Particle Characterization: Module 11, Lecture 32

1. Identify some unique properties of nano-particles.

2. List appropriate uses of OM, SEM, TEM, AFM, XRD for nano-particle characterization.

3. Why is a Differential Mobility Analyzer especially well-suited to nano-particles?

4. Differentiate FBM and PCS.

5. Name some techniques for shape analysis of nano-particles.

6. Describe three density values relevant to nano-particles.

7. How do melting point, surface tension and specific surface area vary as size shrinks?

8. Classify the composite structure of nano-particles.

9. For nano-particles, what does crystal structure depend on?

10. How do mechanical, optical and electrical properties evolve in the nano-range?