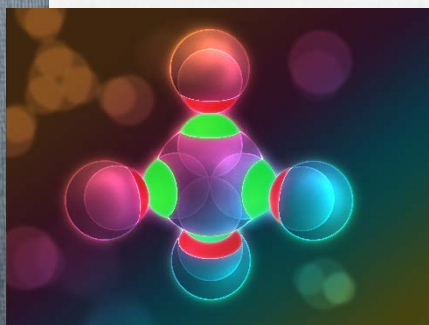


Materials Seminar

Materials design via self-assembly: From supramolecular polymers to colloidal assemblies

Supramolecular polymer chemistry, the science of polymers that are held together and/or functionalized using noncovalent interactions such as hydrogen bonding and metal coordination, has revolutionized polymer science. The field of supramolecular polymer chemistry can be divided into two main areas: side-chain and main-chain supramolecular polymers. Both, classes of materials require polymerization methods that are highly controlled or living, i.e. allow for easy synthesis of multifunctional side-chain copolymers containing a large number of functional groups along their side-chains as well as allow for the controlled incorporation of functional handles at the chain ends of homo- and copolymers. The presentation will focus on design principles of supramolecular copolymers as well as their use for a variety of applications including colloidal assemblies, surface functionalization strategies, and polymer-based foldamers.

Prof. Marcus Weck
New York University



Monday, March 3, 2014
3:30 p.m. in 1315 Chemistry