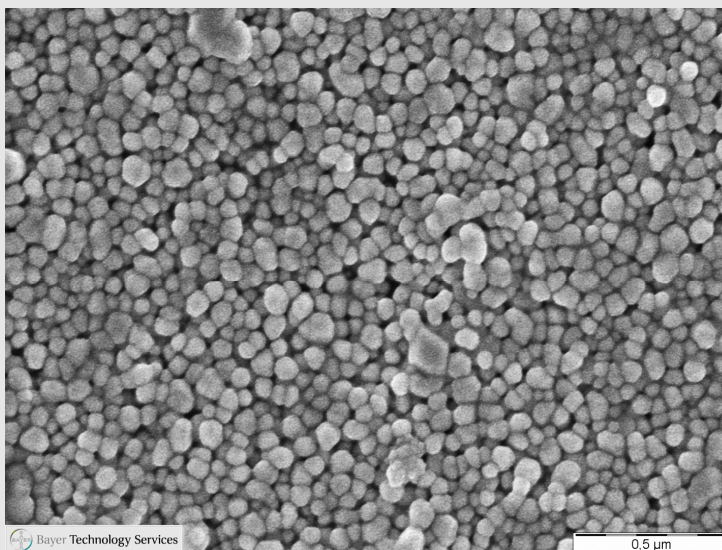


## Material

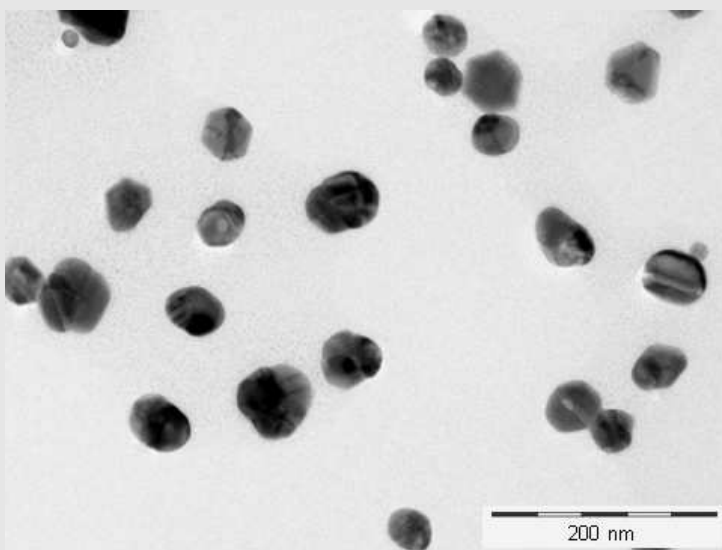
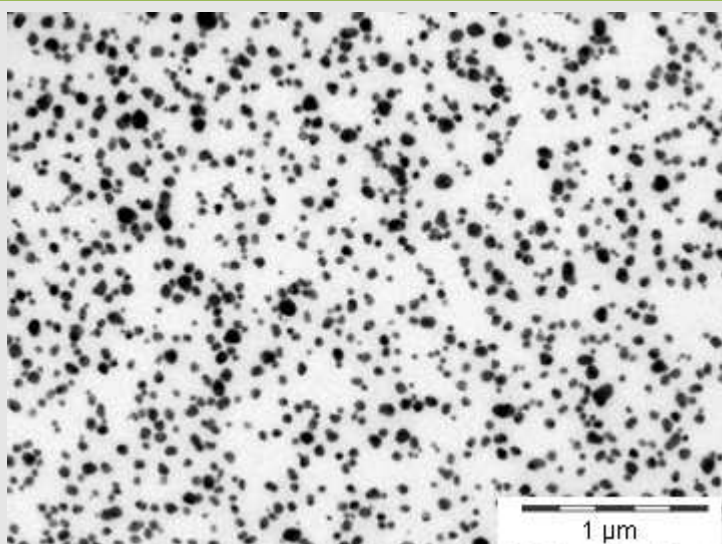
## Ag (50 nm)

<b>NanoTOES number</b>	NanoTOES_Ag_50
<b>Provider</b>	Bayer Technology Services GmbH
<b>Concentration</b>	1 % (wt/wt) in water 3.91*10 <sup>13</sup> NPs/ml
<b>Specific Surface Area</b>	1.37*10 <sup>1</sup> m <sup>2</sup> /g
<b>Size/ Size distribution &amp; Agglomeration/ Aggregation state</b>	DLS: (Correlation Func., Number Distribution) 74.5 nm +/-1.2 ; PDI= 0.130 TEM: d50= 55 nm, d90= 62 nm AC: d50= 43 nm, d90= 78 nm
<b>Shape</b>	quasi spherical
<b>Crystal Structure</b>	cubic
<b>Surface Chemistry</b>	XPS: Atom % C 48.6, Ag 25.6, O 15.9, N 7.7, Na 2.2 SIMS: Ag, Na, K, Ca, C <sub>x</sub> H <sub>y</sub> O <sub>z</sub>
<b>pH (in water)</b>	5.9
<b>Surface Charge</b>	Zeta potential: - 17.5 mV+/- 0.5 IEP: ~ 1.3 pH

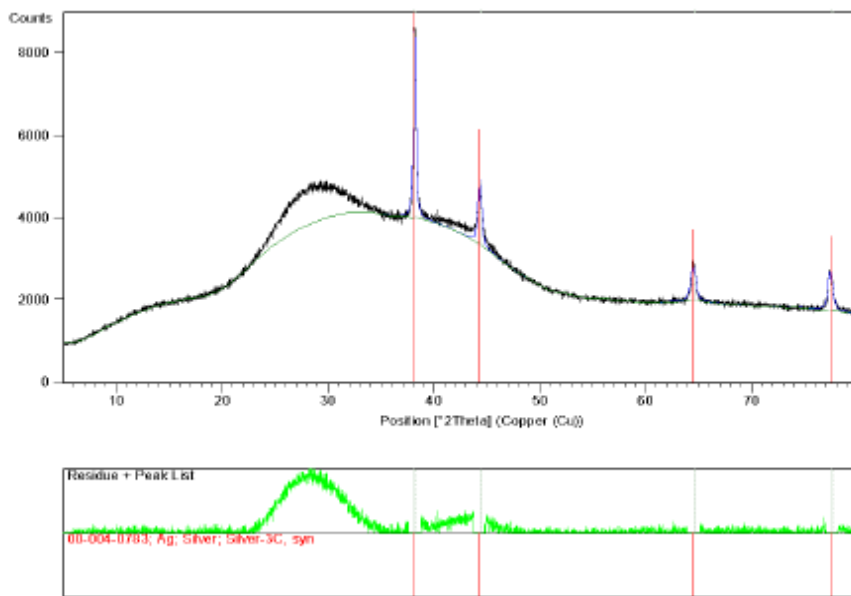
**Scanning (Raster)  
Electron Microscopy  
(SEM)**



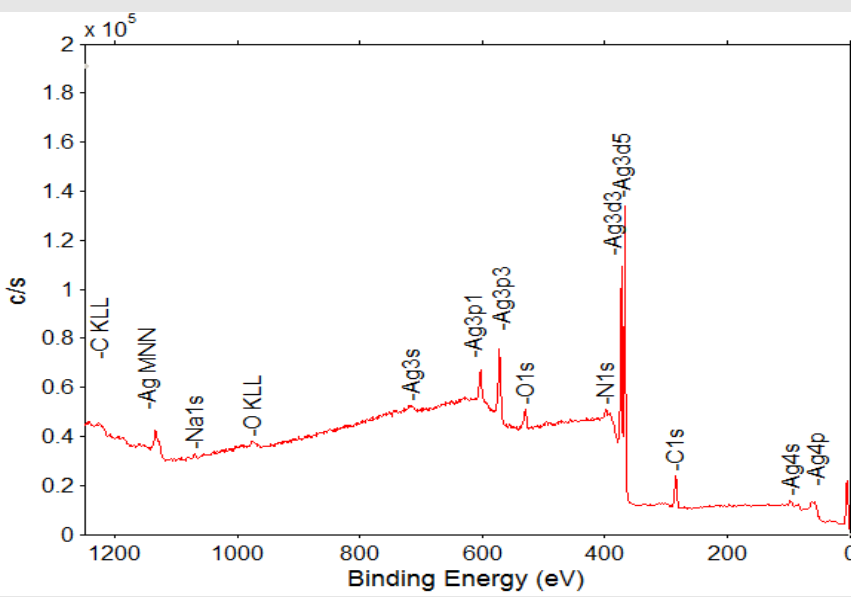
**Transmission Electron  
Microscopy  
(TEM)**



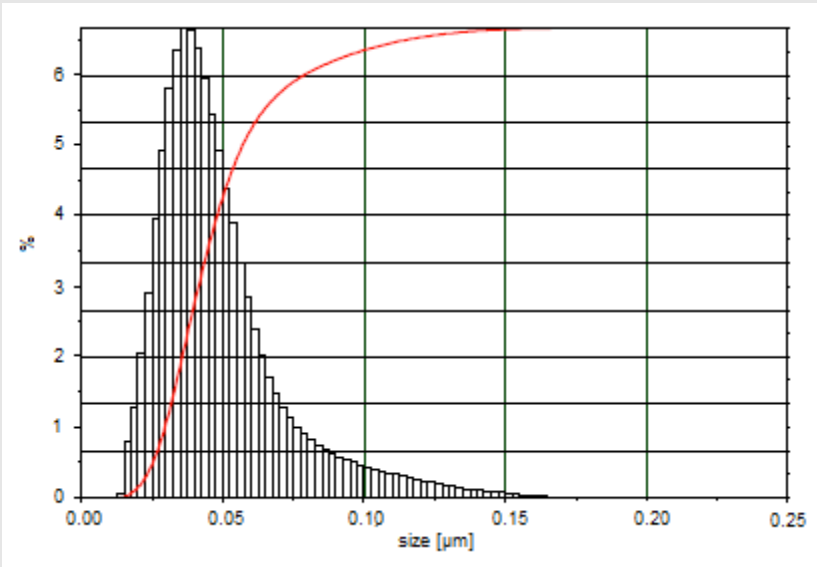
### X-ray Diffraction (XRD)



### X-ray Photoelectron Spectroscopy (XPS)



**Analytical  
Ultracentrifugation  
(AC)**



**Zeta Potential &  
Isoelectric Point**

