

Internal Seminar

Compartmental ligand for the assembly of 3d-4f heterometallic complexes & Supramolecular gel to metal organic framework transformation

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Heterometallic 3d-4f metal complexes are of interest in molecular magnetism.^{1, 2} Compartmental ligands in general and Schiff-base ligands in particular are quite useful for assembling such complexes. One of the compartments in such ligands can be specific for 3d metal ions while the other compartment can be utilized for specifically accommodating f-block metal ions. I have utilized ferrocene as well as 2-aminobenzohydrazide to build new compartmental ligands³ which have been used to synthesize the heterometallic complexes. Besides this, I have designed some amino acid based Schiff base ligand which is further used for synthesis hydrogel in presence of Zn^{II} and Cd^{II} salt and interesting properties are explored.

References:

- [1] Chandrasekhar, V.; Pandian, B. M. Acc. Chem. Res., 2009, 42, 1047.
- [2] Gatteschi, D.; Sessoli, R. Angew. Chem. Int. Ed. 2003, 42, 268.

[3] Chandrasekhar, V.; Chakraborty, A.; Sañudo, E. C. Dalton Trans., 2013, ASAP.

Thursday, Nov 2nd 2017 02:00 PM (Tea/Coffee at 01:45 PM) Auditorium, TIFR-H