

Anti-Aromatic Boroles as Reagents

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Our group has been investigating the chemistry of boroles, unsaturated BC4 heterocycles, to access larger unsaturated boracycles. The antiaromatic systems readily insert atoms to generate 1,2-azaborine, 1,2phoaphaborine, 1,2-oxaborine, and 1,2-thiaborine heteroarenes which have different properties in comparison to their carbonaceous counterpart, benzene. Ongoing efforts are focused on enhancing the electronic properties of these boracycles to explore their utility in electronic materials and pharmaceuticals. Our strategy for the former is to extend conjugation in the inorganic/organic hybrid arenes by utilizing borole-based starting materials with conjugation installed. The mechanisms of these reactions and properties of the boracycles will be discussed.



Date:Wed, Oct. 9, 2019Time:4:30-5:30 pmLocation:208 Clark Hall

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