

Internal Seminar

Lanthanide and Transition metal Complexes as Single Ion Magnets /Single Molecule Magnets

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Lanthanide complexes have attracted considerable attention in recent decades in the field of catalysis, molecular magnets, and photophysical properties. Numerous lanthanide complexes have been investigated for single-molecule magnet (SMM) behaviour, especially Ln= Dy^{III}, Tb^{III}, and Er^{III} with varying nuclearities and topologies. SMMs behaviour of metal complex can be tailored by adjusting the metal centre environment through careful selection of metals and ligand design. We have synthesised and structurally characterised a range of lanthanide and transition metal complexes employing flexible Schiff base ligands. The magnetic properties of these complexes were explored which helped us understand the structure-property relationship. The detailed study will be discussed in the talk.

Friday, Dec 13th 2024

15:30 Hrs

CR-1, TIFRH