**The Softer Side of Actinide Chemistry**

Justin R. Walensky

Department of Chemistry, University of Missouri, Columbia, MO 65211

Our laboratory is interested in the interaction of actinides, known to be hard Lewis acids, with soft donor ligands such as sulfur and selenium. The reason for this is due to the ability for soft donor extractors to selectively separate actinides from lanthanides. To do this we examine the structure, bonding, and reactivity of molecular thorium and uranium complexes with sulfur- and selenium-based ligands. This talk will introduce actinide chemistry looking at differences from transition metals and show our lab’s recent results.

