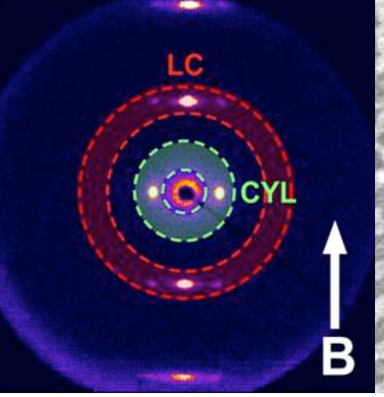
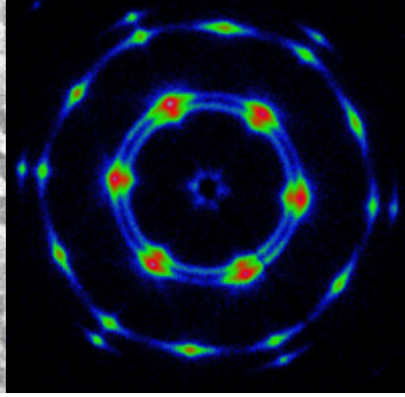


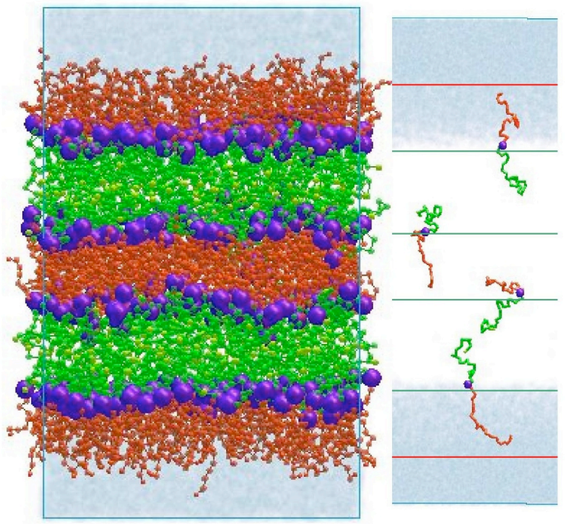
Polymer Physics

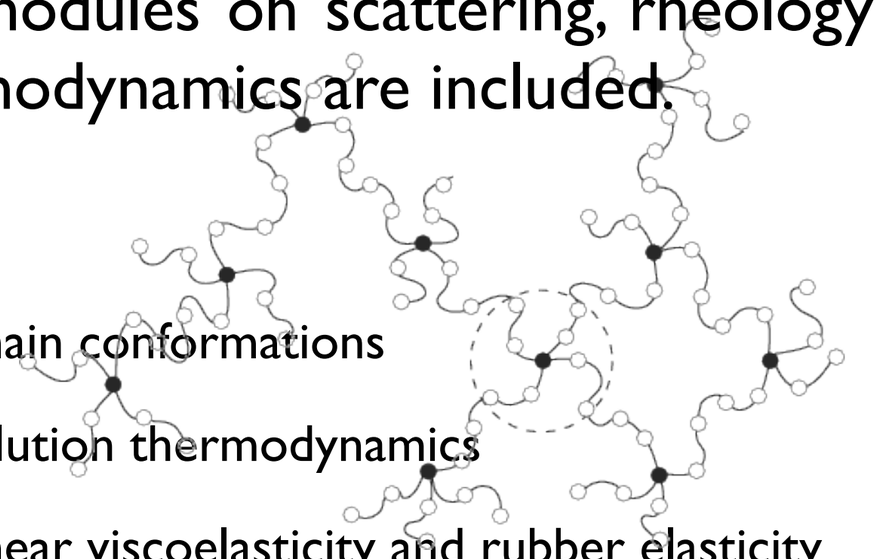
Spring '13: ENAS 606



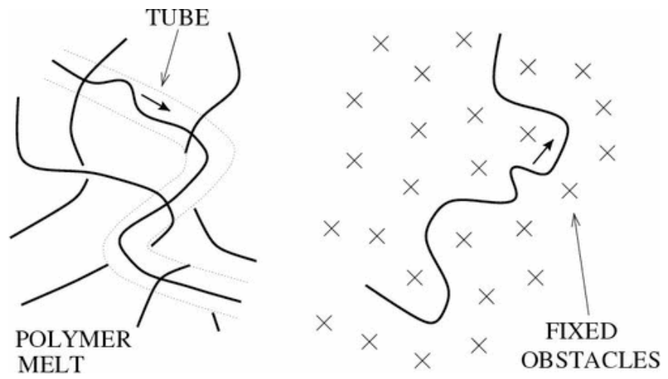
Time: *T/Th 11:35a-12:50p* Instructor: *Chinedum Osuji*

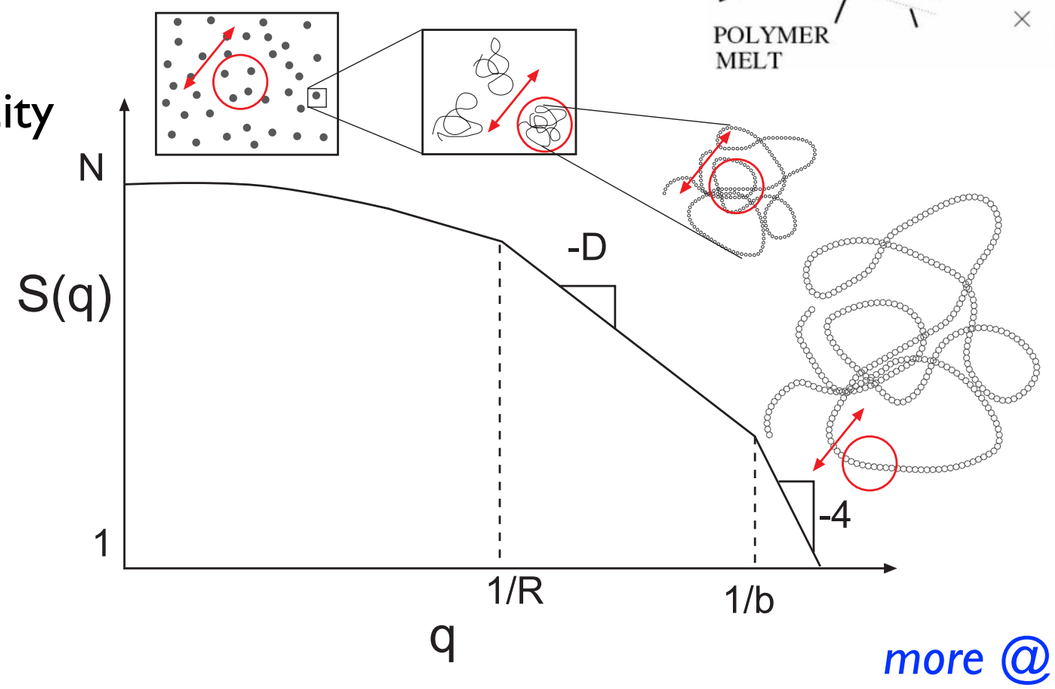
A graduate level introduction to the physics and physical chemistry of macromolecules. This course covers static (structure) and dynamic properties of polymer in solutions, melts and at interfaces. Lab modules on scattering, rheology and solution thermodynamics are included.

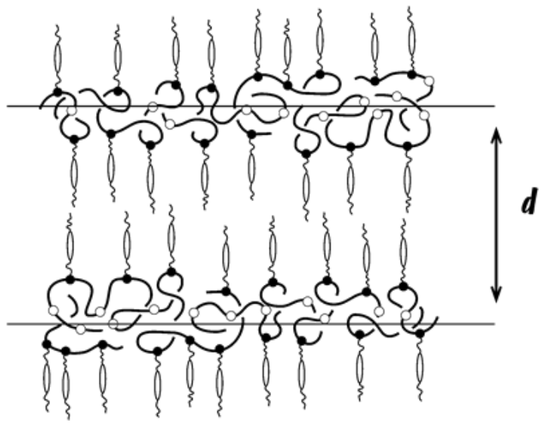




- Chain conformations
- Solution thermodynamics
- Linear viscoelasticity and rubber elasticity
- Gels and network formation
- Entangled and unentangled dynamics
- Polymers at surfaces - brush theory
- Mesoscale phenomena: Self assembly
- Scattering and rheology







more @ www.eng.yale.edu/polymers