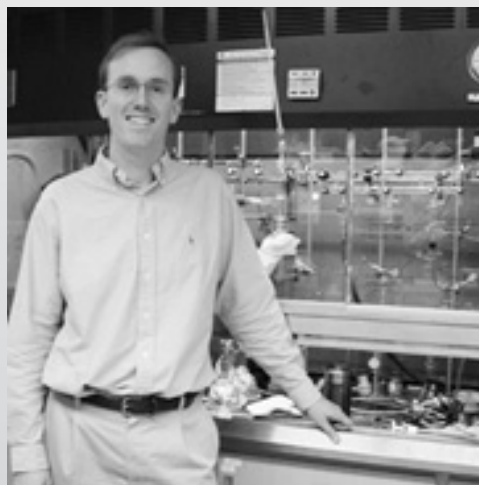


# Frontiers in Catalysis Sciences Seminar Series Presents

## Tuning the Strength and Reactivity of Metal-Ligand Bonds: Reactive Nitrides and Stable Carbides in Catalytic Multiple-Bond Metathesis Reactions



Speaker: **Dr. Marc J.A. Johnson**  
Assistant Professor of Chemistry  
University of Michigan

Date: Tuesday, March 31, 2009

Time: 10:00-11:00 a.m.

Place: EMSL Auditorium

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Modification of the ancillary ligand set can be used to tune the relative strength of metal-element multiple bonds rationally. New nitride complexes of Mo and W that are activated toward triple bond metathesis are described. In the case of W, pairwise nitride/alkylidyne exchange can be reversible, leading to a new catalytic reaction, nitrile-alkyne metathesis.

