

Workshop on Structure-Property Relations in Transuranic
Intermetallic and Molecular Compounds
Lawrence Berkeley National Laboratory, April 12, 2004

Objective: Advance the fundamental understanding of structure and bonding in transuranic intermetallics and molecular systems

This workshop will bring together a subset of both chemistry and physics communities who investigate actinide intermetallics and actinide molecular species spanning the continuum from fundamental science to applications such as environmental remediation and nuclear fuels. In particular, we will emphasize the design, discovery, and development of new material systems that are poised on the brink between localized and itinerant behavior. This balance can then be tipped by relatively minor perturbations such as temperature, pressure, and chemical environment.

Topics:

- Tuning *f*-electron interactions in transuranic intermetallics
- Magnetic properties and tunability of bipyridyl and related transuranic complexes
- Chemical and physical properties of oxides, phosphides and sulphides
- From chemistry to biology: correlated electrons and structural determination
- New frontiers

Partial list of speakers:

Thomas-Albrecht Schmidt (Auburn Univ.)
Patrick Allen (LLNL)
Richard Andersen (UCB/LBNL)
Corwin Booth (LBNL)
Dave Clark (LANL)
Daniel Cox (UC Davis)
Zachary Fisk (UC Davis)
James Ibers (Northwestern)
John Sarrao (LANL)
Lynne Soderholm (ANL)

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Attendance is limited to 35 persons. For more information, contact: John Sarrao (chair) at sarrao@lanl.gov, or Corwin Booth (co-chair and local organizer) at chbooth@lbl.gov.