

Module 8: Particle Cohesion Characteristics

- Comparing particle-surface adhesion forces, and particle-particle cohesion forces, what are the extra forces that appear in the latter case? Discuss implications for cohesiveness of nano-particle suspensions.
- Write the general dynamic equation for aerosol formation and transport in a gas-phase reactor. Identify the differential and integral terms in the equation.
- What is the size dependence of the capillary force between a particle and (a) a surface, (b) another particle? Define dimensionless mean curvature.
- List the forces of cohesion between adjacent particles suspended in a fluid medium, and indicate their corresponding size dependences.