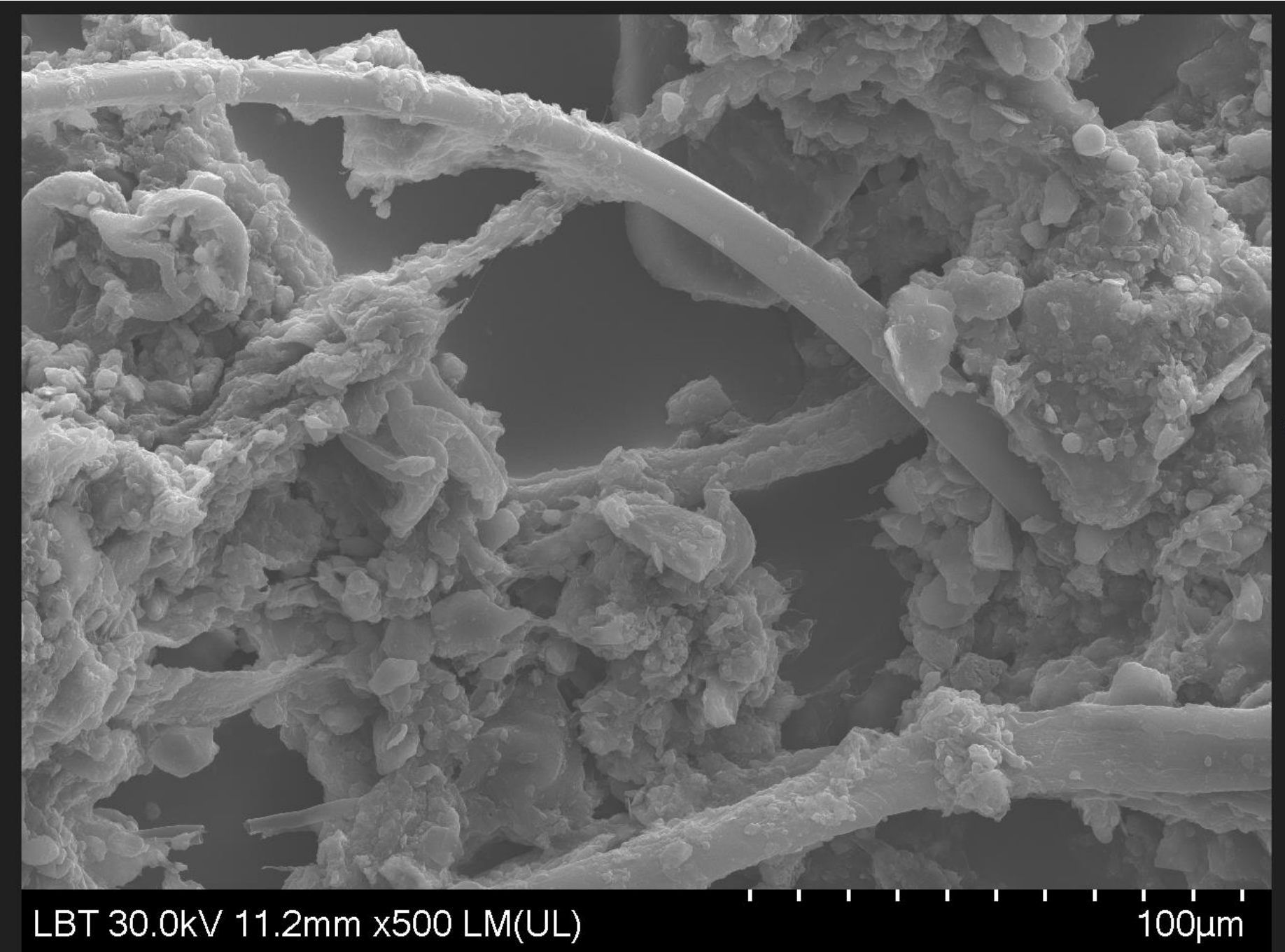
LBT 30.0kV 11.2mm x450 LM(UL)

100μm

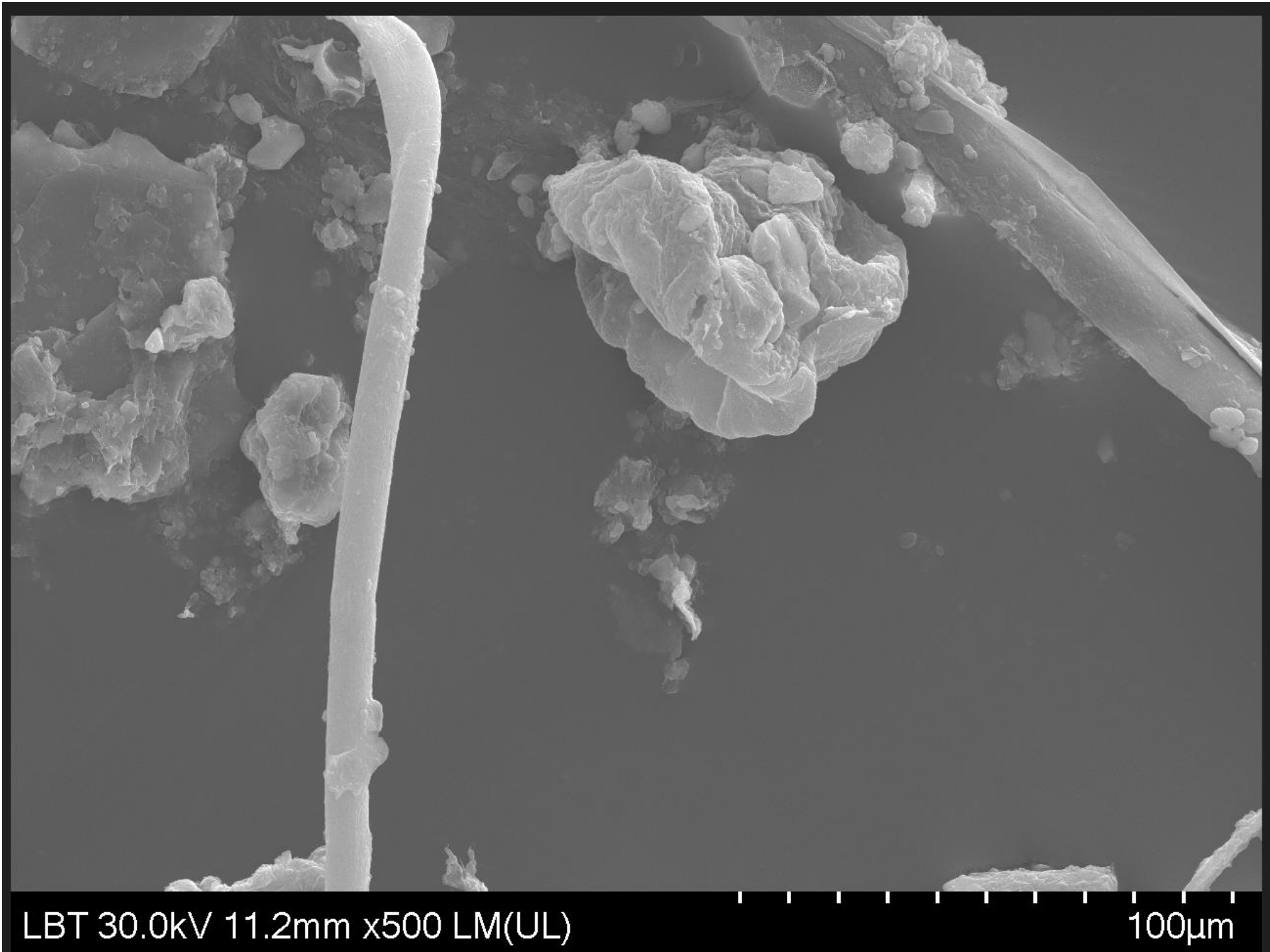


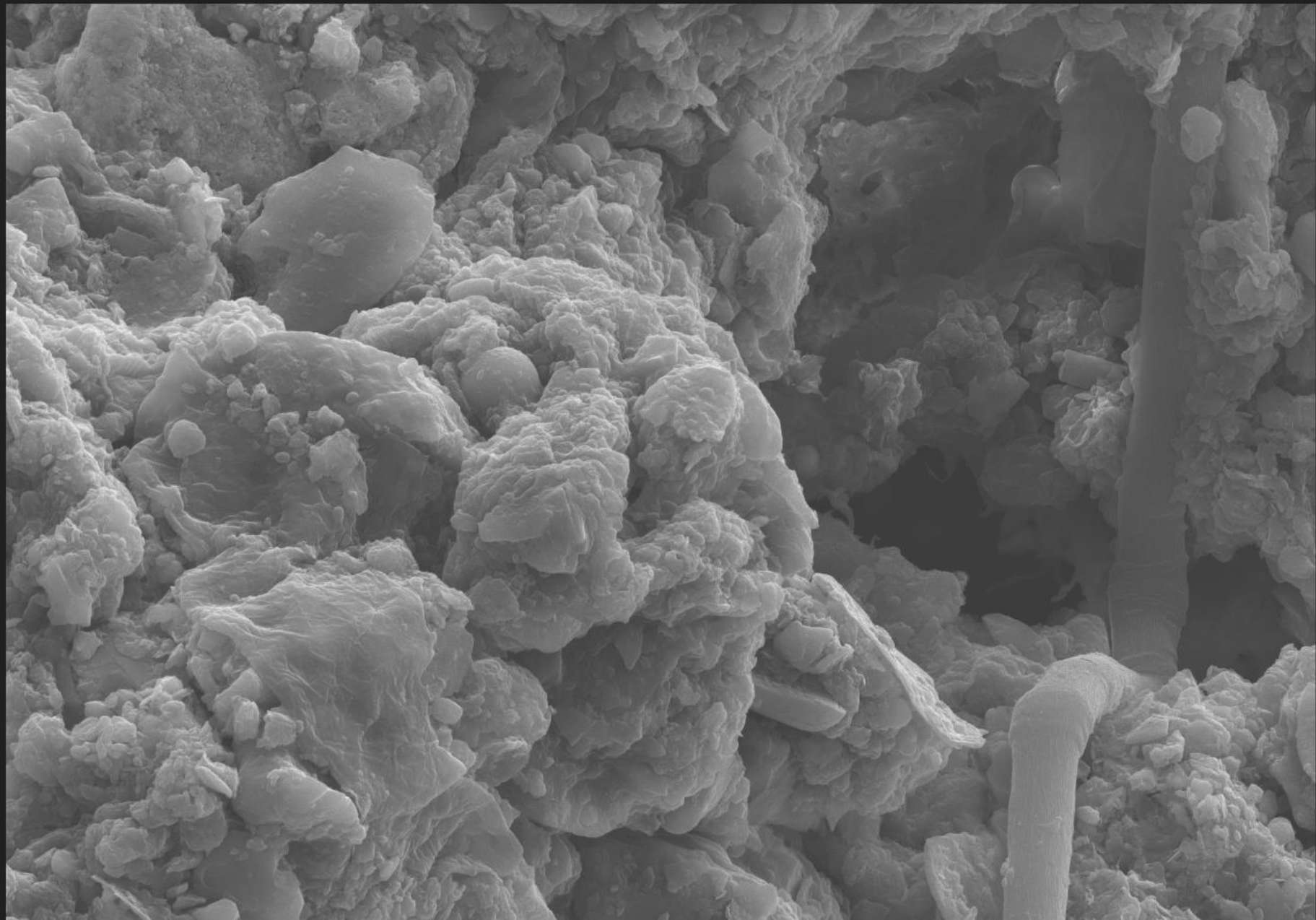
LBT 30.0kV 11.2mm x600 LM(UL)

50.0μm



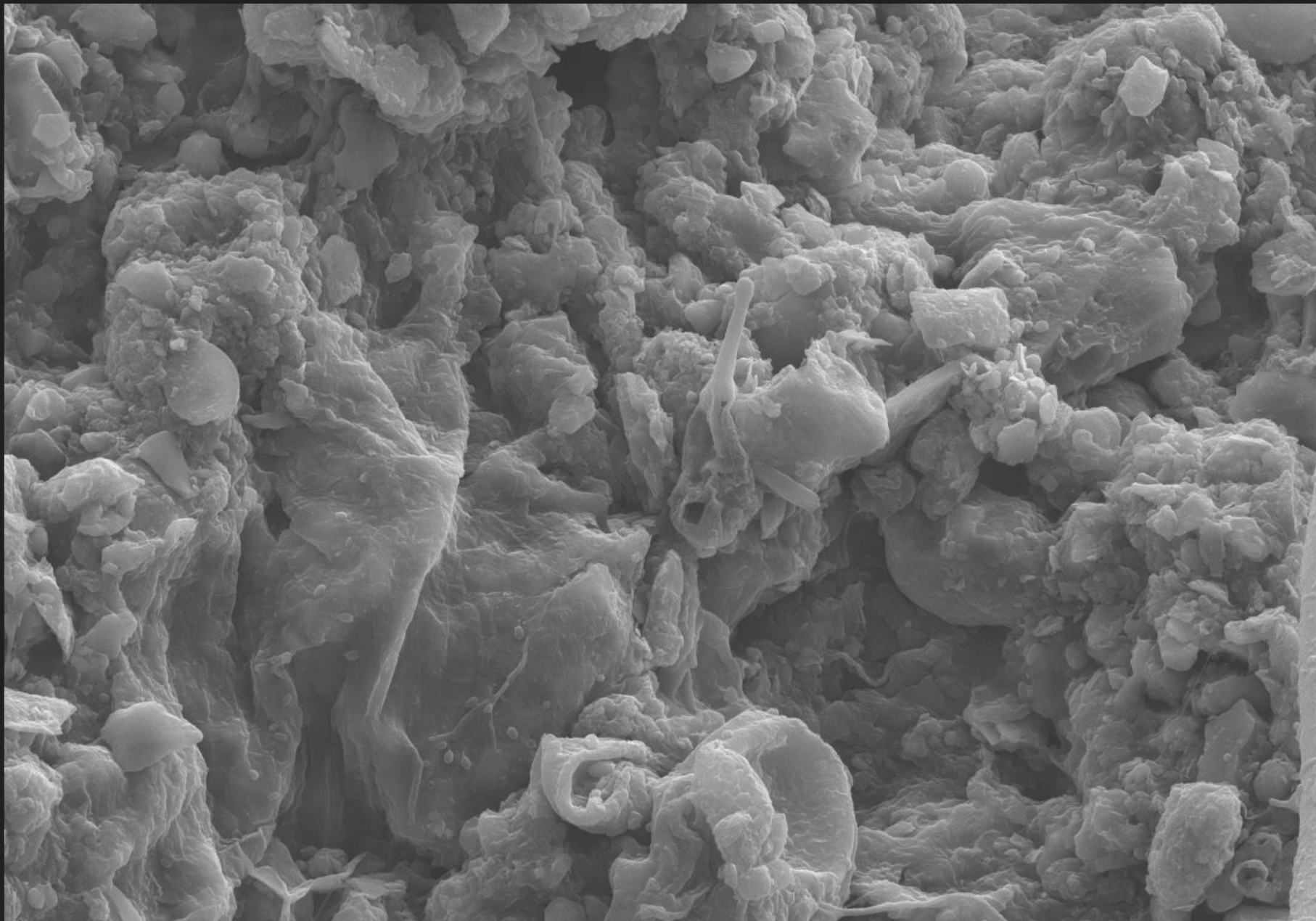






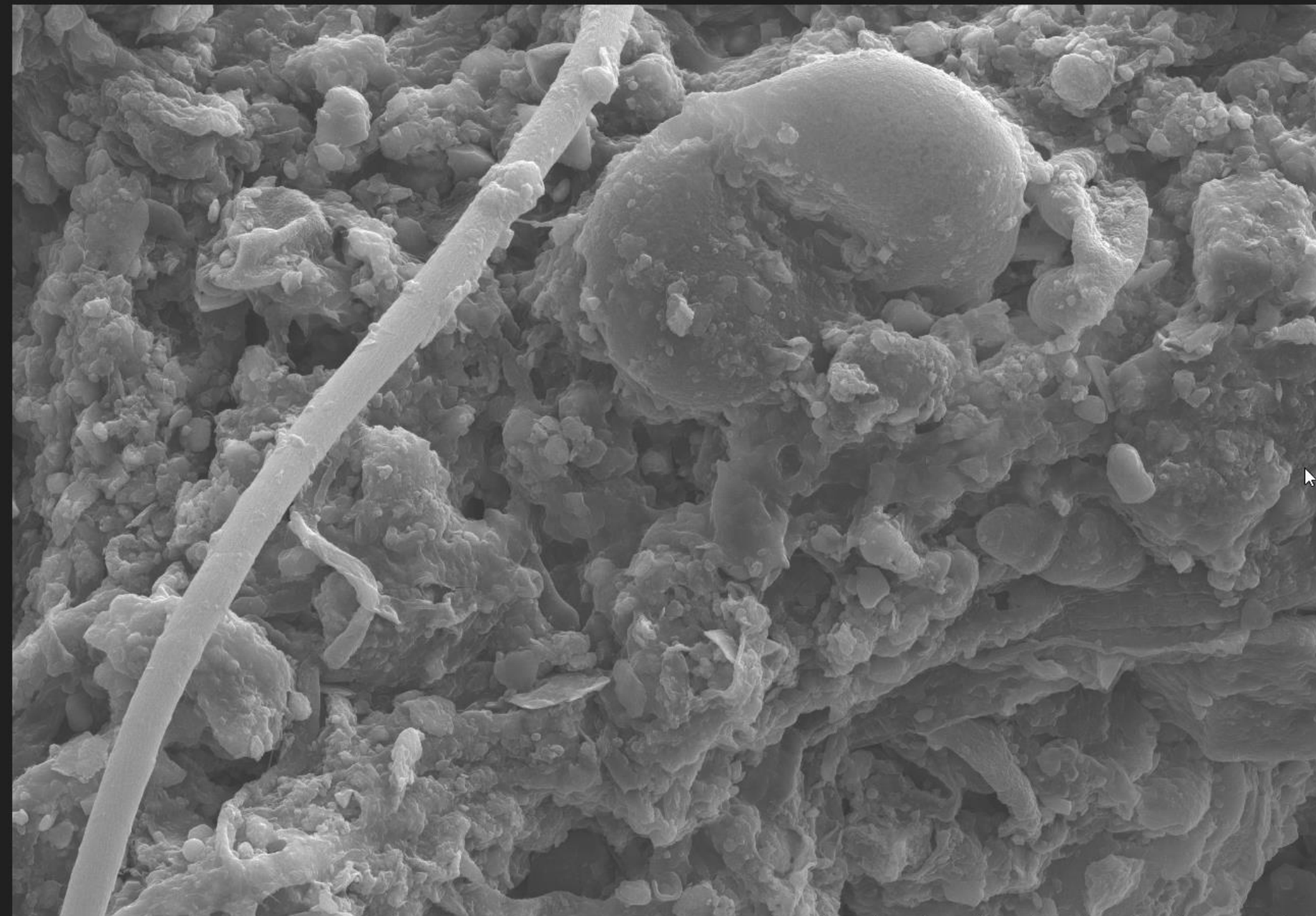
LBT 30.0kV 11.2mm x700 LM(UL)

50.0μm



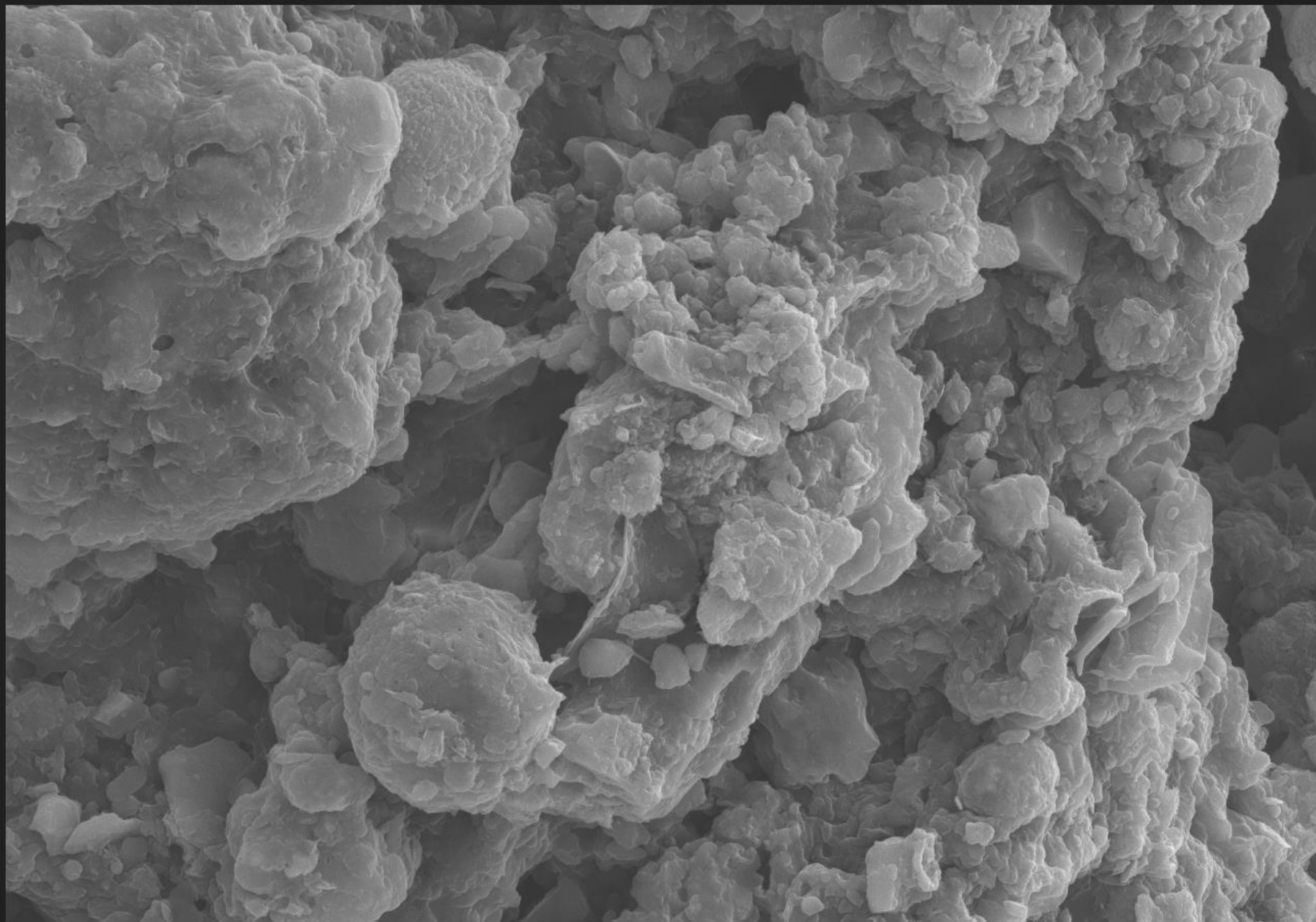
LBT 30.0kV 11.2mm x600 LM(UL)

50.0μm



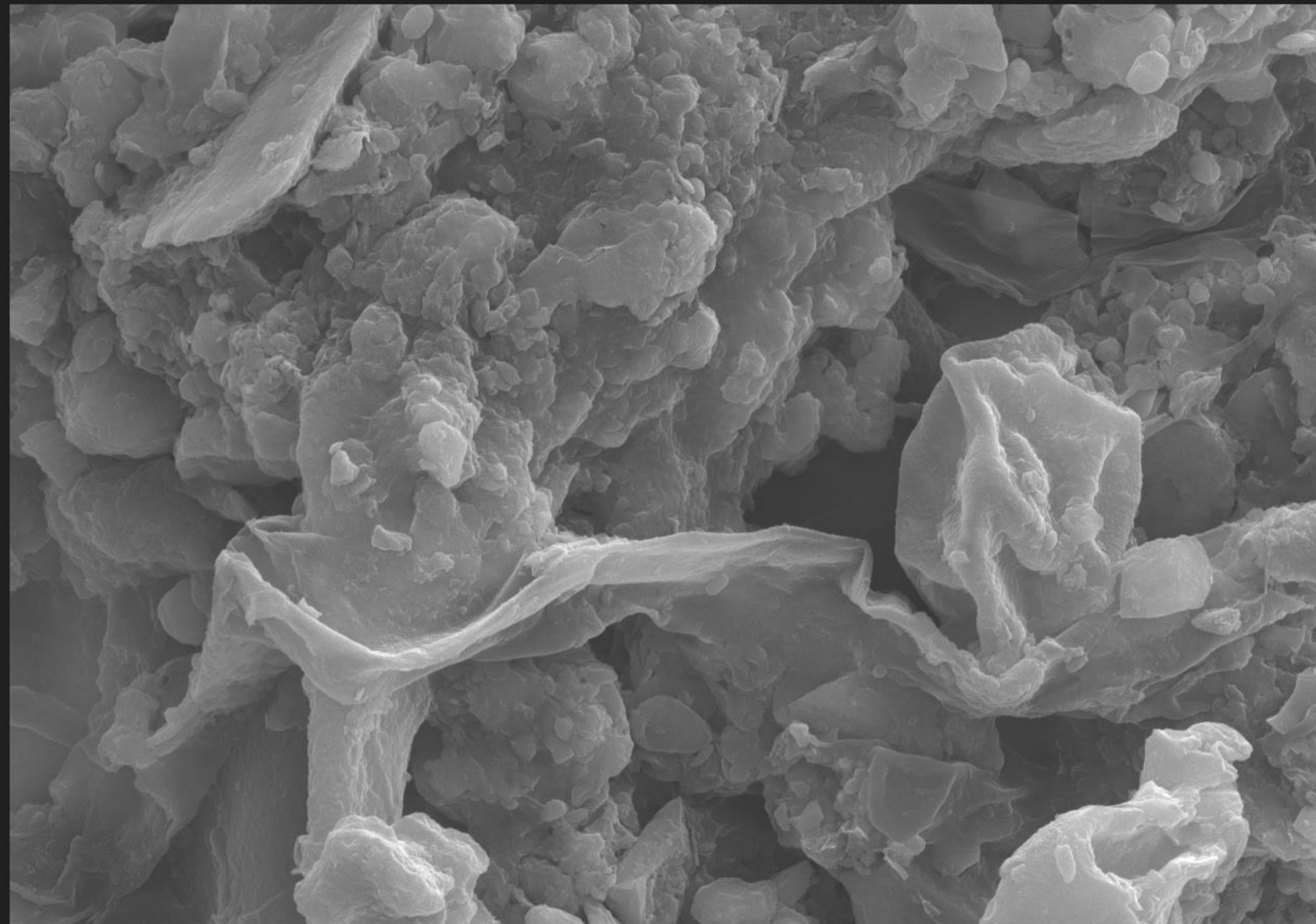
LBT 30.0kV 11.2mm x500 LM(UL)

100μm



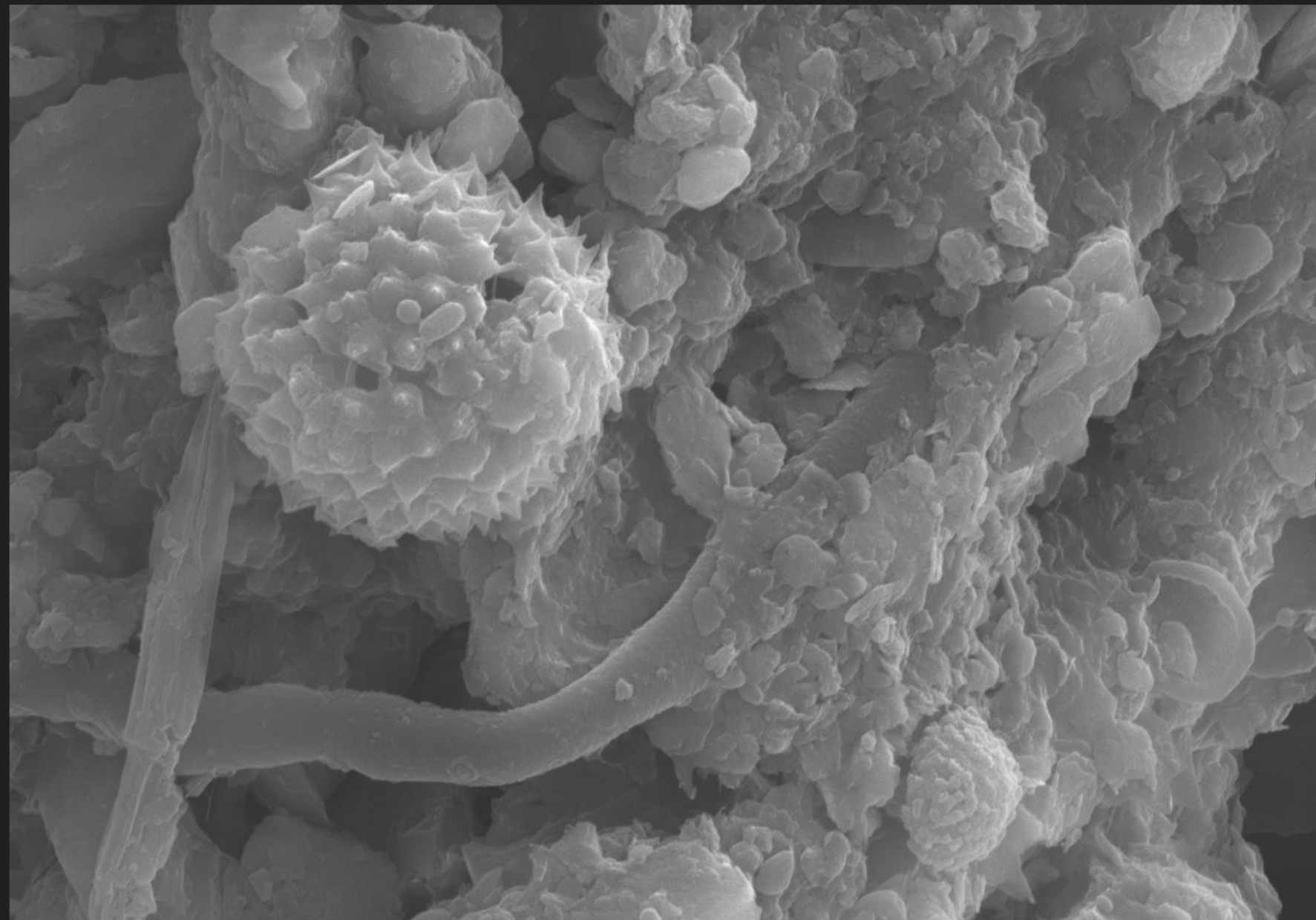
LBT 30.0kV 11.2mm x800 LM(UL)

50.0μm



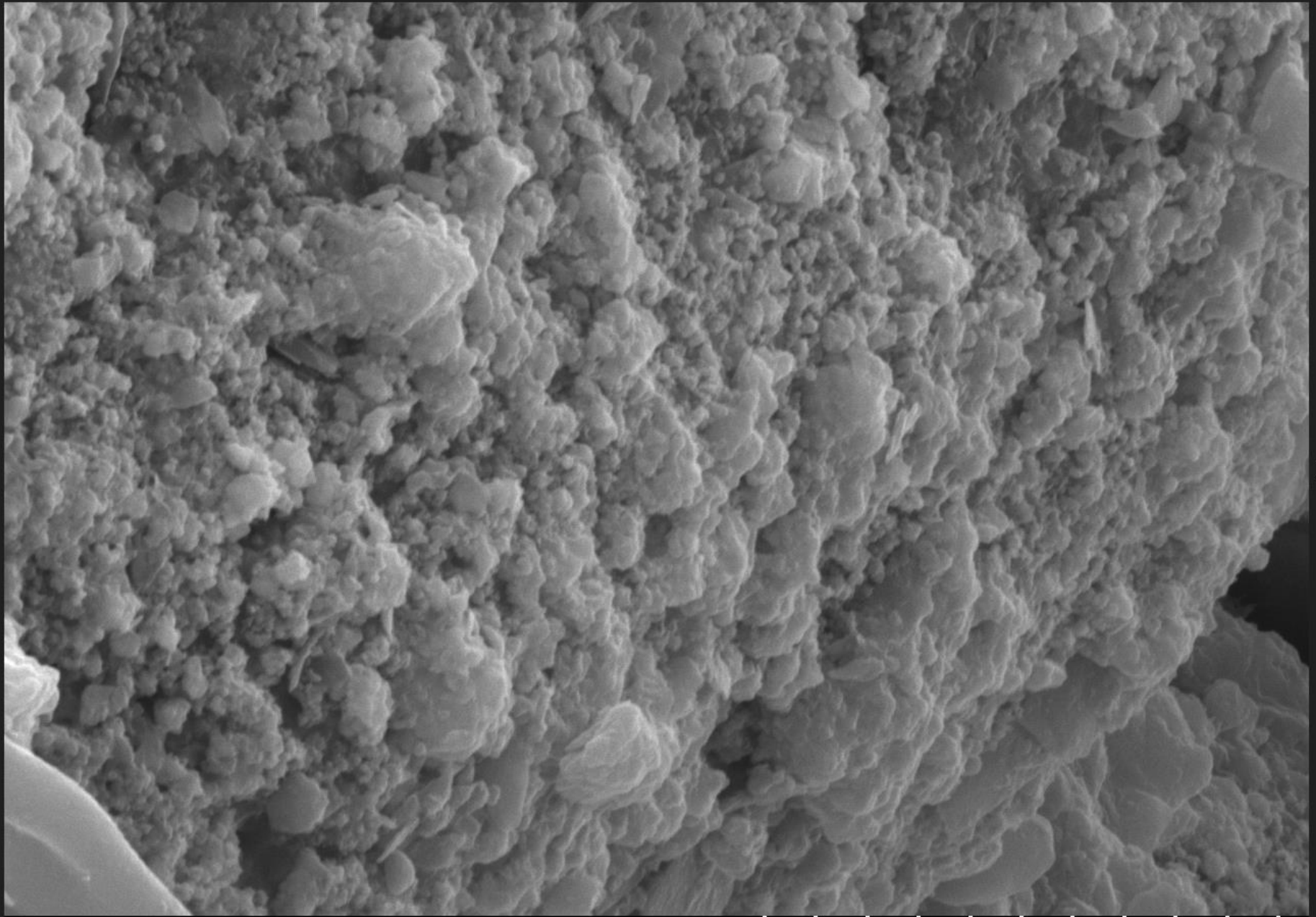
LBT 30.0kV 11.2mm x1.20k LM(UL)

40.0μm



LBT 30.0kV 11.2mm x2.00k LM(UL)

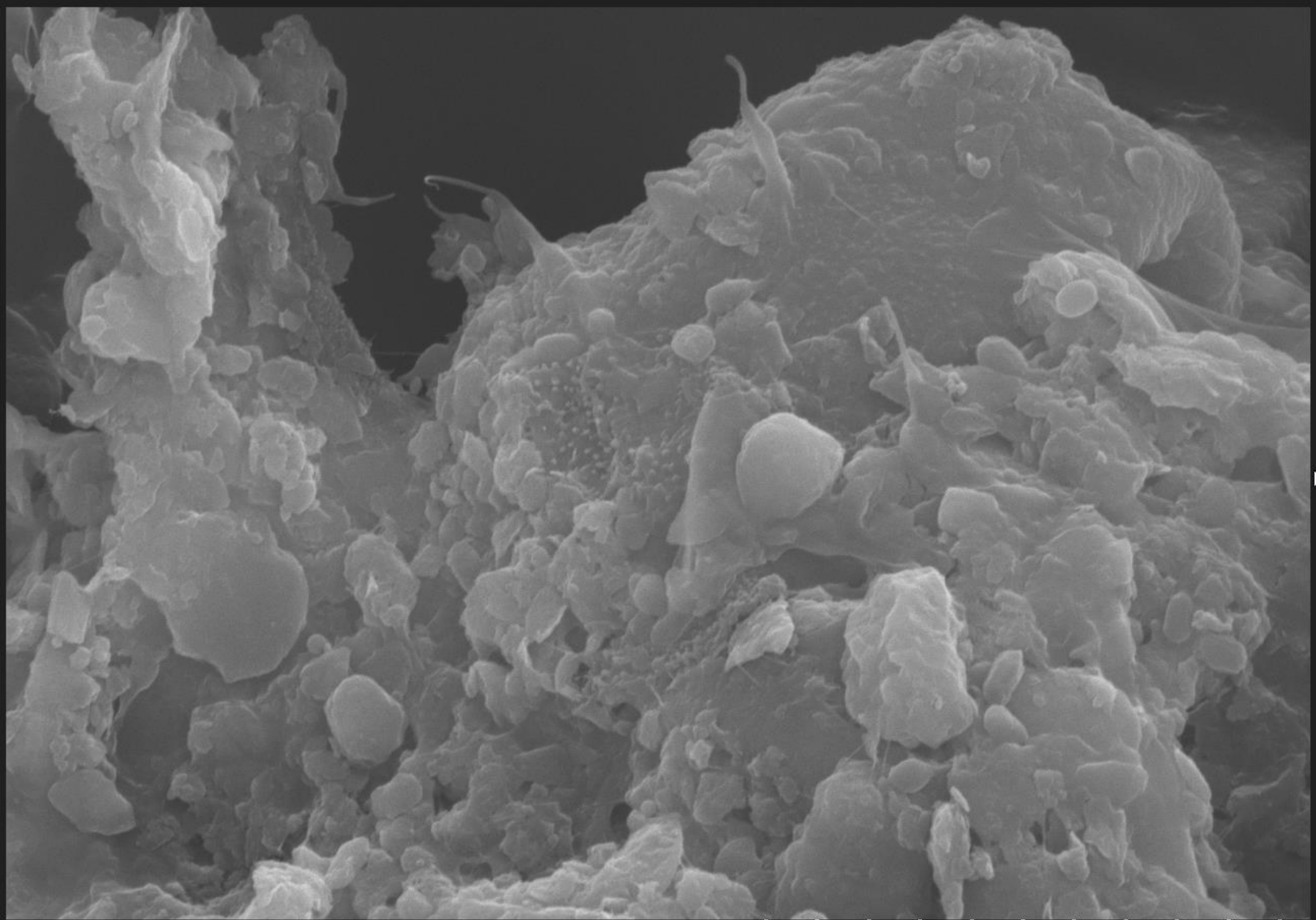
20.0μm



LBT 30.0kV 11.2mm x2.50k LM(UL)

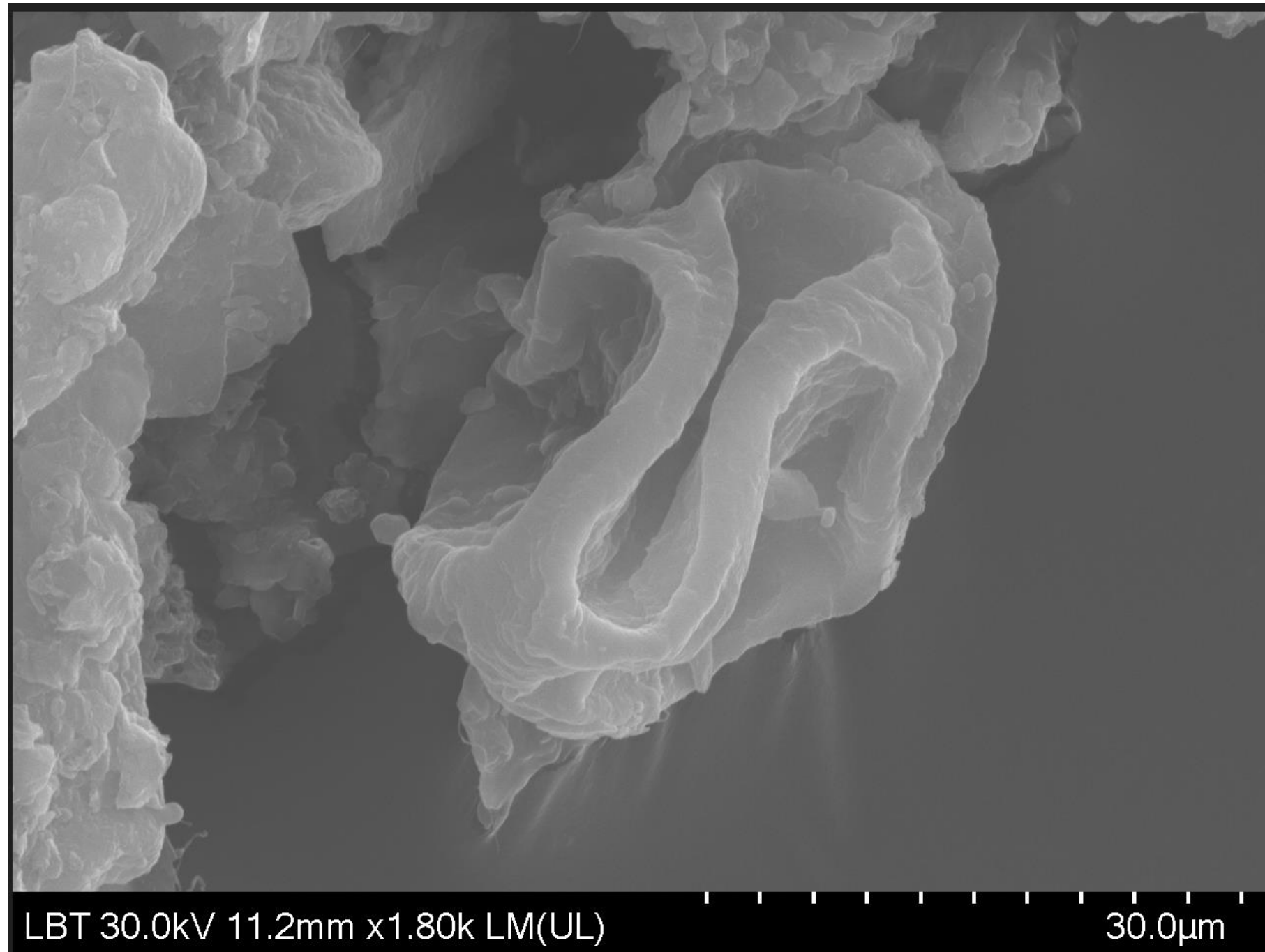
20.0μm





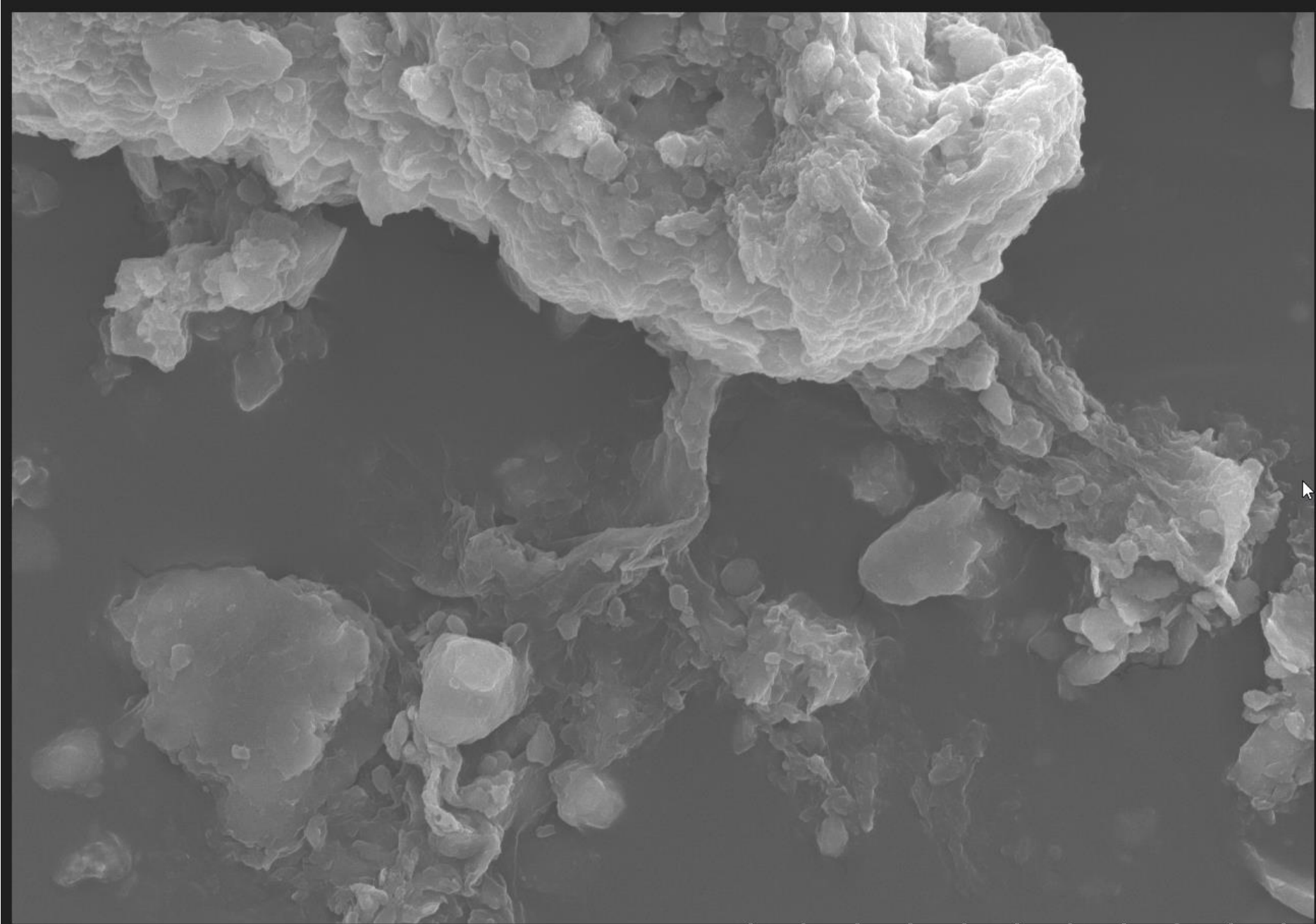
LBT 30.0kV 11.2mm x2.50k LM(UL)

20.0μm



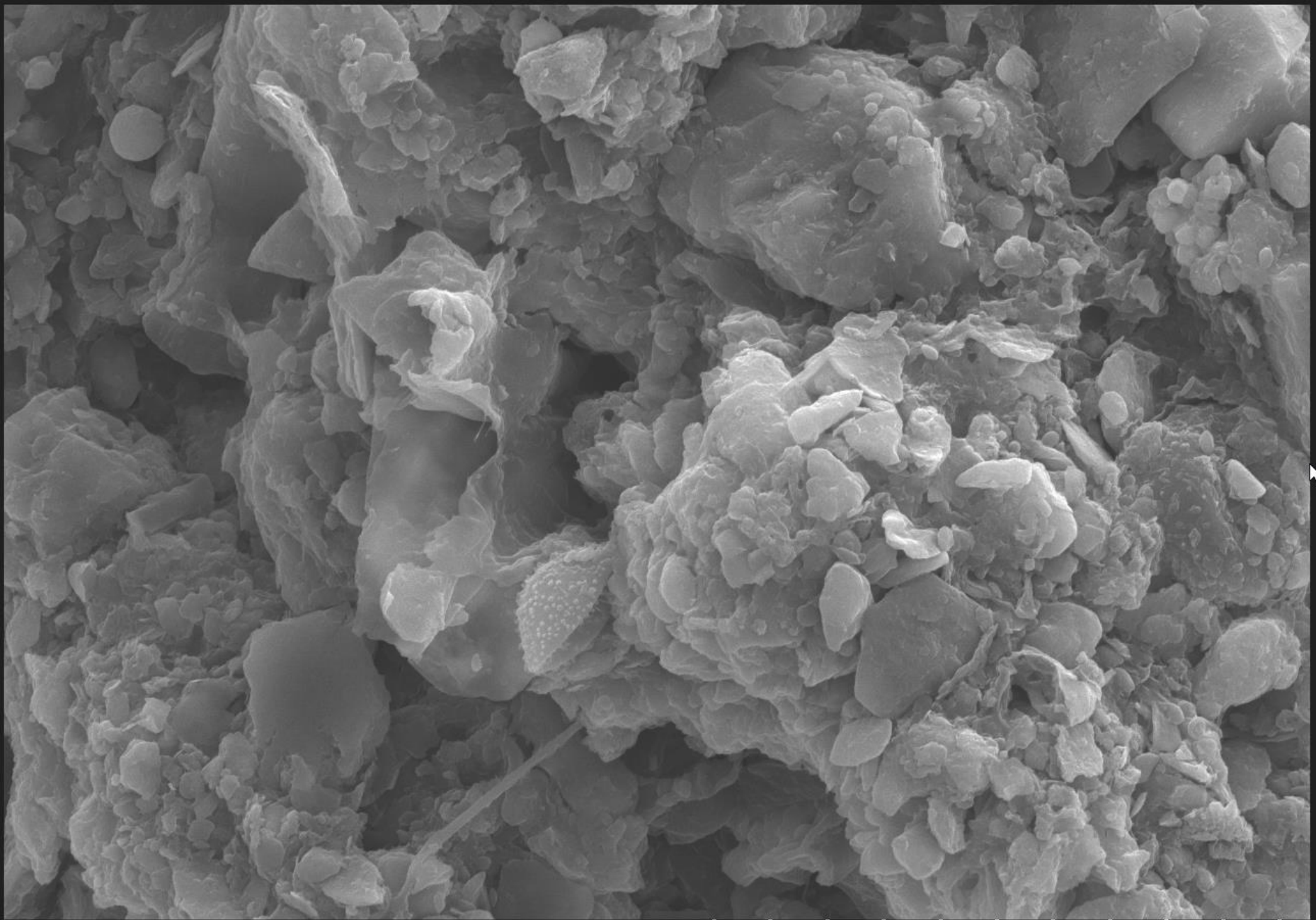
LBT 30.0kV 11.2mm x1.80k LM(UL)

30.0 μm



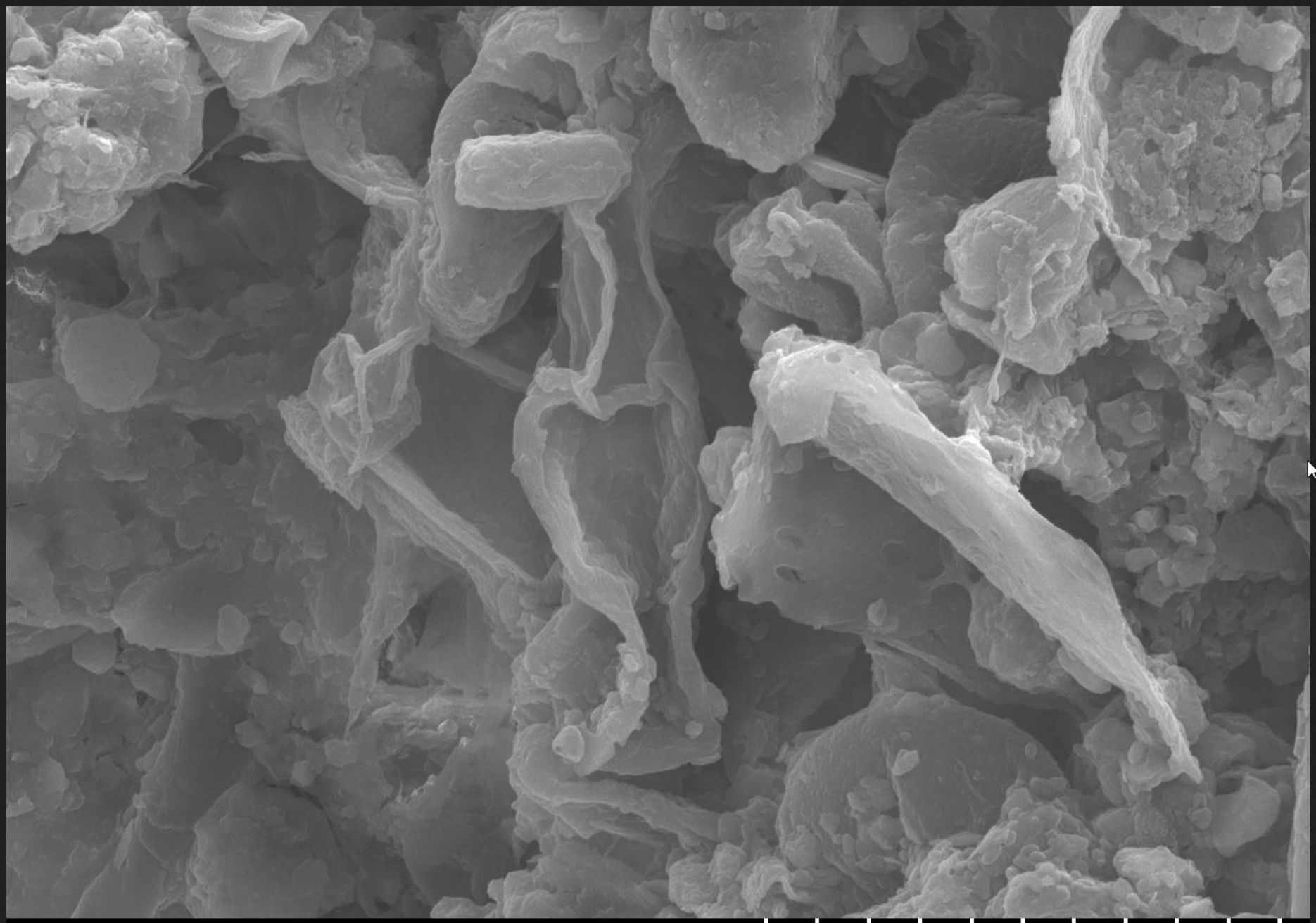
LBT 30.0kV 11.2mm x1.30k LM(UL)

40.0μm



LBT 30.0kV 11.2mm x1.10k LM(UL)

50.0μm



LBT 30.0kV 11.2mm x1.00k LM(UL)

50.0μm

# ANALIZA SEMICANTITATIVA A ELEMENTELOR DIN APA DE PLOAIE (FARA SEDIMENT-FILTRATĂ)

**In atentie:**  
**d-nei Dr. GEANINA HAGIMA**

**Date de contact:**

**E-mail:** [REDACTED]

**Tel:** [REDACTED]

Alaturat va inaintam **Raportul de incercare** [REDACTED] privind determinarea parametrilor solicitati de Dvs., prin comanda cu nr. intrare [REDACTED]/18.07.2023 pentru proba de apa trimisa de dvs.

**Solicitant: P.F.** ([REDACTED] Dr. Geanina Hagima)

**Date de contact:** [REDACTED]

**Tel:** [REDACTED]

**Natura probei:** Apa

**Solicitarea analizei:** determinari concentratii metale

Elemente		Concentratii*
Minerale [mg/L]	Na	1.824
	Mg	0.584
	K	0.530
	Ca	2.271
Metale grele [µg/L]	Al	20.554
	Cr	0.089
	Mn	0.795
	Fe	11.392
	Co	0.020
	Ni	2.551
	Cu	5.101
	Zn	5.516

Metale toxice [µg/L]	As	0.111
	Cd	<0.001
	Sn	0.0012
	Hg	<0.001
Pamanturi rare [µg/L]	Pb	0.177
	Sc	<0.001
	La	0.006
	Ce	0.017
	Pr	0.003
	Nd	<0.001
	Sm	<0.001
	Eu	0.001
	Gd	<0.001
	Tb	0.001



<b>Elemente critic tehnologice [µg/L]</b>	<b>Dy</b>	<0.001
	<b>Ho</b>	<0.001
	<b>Er</b>	<0.001
	<b>Tm</b>	<0.001
	<b>Yb</b>	<0.001
	<b>Lu</b>	0.0001
	<b>Te</b>	<0.001
	<b>Ge</b>	<0.001
	<b>Ga</b>	0.010
	<b>In</b>	0.033
	<b>Nb</b>	0.022
	<b>Ta</b>	0.0017

<b>Elemente din grupa platinei [µg/L]</b>	<b>Pt</b>	<0.001
	<b>Pd</b>	<0.001
	<b>Os</b>	<0.001
	<b>Ir</b>	<0.001
	<b>Ru</b>	<0.001
	<b>Li</b>	0.206
<b>Metale alcaline, alcalino- pamantoase [µg/L]</b>	<b>Cs</b>	<0.001
	<b>Rb</b>	<0.001
	<b>Be</b>	0.111
	<b>Ba</b>	3.732
	<b>Sr</b>	4.757

<b>Metale de tranzitie, post-tranzitie</b> [µg/L]	<b>Zr</b>	<0.001
	<b>Hf</b>	<0.001
	<b>W</b>	0.032
	<b>Au</b>	0.003
	<b>Ag</b>	<0.001
	<b>Re</b>	<0.001
	<b>Ti</b>	3.169
	<b>V</b>	0.186
	<b>Mo</b>	<0.001
	<b>Bi</b>	0.040
	<b>Tl</b>	<0.001