



West Virginia University®

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Recent Developments in Heteroaromatic-Heck Reactions

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Over the past 40 years, the development of transition metal cross-coupling reactions has primarily focused on the use of carbon electrophiles (aryl halides, vinyl halides, and more recently alkyl halides, etc) with various nucleophilic partners. Much less attention has been given to electrophiles of other elements in these types of transformations. This lecture will discuss recent efforts in the Watson group to develop heteroatomic electrophiles for cross-coupling reactions. Specifically, the use of electrophilic silicon, boron, and nitrogen reagents in Heck-type reactions will be discussed. These transformations - the silyl-, boryl-, and aza-Heck reactions - collectively provide access to high-value unsaturated organic compounds from simple alkene starting materials. The development, scope, and mechanistic understanding of these novel hetero-atomic Heck reactions will be described.

Date: Wed, Sept 20, 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