Characterization of Highly Agglomerated Nanoparticles

Peter H. McMurry, Jacob Scheckman, Chris Frethem

Particle Technology Lab, Mechanical Engineering, University of Minnesota

NNIN Facility utilized: Characterization Facility

- Propane flame soot production
- SiO₂ nanoparticle production
- Particle size vs. Mass
- Effects of burner flow rates characteristics of product particles
- Image analysis

MAJOR OBSERVATIONS
- Primary particle size: ~30 nm
- Particle morphology: chain agglomerates
- Particle structure: fractal