# Inorganic Chemistry

Department of Chemistry University of Illinois at Urbana-Champaign

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Alison R. Fout

Synthesis and characterization of transition metal complexes and their use as catalysts for biological, environmental and energy concerns

chemistry.illinois.edu/fout



Andrew A. Gewirth

Structure and reactivity of surfaces, materials, and interfaces relevant to catalysis, electrodes, and biology chemistry.illinois.edu/agewirth



### **Gregory S. Girolami**

Synthesis of transition metal and f-metal complexes and their use in catalysis; as precursors for the chemical vapor deposition of micro- and nanoelectronic devices; in energy applications; and for the reprocessing of nuclear fuel

chemistry.illinois.edu/ggirolam



**Damien S. Guironnet** 

Development and implementation of organometallic complexes as polymerization and/or depolymerization catalysts

chemistry.illinois.edu/guironne



### **Hee-Sun Han**

Design and develop new precursors for high-quality inorganic nanoparticle synthesis; use of inorganic nanoparticles for single molecule imaging and cellular imaging; assembly of nanoparticles

chemistry.illinois.edu/hshan

# Inorganic Chemistry

### Other faculty with interests in Inorganic Chemistry

Scott E. Denmark Transition-metal and main-group chemistry

Walter G. Klemperer Porous inorganic solids, polyoxometalates, platinum chemistry, multinuclear NMR

Eric Oldfield Metalloproteins as drug targets

Thomas B. Rauchfuss (emeritus faculty) Synthesis and mechanistic studies of catalysis

Stephen G. Sligar (emeritus faculty) Nanobiotechnology; drug discovery

Kenneth S. Suslick (emeritus faculty) Sonochemistry; sensor arrays

Wilfred A. van der Donk Metalloenzyme catalysis

M. Christina White Transition-metal mediated reactions for organic synthesis





## Liviu M. Mirica

Synthetic and mechanistic inorganic and organometallic chemistry applied to energy catalysis and oxidative organic transformations; study of the role of transition metal ions in neurodegenerative diseases

chemistry.illinois.edu/mirica



#### Catherine J. Murphy

Syntheis of inorganic nanoparticles of controlled shape and size; use of inorganic nanoparticles for optical sensing and imaging with biological and environmental applications

chemistry.illinois.edu/murphycj



#### Lisa Olshansky

Design, synthesis, and examination of switchable metal complexes for bioinspired solutions in solar energy conversion and multi-electron, multi-proton catalysis

chemistry.illinois.edu/lolshans





## Josh Vura-Weis

Femtosecond X-ray spectroscopy of catalytic reaction intermediates

hemistry.illinois.edu/vuraweis