Comprehensive Dynamics in a Polyelectrolyte Complex

Fri, October 20th
11:00 a.m.
COE B221

Polyelectrolyte complexes, PECs, are obtained by mixing polyelectrolytes of opposite charge, Pol+ and Pol-. Counterions are expelled as Pol+ and Pol- pair together. The resulting material can be glassy to liquid-like, depending on the polymers mixed and the conditions used. This talk will focus on the viscoelastic properties of entangled PECs, ranging from the fastest to the slowest motions. Neutron scattering and other analytical techniques provide a comprehensive picture of the relationship between dynamics and viscoelastic properties, described well by a theory of “sticky” interacting polymers.