ARC11 BERLIN ARC11 BERLIN ARC11 BERLIN

Two-Day Rheology Course
Location: Berlin/Germany. Time: March 29-30, 2011

Amherst Rheology Course (ARC11): "Synergy between Experiment and Theory in Rheology"
co-directed by
H. Henning Winter, Amherst Massachusetts/USA and Manfred H. Wagner, Berlin/ Germany

Objective of Course: A new approach to rheology is presented and taught in tutorials. It allows the "common" rheologist to access the most advanced data analysis and molecular theory. Short lectures on rheology will be combined with hands-on tutorials with the purpose of generating an interdisciplinary environment for discussing rheological experiments and theory and application. On the first day, participants will be shown to master rheology on a quantitative level and also will learn the underlying concepts that lead to the quantitative results. Tutorials on the second day will allow participants to see the rheology of their own materials in new ways, discover, and draw quantitative results. Experiment and theory are well integrated in the new teaching tools of the course.

Teaching Tool: Teaching tool is the IRIS software for exploring rheological properties. While IRIS focuses on linear viscoelasticity, it has recently been extended to include some molecular theory and non-linear viscoelasticity, see http://rheology.tripod.com/. The participants will learn to merge experiment and theory graphically on the PC screen. The user-friendly IRIS platform allows exploration of the newest developments in rheology.

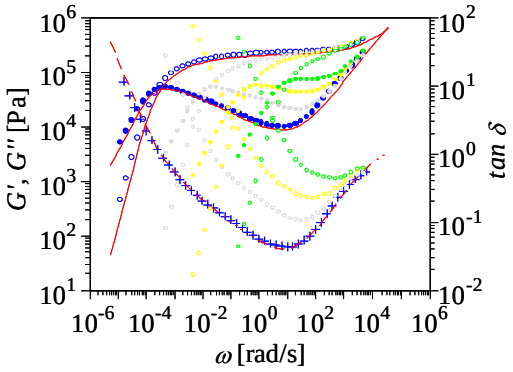
Request: Participants are requested to bring their own PC. A PC is needed for practicing the tutorial projects.

Lecturers: Experimentalists and theoreticians will teach the course jointly: Jonathan Rothstein, Amherst MA, USA; Manfred Wagner, Berlin, Germany; H. Henning Winter, Amherst MA, USA

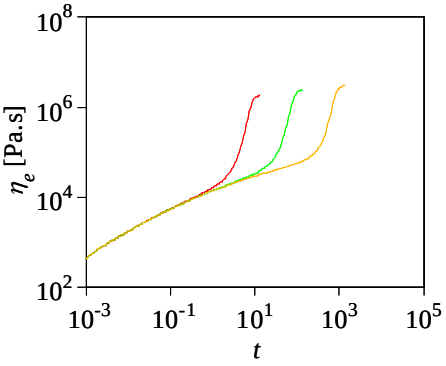
Who Should Participate? Interest has been shown by a most diverse group of rheologists and future rheologists. The course is worth your consideration (for example)

if you plan to expand your quantitative skills in rheology, or
if you feel that rheology is a useful tool for your work, or
if you do not have a rheometer and rely on someone else's data, or
if you are overwhelmed with a large volume of rheological data and need help with your data analysis and documentation, or
if you need to relate molecular architecture to viscoelastic properties, or simply
if you enjoy discovery in an interactive environment of experiment and theory in rheology.

The only prerequisites for participants are an elementary knowledge of rheology and some familiarity with PCs (no knowledge of computer language needed).



Schausberger data of PS at 180°C
with *G'G"* from BSW spectrum for highest molecular weight



MSF theory of Wagner (2003):
extensional viscosity of a HDPE

Enrollment Fee for Short Course

Regular Fee: 870 € - (690 € - if enrolled by Feb 4, 2011).
Fee for Academic Participants: 360 € - (295 € - if enrolled by Feb 4, 2011).
Special offer: add 1200.- € to include one-year IRIS Rheo-Hub license in the course registration.
The enrollment fee includes two lunches but does not include lodging or transportation.
Request Information at winter@ecs.umass.edu or look under http://rheology.tripod.com/ARC.htm

BERLIN….BERLIN….BERLIN….BERLIN….