



Gustaf H. Carlson School of Chemistry and Biochemistry

Presents The

## Twenty-First Annual Harry C. Allen Jr. Symposium

### New Materials for Renewable Energy Alternatives

- 1:30 pm Opening Remarks
- 1:35 pm **Ralph H. Colby** – Penn State University  
*“Designing Ion-Containing Polymers for Facile Ion Transport”*
- 2:35 pm **Gregory J. Kubas** – Los Alamos National Laboratory  
*“Bonding and Splitting of Dihydrogen on Metal Complexes and Relevance to the Hydrogen Economy”*
- 3:35 pm Coffee
- 4:10 pm Presentation of the Theoharides Graduate Award  
in Chemistry
- 4:15 pm **Tom Zawodzinski** – Case Western Reserve University  
*“Recent Progress in Proton Conduction in Membranes”*

Friday, November 13, 2009

Sackler Sciences Center

Room S121

1:30 pm – 5:30 pm

Free and Open to the Public