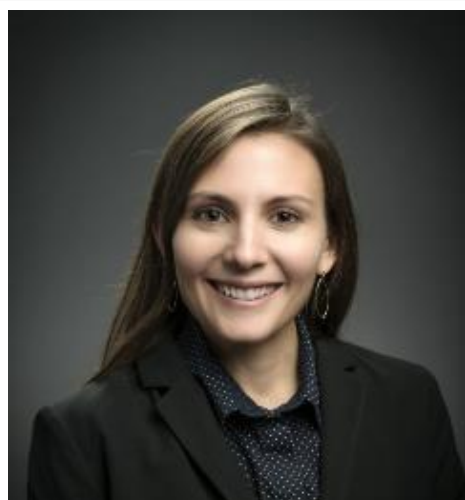


Controlling Site Selectivity in Cross Coupling Reactions

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Catalytic cross coupling reactions are among the most widely used strategies for C–C and C–N bond formation in organic synthesis. However, when two or more electrophiles (usually aryl halides) are present in the reactants, controlling site selectivity becomes critical. The most common approach to controlling selectivity involves using different substrates to access different products (substrate control). A potentially more efficient approach is to dictate selectivity through choice of catalyst or reaction conditions. Here, we describe our efforts toward achieving and understanding ligand- and solvent-control over selectivity in Pd-catalyzed cross coupling reactions. In addition to streamlining synthetic methods, this work provides insight into mechanistic details that could facilitate future catalyst design.

Date: Wed, Oct. 30, 2019

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