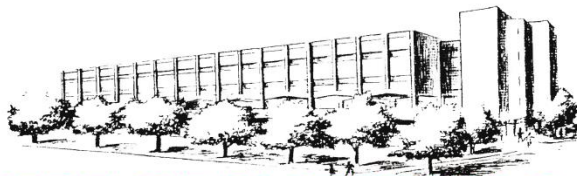


UNIVERSITY OF CONNECTICUT



INSTITUTE OF MATERIALS SCIENCE

POLYMER PROGRAM SEMINAR

**“Non-equilibrium Morphologies
Using Block-copolymer Self-assembly”**

**Dr. Kevin Yager
Brookhaven Laboratory**

**Friday, February 10, 2017
11:00 AM, IMS Room 20**

ABSTRACT

I will present emerging strategies for constructing three-dimensional nanostructures whose shapes and symmetries go beyond those of the bulk equilibrium diblock copolymer phase diagram. Photo-thermal methods are used to control block copolymer ordering; ordered layers can be stacked to yield new lattice symmetries. This multi-layered ordering strategy can also be performed in a responsive mode, where each self-assembled layer templates the ones that follow. Finally, I describe how blending allows the self-assembling film morphology itself to be responsive to underlying guide patterns. Taken together, these new motifs represent a toolbox for constructing 3D nanostructures with symmetries and complexity beyond conventional self-assembled morphologies.

**For further information, please contact YoungHee Chudy at younghee.chudy@uconn.edu or 860 486 3582.*

