



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

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## **Seminar**

**Nano-spintronics & Novel memory technologies**

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**IISc, Bangalore**

The use of nanometer-sized molecules as materials for spintronics is gaining a widespread attention contributing to the development of molecular spintronics. Of particular interest is the study of interface interaction between a ferromagnet and an organic molecule. Recent studies have highlighted the creation of new interface states, formed by the hybridization of molecular orbitals with the spin-polarized bands of the surface, with unique electronic and magnetic character. Using organic junction devices, we demonstrate the richness of the interface spin-chemistry in developing new handles to functionalize the properties of the adsorbed molecules, opening up a molecular-genome initiative to develop spin-functional tailor-made devices. Lastly, a research discussion on novel memory technologies including the recent work using mixed ionic electronic conductors will also be covered in the talk.

***Wednesday, Mar 26<sup>th</sup> 2014***

***4:00 PM (Tea/Coffee at 3:30 PM)***

***Seminar Hall, TCIS***