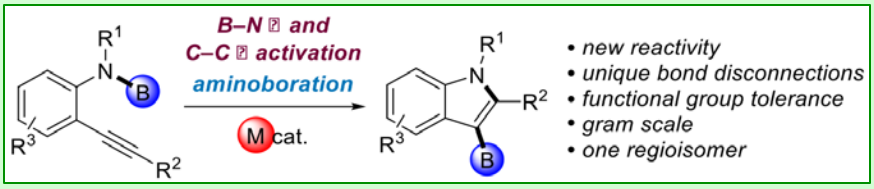
"Aminoboration and Oxyboration Reactions"

ORGANIC SEMINAR
Friday,
September 18, 2015
9:00 a.m.

Hutchison Hall 473
University of Rochester
Department of Chemistry

Guest Speaker:
Professor Suzanne Blum
University of California, Irvine
Department of Chemistry



Abstract: The first catalytic aminoboration and oxyboration of C–C π bonds by B–N/O σ bonds and their application to the synthesis of 3-borylated indoles and furans are described. The regiochemistry and broad functional group compatibility of this addition reaction enable substitution patterns that are incompatible with major competing technologies. These reactions effect the formation of C–B and C–N/O bonds in a single step from simple starting materials available on the gram scale. This reaction generates synthetically valuable N- and O-heterocyclic organoboron compounds as potential building blocks for drug discovery. The working mechanistic hypothesis involves a carbophilic Lewis acid that activates the C–C π bond.

Host: Professor Daniel Weix, email: dweix@UR.rochester.edu