



# Inorganic Chemistry Seminar Series

Tuesday, September 4, 2018, 12:30 pm

Seaver Science Library, Room 150

*SSC Auditorium next to the library*

## Professor Hill Harman

*Department of Chemistry*

*University of California Riverside*

### ***Boron-Doped Acenes for the Redox Activation of Small Molecules***

Transition metals have long been explored for the catalysis of reactions related to energy storage and conversion, as they possess both rich redox chemistry and the ability to bind and activate challenging small molecule substrates like H<sub>2</sub> and CO<sub>2</sub>. Recently, new approaches to small molecule activation featuring transition-metal-free systems such as Frustrated Lewis Pairs have emerged, but coupling this reactivity to facile electron transfer chemistry remains a challenge. We are developing new molecular platforms featuring 9,10-diboraanthracene that combine facile multi-electron redox chemistry with unique reactivity towards small molecules. These systems capture many of the salient features of transition metal catalysts by exploiting the unique chemistry of conjugated boron-containing heterocycles.

Hosted by Professor Mark Thompson

*The scientific community is invited*

**USC Department of Chemistry**

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