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Title: Coordination Chemistry of Pn(V) Cations

Abstract: Compared to transition metals, the coordination chemistry of main group elements is greatly unexplored. Antimony(V) acceptors have been shown to form coordination complexes with a wide range of ligands. Recently, the reactivity of mono and di-cationic antimony (V) acceptors, $Ph_4Sb(OTf)$ and $Ph_3Sb(OTf)_2$, has been studied and shown to form coordination complexes with a variety of redox resistant donors offering a wide array of structural diversity. However, structural characterization of tri-, tetra-, and penta- cationic complexes of Pn(V) were at the time unreported. The synthetic methodologies, resulting compounds, and their reactivities will be discussed.

Bio: Dr. Chris Frazee is an LTA Professor in the Department of Chemistry at Saint Mary's University. He received his bachelor's degree from the University of New Brunswick where he worked under Dr. McGrady researching solid state hydrogen storage materials. Afterwards he obtained his Ph.D. from the University of Victoria where he researched the coordination chemistry of pnictogens under Dr. Burford. Since then, his focus has been on teaching. He was a lab instructor at Memorial University, Grenfell Campus in Newfoundland and currently an LTA Professor at Saint Mary's University in Nova Scotia.