



*A Special Rheology Symposium  
in honor of  
Professor Roger I. Tanner  
on the occasion of his 82<sup>nd</sup> birthday*



**Organizing Committee**

Kostas D. Housiadas (chair), Greece  
Georgios C. Georgiou (co-chair), Cyprus

**Scientific Committee**

Antony N. Beris, USA  
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**Monday, June 29<sup>th</sup> - Thursday, July 2<sup>nd</sup>, 2015  
Samos City Hotel, Vathi, Samos, Greece**

# Programme

## Friday, June 26, 2015

10:00-15:00	<i>Excursion to the south-west part of Samos, hiking to Pythagoras cave, lunch at Votsalokia village (Activity #1)</i>
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## Saturday, June 27, 2015

08:00-15:00	<i>Excursion to the north-west part of Samos, hiking at Kerkis mountain, swimming at Big Seitani Beach, lunch at Karlovassi (Activity #2)</i>
20:00-23:00	<i>Dinner at Dona Rossa restaurant, Avlakia (Activity #3)</i>

## Sunday, June 28, 2015

20:30-23:00	<i>Registration and Welcome Reception, Samos City Hotel (Activity #4)</i>
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## Monday, June 29, 2015

08:00-08:20	<i>Registration</i>
08:20-08:30	<i>Opening remarks</i>
08:30-09:05	<i>Keynote lecture</i> <b>K. Walters</b> , The interpretation of a long-standing rheological flow problem using computational rheology and a PTT constitutive model
09:05-09:25	<b>E. Mitsoulis</b> , Integral constitutive equations in rheology and polymer processing: from Tanner's early work to the present
09:25-09:45	<b>A.R. Davies</b> , Derivative spectroscopy and the continuous relaxation spectrum
09:45-10:05	<b>J. Maia</b> , Mesoscale modeling of polymer-nanocomposites by dissipative particle dynamics
10:05-10:30	<i>Coffee break</i>
10:30-10:50	<b>R. Larson</b> , Mesoscopic Simulation Methods for Polymer Dynamics
10:50-11:10	<b>V.G. Mavrantzas</b> , Using nonequilibrium thermodynamics to model the phase behavior, microstructure and rheology of polymer nanocomposite melts
11:10-11:30	<b>V. Harmandaris</b> , Dynamics of graphene based polymer nanocomposites through molecular simulations
11:30-11:50	<b>T.N. Phillips</b> , Extended Spectral Element Methods for Viscoelastic Fluid Structure Interaction Problems based on the Immersed Boundary Method
11:50-12:10	<b>S-C. Xue</b> , Pressure-Based Finite Volume Method with a Collocated Unstructured Grid Arrangement for Viscoelastic Fluid Flow Simulations
12:10-12:30	<b>A. Jabbarzadeh</b> , Wetting at the nanoscale effect of surface roughness and crystallinity
12:30-17:00	<i>Visit to Samos Wine Museum &amp; Lunch and coffee at Vourliotes village (Activity #5)</i>
17:00-17:20	<b>S.G. Advani</b> , Advances in fiber orientation modeling and simulation in composite materials processing
17:20-17:40	<b>N. Willenbacher</b> , Multi particle tracking microrheology probing structures and flow of turbid, concentrated colloidal dispersions
17:40-18:00	<b>G. Petekidis</b> , Flow of colloidal glasses: Correlating structure, dynamics and rheology
18:00-18:20	<b>I. Stratigakis</b> , Stress relaxation experiments and constitutive modeling of the effect of long chain branching in the nonlinear viscoelasticity of entangled polyethylenes,
18:20-18:35	<i>Coffee break</i>
18:35-18:55	<b>P. Photinos</b> , Rheological and electrical conductivity measurements on the semi-dilute CPyCl/NaSal micellar
18:55-19:15	<b>M.N. Charalambides</b> , Modeling the peeling of a viscoelastic pressure sensitive adhesive film using cohesive zones
19:15-19:35	<b>D. Izbassarov</b> , Effects of viscoelasticity on impact of a compound droplet on a flat surface
19:35-19:55	<b>E. Karpushkin</b> , Dynamic rheological properties of carbon nanotubes dispersed in polymer solution
20:15-23:00	<i>Excursion to Kokkari (Activity #6)</i>

<b>Tuesday, June 30, 2015</b>	
08:15-08:50	<b>Keynote lecture</b> <b>R.I. Tanner</b> , The rough and the smooth in suspension mechanics
08:50-09:10	<b>J. Vlachopoulos</b> , A critical review of mathematical modeling and technological developments in blown film extrusion
09:10-09:30	<b>S.G. Hatzikiriakos</b> , Slip of HDPEs: surface treatment effects
09:30-09:50	<b>M. Renardy</b> , Korteweg stresses and admissibility criteria for shear banded flows
09:50-10:10	<b>Coffee break</b>
10:10-10:45	<b>Keynote lecture</b> <b>N. Phan-Thien</b> , Red blood cells in motion
10:45-11:05	<b>B. Caswell</b> , Modeling blood clotting with Dissipative Particle Dynamics
11:05-11:25	<b>A.N. Beris</b> , Investigation of Viscoelastic and Thixotropic Characteristics of Blood Rheology to Arterial flow
11:25-11:45	<b>G.G. Fuller</b> , Lymphatic endothelial cells: Nature's rheologists
11:45-12:05	<b>P. Fischer</b> , Gut bacteria adhesion investigated by interfacial rheology
12:20-18:00	<b>Tour to the east part of Samos, light lunch, visit archaeological sites and museums at Ireon and Pythagorion, swimming (Activity #7)</b>
18:00-20:30	<b>Free time</b>
20:30-23:00	<b>Banquet, Samos City Hotel (Activity #8)</b>

<b>Wednesday, July 01, 2015</b>	
08:30-09:05	<b>Keynote lecture</b> <b>E.S.G. Shaqfeh</b> , Finite volume, immersed boundary simulations of nonBrownian particulate suspensions in viscoelastic fluids: shear effects in rheology and sedimentation
09:05-09:25	<b>G. Ausias</b> , Direct simulation and model development for fiber suspension rheology
09:25-09:45	<b>F.J. Chinesta</b> , Modeling entangled suspensions involving flexible rods: A first modeling approach of SMC
09:45-10:05	<b>M. Ellero</b> , Three-dimensional simulations of dilute and concentrated suspensions under shear using smoothed Particle Hydrodynamics
10:05-10:25	<b>E.L. Bertevas</b> , Applications of Smoothed Particle Hydrodynamics to complex fluids: sediment bed / structure interactions and free-surface flow of fibre suspensions
10:25-10:45	<b>Coffee break</b>
10:45-11:20	<b>Keynote lecture</b> <b>G. McKinley</b> , Power-Law Rheology, Fractional Calculus and Yielding of Dough and Other Food Gels
11:20-11:40	<b>J. Vermant</b> , Superposition rheometry of complex fluids
11:40-12:00	<b>P.L. Maffettone</b> , Viscoelastic Microfluidics
12:00-12:20	<b>T. Sridhar</b> , Step strain experiments in extensional flow of entangled systems
12:20-12:40	<b>P.J. Carreau</b> , Control of rheological and morphological properties of thermoplastic olefin blends with nanosilica
12:40-17:00	<b>Visit to Samos Museum &amp; Lunch and coffee at Mitilini village (Activity #9)</b>
17:00-17:35	<b>Keynote lecture</b> <b>R.N. Zia</b> , Delayed yield in reversible colloidal gels: a micro-mechanical perspective
17:35-17:50	<b>R. Andrade</b> , Rheological properties of shear thickening colloidal suspensions
17:50-18:05	<b>A.R. Jacob</b> , Convective cage release in model hard-sphere glasses
18:05-18:20	<b>E. Moghimi</b> , Microscopic origin of internal stresses in colloidal gels
18:20-18:35	<b>Coffee break</b>
18:35-18:50	<b>G.P. Baeza</b> , Strong physico-chemical interactions control the dynamics of nanosilica-filled P2VP
18:50-19:05	<b>C. Dessi</b> , Non-linear shear rheology of silica-filled P2VP nanocomposites
19:05-19:20	<b>S. Costanzo</b> , Unusual dynamics in dendronized polymers,
19:20-19:35	<b>A.D. Gotsis</b> , Foaming process of strain hardening fluids
19:35-19:50	<b>P. Bogri</b> , Structure and dynamics in concentrated suspensions of soft core-shell colloids
20:15-23:00	<b>Excursion to Pythagorion (Activity #10)</b>

<b>Thursday, July 02, 2015</b>	
08:30-09:05	<b>Keynote lecture</b> <b>R.H. Colby</b> , Linear viscoelasticity of associating ionomers
09:05-09:25	<b>M.H. Wagner</b> , The interchain tube pressure effect – the missing element of the Doi-Edwards model
09:25-09:45	<b>G. Marrucci</b> , A dumbbell model for the rheology of the associating telechelic polymers
09:45-10:05	<b>H. Watanabe</b> , Viscoelastic relaxation of rouse chains undergoing head-to-head association and dissociation: motional coupling through chemical equilibrium
10:05-10:25	<b>Coffee break</b>
10:25-11:00	<b>Keynote lecture</b> <b>D. Vlassopoulos</b> , Tunable rheology of soft colloids
11:00-11:20	<b>M. Cloitre</b> , Yielding of soft amorphous solids
11:20-11:40	<b>A.N. Alexandrou</b> , Viscoplastic Flow: Transition to Turbulence
11:40-12:00	<b>R.J. Poole</b> , Transition to asymmetry in pipe flow of shear-thinning fluids
12:00-12:20	<b>F.T. Pinho</b> , Turbulent flows of FENE-P fluids: the effect of viscoelasticity upon the interactions between grid and subgrid scales
12:20-12:40	<b>Coffee break</b>
12:40-13:00	<b>R.R. Huilgol</b> , Mesoscopic Model for Bingham Fluids
13:00-13:20	<b>G.C. Georgiou</b> , Cessation of viscoplastic Poiseuille flow in a rectangular duct with wall slip
13:20-13:40	<b>K.D. Housiadas</b> , Modeling of hard-sphere suspensions using effective medium techniques
13:40-13:50	<b>R.I. Tanner</b> , Closing remarks
13:50-15:00	<b>Lunch and coffee, Samos City Hotel (Activity #11)</b>
15:00-16:00	<b>Free time</b>
16:00-18:30	<b>To the beach for swimming</b>
20:15-23:00	<b>Excursion to Ireon (Activity #12)</b>

<b>Friday, July 03, 2015</b>	
08:00-15:00	<b>Excursion to the north-west part of Samos, hiking at Kerkis mountain, swimming at Big Seitani Beach, lunch at Karlovassi (Activity #13)</b>

