

ICP ESCA TGA  
GC MS NMR XRF  
GPC DSC  
FTIR SEM TEM

# Analytical Solutions

## Do You Need to Know What Your Materials Look Like on the Micro to Nano Size Level?

Dow Corning Analytical Solutions offers a wide range of microscopy techniques to fully characterize the morphology of your materials. We can characterize the size, shape, thickness, composition and uniformity of substrates, films, liquids and particles—from micro to nano size.

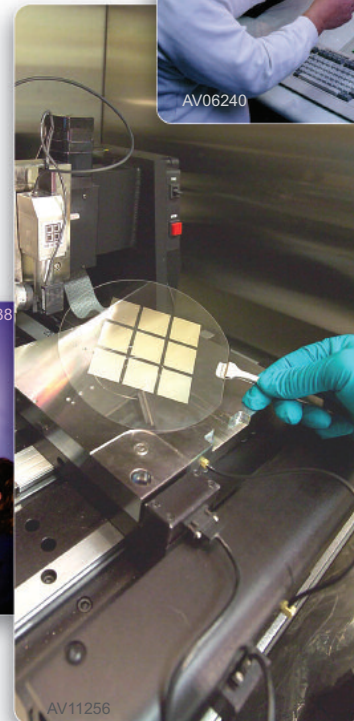
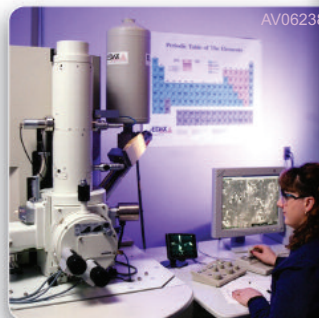
### Analytical Expertise and Capabilities:

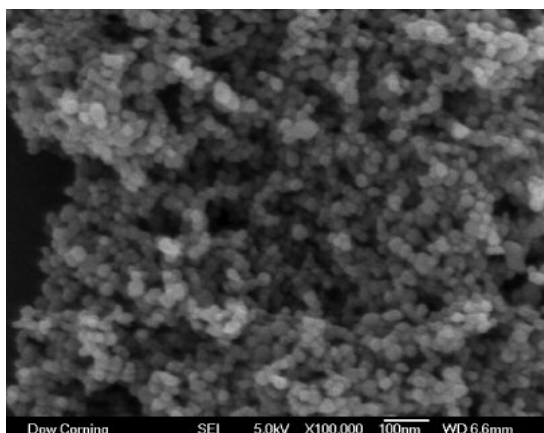
Our skilled microscopists are experienced at analyzing a wide variety of materials including emulsions, electronic packaging, nanoparticles, laminates, hair, textiles, polymers and more.

Microscopy characterization techniques include:

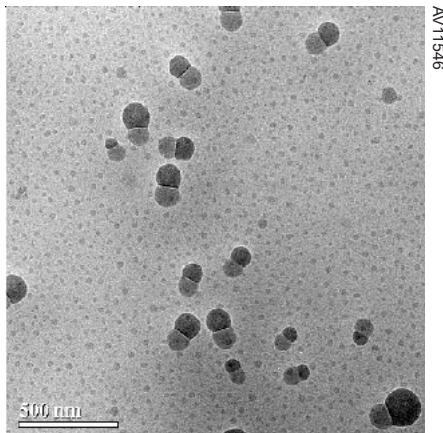
- Optical microscopy
- Confocal microscopy
- Laser diffraction and light-scattering particle size measurement
- Field-emission scanning electron microscopy (FESEM)
- Energy dispersive spectroscopy (EDS or EDX)
- Atomic force microscopy (AFM) with nanoindentation capability
- Transmission electron microscopy (TEM) with EELS/STEM/EDS/cryo-stage capability
- Infrared and Raman microscopy
- White light interferometry

We also offer surface characterization techniques such as x-ray photoelectron spectroscopy (XPS), BET and surface energy measurements to complement our microscopy techniques.





Field emission SEM images of titanium dioxide nanoparticles.



TEM image of single lobed emulsion dispersed in water. The specimen was prepared using a cryo-plunging technique and imaged under cryo-environment.

### Additional Capabilities:

In addition to microscopy and surface analysis, our lab offers other tests you may need:

- Molecular spectroscopy (Raman, IR, NMR)
- Chromatography (GPC, IC, GC)
- Mass spectrometry (GC-MS, LC-MS, FT-MS, MALD-TOF-MS, GC-TOF-MS)
- Elemental (WDXRF, ICP-MS, ICP-AES, XRD)
- Thermal (TGA, DSC, DMA, DTA, TMA, Py-GCMS)

### Quality Accreditation:

- ISO 9001:2000 (BTI FM 10734)

### How to contact us:

For further information, to request a quote or to discuss how we can help you:

- Visit our website:  
[www.dowcorning.com/analytical](http://www.dowcorning.com/analytical)
- E-mail us:  
[analytical.solutions@dowcorning.com](mailto:analytical.solutions@dowcorning.com)
- Call us:  
Technical Contacts  
United States 1-877-dcc-test (1-877-322-8378)  
Belgium 32-64888239  
United Kingdom 44-1446-723430  
Japan 81-436-22-5966

Product Customer Service 1-800-248-2481

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Dow Corning expressly warrants for a period of ninety (90) days following completion of any service that the service was performed in accordance with generally accepted practices and procedures or, if applicable, practices or procedures developed by Dow Corning. Dow Corning's sole responsibility under this limited warranty is to re-perform any service or refund the fees paid to Dow Corning for such services if client notifies Dow Corning within 90 days of performance of the service.

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