

INORGANIC CHEMISTRY SEMINAR

Exploring the Chemistry of Ni(I) and Pd(I) dimers with bridging allyl and related ligands



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Wednesday, October 2, 2013
Cram Conference Room, 3440 Mol Sci
4:30 pm

Refreshments will be served

Abstract

In comparison to the chemistry of monomeric Pd(II) and Ni(II) species containing allyl ligands relatively little is known about Ni(I) and Pd(I) dimers that contain bridging allyl moieties. Even less is known about Ni(I) and Pd(I) dimers that are bridged by cyclopentadienyl (Cp) or indenyl ligands. Here, we describe the synthesis of a variety of dimers which contain a combination of bridging allyl, Cp or indenyl ligands and are all supported by either phosphine or NHC ligands. The solid state geometries, electronic structures and reactivity of these new compounds will be compared. The role of these complexes in cross-coupling reactions will be described.