

Organic Transformations Enabled by d^0 Metals and Redox-Active Ligands

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Group 3 and 4 metals generally exist in their highest oxidation states, making them d^0 metals. Due to this, redox transformations are challenging. Our group has recently employed redox-active (tris)amido ligands in order to allow for facile redox reactions with d^0 metals. Through this manifold we have developed radical reactions (alkyl-alkyl cross-coupling), polar reactions through radical-polar crossover (gem-difluorostyrene synthesis), and photocatalyzed reactions (cross-coupling with unactivated substrates). Recent advances in these areas will be discussed.

Students, meet the speaker after the seminar in a student/postdoc session from 4:45-5:15 pm

Date: Friday, Sept 9, 2022

Time: 3:30-4:30 pm

Location: Clark Hall 112