

Tata Institute of Fundamental Research

Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500107

Internal Seminar

Factors Influencing The Magnetization Relaxation Dynamics in 3d, 4f, and 3d-4f metal based SMM: Synthesis and Theoretical Investigations

Naushad Ahmed IIT-B, Mumbai

Single-Molecule Magnets (SMM) are a class of molecular magnets which show the magnetic-bistability below a certain blocking temperature. Due to the presence of under barrier relaxation processes such as quantum tunnelling of magnetization (QTM), the relaxation barrier and hence the blocking temperature is still low. A number of factors such as magnetic exchange coupling, electronic structure, and geometry are found to be governing the magnetization relaxation dynamics as well as blocking temperature in SMM. We will address these governing factors by taking the example of 3d-4f metal based SMM.

Monday, Nov 26th 2018 4:00 PM (Tea/Coffee at 3:30 PM) Seminar Hall, TIFR-H