# UNIVERSITY OF RHODE ISLAND Department of Chemistry

### **SEMINAR**

Room 105 Beaupre 3:00 P.M, Monday, Nov. 7, 2016

## Prof. Chia-Kuang (Frank) Tsung

Department of Chemistry
Boston College
Chestnut Hill, MA

# "Controlled Encapsulation of catalysts into metal-organic frameworks"

**HOST** 

Jason Dwyer Department of Chemistry 401-874-4648

# Controlled Encapsulation of Catalysts into Metal-organic Frameworks

Chia-Kuang (Frank) Tsung Assistant Professor of Chemistry Boston College

#### Abstract:

Towards our long-term vision of precisely controlling active sites, our group focuses on incorporating catalysts into crystalline nanoporous materials, metal-organic frameworks (MOFs). The precise molecularly-defined pores intrinsic to the MOFs provide a new tool to control the catalytic transformations on the catalysts. We have developed methods to combine organometallic catalysts, enzymes, and nanoparticle catalysts with MOFs of precisely tuned pore structures to manipulate the reactions.