

Internal Seminar

Synthesis, Structure and Reactivity of Bulky Aryl Phosphates and its Complexes

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The chemistry of metal phosphates has been extensively investigated due to their structural diversity and potential applications in various fields such as catalysts, ion exchange, sensing, photoluminescence, medicine, adsorption, proton conduction and also use as a scavenger of small molecules and ions. Among the metal phosphates, lanthanide based complexes have been widely investigated in recent times due to their interesting magnetic properties. The reaction of the mono organophosphates [ArOP(O)(OH)₂] (Ar = 2,6-CHPh₂-p-R-C₆H₂; R = tBu) with Ln(III) ions produces mononuclear Ln(III)-phosphates and in the presence of Et₃N; it forms multinuclear Ln(III)-phosphates. Apart from this; we synthesised the 2,6-(diphenylmethyl)-4-iso-propyl-phenyl substituted phosphate diesters (both in their neutral and anionic forms) as molecular templates for hosting the water dimer.

Friday, Sep 21st 2018

10:00 AM (Tea/Coffee at 9:30 AM)

Seminar Hall, TIFR-H