

# **CORE-CM SEMINAR**

## **Michigan State University**

**Paul T. Barger**  
**Honeywell UOP**  
**Des Plaines, IL**

### **UOP Advanced MTO Technology – A New Route for the Production of Light Olefins**

The UOP Advanced Methanol-to-Olefins (MTO) Technology combines the UOP/Hydro MTO process for the conversion of methanol to light olefins with the Total Petrochemicals/UOP Olefin Cracking Process (OCP) to convert C<sub>4+</sub> by-products into additional ethylene and propylene. The overall process provides a cost-advantaged route for the utilization of natural gas, coal or biomass to produce these high volume petrochemicals. Fundamental understanding of catalyst structure-performance relationships and the MTO reaction mechanism have guided the development of this technology. The integration of the MTO and OCP processes provides close to 90% overall carbon selectivity to ethylene and propylene from methanol. The development path that has led to the successful commercialization of this technology over the last three years will be reviewed.

**Thursday, October 27, 2016**  
**12:00 NOON**  
**Room 1400 – Biomedical & Physical Sciences**  
**Professor John Frost - Host**