

Particle Characterization: Module 5, Lecture 14

1. How does surface energy influence the interaction of a particle with its surroundings?
2. What makes nano particles highly reactive?
3. Related surface energy to Helmholtz free energy.
4. Sketch Lennard-Jones potential as a function of distance of separation.
5. State underlying assumptions in Langmuir model of adsorption.
6. Derive Langmuir model of adsorption from a dynamic equilibrium viewpoint.
7. Plot F vs P in Langmuir adsorption.
8. Plot V_{ads} vs p in BET adsorption.
9. How does chemisorption affect gas adsorption?
10. How does temperature affect adsorption?