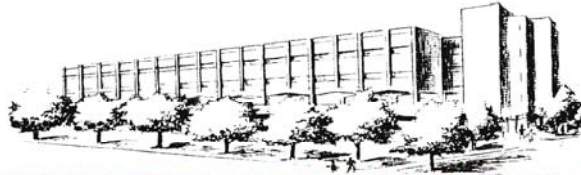


UNIVERSITY OF CONNECTICUT



INSTITUTE OF MATERIALS SCIENCE

POLYMER PROGRAM SEMINAR

**“Polymer Brushes as Responsive Materials for the
Biology-material Interface”**

**Prof. Christopher Ober
Cornell University**

**Friday, March 20, 2009
11 AM, IMS Room 20**

Polymer brushes offer a unique means to design and tailor the surface properties of materials. Brushes can be produced in several different ways including attachment of polymer chains to or growth from surfaces, formation of loosely tethered polymer networks, and self-assembly of block copolymers. Each of the resulting structures generates polymer strands able to extend into their local environment. These materials are ideal for controlling the binding of cells and biomacromolecules to surfaces. Brushes that minimize non-specific binding can be used in a variety of applications ranging from the study of cell function to new coatings inhibiting attachment of marine organisms. Surface modification has recently found use in bioengineering, nonlinear optics, biosensors, nano-patterning, molecular recognition, waveguides, electronic microcircuit processing, and antifouling coatings. This presentation summarizes several different on-going efforts by our research group and collaborators to surface modification using polymer brushes to control the biology-materials interface.

**Coffee will be served at 10:45AM outside the seminar room.*

**For further information, please contact YH Chudy at 860.486.3582 of yhchudy@ims.uconn.edu*