Nanocatalysis for Chemical and Energy Transformations

Research:

- o Catalyst synthesis
- In-situ and operando studies using spectroscopic and microscopic techniques
- Chemical transformations with high activity and selectivity
- Production of fuels through heterogeneous catalysis
- Understanding of catalysis at a molecular level
- Instrumentation of in-situ studies for surface chemistry and structure

Collaborating Faculty:

Anatoly Frenkel, Cynthia Friend, Jun Li, Meilin Liu, Raghunath V. Chaudhari, Miquel Salmeron, Bala Subramaniam, Seiji Takeda, Judith Yang

Equipment:

Fixed-bed flow reactors, high pressure liquid reactors, Al K α ambient pressure XPS (AP-XPS), high pressure STM, and Atom-layer deposition in Tao group.

Funding Sources:

Department of Energy National Science Foundation American Chemical Society





Director:

Franklin (Feng) Tao, Ph.D. (Princeton, 2006) Miller Associate Professor, Chemical and Petroleum Engineering and Chemistry



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Courses:

Physical chemistry, Thermodynamics and Its Applications, Surface Science and Catalysis

Go to cpe.engr.ku.edu to learn more.