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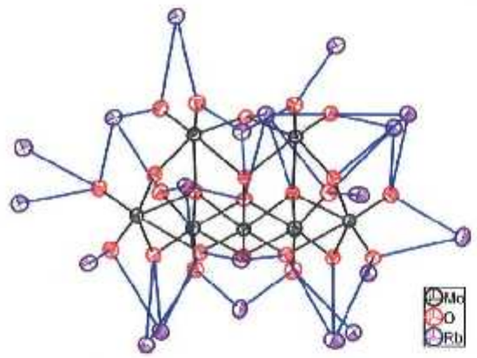
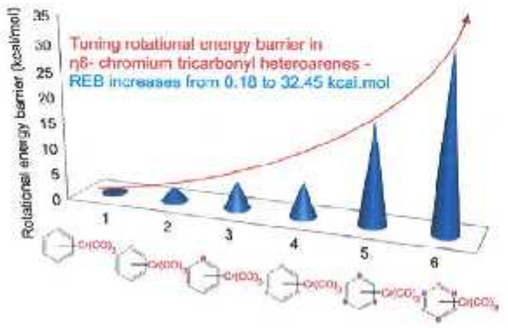
601 **Synthesis, structure and properties of a hexarubidium heptamolybdate with bridging aqua ligands**

Synthesis, single crystal structure and properties of a hexarubidium heptamolybdate $[Rb_6(H_2O)_4(Mo_7O_{24})]$ is reported. The bridging binding modes of the unique $(Mo_7O_{24})^{6-}$ ion and the four crystallographically independent coordinated water molecules result in coordination numbers ranging from 8 to 10 for the six unique Rb(I) ions.



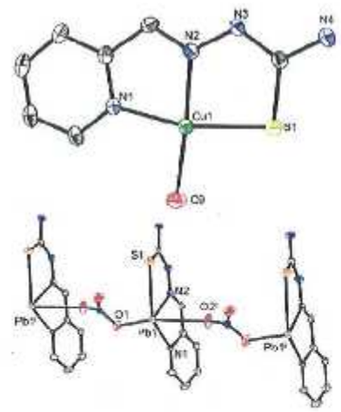
Bikshandarkoil R Srinivasan*, Sudesh M Morajkar, Savita S Khandolkar, Christian Näther & Wolfgang Bensch

610 **Tuning the tripodal rotational barrier in η^6-chromiumtricarbonyl heteroarenes – A step towards torsional switches**



A Kalpana & L Akilandeswari*

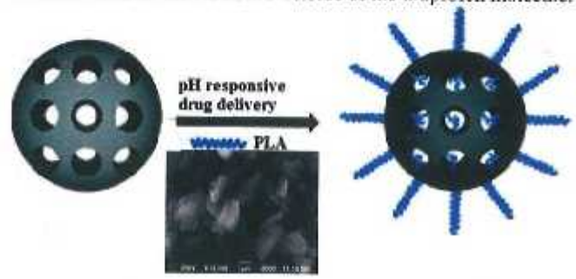
616 **Synthesis and crystal structures of pyridine-2-carboxaldehyde thiosemicarbazone, its mononuclear and cytotoxic Cu(II) and polynuclear Pb(II) complexes: Effect of size of metal ion on nucleation of the complexes**



Ayon Kanti Ghosh, Hare Ram Yadav, Angshuman Roy Choudhury, N Duraipandian, Manikantan Syamala Kiran & Rajarshi Ghosh*

621 **Polylactic acid coated SBA-15 functionalized with 3-aminopropyl triethoxysilane**

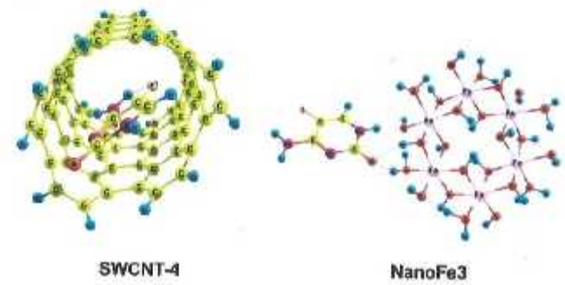
A new method of coating PLA on amine functionalized mesoporous silica is reported. Drug release studies with this material under different pH conditions show that mild acidic condition favours the successful release of the ibuprofen molecule.



Jose Varghese, Pachiannan Sakthipriya, Gunalan Rachel & Nallamuthu Ananthi *

626 **Tautomerism and non-covalent interactions of flucytosine with armchair (5,5) SWCNT and γ-Fe_2O_3 nanoparticles: A DFT study**

Structural parameters, energetic behavior and NBO analysis of flucytosine, as well as its tautomerization mechanism are explored using DFT calculations. Due to the large HOMO-LUMO energy gap, the flucytosine molecule is highly stable, with the the most stable tautomer being **F3**. Non-covalent interactions of **F3** with SWCNT shows the most stable form to be SWCNT-4, where the flucytosine drug is encapsulated inside the SWCNT. In its non-covalent interactions with γ-Fe_2O_3 nanoparticles, NANO-Fe1 involving three strong H-bonds is the most stable form.



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