

**PLEASE NOTE CHANGE IN DAY AND TIME FOR THIS SEMINAR ONLY**

**CENTER FOR FLUID MECHANICS  
AND  
THE FLUIDS, THERMAL AND CHEMICAL PROCESSES GROUP  
OF  
THE DIVISION OF ENGINEERING  
SEMINAR SERIES**

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Benjamin Levich Institute for Physico-Chemical Hydrodynamics and  
Department of Chemical Engineering  
City College of New York  
New York, NY**

**MATERIAL FAILURE IN ENTANGLED POLYMERIC LIQUIDS**

The processing of polymer melts and concentrated solutions, in which the mobility and time dependence of the liquid is determined by macromolecular "entanglements," is often limited by the onset of material failure in the form of shape distortions or mechanical rupture. Failure mechanisms in polymeric liquids have been studied for more than half a century, but they are still not well understood. This lecture will illustrate some of the important features of failure in polymeric liquids and examine the current level of understanding and the major open questions.

**THURSDAY APRIL 7, 2005  
DIVISION OF APPLIED MATHEMATICS  
182 GEORGE STREET, ROOM 110  
2:00 PM**