

## **Department of Chemistry**

# Aldrich Seminar in Synthetic Organic Chemistry

9:45 a.m. Tuesday, February 8 • 331 Smith Hall



**Professor** 

### **Tomislav Rovis**

Department of Chemistry Colorado State University, Fort Collins CO

Ring Forming Strategies in Asymmetric Catalysis

#### Research interests:

Development of chiral bench-stable nucleophilic carbenes and their use as organocatalysts in organic transformations as well as ligands in transition metal catalysis.

#### Website:

http://www.chm.colostate.edu/rovis/Rovis\_Group\_Website/Home\_Page.html

#### **Abstract**

Construction of complex molecules mandates efficient means of introducing stereochemistry. We have been engaged in the development of a variety of transition metal and small organic molecule catalyzed asymmetric transformations with a focus on C-C and C-N bond forming reactions. Complementary strategies involving heterocumulene fixation as well as aldehyde umpolung reactivity will be discussed with an emphasis on recent discoveries.