

LAURA ANDERSON

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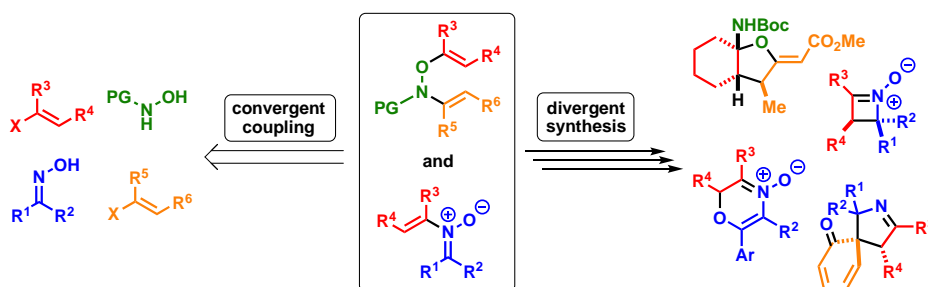


Thursday, October 26th

10:30am - 11:30am

Steele 006

“Enabling Access to New Molecules with New Reactions of Nitrones and Hydroxylamines”



Biography: Laura Anderson received her Ph.D. from UC Berkeley in 2005 with Profs. John Arnold and Robert G. Bergman. After completing an NIH postdoctoral fellowship with Prof. Keith A. Woerpel at UC Irvine, she began her independent career at the University of Illinois Chicago in 2008 and was promoted to Associate Professor in 2015. The Anderson Group is focused on designing transformations to use the reactivity imbedded in conjugated nitrones and hydroxylamines to address synthetic challenges.

Abstract: Pericyclic reactions have traditionally been used to rapidly create molecular complexity; however, these reactions have also been limited to accessible precursors. Our group looks to expand the pericyclic reaction tools available for creating molecular complexity and installing stereochemical information in heterocyclic structures. By developing new ways to access N-alkenylnitrones and N,O-dialkenylhydroxylamines and control their reactivity in cyclization, rearrangement, and cascade reactions, we advance the synthetic utility of these reactive intermediates and expand the chemical space around privileged, non-planar, heterocyclic compounds.