

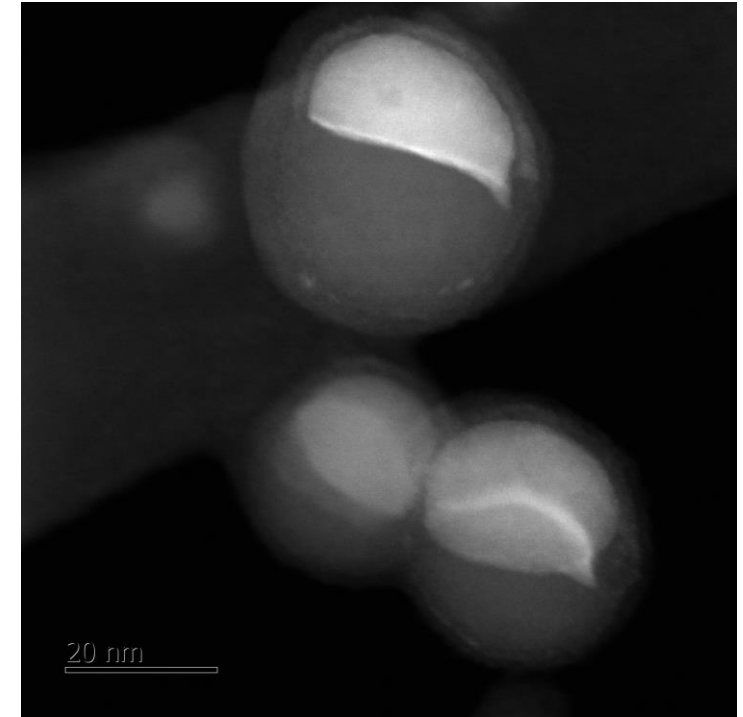
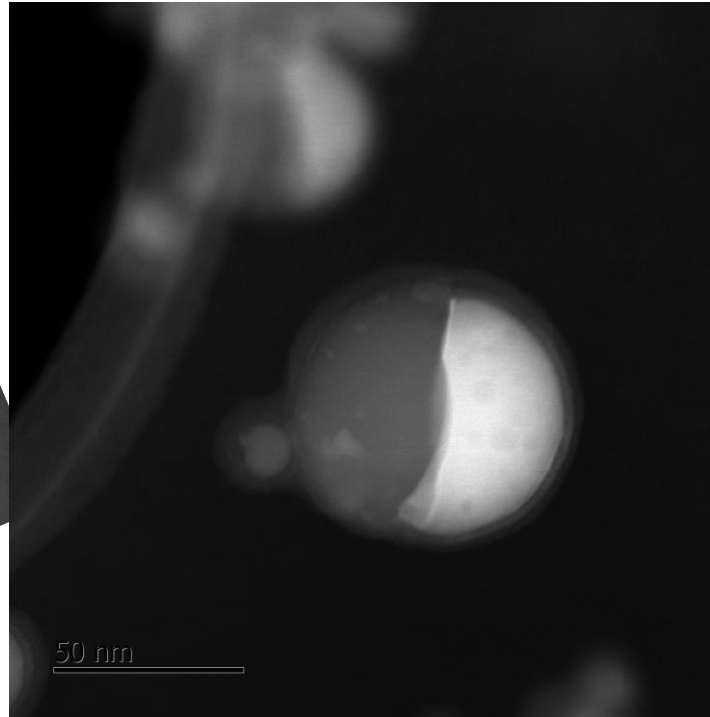
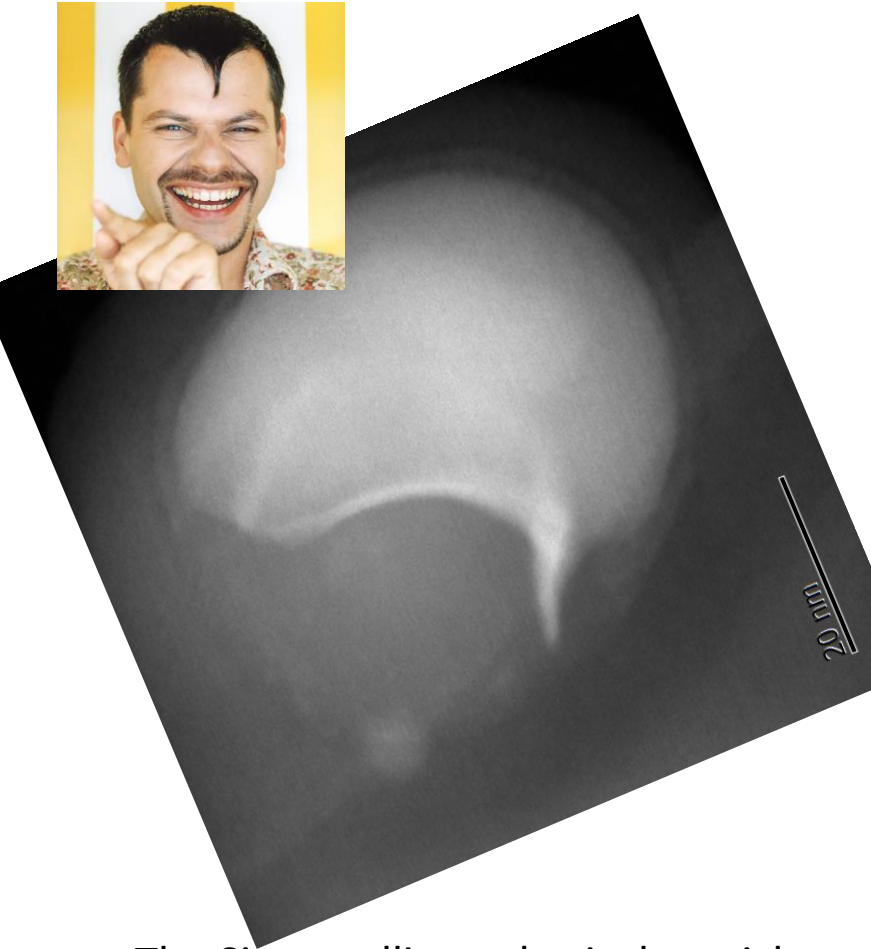
# Semisphere Janus-like particles

ID2725

NeoArm

Niklas Wolff

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The Si-crystalline spherical particles are semi-covered by a thin cap-shell containing elements of ??? Mn ,Cr and Sn, Fe ,Co ???



„Deutscher Schaller“

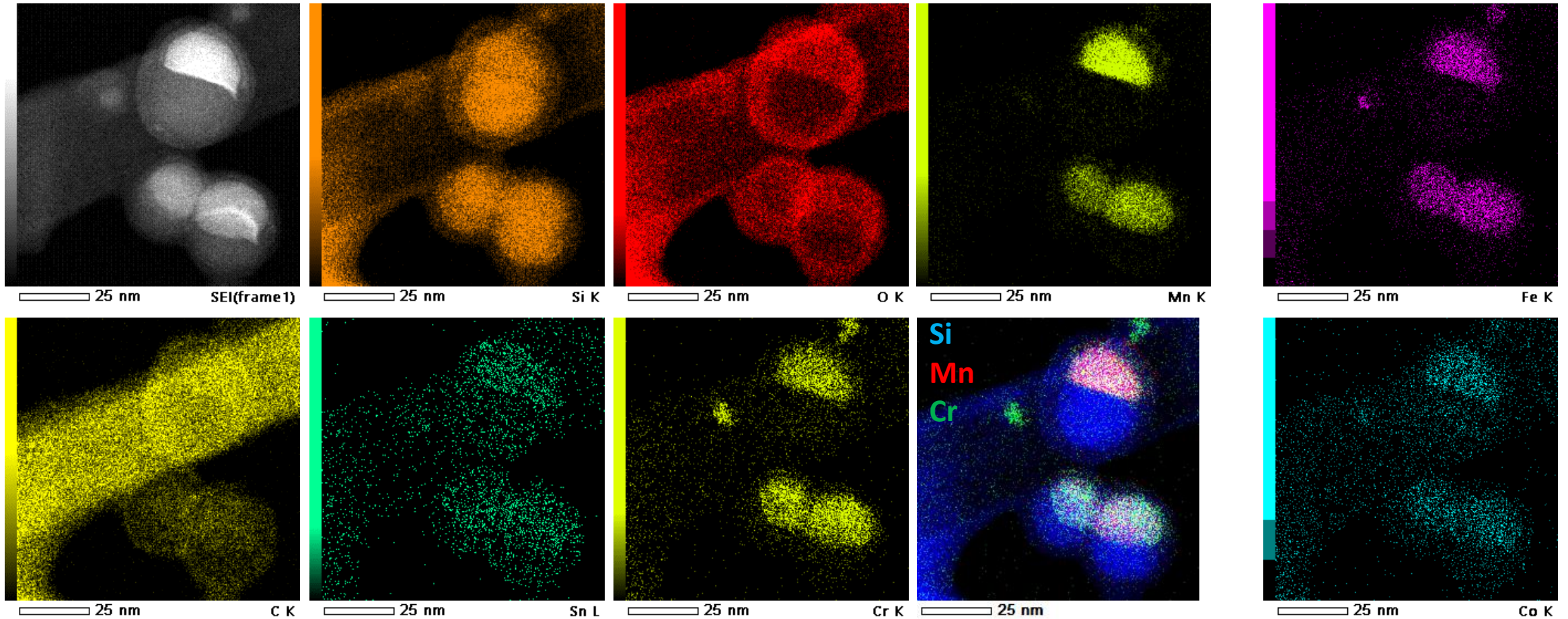


„Ballonschiebermütze“

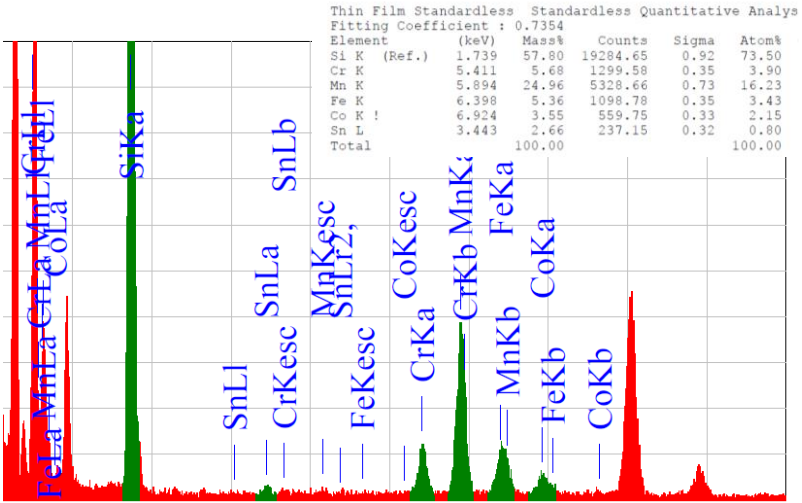
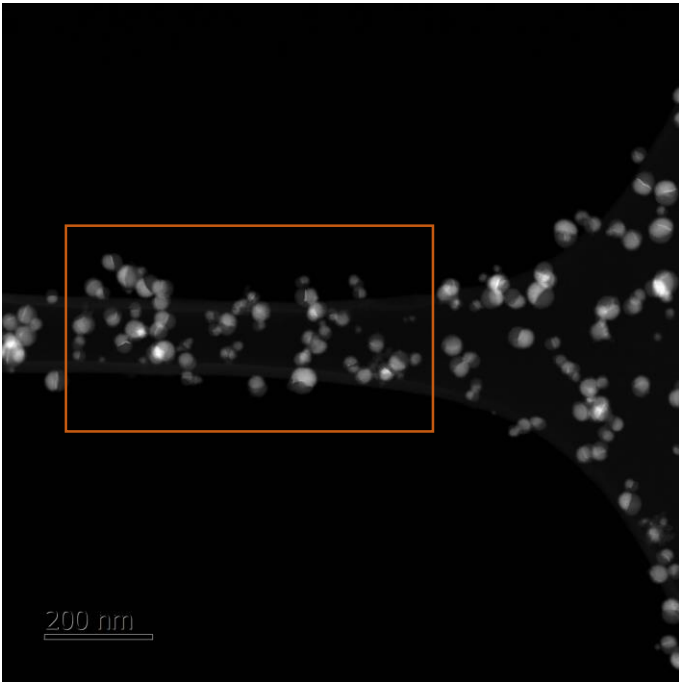
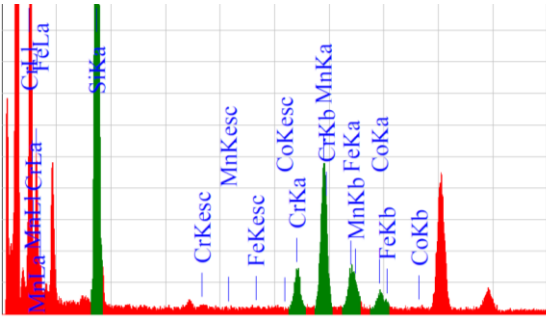
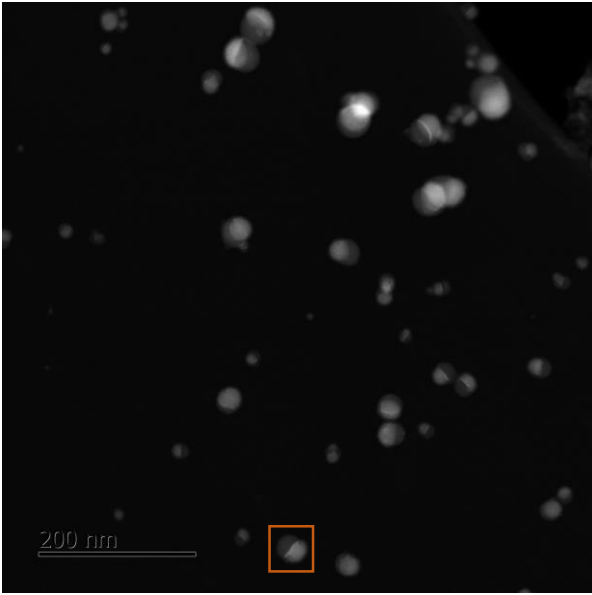
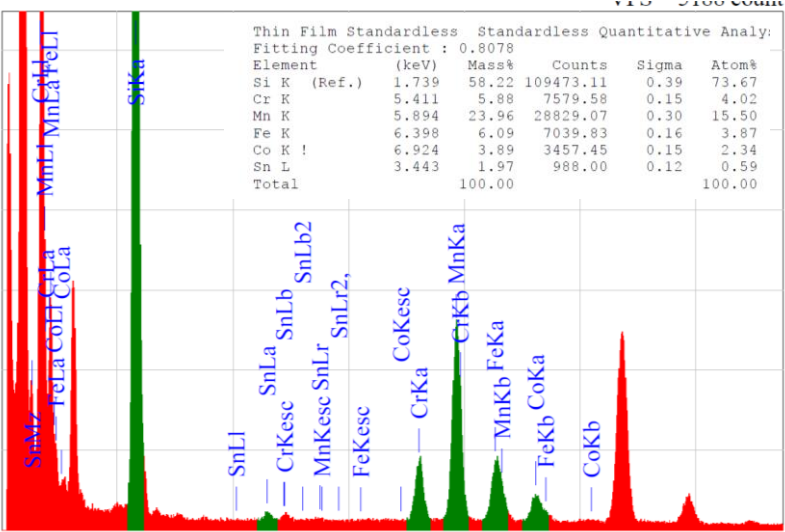
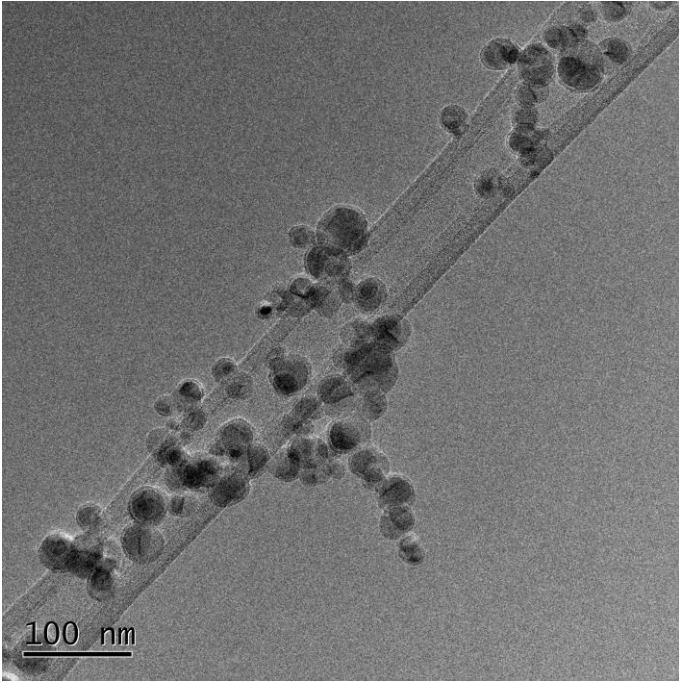
# EDX Mapping

Are Cr, Fe, Co secondary signals?

- Niklas Kohlman also observed Cr
- Check with Tecnai EDX determined that Cr and Fe are real signals and Co stems from the column

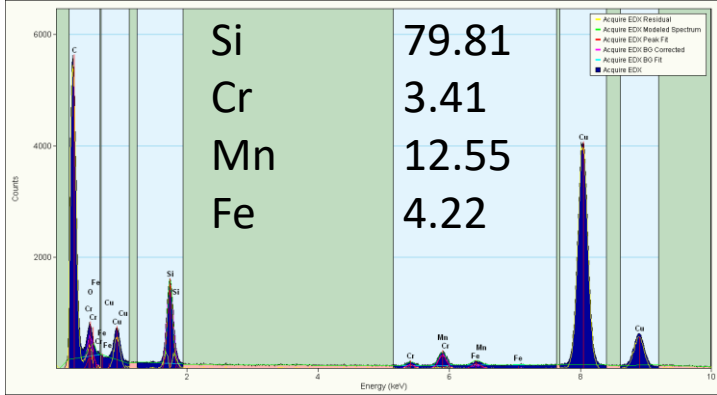
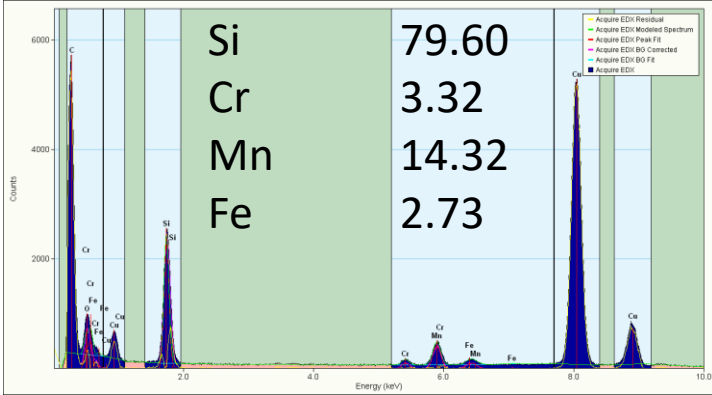
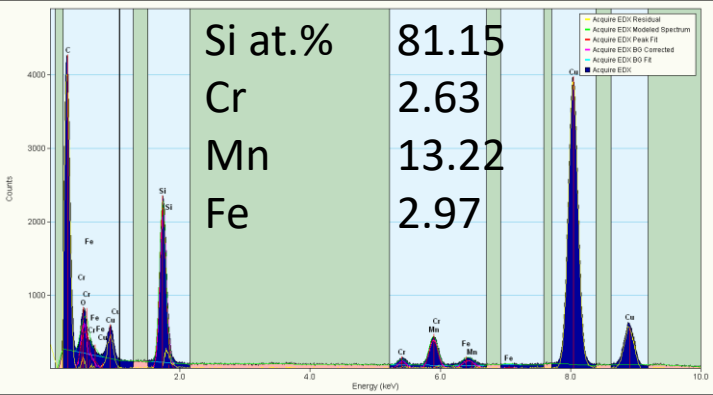
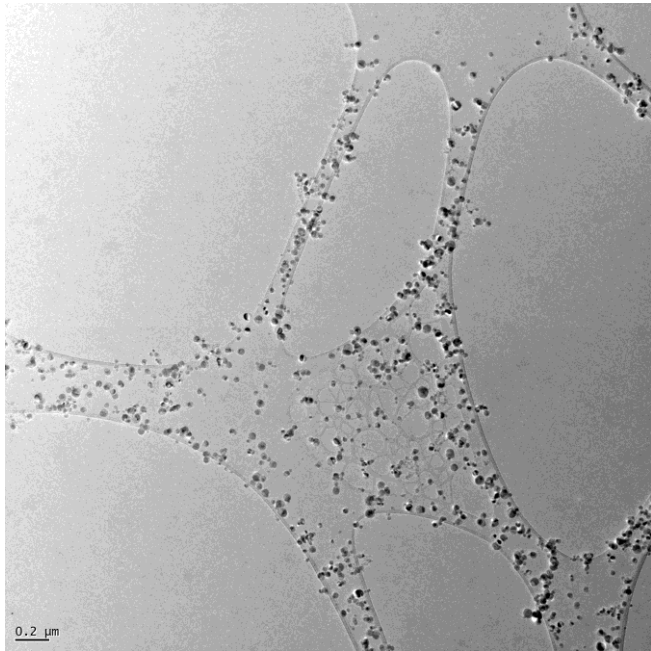
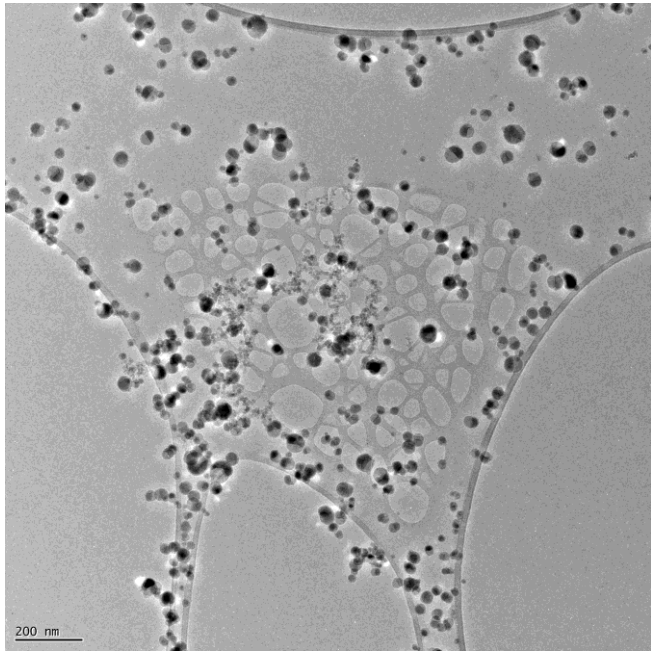
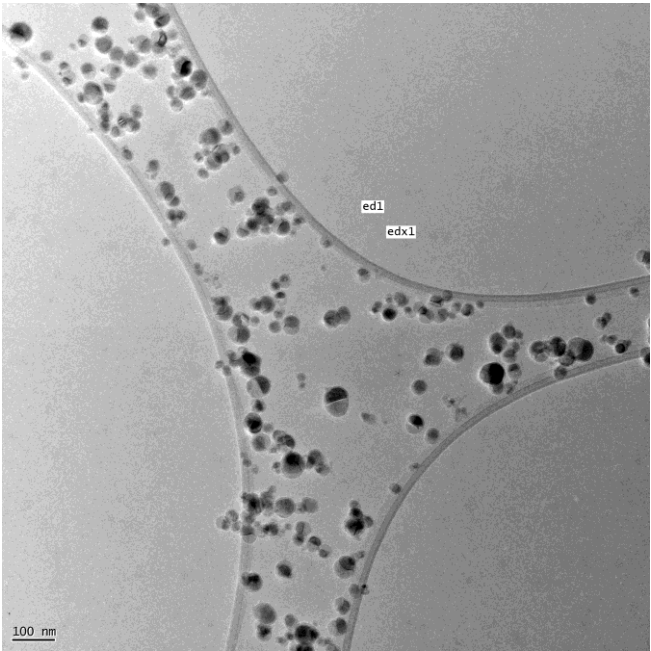






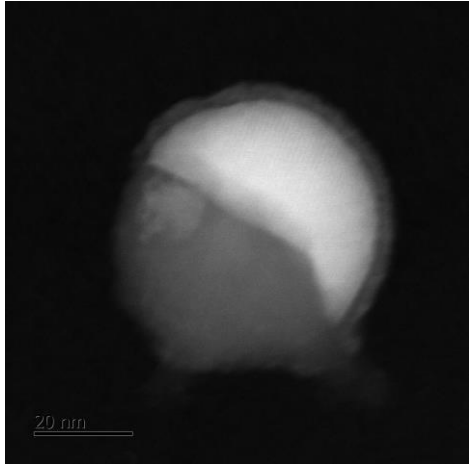
Thin Film Standardless Standardless Quantitative Analysis					
Fitting Coefficient : 0.7429					
Element	(keV)	Mass%	Counts	Sigma	Atom%
Si K (Ref.)	1.739	60.19	25186.08	0.84	74.74
Cr K	5.411	5.31	1525.54	0.30	3.56
Mn K	5.894	25.43	6809.73	0.66	16.15
Fe K	6.398	5.52	1420.76	0.32	3.45
Co K	6.924	3.54	701.06	0.30	2.10
Total		100.00			100.00

# Tecnai EDX

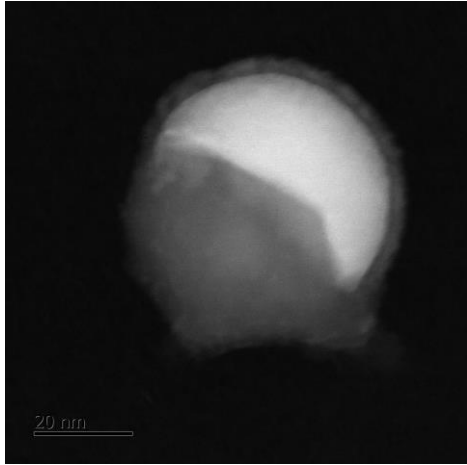


# STEM tilt series

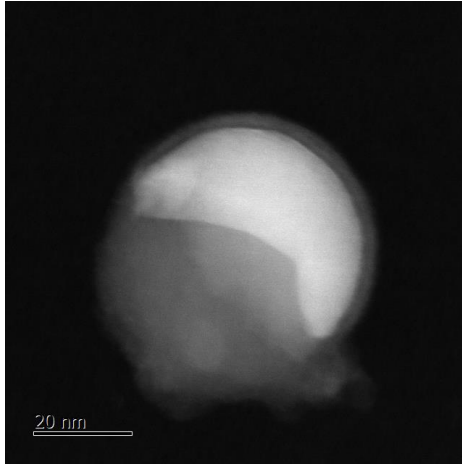
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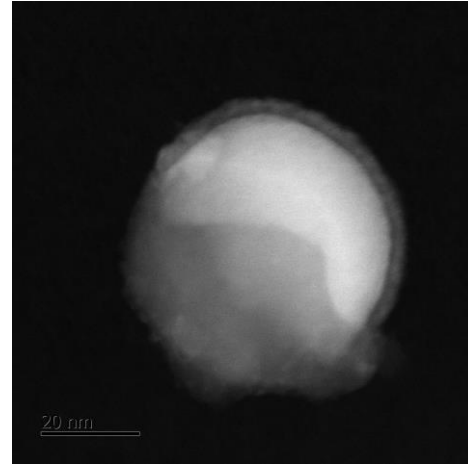
-15°



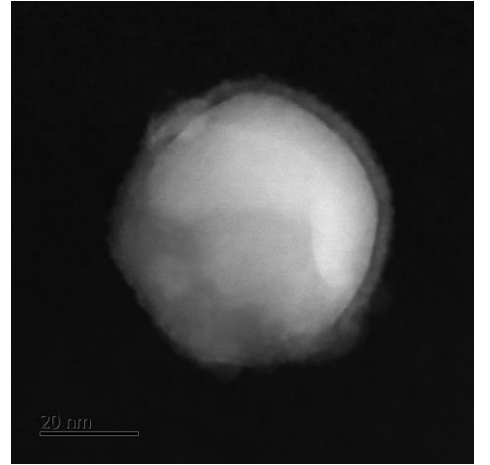
0°



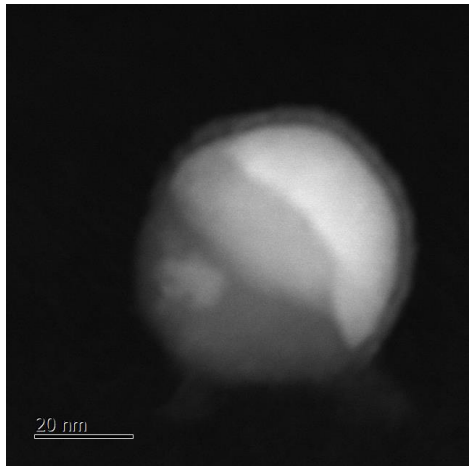
+15°



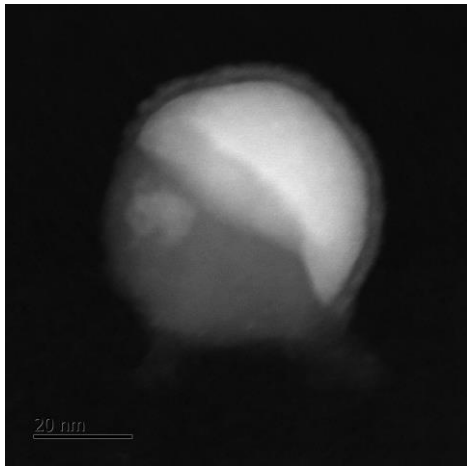
+30°



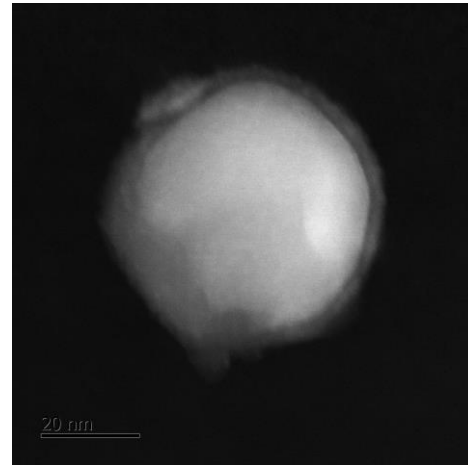
-60°



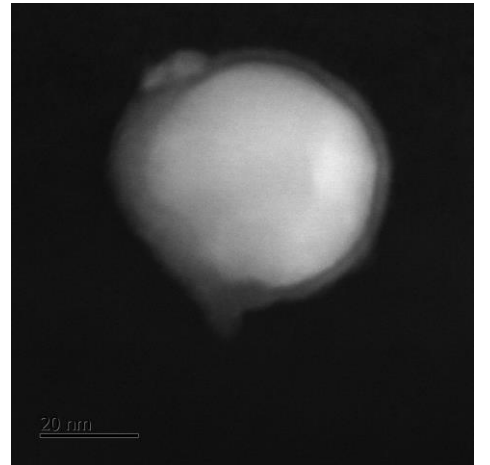
-45°



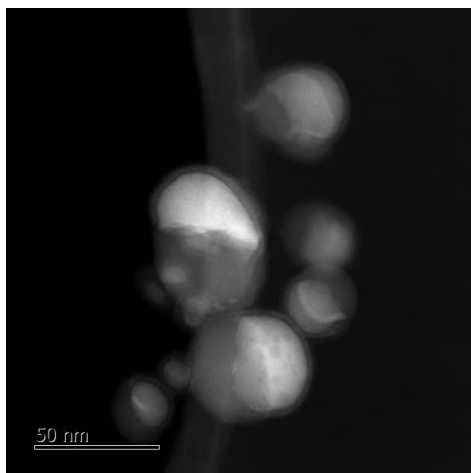
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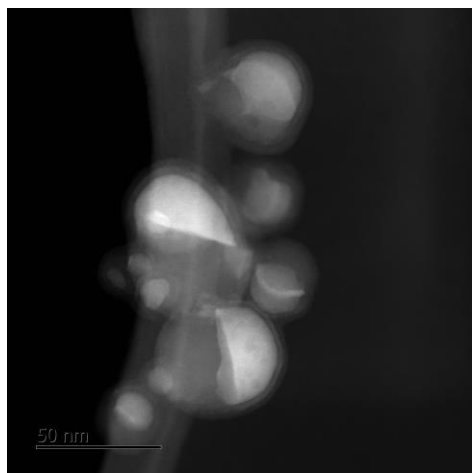
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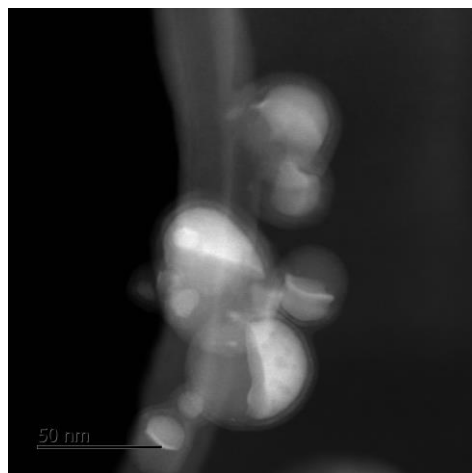
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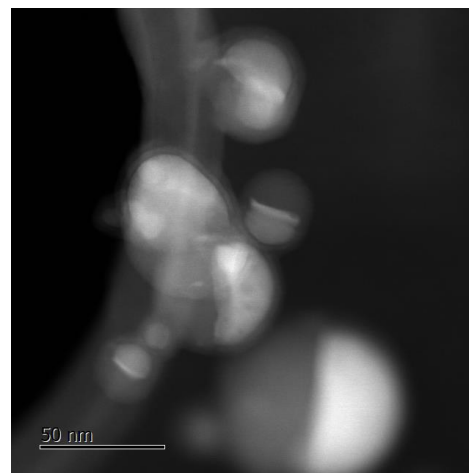
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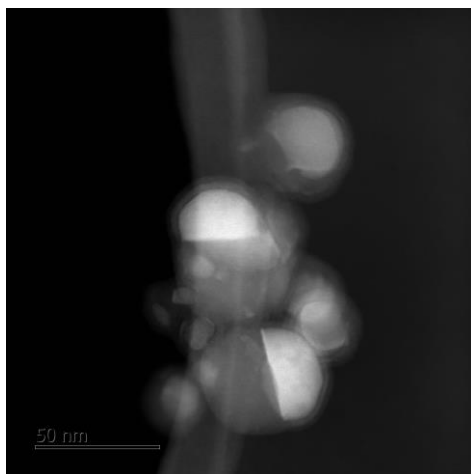
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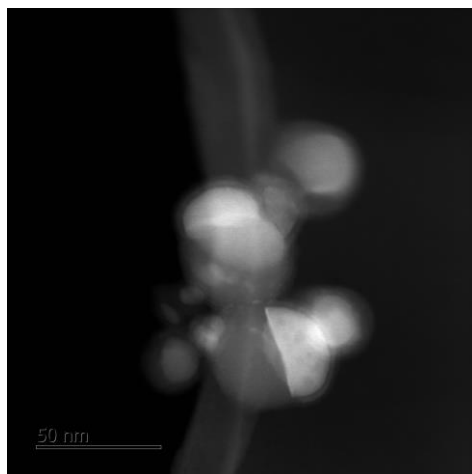
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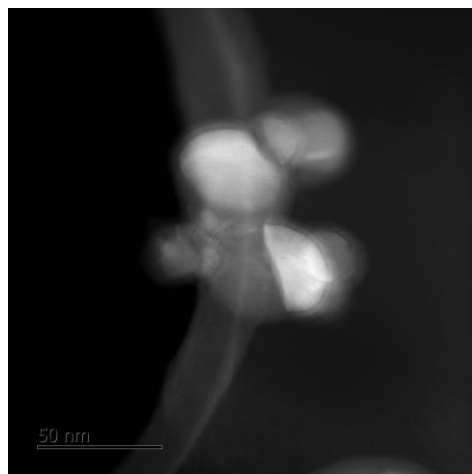
-15°



-30°



-45°



-60°



-75°

