



September 17: **Ronald A. Siegel**  
University of Minnesota  
*Novel Behaviors of Responsive Hydrogels:  
Applications in Drug Delivery*

October 15: **Todd M. Przybycien**  
Carnegie-Mellon University  
*Simulation of Protein Crystallizability*

December 3: **Susan J. Muller**  
University of California, Berkeley  
*Flow of Macromolecules:  
Hydrodynamic Stability, Modeling Challenges,  
and Opportunities at the Microscale*

**RICHARD H. WILHELM LECTURES**

**John F. Brady**

California Institute of Technology

\*\*September 22 (Monday):

*The Micromechanics of Complex Fluids:  
From Chocolate to Nuts*

\*September 24 (Wednesday):

*What's the Problem with Two-Phase Flow?*

October 22: **Harvey W. Blanch**  
University of California, Berkeley  
*Beyond Sieving: Probing the Mechanisms  
of the Electrophoretic Separation of DNA*

December 10: **Sanjoy Banerjee**  
University of California, Santa Barbara  
*Computational Design of Complex  
Fluid Formulations*

November 5: **Steven F. Maria**  
Princeton University  
*Source Signatures and Hygroscopic  
Properties of Organic Submicron  
Atmospheric Aerosol*

January 7: **Nicholas L. Abbott**  
University of Wisconsin  
*Liquid Crystals as Amplifiers*

October 1: **Prodromos Daoutidis**  
University of Minnesota  
*Control of Nonlinear Differential Algebraic  
Systems: Theory and Applications to  
Process and Plant-wide Control*

November 12: **Gerhard Hummer**  
National Institutes of Health  
*Water in Confinement:  
From Nanotubes to Proteins*

January 14: **Glenn H. Fredrickson**  
University of California, Santa Barbara  
*Field-Based Simulations for the Design  
of Polymer Nanostructures*

\*October 8: **William S. Hammack**  
University of Illinois at Urbana - Champaign  
*Teaching the Public About Engineering  
and Technology*

November 26: **Upma Sharma**  
Princeton University  
*The Role of Protein Charge in  
Protein-Polymer Interactions*

January 21: **Atul Narang**  
University of Florida  
*Gradient Sensing by Eucaryotic Cells:  
Signaling Mechanisms and  
Spatiotemporal Dynamics*

Seminars begin at 4:00 pm,  
preceded by refreshments at 3:30

seminars held in Elgin Room (A224 EQuad)  
except: \*Bowen Hall Auditorium  
\*\*Convocation Room (C217 EQuad)