
Seminar

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Topic I: Metal Complexes with Redox-Active Ligands: Electronic Structure Determination and Reactivities towards Small Molecule Activation

Transition-metal complexes with redox-active “non-innocent”, ligands have generated much interest in recent years owing to an increased drive to understand the prospective role of various ligand-based oxidation states in either stoichiometric or catalytic molecular transformations. In this section, synthesis, electronic structure determination and reactivities, of a variety of metal complexes with redox-active ligands will be discussed.

Topic II: Covalent Attachment of Catalyst Molecules to Carbon Electrodes: H₂ Evolution from Catalyst Modified Electrode

In this section, characterization and catalysis from hydrogen-evolving electrocatalysts Ni(P₂N₂)₂ modified electrode will be discussed. The effect of surface attachment on catalysis rate and overpotential will also be discussed based on comparing homogeneous vs surface-bound catalytic results measured in the same solvent and electrode material.

Friday, Nov 27th 2015

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS