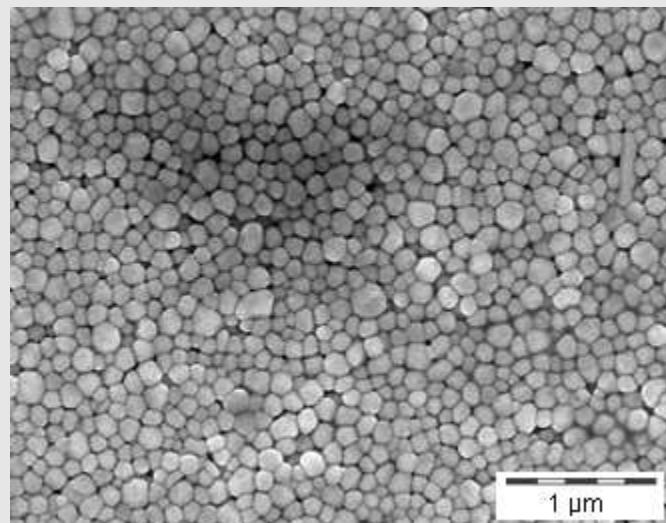


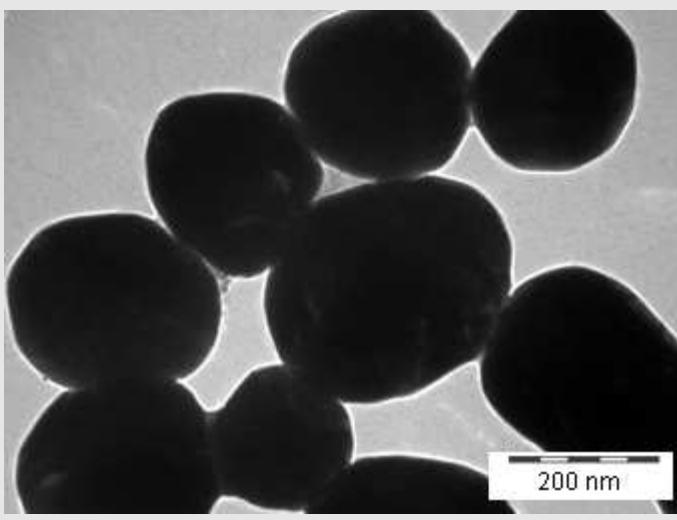
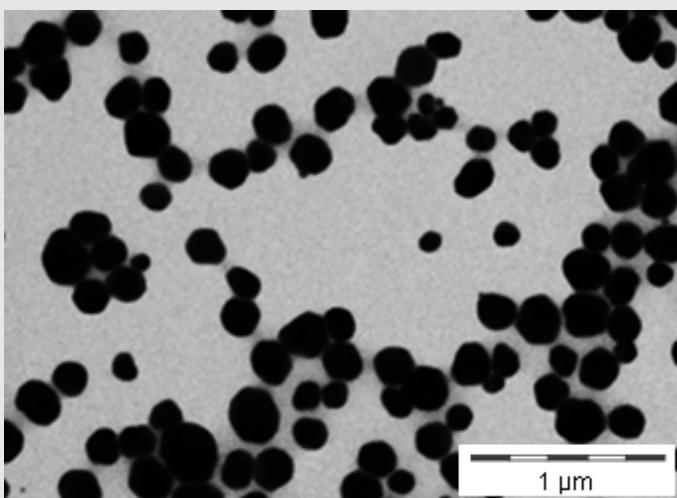
## Material **Ag (200 nm)**

<b>NanoTOES number</b>	NanoTOES_Ag_200
<b>Provider</b>	Bayer Technology Services GmbH
<b>Concentration</b>	1 % (wt/wt) in water $1.94 \times 10^{12}$ NPs/ml
<b>Specific Surface Area</b>	$3.87 \text{ m}^2/\text{g}$
<b>Size/ Size distribution &amp; Agglomeration/ Aggregation state</b>	DLS: (Correlation Func., Number Distribution) 272.5 nm +/- 2.2 ; PDI= 0.136 TEM: d50= 168 nm, d90= 255 nm AC: d50= 150 nm, d90= 380 nm
<b>Shape</b>	quasi spherical
<b>Crystal Structure</b>	cubic
<b>Surface Chemistry</b>	XPS: Atom % C 58.1, O 18.0, Ag 15.4, N 7.5, Na 1.0 SIMS: Ag, Na, K, $\text{C}_x\text{H}_y\text{O}_z$
<b>pH (in water)</b>	6.0
<b>Surface Charge</b>	Zeta potential: - 5.5 mV +/- 0.5 IEP: ~ 4.2 pH

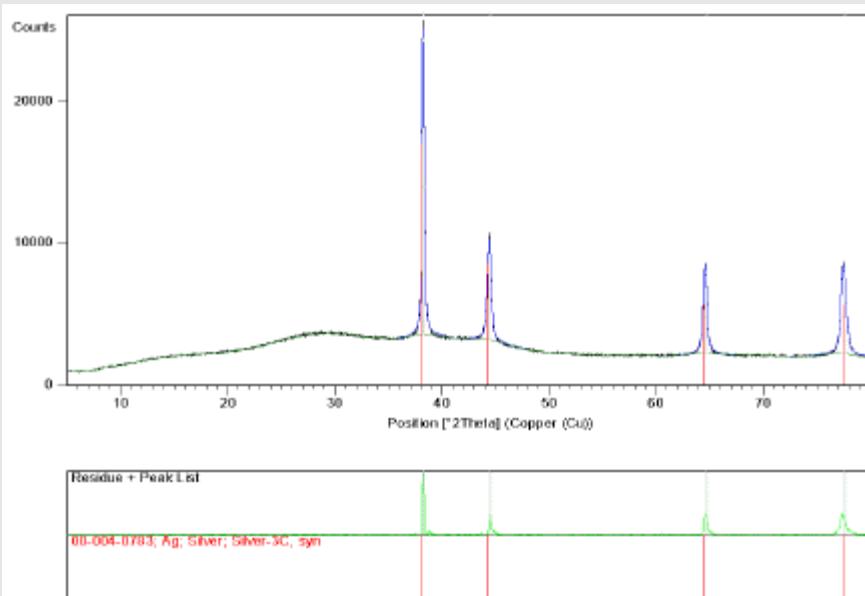
**Scanning (Raster)  
Electron Microscopy  
(SEM)**



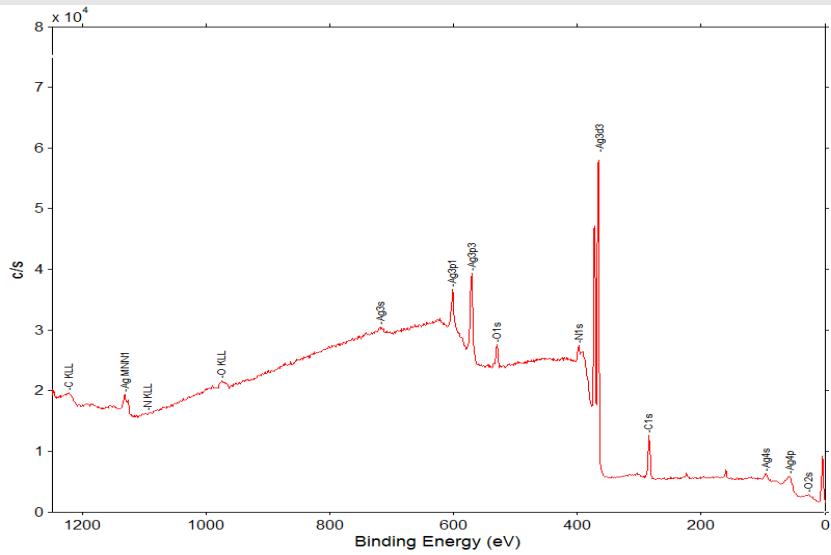
**Transmission Electron  
Microscopy  
(TEM)**



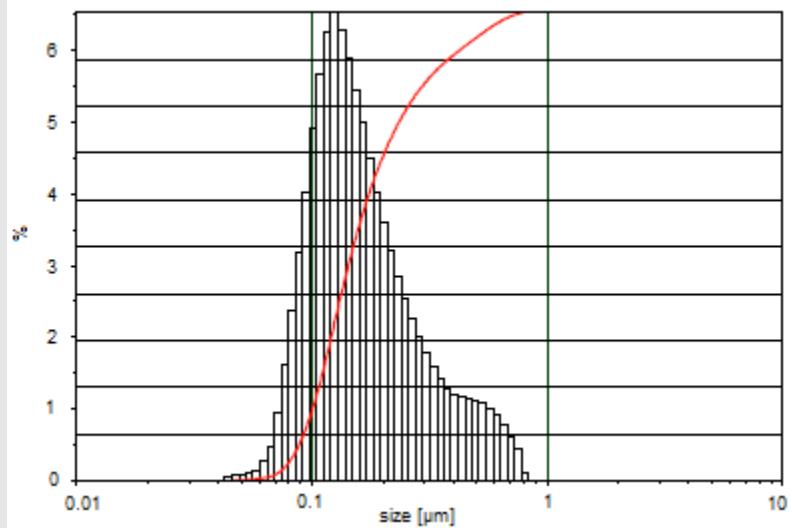
## X-ray Diffraction (XRD)



## X-ray Photoelectron Spectroscopy (XPS)



## Analytical Ultracentrifugation (AC)



## Zeta Potential & Isoelectric Point

