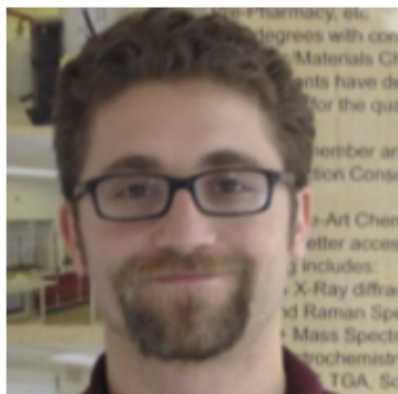


A Mechanistic Approach to Metal-Organic Framework and Organometallic Chemistries

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As metal-organic frameworks continue to gain prominence and more targeted synthetics become the norm, mechanistic elaboration of these materials, specifically the formation of the secondary building unit (SBU) is paramount. Through a combination of solvothermal synthesis, solid-state to solid-state transformations, and *in situ* Raman spectroscopy, proposed mechanisms of formation (along with their synthetic consequences) of select indium-derived SBUs will be presented.

Silylated rhodium(III) complexes have long been invoked as mechanistic intermediates in reactions such as hydrosilylation. However, the organometallic chemistry and catalytic competency of these electron-rich high oxidation state complexes has been understudied due to lack of stability and accessibility. The synthesis and preliminary catalytic activity of a series of new complexes stabilized via chelation will be presented.

Date: Wed, Oct 4, 2017

Time: 4:30-5:30 pm

Location: 208 Clark Hall

Students, meet the speaker over coffee and cookies in the Bennett Conference room at 3:30 pm