



Green Chemistry Seminar (CCVC) (Open to public)



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**Title: TEACHING ENANTIOSELECTIVITY TO C-H BOND
FUNCTIONALIZATIONS**

Date/Time: Thursday, February 7, 2013, 1:00PM

Location: Otto Maass Chemistry Building (McGill University), RM 10

Reactions involving the activation and subsequent functionalization of relatively inert C-H bonds have considerable synthetic potential because of their economic and ecological benefits. Significant progress was made in addressing reactivity and selectivity (mainly chemo- and regio-) issues, as well as refining mechanistic understanding of the different pathways. Despite these great advances, asymmetric transformations have so far little precedence. Harsh reaction conditions, requirement of uncommon, yet to find ligand systems have hampered developments in this area. The design and development of such new ligands is vital to the success these transformations as the ligand is not only linked to yield and enantioselectivity, but also impact the reaction outcome itself. The presentation will focus on our recent developments of activating enantiotopic C(sp²)-H and C(sp³)-H bonds as well as using C-H activations as entry point for enantioselective downstream reactions.

