Chemical Reactivity of Oxide Nanoparticles

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NNIN Facility utilized: Characterization Facility

In this area of research, we ask the fundamental question: What is the link between the chemical reactivity of a nanoparticle and its physical (e.g., size and shape) and chemical (e.g., doping) properties?

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\text{Benzoquinone (Q)} \quad \text{Hydroquinone (QH}_2\text{)}
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X-ray Absorption Spectroscopy

Collaborators in this area:
Prof. Bill Arnold, Department of Civil Engineering
Prof. Subir Banerjee, Department of Geology and Geophysics

Publications
Erbs et al., J. Phys. Chem. C (in prep)
Chun et al., ES&T (2006)
Anschutz and Penn, Geochem. Trans. (2005)
Nurmi et al., ES&T (2005)