

Nanoparticles, Biology and Supramolecular Chemistry --From Diagnostics to Therapeutics

A key issue in the use of nanomaterials is controlling how they interact with themselves and with the outer world. Our research program focuses on the tailoring of nanoparticles of surfaces for a variety of applications, coupling the atomic-level control provided by organic synthesis with the fundamental principles of supramolecular chemistry. Using these tailored monolayers, we are developing particles for biological applications, in particular delivery and sensing. This talk will focus on the interfacing of nanoparticles with biosystems, and will discuss our use of nanoparticles for delivery and self-therapeutic applications as well as our use of polymer- and fluorescent protein-nanoparticle systems for sensing and identification of proteins, bacteria and cancer cells.

Professor Vincent Rotello

University of Massachusetts - Amherst

Joint Materials-Chemical
Biology Seminar
Wednesday, April 13
3:30 p.m.
Room 1315 Chemistry

