



**TIFR Centre for Interdisciplinary Sciences,
Narsingi, Hyderabad 500075**

Seminar

**Structure and dynamics of H/Li/N systems
at high pressure**

Dasari L. V. K. Prasad

**Baker Laboratory, Cornell University, Ithaca
NY 14853**

Abstract: The elemental components of H/Li/N ternary chemical space have had a great impact on our general understanding of the chemistry and physics of condensed matter at extreme conditions. In view of this I shall discuss some of our recent theoretical results on structure and chemical bonding, lattice dynamics, and metal insulator transitions of H/Li/N systems at high pressure. The binaries include some well-known molecules (in the N/H system); a new feature in the binaries and ternaries is also the existence of very ionic compounds – LiH, Li₃N and LiNH₂, whose behavior under pressure will be examined.

Date: Thursday, January 10th 2013

Time: 11:30AM (Tea/Coffee at 11:15AM)

Venue: Conference Hall, TCIS

All are cordially invited