

McGill Chemical Society Seminar Series



Tuesday, 8 March, 2016, 1:00 PM



Otto Maass Chemistry Building, Room 10

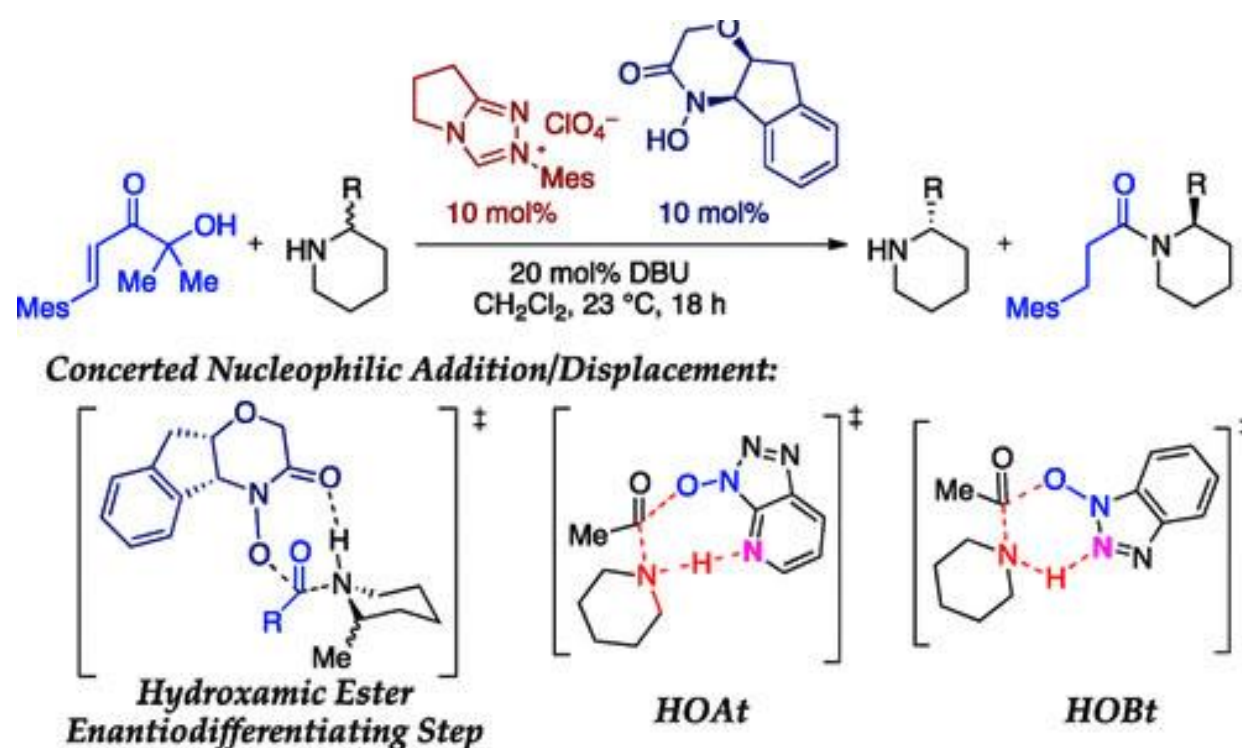
Prof. Marisa Kozlowski

Department of Chemistry, University of Pennsylvania



Oxygen Driven Fragment Coupling by Activation of C-H, N- H, and O-H Bonds

Inspired by Nature's use of oxidative couplings to construct carbon-carbon, carbon-oxygen, and carbon-nitrogen bonds in many natural products, we have undertaken studies of these important transformations. The development of selective catalytic processes for naphthol coupling, phenol coupling, N-arylation, and alkyl C-H activation that utilize oxygen as the terminal oxidant will be discussed.



Application to the synthesis of chiral natural products including nigerone, hypocrellin, cercosporin, and bisoranjidiol as well as to the synthesis of novel optically active materials will be presented.