

Chem 423: Organometallics and Catalysis

Course description: The metal-carbon bond within the context of coordination chemistry. Structure, bonding, synthesis, reactivity and applications in catalysis.

Course Goals

Develop the ability to draw reaction mechanisms

Develop the ability to apply the concept of coordination chemistry and functional group transformation to inorganic chemistry

Develop an understanding of the concepts and applications of catalysis

Develop an understanding of kinetics as applied to catalysis

Develop the ability to use analytical and spectroscopic data to assign structure and understand catalysis

Program Goals

Develop the ability to represent chemical information.

Develop an understanding of the use of models, their premises, advantages and limitations.

Develop competence in problem solving.

Develop the ability to use the chemical literature in a critical manner.

Develop the ability to disseminate scientific information orally and in writing.

Develop an understanding of the impact and relevance of chemistry in society.

Develop the ability to engage in scientific discussions.