



Expert Vision for a Changing World

PolyInsight LLC
526 South Main Street
Suite 414
Akron, OH 44311 USA

P/F: 330-777-0025
info@polyinsight.com
www.polyinsight.com

AFM Applications for Polymer and Particle Systems

Atomic-Force Microscopy (AFM) is considered to be one of the enabling tools of the nanotechnology industry. It is well-established in the field of semiconductor metrology for critical dimension measurements, and now finds application across most materials science fields in R&D and new product development. As a high spatial resolution microscope, AFM differentiates itself from the traditional electron microscopy techniques (SEM, TEM) with its ability to make quantitative measurements of surface topography and with its sensitivity to mechanical properties (elastic modulus). Examples of AFM investigations of biological nanoparticle systems and polymer chemistry applications will be presented. The unique information provided by this technique can assist the cosmetic chemist in accelerating product development and troubleshooting efforts.