

# Inorganic Chemistry

Department of Chemistry  
University of Illinois at Urbana-Champaign

For more information, visit  
[chemistry.illinois.edu](http://chemistry.illinois.edu)



## What is Inorganic Chemistry?

The University of Illinois is one of the premier institutions of inorganic chemical research, as shown by its ranking as one of the top 10 graduate inorganic programs by US News and World Report. The faculty members not only are leaders in the field, but are also outstanding mentors of graduate students working toward their PhD degrees. Our students have gone on to extremely successful careers in both academia and industry. The program covers all areas of modern inorganic chemistry from organometallic chemistry, kinetics/mechanism, and catalysis to the frontiers of materials chemistry, bioinorganic chemistry, and advanced physical characterization.



### 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](http://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](http://chemistry.illinois.edu/agewirth)



### Gregory S. Girolami

Synthesis of transition metal complexes and their use as catalysts; as precursors for the chemical vapor deposition of thin films; as building blocks for novel magnetic materials

[chemistry.illinois.edu/ggirolam](http://chemistry.illinois.edu/ggirolam)



### Yi Lu

Biosynthetic inorganic chemistry in environmentally benign catalysis; renewable energy and pharmaceuticals; metallo-DNAzymes in environmental monitoring, medical diagnostics, and targeted drug delivery

[chemistry.illinois.edu/yi-lu](http://chemistry.illinois.edu/yi-lu)



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Chemistry

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*also see reverse side*

# Inorganic Chemistry

## Other faculty with interests in Inorganic Chemistry

### Scott E. Denmark

Transition-metal and main-group chemistry

### 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

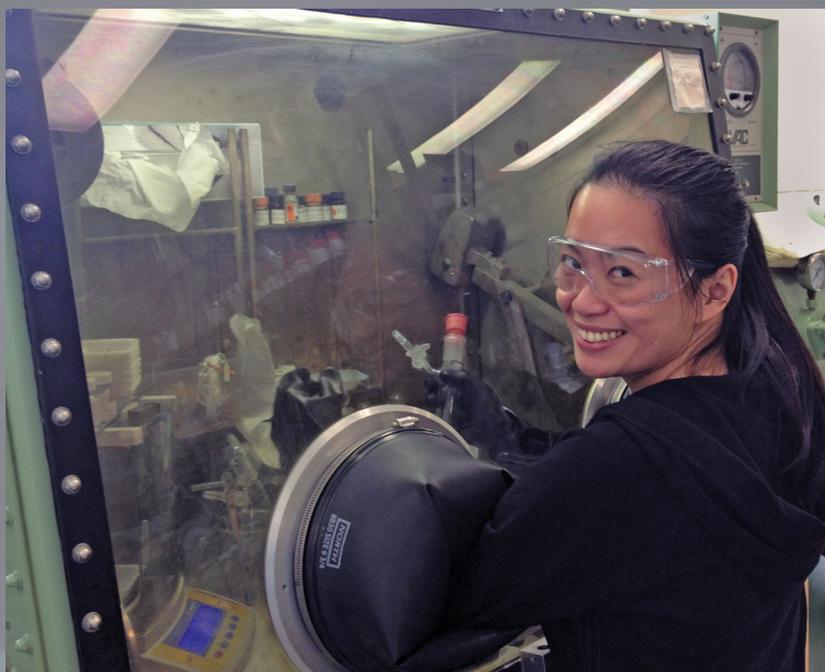
Metalloenzyme catalysis

### Renske van der Veen

Ultrafast characterization of metal-organic nanomaterials

### 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](http://chemistry.illinois.edu/mirica)



### Catherine J. Murphy

Synthesis 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](http://chemistry.illinois.edu/murphycj)



### Ralph G. Nuzzo

The chemistry of materials; nano and microscale fabrication; soft materials; integrated devices; self-organizing structures

[chemistry.illinois.edu/r-nuzzo](http://chemistry.illinois.edu/r-nuzzo)



### 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](http://chemistry.illinois.edu/lolshans)



### Josh Vura-Weis

Femtosecond X-ray spectroscopy of catalytic reaction intermediates

[chemistry.illinois.edu/vuraweis](http://chemistry.illinois.edu/vuraweis)

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