

The departments of Chemical Engineering, Chemistry & Biochemistry, and the Partnership for International Research in Electron Chemistry and Catalysis at Interfaces are pleased to announce a

SPECIAL SEMINAR

Metal and Chemical Hydrides for Hydrogen Storage: Recent Progress

Prof. Sean McGrady

Professor of Chemistry
University of New Brunswick

Wednesday, Jan. 11th @ 4pm, Engineering II #1519

Since 2007, we have been working on a range of inorganic materials that offer the prospect of safe and efficient storage of hydrogen, and on unconventional processes for their synthesis and recharging. This presentation will review progress made up to the end of 2010 on the complex hydride LiAlH_4 , and will describe progress made in 2011 on a theoretical analysis of the local charge density in these and related hydrides, which has revealed in these materials a novel type of homopolar H...H interaction of relevance to H_2 desorption and uptake. The existence and significance of analogous homopolar hydride-hydride interactions in chemical hydride species like LiNH_2BH_3 and its precursor NH_3BH_3 will also be discussed.