

SYLLABUS :-

Prerequisite : Nil From molecular to supramolecules, factors leading to strong binding, hydrogen bonding and stacking interactions, design, synthesis and binding studies of synthetic receptors, design, properties and applications of crown ethers, siderophores, cyclophanes, cyclodextrins, Catenanes and rotaxanes. Metal guided self-assemblies and applications, Supramolecular reactivity and catalysis, supramolecular devices, transportation of anions and cations across transmembrane channels, Self-assembled monolayers, Crystal engineering of hydrogen bonded and metal-organic framework solids. Books: Jean-Marie Lehn: Supramolecular Chemistry Concepts and Perspectives