**Speaker:** Dr. Samuel Johnson - University of Windsor

**Title:** The Fast and the Furious: Tuning Nickel Complexes for C-H and C-F Bond Activation

**Abstract:** The direct functionalization of traditionally unreactive bonds, such as C-H bonds provides a facile, cheap and environmentally friendly route to the synthesis of organic compounds. The development of methodologies for the use of relatively inexpensive 1st row transition metals, such as nickel, in C-H and C-F bond activation could revolutionize the importance of these catalytic functionalization reactions in chemical synthesis; unfortunately, both kinetic and thermodynamic issues render this advancement difficult. Our group is working to demonstrate that through both ligand and reaction design nickel complexes can be synthesized that are capable of the selective activation of these bonds.