

Amherst Rheology Course (2 days)  
Synergy of Experiment with Theory in Rheology

Schedule and Course Content

**Evening Before**

4-6 pm      Registration

**Day One**

8:00    Registration (continued)  
8:30    Opening and General Computer Startup ([Winter](#))  
8:45-9:15 Introduction into the IRIS platform ([Winter](#))  
9:15-10:00 Steady Shear Material Functions ([Winter](#))  
10:00-10:20 Coffee Break  
10:20-11:05 Linear viscoelastic experiments ([Winter](#))  
11:05-11:50 Rheological Constants and Material Functions ([Winter](#))  
11:50-1:30 Lunch Break  
1:30-2:15 Extensional Flow Experiments ([Rothstein](#))  
2:15-3:00 Extensional Rheology of Micro & Nanoparticle Suspensions ([Rothstein](#))  
3:00-3:15 Coffee Break  
3:15-4:00 Rheology of Model Polymers and Synergy with Theory ([Winter](#))  
4:00-4:45 Tutorial: Data Handling and Advanced Graphics Capabilities ([Winter](#))  
4:45-5:00 Discussion ([group](#))

**Day Two**

8:30    General Computer Startup ([Winter](#))  
8:45-9:15 Molecular Architecture and Dynamics of Polymers ([Wagner](#))  
9:15-10:00 Molecular Stress Function, Basic Concepts ([Wagner](#))  
10:00-10:20 Coffee Break  
10:20-11:05 Molecular Stress Function, tutorial ([Wagner](#))  
11:05-11:50 Gel Rheometry ([Winter](#))  
11:50-1:30 Lunch Break  
1:30-2:15 Micro-Rheology ([Rothstein](#))  
2:15-3:00 Tutorials: Non-Linear Viscoelasticity ([group](#))  
3:00-3:15 Coffee Break  
3:15-4:00 Nanocomposite Rheometry ([Winter](#))  
4:00-4:45 Improv ([data of participants](#)) ;  
            Molecular Weight Distribution from  $G'G''$  (Nobile/Cocchini model);  
            Recent Developments ([Winter](#))  
4:45-5:00 Discussion  
5:00    End of Course

*Amherst Rheology Course (ARC), once a year since 2004*

*<http://rheology.tripod.com/ARC.htm>*