

OCCI Lecture

Speaker: Professor Kim Baines, *Department of Chemistry, University of Western Ontario*

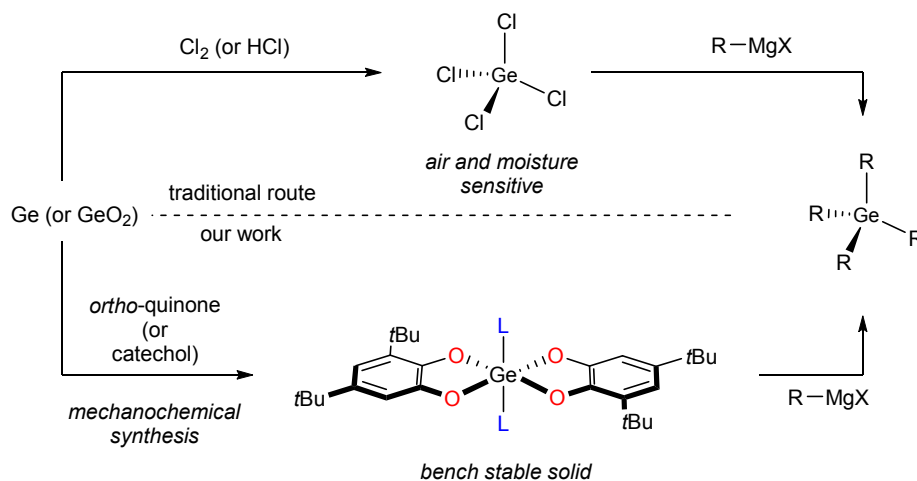
Title: Extreme Fun: The Synthesis and Chemistry of Hypercoordinate and Low Valent Main Group Complexes

Date, Time and Place: Friday, January 13, 2017, 10 am, TB 342



As a society, we are increasingly aware of the environmental impact of human activity and consequently, the dire need to develop cleaner technologies and to use our resources more efficiently. In this lecture, I will describe two aspects of our research which are designed to address these important societal challenges.

First, I will describe our efforts towards the development of alternative methods for the industrial processing of germanium and tin, two vital technological materials, which avoid the use of highly corrosive and toxic chlorine-based reagents.



In the second part of this lecture, I will describe the synthesis of novel, cryptand-stabilized low valent main group cations and their spectroscopic properties. Such complexes have attracted much attention over the last 10 years because of their potential to serve as replacements for transition metals in the activation of small molecules or as catalysts.

