Tuesday, September 24, 2019, 12:30 pm
Verna and Peter Dauterive Hall, VPD 105

Professor John Arnold

Department of Chemistry
University of California, Berkeley

Catalytic and Stoichiometric Reactivity with Electropositive Metals

It has long been known that metal complexes have the ability to activate otherwise unreactive small molecules such that they can engage in interesting and useful reactivity pathways. Starting with an initial binding event at a metal center, small molecules can be trapped, cleaved, rendered susceptible to attack by external reagents, or undergo electron-transfer reactions. Metal ions and their associated supporting ligands facilitate these important processes by controlling the steric and electronic environment around the binding site.

This presentation will focus on results from our studies on the synthesis of new complexes incorporating electropositive metals for activation of small molecules and organic substrates. I will present work from two areas of our current research in this area of the periodic table. Recent findings with metals from groups 5 and 7 of the periodic table will be discussed, along with our latest findings involving the lighter actinides thorium and uranium.

Hosted by Professor Megan Fieser

The scientific community is invited

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