BOSE COLLOQUIUM

Tuesday, 11 February 2014 4.00 pm Fermion

Speaker:

Mark Maroncelli

Professor & Associate Head for Undergraduate Education

Penn State Department of Chemistry

Title:

Solvation and Solute Dynamics in Ionic Liquids

Abstract:

Ionic liquids are molten salts whose constituent ions are selected in order to frustrate crystallization and achieve melting points near to or below room temperature. This relatively new class of materials is being actively explored for use in virtually all areas of chemistry due to the ability to tailor make liquids for specific applications and to the distinctive features of these liquids compared to conventional organic solvents. Our group and many others have been exploring the basic physical chemistry of ionic liquids: characterizing their properties and trying to understand how these purely ionic fluids differ from dipolar liquids and ionic solutions. I will provide an overview of our contributions to understanding solvation in ionic liquids and how solvation impacts solute diffusion and simple reactions taking place in these interesting new solvents.
