Tuesday, October 24, 2017, 12:30 pm
Seaver Science Library, Room 150
SSC Auditorium next to the library

Professor Casey Wade

Department of Chemistry
Brandeis University

Design and Reactivity of Metal-organic Frameworks Assembled from Diphosphine Pincer Complexes

Abstract:

Metal-organic frameworks (MOFs) have emerged as versatile platforms for the design of heterogeneous catalysts that retain many of the beneficial features (e.g., ligand tunability) of homogeneous systems. In addition to recyclability, MOFs offer the potential to enhance the reactivity of immobilized catalyst species through site isolation effects. Our group has been investigating the assembly of MOFs from linkers based on late transition metal diphosphine pincer complexes in order to elucidate immobilization and site isolation effects on these species. This presentation will highlight design principles for the synthesis of Zr-based MOFs containing a variety of M-PCP and M-PNP pincer complexes (M = Co, Ru, Rh, Pd, Pt) as well as recent investigations into reactivity and catalytic activity.

Hosted by Professor Smaranda Marinescu

The scientific community is invited

USC Department of Chemistry
chem.usc.edu