The Society of Rheology 81st Annual Meeting
Monona Terrace, Madison, Wisconsin

Meeting Schedule

Monday, October 19, 2009

8:30		N. J. Wagner (PL1)			
9:20		Coffee			
9:45	SC1	SA1	MR1	BR1	MS1
10:10	SC2	SA2	MR2	BR2	MS2
10:35	SC3	SA3	MR3	BR3	MS3
11:00	SC4	SA4	MR4	BR4	MS4
11:25	SC5	SA5	MR5	BR5	MS5
11:50		Society Luncheon at NOON			
1:55	SC6	SA6	MR6	BR6	MS6
2:20	SC7	SA7	MR7	BR7	MS7
2:45	SC8	SA8	MR8	BR8	MS8
3:10	SC9	SA9	MR9	BR9	MS9
3:35	SC10	SA10	MR10	BR10	MS10
4:00		Coffee			
4:25	SC11	SA11	MR11	BR11	MS11
4:50	SC12	SA12	MR12	BR12	MS12
5:15	SC13	SA13	MR13	BR13	MS13
5:40	SC14	SA14	MR14	BR14	MS14
6:05	SC15	SA15		BR15	MS15
6:30		End			
7:00		Society Reception			

Tuesday, October 20, 2009

8:30		G. B. McKenna (PL2)				
9:20		Coffee				
9:45	SC16	SM1	MR16	BR16	MS16	
10:10	SC17	SM2	MR17	BR17	MS17	
10:35	SC18	SM3	MR18	BR18	MS18	
11:00	SC19	SM4	MR19	BR19	MS19	
11:25	SC20	SM5	MR20	BR20	MS20	
11:50		Lunch				
1:30	SC21	SM6	EB1	GG1	VS1	
1:55	SC22	SM7	EB2	GG2	VS2	
2:20	SC23	SM8	EB3	GG3	VS3	
2:45	SC24	SM9	EB4	GG4	VS4	
3:10	SC25	SM10	EB5	GG5	VS5	
3:35		Coffee				
4:00	SC26	SM11	EB6	GG6	VS6	
4:25	SC27	SM12	EB7	GG7	VS7	
4:50	SC28	SM13	EB8	GG8	VS8	
5:15	SC29	SM14	EB9	GG9	VS9	
5:40	SC30	SM15	EB10	GG10	VS10	
6:05		End				
6:10		Society Business Meeting				
7:00		Awards Reception				
8:00		Awards Banquet				

Wednesday, October 21, 2009

8:30		A. K. Sood (PL3)				
9:20		Coffee				
9:45	SC31	SM16	EB11	GG11	FM1	
10:10	SC32	SM17	EB12	GG12	FM2	
10:35	SC33	SM18	EB13	GG13	FM3	
11:00	SC34	SM19	EB14	GG14	FM4	
11:25	SC35	SM20	EB15	GG15	FM5	
11:50		Lunch				
1:30	SC36	SM21	EB16	GG16	FM6	
1:55	SC37	SM22	EB17	GG17	FM7	
2:20	SC38	SM23	EB18	GG18	FM8	
2:45	SC39	SM24	EB19	GG19	FM9	
3:10	SC40	SM25	EB20	GG20	FM10	
3:35		Coffee				
4:00	IC1	SM26	EB21	GG21	FM11	
4:25	IC2	SM27	EB22	GG22	FM12	
4:50	IC3	SM28	EB23	GG23	FM13	
5:15	IC4	SM29	EB24	GG24	FM14	
5:40	IC5	SM30	EB25	GG25	FM15	
6:05		End				
6:10		Poster Session & Reception				

Thursday, October 22, 2009

7:45	SC41	SM31	IC6	GG26	FM16
8:10	SC42	SM32	IC7	GG27	FM17
8:35	SC43	SM33	IC8	GG28	FM18
9:00	SC44	SM34	IC9	GG29	FM19
9:25	SC45	SM35	IC10	GG30	FM20
9:50			Coffee		
10:10	SC46	SM36	IC11	GG31	
10:35	SC47	SM37	IC12	GG32	
11:00	SC48	SM38	IC13	GG33	
11:25	SC49	SM39	IC14	GG34	
11:50	SC50	SM40	IC15	GG35	
12:15			End		

Session Codes

BR = Biorheology and Rheology in Biological Systems
EB = Emulsions, Blends and Multiphase Systems
FM = Non-Newtonian Fluid Mechanics and Stability
GG = Gels, Glasses and Jammed Systems
IC = Industrial and Complex Systems Rheology
MR = Microrheometry and Microfluidics
MS = Molecular Modeling and Simulation in Rheology
PL = Plenary Lectures
SA = Self-Assembled Systems and Interfacial Rheology
SC = Suspensions and Colloids
SM = Polymer Solutions and Melts
VS = Viscoplasticity and Soft Solids

Monday, October 19

Morning

8:30 **PL1.** Microstructure and rheology relationships for concentrated colloidal dispersions: Shear thickening fluids and their applications. *N. J. Wagner* Lecture Hall

9:20 COFFEE

	Lecture Hall	*Meeting Rooms KLOP*	*Hall of Ideas G*	*Meeting Rooms MNQR*	*Hall of Ideas J*
	Suspensions and Colloids	**Self-Assembled Sys & Interfacial Rheo**	**Microrheometry & Microfluidics**	**Biorheology & Rheology in Bio Sys**	**Molecular Modeling & Simulation**
9:45	**SC1.** Hydrodynamic interactions between particles in viscoelastic liquids: Trajectory analysis. *J. Vermant, F. Snijkers, R. Pasquino and N. Grizzuti*	**SA1.** An investigation of the collective behavior of colloidal particles trapped at a fluid-fluid interface. *S. Yan, E. S. Shaqfeh and G. G. Fuller*	**MR1.** Formation of supramolecular hydrogel microspheres via microfluidics. *A. Shen, Y. Yang and W. Chen*	**BR1.** Oriented matrices of collagen for directed cellular growth. *E. Lai and G. G. Fuller*	**MS1.** Dynamic Monte Carlo simulations of lattice polymers subjected to shearing flows. *S. Shanbhag*
10:10	**SC2.** Buckling transition in wall-bounded hydrodynamic crystals. *J. Blawzdziewicz and E. Wajnryb*	**SA2.** Apparent microrheology of oil-water interfaces by particle tracking. *C.-Y. Wu and L. L. Dai*	**MR2.** Microfluidic device incorporating closed loop feedback control for uniform and tunable production of micro-droplets and emulsions. *E. Miller, J. P. Rothstein and M. Rotea*	**BR2.** Rheological behavior of modified poly(2-hydroxyethyl methacrylate) [pHEMA]/normal human fibroblast [NHF] composite substrates: Applications for percutaneous medical implants. *B. M. Holt, A. Tripathi and J. R. Morgan*	**MS2.** Dynamic Monte Carlo simulation of melt rheology. *J. R. Dorgan*
10:35	**SC3.** Numerical simulation of concentrated suspensions of non-colloidal particles in Couette flow. *K. Yeo and M. R. Maxey*	**SA3.** Experimental rheological measurements at liquid-gas interfaces. *T. P. Koehler, M. A. Yaklin, C. F. Brooks, R. O. Cote, A. M. Grillet and L. A. Mondy*	**MR3.** Microscale shear flow of focal conic defects in layered liquids. *S. Chatterjee and S. L. Anna*	**BR3.** Combined use of a rotational rheometer and Piezo-Rotary-Vibrator (PRV) to characterize soft biomaterials at sonic frequencies. *S. A. Klemuk and I. R. Titze*	**MS3.** A comparison of Brownian dynamics and lattice-Boltzmann simulations of dilute polymer solutions. *R. Kekre, J. E. Butler and A. Ladd*
11:00	**SC4.** Performance of mesoscale modeling methods for predicting rheological properties of charged polystyrene/water suspensions. *P. R. Schunk, J. B. Lechman, G. S. Grest, S. J. Plimpton, M. K. Petersen, R. Jendrejack, P. in't Veld, H. Weiss, C. Stoltz, D. Heine, J. L. Higdon and A. Kumar*	**SA4.** The measurement of surface rheological and surface adhesive properties using nanoparticle embedment and interfacial force microscopy. *S. A. Hutcheson and G. B. McKenna*	**MR4.** Confinement effects on the self-assembly of organogels. *W. Chen, Y. Yang, C. Lee and A. Shen*	**BR4.** Building gels with cells: Associating biopolymers mediating self-assembly of new tissues. *M. B. Dowling, M. Keibler and S. R. Raghavan*	**MS4.** Effects of fluctuating hydrodynamic interactions on the dynamics of confined polymer solutions: Grooved channels and pore-translocation rates. *J. P. Hernandez-Ortiz, J. J. de Pablo and M. D. Graham*
11:25	**SC5.** Low-order statistical properties of suspensions based on an algebraic closure model for the fourth-order orientation moment. *Y. Kim, A. Benard and C. A. Petty*	**SA5.** Double wall ring geometry to measure interfacial rheological properties. *A. J. Franck, S. Vandebril and J. Vermant*	**MR5.** Design of a microfluidic device for droplet capture. *S. S. Bithi and S. A. Vanapalli*	**BR5.** Structure and mechanics of dense fibrin gels from neutron scattering and non-linear rheology. *D. C. Pozzo, K. Weigandt and L. Porcar*	**MS5.** Reverse Poiseuille flow - the virtual rheometer. *D. A. Fedosov, B. Caswell and G. E. Karniadakis*

11:50 SOCIETY LUNCHEON AT NOON Grand Terrace

Afternoon

	Lecture Hall	*Meeting Rooms KLOP*	*Hall of Ideas G*	*Meeting Rooms MNQR*	*Hall of Ideas J*
	Suspensions and Colloids	**Self-Assembled Sys & Interfacial Rheo**	**Microrheometry & Microfluidics**	**Biorheology & Rheology in Bio Sys**	**Molecular Modeling & Simulation**
1:55	**SC6.** Controlling the rheology of biomass. *J. R. Samaniuk, C. T. Scott, T. W. Root and D. J. Klingenberg*	**SA6.** Flow of wormlike micellar solutions through rectilinear and hyperbolic converging channels. *M. E. Cromer, L. P. Cook and G. H. McKinley*	**MR6.** Flow birefringence measurements of shear-banding wormlike micellar solutions under high rate deformations. *T. J. Ober, J. M. Soulages and G. H. McKinley*	**BR6.** Surface tension driven pumping for cell based assays. *D. J. Beebe*	**MS6.** What is measured by passive microbead rheology? *J. D. Schieber and E. Pilyugina*
2:20	**SC7.** Effect of fiber properties on the rheology of cellulosic suspensions visualized using magnetic resonance imaging. *E. J. Tozzi, M. J. McCarthy, S. P. Shoemaker, D. Lavenson and R. L. Powell*	**SA7.** Study of the rheological behavior of telechelic micellar solutions. *F. J. Stadler and C. Bailly*	**MR7.** High-throughput microrheology of biocompatible hydrogelators. *K. M. Schultz, A. D. Baldwin, K. L. Kiick and E. M. Furst*	**BR7.** Neutrophil motion, adhesion and activation in an in vitro micropipette model of a lung capillary. *D. Tees, Y. E. Choi, P. Sundd and D. J. Goetz*	**MS7.** Rheology, microstructure and migration in colloidal suspensions. *W. Pan, B. Caswell and G. E. Karniadakis*

2:45	**SC8.** The effect of particle morphology on the maximum packing fraction and rheology of biomass slurries. *C. J. Dibble and J. J. Stickel*	**SA8.** A pH induced transition from rigid nanorods to a semiflexible string-of-spheres in a polyelectrolyte-surfactant aggregate system. *V. Lam and L. M. Walker*	**MR8.** The stiffening of ultrathin polymer films in the rubbery regime – the relative contributions of bending, membrane stress and surface tension. *P. A. OConnell and G. B. McKenna*	**BR8.** Particle size and the efficacy of vascular–targeted drug carriers: Role of hemorheology and hemodynamics. *L. Eniola-Adefeso and P. Charoenphol*	**MS8.** Molecular scale rheometry. *S. Feng, A. L. Graham, B. Murch and A. Redondo*
3:10	**SC9.** Bacterial cellulose, a natural choice for fiber network formation. *M. Caggioni, S. E. Lindberg and P. T. Spicer*	**SA9.** Non-aqueous photorheological fluids by self-assembly of simple, commercially available molecules. *R. Kumar and S. R. Raghavan*	**MR9.** Nanoscale viscosity measurements using magnetic nanoparticles. *C. Barrera, V. Calero-DdelC and C. Rinaldi*	**BR9.** A numerical simulation study of rheology and dynamics of healthy red blood cells and parasitized by Plasmodium falciparum. *D. A. Fedosov, B. Caswell and G. E. Karniadakis*	**MS9.** Active nanorheology: Calculation of viscoelastic properties of complex materials using molecular dynamics simulations. *S. C. Kohale and R. Khare*
3:35	**SC10.** Ultrasonic rheometry of pulp suspensions. *B. Derakhshandeh, S. G. Hatzikiriakos and C. P. Bennington*	**SA10.** Oriented monolayers of single-walled carbon nanotubes using interfacial flow processing. *C. F. Wu and G. G. Fuller*	**MR10.** Anomalous diffusion of tracers in polymeric liquids. *M. G. Forest, S. McKinley, L. Yao, D. Hill, J. Cribb and R. Superfine*	**BR10.** Quantitative models of monocyte-endothelial cell interactions in atherosclerosis. *D. I. Khismatullin, C. Chen and G. A. Truskey*	**MS10.** Effect of shear and elongational flow on block copolymer/nanoparticle assembly: A coarse-grained molecular dynamics study. *V. Kalra, S. Mendez, F. Escobedo and Y. L. Joo*
4:00			COFFEE		
4:25	**SC11.** Rheology of polymer nanocomposites in the "nanoparticle limit". *J. E. Seppala and M. E. Mackay*	**SA11.** Self-assembled networks of collagen-inspired polypeptides with precisely defined functionality. *J. Van der Gucht, P. Skrzeszewska, F. De Wolf and M. A. Cohen Stuart*	**MR11.** Effect of nanoconfinement on the coil-stretch transition of DNA molecules. *J. Tang and P. S. Doyle*	**BR11.** Rheological and tribological investigation of protein interactions in synovial fluid. *R. R. Klossner, J. Liang and W. E. Krause*	**MS11.** Direct simulation of micro- and nano-fibre composites in shear and extensional flows. *J. M. Maia and M. Yamanoi*
4:50	**SC12.** Aging of polystyrene melts filled with graphene layers: Rheology and dielectric spectroscopy. *H. Kim and C. W. Macosko*	**SA12.** Confinement enhanced self-assembly of lipid vesicles into oriented lipid tubules. *M. Tan, M. Liang, E. Elson and A. Shen*	**MR12.** The dynamics of tethered DNA in shear: Cyclic dynamics and processing for molecular wire scaffolds. *E. S. Shaqfeh, C. Lueth and G. Yu*	**BR12.** Particle-tracking in breast-cancer cells and model microenvironment under electric fields. *M. L. Yizraeli and D. Weihs*	**MS12.** Modeling of fiber behavior during processing of fiber reinforced composite parts. *A. Londono-Hurtado, J. P. Hernandez-Ortiz and T. A. Osswald*
5:15	**SC13.** Physical gelation and ripening dynamics of a model colloid. *H. H. Winter, X. Wang, G. Xue and P. Sun*	**SA13.** Direct measurement of polymer-polymer interfacial slip. *H. E. Park and C. W. Macosko*	**MR13.** Feasibility study of a deformability-activated cell sorting microfluidic platform. *S. C. Hur and D. Di Carlo*	**BR13.** Characterization of tendon and ligament viscoelasticity. *S. E. Duenwald, R. Vanderby, Jr. and R. S. Lakes*	**MS13.** Multiscale molecular simulation of linear viscoelasticity of entangled polymers by the molecular dynamics and primitive chain network models. *T. Uneyama and Y. Masubuchi*
5:40	**SC14.** Time strain superposition in nanoparticle organic hybrids. *H. Qi and L. A. Archer*	**SA14.** Convective deposition of binary suspensions. *P. Kumnorkaew and J. F. Gilchrist*	**MR14.** Evidence of strong anomalous diffusion in living cells. *N. Gal and D. Weihs*	**BR14.** The dilute rheology of swimming suspensions: A simple kinetic model. *D. Saintillan*	**MS14.** A proposal to solve the time-stress discrepancy of tube models. *E. van Ruymbeke, D. Vlassopoulos, M. Kapnistos, C.-Y. Liu and C. Bailly*
6:05	**SC15.** Transient shear and extensional rheology and nanostructure of polymer nanocomposites. *C. Kagarise, M. Mahboob, K. Miyazono, K. W. Koelling and S. E. Bechtel*	**SA15.** Can salts influence self-assembly in oil? Gelation of lecithin organosols by multivalent cations. *H.-Y. Lee, S.-H. Tung and S. R. Raghavan*		**BR15.** Dynamic simulation of semiflexible filaments with hydrodynamic interaction. *P. L. Chandran and M. Mohammad*	**MS15.** Analyzing tube model assumptions for monodisperse LVE predictions. *R. N. Khaliullin and J. D. Schieber*
6:30			END		
7:00			SOCIETY RECEPTION Grand Terrace		

Tuesday, October 20

Morning

8:30 *Bingham Lecture*: **PL2.** Interrogating the physics of amorphous solids: Rheological and mechanical measurements. *G. B. McKenna* Lecture Hall

9:20 COFFEE

	Lecture Hall	*Hall of Ideas G*	*Meeting Rooms OP*	*Hall of Ideas J*	*Meeting Rooms QR*
	Suspensions and Colloids	**Polymer Solutions & Melts**	**Microrheometry & Microfluidics**	**Biorheology & Rheology in Bio Sys**	**Molecular Modeling & Simulation**
9:45	**SC16.** Direct measurement of suspension structure in pressure driven flow. *C. Gao and J. F. Gilchrist*	**SM1.** Single segment differential tube model with interchain tube pressure effect: Analysis of elongation and shear data of monodisperse polystyrene melts. *S. Dhole, A. Leygue, C. Bailly and R. Keunings*	**MR16.** Stability and breakup of confined threads. *P. Janssen, P. D. Anderson and H. Meijer*	**BR16.** A constitutive equation for unidirectional flows of dilute deformable particles. *D. T. Leighton and A. Ramachandran*	**MS16.** Self-consisting modeling of entangled network strands and dangling ends. *M. K. Jensen, J. D. Schieber, R. N. Khaliullin, O. Hassager, A. L. Skov and A. Bach*
10:10	**SC17.** Inertial effects in suspension mechanics: Rheology and constitutive modeling. *P. M. Kulkarni and J. F. Morris*	**SM2.** Rheological studies of biodegradable thermoplastic polyester-urethanes bearing POSS. *Q. Guo, P. T. Knight and P. T. Mather*	**MR17.** Alteration of flow instability in planar contraction microchannels. *N. J. Kim, K. H. Ahn and S. J. Lee*	**BR17.** Dynamics of suspensions of elastic capsules flowing in confined geometries. *P. Pranay, P. Janssen and M. D. Graham*	**MS17.** Direct nonequilibrium Monte Carlo simulation of flow-induced crystallization of a linear short-chain polyethylene liquid in uniaxial elongational flow. *C. Baig and B. J. Edwards*
10:35	**SC18.** Rheological and microstructural development as a function of strain in oscillating suspensions of non-colloidal spheres. *H.-O. Park and J. E. Butler*	**SM3.** A theoretical analysis of rheo-dielectric response of type-A polymer chains under steady shear and LAOS. *H. Watanabe*	**MR18.** Oscillatory flow behavior of thermally responsive fluids in microchannels. *N. Dubash, I. A. Frigaard, B. Stoeber and V. Basargan*	**BR18.** Simulation of red blood cell ghost deformation induced by linear diode bar optical stretchers. *I. Sraj, D. W. Marr and C. D. Eggleton*	**MS18.** Simulations of transient forces in soft matter: Applications to the rheology of tri-block copolymer telechelics and linear polymer melts. *W. J. Briels, J. T. Padding and J. Sprakel*
11:00	**SC19.** Particle migration in oscillatory torsional flows of concentrated suspensions. *K. V. Deshpande and N. C. Shapley*	**SM4.** Rheology of gradient copolymer melts: Indications of both LCOT and UCOT in high molecular weight styrene/n-butyl acrylate systems. *M. M. Mok, W. R. Burghardt, C. J. Ellison and J. M. Torkelson*	**MR19.** Flow behavior of biopolymer solutions in a microfluidics flow contraction device. *A.-L. Koliandris, T. J. Foster, A. J. Taylor, B. Wolf, E. Rondeau and J. Cooper-White*	**BR19.** Simulation of cellular blood flow in the microcirculation. *J. B. Freund, H. Zhao and A. Isfahani*	**MS19.** Magnetoviscosity of magnetic fluids under oscillating and rotating magnetic fields obtained through rotational Brownian dynamics simulations. *J. H. Sanchez and C. Rinaldi*
11:25	**SC20.** Mass transport enhancement to surfaces in dilute sheared suspensions. *A. Rohatgi and D. T. Leighton*	**SM5.** Linear viscoelasticity of solvated ionomer melts. *R. H. Colby, W. Liu, G. J. Tudryn and D. R. King*	**MR20.** Mass transfer kinetics and interfacial rheology in two-phase microchannel flows. *J. D. Martin and S. D. Hudson*	**BR20.** Three-dimensional computational modeling of semi-dense suspension of O(1000) deformable capsules in channel flow. *P. Bagchi and R. M. Kalluri*	**MS20.** Effect of extensional flow on phase transitions and orientational structure in binary carbonaceous mesophase mixtures. *M. Golmohammadi and A. D. Rey*

11:50 LUNCH

Afternoon

	Lecture Hall	*Hall of Ideas G*	*Meeting Rooms OP*	*Hall of Ideas J*	*Meeting Rooms QR*
	Suspensions and Colloids	**Polymer Solutions & Melts**	**Emulsions, Blends & Multiphase Sys**	**Gels, Glasses & Jammed Systems**	**Viscoplasticity & Soft Solids**
1:30	**SC21.** High-flux magnetorheology at elevated temperatures. *M. Ocalan and G. H. McKinley*	**SM6.** Rheological data and molecular modeling of polydisperse H-shaped polybutadienes. *S. W. Li, H. E. Park and J. M. Dealy*	**EB1.** Dynamics of polyisoprene-poly(p-tert-butyl styrene) diblock copolymer in disordered state. *H. Watanabe*	**GG1.** Thermoreversible gel formation and aging in concentrated nanoparticle suspensions. *S. Ramakrishnan, H. Guo, R. Leheny and J. Harden*	**VS1.** Modeling the thixotropic behavior of viscoplastic liquids. *P. R. de Souza Mendes*
1:55	**SC22.** Simulation of fibrous electro- and magnetorheological fluids. *W. T. W. Ho and D. J. Klingenberg*	**SM7.** Unique rheological properties and phenomena of a tree-like polybutadiene melt. *X. Li, S.-Q. Wang and X. Wang*	**EB2.** Coupling of component dynamics in miscible polymer blends. *T. P. Lodge and A. N. Gaikwad*	**GG2.** Aging of soft colloidal suspensions studied by macro- and micro-rheology. *D. Van den Ende*	**VS2.** Large amplitude oscillatory shear of pseudoplastic and elastoviscoplastic materials. *R. H. Ewoldt and G. H. McKinley*
2:20	**SC23.** Electrorheology of nanocage based systems. *E. C. McIntyre and P. F. Green*	**SM8.** Stress relaxation of comb polymer with short branches. *K. M. Kirkwood, L. G. Leal, D. Vlassopoulos, P. Driva and N. Hadjichristidis*	**EB3.** Shear and extensional rheology of nylon 6 nanocomposites based on polyacrylic nanoparticles. *E. Huitrón-Rattinger, A. Romo-Uribe and C. A. Cruz-Ramos*	**GG3.** Dynamics of internal stresses and scaling of strain recovery in aging colloidal gels. *A. S. Negi and C. O. Osuji*	**VS3.** Predicting slump lengths in the setting of annular plugs and chemical packers. *I. A. Frigaard and G. A. Ngwa*

2:45	**SC24.** Rheology of calcium carbonate cuspensions with sodium polyacrylate dispersant. *G. R. Gagnon, D. J. Neivandt, N. D. Sanders and D. W. Bousfield*	**SM9.** Self-similar dynamics of a flexible ring polymer in a fixed obstacle environment. *B. I. Vaidyanathan Shantha, A. K. Lele and V. A. Juvekar*	**EB4.** Rheological behavior of thermoplastic polyurethane/layered silicate nanocomposites. *T. Ebrahimi and H. Nazockdast*	**GG4.** Effect of interparticle attractions on the shear thickening phase boundary. *E. Brown and H. M. Jaeger*	**VS4.** Finite perturbations of static wall layers in the Couette flow of a Bingham fluid. *I. A. Frigaard, C. Nouar and M. Naccache*
3:10	**SC25.** Extensional rheology of shear-thickening nanoparticle suspensions. *M. Chellamuthu, E. M. Arndt, E. E. Bischoff White and J. P. Rothstein*	**SM10.** Melt dynamics of blended poly(oxyethylene) chains and rings. *S. Nam, J. Leisen, H. W. Beckham and V. Breedveld*	**EB5.** Rheological properties of natural fibre/polymer composites. *D. Rodrigue, E. Twite-Kabamba and A. Mechraoui*	**GG5.** Re-entrant state behavior in an anisotropic colloid system. *R. C. Kramb, C. F. Zukoski, R. Zhang and K. S. Schweizer*	**VS5.** Different experimental methods to characterize the non-linear behavior of gels. *J. Laeuger, P. Heyer and H. Stettin*
3:35			COFFEE		
4:00	**SC26.** Flow induced orientation behavior of concentrated dispersions of multi-walled carbon nanotube suspension under shear flow. *S. Pujari, W. R. Burghardt, S. Rahatekar, J. W. Gilman, K. K. Koziol and A. H. Windle*	**SM11.** Influence of long-chain branching on strain hardening of low density polyethylene. *F. J. Stadler, F. Becker, M. Buback, J. Kaschta and H. Münstedt*	**EB6.** Rheo-SALS study of shear induced phase separation (SIPS) in aqueous solutions of cationic surfactant and salt. *N. J. Wagner, P. Thareja, M. Liberatore and M. Helgeson*	**GG6.** Aging dynamics of a flow-quenched colloidal glass. *C. O. Osuji and A. S. Negi*	**VS6.** In-situ velocimetric measurements and studying the rheological behavior of wax-oil systems for the purpose of flow assurance. *C. J. Dimitriou, G. H. McKinley, A. Montesi and R. Venkatesan*
4:25	**SC27.** Transient behavior of carbon nanotube suspensions in an epoxy. *F. Khalkhal and P. J. Carreau*	**SM12.** Use of relaxation spectra for probing of polymers dynamics and architecture. *F. J. Stadler and C. Bailly*	**EB7.** Nonlinear dynamics of coiling and buckling in viscoelastic jets. *T. S. Majmudar, M. Varagnat and G. H. McKinley*	**GG7.** Aging of colloidal suspensions of thermosensitive particles. *K. Z. Win, G. B. McKenna, T. Narita, F. Lequeux, S. Pullela and Z. Cheng*	**VS7.** Dimensionless durometry. *A. W. Mix and A. J. Giacomin*
4:50	**SC28.** Viscoelasticity of single-walled carbon nanotubes (SWNTs) in superacids. *C. C. Young, D. E. Tsentalovich, V. A. Davis, M. J. Green, A. N. Parra-Vasquez, N. Behabtu, M. Banzola and M. Pasquali*	**SM13.** Effect of sparse long-chain branching on the step-strain behavior in a series of well-defined HDPEs. *D. G. Baird, C. D. McGrady and C. W. Seay*	**EB8.** Piling up of high speed, yield stress fluid jets: Experimentally observed flow regimes. *W. Hartt, L. Bacca, T. Baer, T. S. Majmudar and T. J. Ober*	**GG8.** Photogelling colloidal dispersions based on light-activated assembly of nanoparticles. *K. Sun, R. Kumar, D. E. Falvey and S. R. Raghavan*	**VS8.** Nanoindentation characterization of viscoplasticity. *J. E. Jakes, C. R. Frihart and D. S. Stone*
5:15	**SC29.** Rheological properties and percolation behavior of polypropylene/multiwalled carbon nanotube composites. *P. J. Carreau, S. Abbasi and A. Derdouri*	**SM14.** Parameter-free predictions of the linear rheology of commercial ethene/α-olefin copolymers with and without long-chain branching. *X. Chen and R. G. Larson*	**EB9.** Measurements of viscoplastic fluid flow through an axisymmetric sudden contraction with particle image velocimetry. *F. Palacios, A. T. Franco and R. E. Morales*	**GG9.** Thermoreversible gels composed of monodispersed rod-like particles: Rheology and light scattering. *N. K. Reddy, Z. Zhang, J. Vermant, P. Lettinga and J. Dhont*	**VS9.** Wrinkling and strain softening in thin films of single-wall carbon nanotubes on elastic substrates. *E. K. Hobbie, D. O. Simien, J. Y. Chung, J. A. Fagan, J. Obrzut, S. D. Hudson and C. M. Stafford*
5:40	**SC30.** Structural order induced by carbon nanotubes in surfactant solutions. *O. Ben-David, E. Nativ-Roth, R. Yerushalmi-Rozen and M. Gottlieb*	**SM15.** Computational models for predicting the linear rheology of branched polymer melts. *Z. Wang, X. Chen and R. G. Larson*	**EB10.** Rheological properties of metallocene-catalyzed ethylene copolymers and morphology control of their blends with polypropylene. *A. Maani, M.-C. Heuzey and P. J. Carreau*	**GG10.** Thermoreversible gels from triblock copolymers and ionic liquids. *T. P. Lodge, Y. Lei and A. Noro*	**VS10.** The affect of prestrain on non-linear modulus characterization of filled elastomers. *C. c. White, D. l. Hunston and K. T. Tan*
6:05			END		
6:10			SOCIETY BUSINESS MEETING Section G or J of Hall of Ideas		
7:00			AWARDS RECEPTION Grand Terrace – East		
8:00			AWARDS BANQUET Madison Ballroom A – B		

Wednesday, October 21

Morning

8:30 **PL3.** Spatio-temporal chaos and negative shear rate fluctuations in sheared soft matter systems. *A. K. Sood* Lecture Hall

9:20 COFFEE

	Lecture Hall	*Meeting Rooms KLOP*	*Hall of Ideas G*	*Meeting Rooms MNQR*	*Hall of Ideas J*
	Suspensions and Colloids	**Polymer Solutions & Melts**	**Emulsions, Blends & Multiphase Sys**	**Gels, Glasses & Jammed Systems**	**Non-Newt Fluid Mechanics & Stability**
9:45	**SC31.** Shear induced ageing and slow dynamics in hard sphere glasses. *P. Ballesta, N. N. Koumakis and G. Petekidis*	**SM16.** Extensional flow induced crystallization of poly-1-butene using a filament stretching rheometer. *M. Chellamuthu, D. Arora, H. H. Winter and J. P. Rothstein*	**EB11.** Numerical simulation of drop retraction after a large strain jump. *Y. Renardy, M. Renardy, S. Assighaou and L. Benyahia*	**GG11.** Rheological characterization of a discotic colloidal clay at bulk and microscopic scales. *J. P. Rich, G. H. McKinley and P. S. Doyle*	**FM1.** Inertial and elastic instabilities in shear layers. *A. Morozov*
10:10	**SC32.** Charge effects on microstructure, rheology and order-disorder transitions for sheared colloidal crystals and suspensions. *A. Kumar and J. L. Higdon*	**SM17.** Shear-induced crystallization studied by simultaneous measurement of rheology and turbidity. *J. S. Tiang and J. M. Dealy*	**EB12.** Direct numerical simulations of emulsions immersed in electric fields. *A. Fernandez*	**GG12.** Rheological properties of temperature sensitive composite hydrogels. *J. Meid and W. Richtering*	**FM2.** Non-modal amplification of disturbances in channel flows of viscoelastic fluids: A possible route to elastic turbulence. *N. Hoda, M. R. Jovanovic and S. Kumar*
10:35	**SC33.** Step strain induced crystallization in concentrated colloidal suspensions. *L. T. Shereda, R. G. Larson and M. J. Solomon*	**SM18.** Structure-property evolution during crystallization of isotactic poly-1-butene: Shear rheology, DSC, optical microscopy, small angle light scattering and transmission intensity measurements. *D. Arora, M. Chellamuthu, J. P. Rothstein and H. H. Winter*	**EB13.** Slender-body theory for low-viscosity drops in confined geometries. *P. Janssen, P. D. Anderson and M. Loewenberg*	**GG13.** Characterization of sheared compressed emulsions using confocal rheology. *D. L. Blair and S. Dutta*	**FM3.** The effect of viscoelasticity on the probability density functions in turbulent channel flow. *G. Samanta, K. D. Housiadas, R. A. Handler and A. N. Beris*
11:00	**SC34.** Contact and stress anisotropies in the start-up flow of colloidal suspensions. *N. S. Martys, D. Lootens, W. L. George and P. Hebraud*	**SM19.** Flow induced crystallization of polylactide: Accurate determination of induction time. *Y. Yuryev and P. M. Wood-Adams*	**EB14.** Combined effect of confinement and compatibilization on the dynamics of droplets. *A. Vananroye, P. Van Puyvelde and P. Moldenaers*	**GG14.** Soft glassy rheological features of nanoscale ionic materials (NIMs). *P. Agarwal, Q. Haibo and L. A. Archer*	**FM4.** Understanding the dynamics of viscoelastic turbulent flows and polymer drag reduction in minimal flow units. *L. Xi and M. D. Graham*
11:25	**SC35.** Study of the flow dynamics of solid and liquid phases of a colloidal suspension in a microcapillary using NMR. *E. O. Fridjonsson, S. L. Codd and J. D. Seymour*	**SM20.** Simultaneous rheometry and FT-IR for the determination of molecular structures as a function of the deformation. *M. Feustel, C. Kuechenmeister and J. Nijman*	**EB15.** Effect of compatibilizer concentration and volume fraction on model immiscible blends with interfacial crosslinking. *C. L. DeLeo and S. S. Velankar*	**GG15.** Periodic transformation of a dense suspension into a deforming porous medium. *S. D. Kulkarni, B. Metzger and J. F. Morris*	**FM5.** Effect of Karhunen-Loeve optimization criterion on the reconstructed conformation field in viscoelastic turbulent channel flow. *G. Samanta, A. N. Beris, K. D. Housiadas and R. A. Handler*

11:50 LUNCH

Afternoon

	Lecture Hall	*Meeting Rooms KLOP*	*Hall of Ideas G*	*Meeting Rooms MNQR*	*Hall of Ideas J*
	Suspensions and Colloids	**Polymer Solutions & Melts**	**Emulsions, Blends & Multiphase Sys**	**Gels, Glasses & Jammed Systems**	**Non-Newt Fluid Mechanics & Stability**
1:30	**SC36.** Suspensions of bubbles in yield stress fluids. *M. Kogan, J. Goyon, X. Chateau, O. Pitois and G. Ovarlez*	**SM21.** An experimental study of slip flow in capillaries and semi-hyperbolically converging dies. *P. A. Kamerkar and B. J. Edwards*	**EB16.** Linear and non-linear rheology of cocontinuous blends during coarsening. *C. R. Lopez-Barron and C. W. Macosko*	**GG16.** Microrheology of microtubule solutions and microtubule-actin composite networks. *M. Kilfoil*	**FM6.** Stability of elongational flow of the upper convected Maxwell fluid. *M. Renardy and Y. Renardy*
1:55	**SC37.** Set-on-demand cement, a novel approach to cement rheology. *B. D. Figura and R. K. Prud'homme*	**SM22.** Understanding the origin of flow inhomogeneity in entangled fluids by direct visualization of individual DNAs during flow. *P. E. Boukany, O. L. Hemminger, S.-Q. Wang and L. J. Lee*	**EB17.** Rheology of explosive emulsions: Viscosity, elasticity, tiime effects, transportation. *I. Masalova*	**GG17.** The effect of crosslink density on the viscoelastic bulk modulus. *J. Guo and S. L. Simon*	**FM7.** Thermal instabilities in melt spinning of viscoelastic fibers. *C. Zhou and S. Kumar*

2:20	**SC38.** Suspensions of polydisperse particles in yield stress fluids. *X. Chateau, T. S. Vu and G. Ovarlez*	**SM23.** Influence of viscosity and elasticity on the diameter distribution of meltblown polymer fibers. *D. H. Tan, C. Zhou, S. Kumar, C. W. Macosko, F. Bates and C. J. Ellison*	**EB18.** Evolving structure and rheological properties of an emulsion undergoing internal phase solidification. *P. U. Karanjkar, J. W. Lee and J. F. Morris*	**GG18.** Direct measurement of molecular mobility in actively deformed PMMA glasses. *M. D. Ediger, H.-N. Lee, R. A. Riggleman and J. J. de Pablo*	**FM8.** Probing instabilities in channel flow of entangled melts: A particle-tracking velocimetric study. *X. Zhu and S.-Q. Wang*
2:45	**SC39.** Rheological variability of Savannah River Site (SRS) high level waste (HLW) sludges. *J. M. Pareizs, S. H. Reboul and E. K. Hansen*	**SM24.** Stress relaxation in polymer melts following equibiaxial step strain. *T. Kashyap and D. C. Venerus*	**EB19.** Linear viscoelasticity of organic foams: Relaxations, temporal dependencies, and bubble loading phenomena. *J. M. Kropka, L. A. Mondy and M. Celina*	**GG19.** Topological changes during the gel transition of a reversible polymeric network. *A. R. Baljon, J. Billen, M. Wilson and A. Rabinovitch*	**FM9.** Stability of plane Couette-Poiseuille flow of shear thinning fluid. *I. A. Frigaard and C. Nouar*
3:10	**SC40.** Study of shear induced particles sedimentation and bubbles rising in yield stress fluids through MRI. *J. Goyon, F. Bertrand, O. Pitois and G. Ovarlez*	**SM25.** A continuous lubricated squeezing flow technique to study the rheological behavior of polymer melts in equibiaxial elongational flow. *D. C. Venerus, K. Teresita and T.-Y. Shiu*	**EB20.** Foam drainage equation. *F. T. Akyildiz and D. A. Siginer*	**GG20.** Catastrophic breaking of polymer gels. *M. L. Lynch and A. L. Graham*	**FM10.** Multiple failure-mode transitions in transient polymer networks. *J. Sprakel, J. T. Padding and W. J. Briels*
3:35			COFFEE		
	Industrial & Complex Systems Rheology				
4:00	**IC1.** Fluid mechanics of pretreated corn stover slurries in process equipment. *B. J. Niesner, V. Raman, J. Baek, J. J. Stickel, C. J. Dibble and R. J. Fisher*	**SM26.** Anisotropic thermal conduction in polymers subjected to uniaxial elongation. *D. C. Venerus, J. D. Schieber, S. Gupta and N. Shahab*	**EB21.** A novel miniature mixing device for polymeric blends, nanocomposites and food compounds. *M. Sentmanat, C. Stamboulides and S. G. Hatzikiriakos*	**GG21.** Nonlinear viscoelastic response of a colloidal system near the glass transition concentration: Superposition experiments and rejuvenation. *G. B. McKenna, T. Narita and F. Lequeux*	**FM11.** Fluid mechanics of rinsing flows. *T. T. Hsu, G. G. Fuller and C. W. Frank*
4:25	**IC2.** Investigating the changing rheology of high-solids biomass slurries during enzymatic saccharification. *J. S. Knutsen, M. Liberatore, J. J. Stickel, C. J. Dibble and C. M. Roche*	**SM27.** What is chain disentanglement during or after external deformation? *P. E. Boukany, Y. Wang and S.-Q. Wang*	**EB22.** Control of filament formation in microfluidic flow focusing. *W. Lee, L. M. Walker and S. L. Anna*	**GG22.** Nanostructure and rheology of concentrated nanoparticle & colloidal gel suspensions. *A. P. Eberle and N. J. Wagner*	**FM12.** Relaxation times of CTAB/NaSal surfactant solutions. *M. Ouchi and D. F. James*
4:50	**IC3.** Rheology of model invert emulsion drilling fluids containing nanoparticles. *S. Agarwal, L. M. Walker, D. C. Prieve, P. Tran, Y. Soong and R. K. Gupta*	**SM28.** Brittle failure of entangled melts in rapid uniaxial extension. *Y. Wang and S.-Q. Wang*	**EB23.** Co-extrusion of polymers filled with particulates and a eutectic alloy. *L. A. Mondy, R. R. Rao, L. Bieg, J. L. Schroeder, M. Stavig, D. Schneider, S. Spangler, P. Cole, R. A. Mrozek and J. L. Lenhart*	**GG23.** Contributions of dynamical heterogeneities to non-linear rheology of confined colloidal liquids under oscillatory shear. *P. S. Sarangapani, A. Schofield and Y. E. Zhu*	**FM13.** The dynamics of viscoelastic wormlike micelles in crossflow past a circular cylinder. *G. R. Moss and J. P. Rothstein*
5:15	**IC4.** Rheological characterization of unconventional oil resources. *J. R. Dorgan, J. Bechura and M. Batzle*	**SM29.** Shearing entangled polymer solutions at small gap distances. *S. Ravindranath, P. E. Boukany, S.-Q. Wang and L. J. Lee*	**EB24.** Microfluidic forced assembly of polymer blends: Mixing and layering. *D. Young and K. B. Migler*	**GG24.** Computational study of rheology for colloidal suspensions and particulate gels. *M. D. Bybee and J. L. Higdon*	**FM14.** Capillary break-up, jetting and extensional rheology of associative polymer solutions. *V. Sharma, J. G. Serdy, P. K. Bhattacharjee and G. H. McKinley*
5:40	**IC5.** Temperature and pressure effects on suspension rheology. *J. Maxey*	**SM30.** Passive breakup of viscoelastic droplets and filament self-thinning at a microfluidic T-junction. *G. F. Christopher and S. L. Anna*	**EB25.** Influence of rheological properties on the electrospinning of chitosan/PEO solutions. *M. Pakravan, M.-C. Heuzey and A. Ajji*	**GG25.** Multiple glasses in colloidal star mixtures. *B. Erwin, E. Stiakakis, M. Cloitre and D. Vlassopoulos*	**FM15.** Characterization of a dilute polymer solution following preshear in microgravity. *J. M. Soulages, G. H. McKinley, N. R. Hall, K. S. Magee, G. E. Chamitoff and M. E. Fincke*
6:05			END		
6:10			POSTER SESSION & RECEPTION Grand Terrace		

Thursday, October 22

Morning

	Lecture Hall	*Meeting Rooms KLOP*	*Hall of Ideas G*	*Meeting Rooms MNQR*	*Hall of Ideas J*
	Suspensions and Colloids	**Polymer Solutions & Melts**	**Industrial & Complex Systems Rheology**	**Gels, Glasses & Jammed Systems**	**Non-Newt Fluid Mechanics & Stability**
7:45	**SC41.** Phase behavior and dynamics of colloidal microgels: Softness matters. *J. K. Cho and V. Breedveld*	**SM31.** Increasing polyelectrolyte viscosity by addition of salt. *N. B. Wyatt and M. Liberatore*	**IC6.** Capillary rheometry of bread dough: Experimental and conceptual issues. *C. I. Hicks and H. See*	**GG26.** Jamming in systems composed of frictionless ellipse-shaped particles. *C. S. O'Hern, C. F. Schreck, M. Mailman and B. Chakraborty*	**FM16.** Viscoelastic flow simulation using the Radial Basis Function Method (RFM). *I. D. Lopez-Gomez, L. T. Holmes and T. A. Osswald*
8:10	**SC42.** Microviscosity, microdiffusivity, normal stresses? *R. N. Zia and J. F. Brady*	**SM32.** AC-polarization and conformational transition of single weak polyelectrolyte in uniform AC-electric fields. *S. Wang and Y. E. Zhu*	**IC7.** Rheology and phase behavior of nanovesicle-polymer mixtures. *B. M. Gurappa, N. L. McFarlane, M. L. Lynch and N. J. Wagner*	**GG27.** Signatures of jamming in flowing and static granular materials. *L. E. Silbert*	**FM17.** On the limitations of elastic dumbbell based constitutive equations in simulation of flow of dilute polymeric solutions with stagnation points. *A. Abedijaberi and B. Khomami*
8:35	**SC43.** Two-point non-linear microrheology of a colloidal suspension. *E. M. Furst and I. Sriram*	**SM33.** The viscoelastic behavior of polymer/oligomer solutions. *W. Zheng, G. B. McKenna and S. L. Simon*	**IC8.** Vibrational effects on particle sedimentation in complex fluids. *P. T. Spicer and M. Caggioni*	**GG28.** Testing the Edwards' hypothesis in small granular systems. *J. Blawzdziewicz, G.-J. Gao, C. S. O'Hern and M. D. Shattuck*	**FM18.** Measurement technique and data analysis of extensional viscosity for polymer melts by Sentmanat Extensional Rheometer (SER). *J. Aho, V. H. Rolón-Garrido, S. Syrjälä and M. H. Wagner*
9:00	**SC44.** Numerical prediction of the dynamics of nanoparticles embedded in a liquid crystalline solvent. *B. Gettelfinger, J. Moreno-Razo, G. M. Koenig, N. Abbott, J. P. Hernandez-Ortiz and J. J. de Pablo*	**SM34.** Thermo-thickening in solutions of telechelic associating polymers and cyclodextrins. *R. Kumar and S. R. Raghavan*	**IC9.** High shear rate rheometry using narrow gap rotating parallel plates. *D. W. Giles, T. E. Briese, E. B. Secor, C. W. Macosko and R. B. Secor*	**GG29.** Anisotropic power law strain correlations in sheared amorphous jammed materials.. *C. E. Maloney and M. O. Robbins*	**FM19.** A smoothed-particle-hydrodynamics-based fluid model with a local shear-rate dependent viscosity: Application to flow of a suspension with a non-Newtonian fluid matrix. *N. S. Martys, W. L. George, S. G. Satterfield, D. Lootens, P. Hebraud and J. G. Hagedorn*
9:25	**SC45.** An active microrheological technique to determine normal stress differences of complex fluids. *A. S. Khair and T. M. Squires*	**SM35.** Development of a comprehensive rheological property database for EOR polymers. *D. H. Kim, S. Lee, C. Huh and G. A. Pope*	**IC10.** Consideration of elongation effects for both fiber reinforced and unfilled fluids by means of an invariant constitutive model. *T. Tsigkopoulos, T. A. Osswald, R. Feulner, G. Hülder and D. Drummer*	**GG30.** Soft glassy rheology in the hard sphere limit. *T. K. Haxton and A. J. Liu*	**FM20.** An eXtended Finite Element Method (XFEM) for the simulation of the flow of viscoelastic fluids with suspended particles. *Y. J. Choi, M. A. Hulsen and H. Meijer*
9:50			COFFEE		
10:10	**SC46.** Microstructure, orientation and rheology in suspensions of non-spherical dicolloidal particles. *A. Kumar and J. L. Higdon*	**SM36.** Coarse graining at various scales for dilute polymer solutions. *I. Saha Dalal, S. Jain and R. G. Larson*	**IC11.** Bulk and surface molecular orientation distribution in injection molded liquid crystalline polymers: Experiment and simulation. *J. Fang, W. R. Burghardt and R. A. Bubeck*	**GG31.** An empirical constitutive law for concentrated colloidal suspensions in the approach of the glass transition. *H. H. Winter, M. Siebenburger, M. Ballauff and M. Fuchs*	
10:35	**SC47.** Rheo-microscopy of semi-flexible fiber suspensions in shear flow. *M. Keshtkar, M.-C. Heuzey, P. J. Carreau, M. Rajabian and C. Dubois*	**SM37.** Time-composition superpositioning in the rheological behavior of triblock copolymer/selective co-solvent blends. *A. Krishnan, S. A. Khan and R. J. Spontak*	**IC12.** On-line shear stress measurement during the injection molding process using a novel rheo-dielectric sensor. *Y. Peng, H. Li and L.-S. Turng*	**GG32.** Complex yielding transition from an attractive glass to a colloidal gel. *N. N. Koumakis and G. Petekidis*	
11:00	**SC48.** Simulation of the rheological properties of suspensions of oblate spheroidal particles in a Newtonian fluid. *E. Bertevas*	**SM38.** Mechanical hole burning spectroscopy in polymer solutions: Is the hole related to the length scale? *Q. Qin and G. B. McKenna*	**IC13.** Planar extensional flow resistance of a foaming plastic. *J. Wang, D. F. James and C. B. Park*	**GG33.** Scaling of free energy barriers to flow events with applied stress. *D. Lacks*	
11:25	**SC49.** Dynamic simulation of non-spherical suspensions. *P. Kittipoomwong, H. See and N. Mai-Duy*	**SM39.** Tracking of phase separation kinetics in copolymer solutions using rheological measurements. *M. J. Heinzer and D. G. Baird*	**IC14.** Sag in thermoforming. *A. J. Giacomin, O. Mahmood and A. W. Mix*	**GG34.** Structure and dynamics of coarsening emulsions. *K. Feitosa and J. C. Crocker*	
11:50	**SC50.** Performance of various moment closures in simple and periodic shear and turbulent channel flow of fiber suspensions. *A. Moosaie, A. Le Duc and M. Manhart*	**SM40.** Thin film lubrication based on PDMS networks. *L. J. Landherr, C. Cohen and L. A. Archer*	**IC15.** Flow properties and extrudate swell of monodisperse polymer melt composites. *D. Auhl, M. Tassieri and P. Hine*	**GG35.** Controlled jamming of particle-laden interfaces using a spinning drop tensiometer. *S. S. Velankar and H.-L. Cheng*	
12:15			END		

Poster Session

Wednesday 6:10 PM Grand Terrace

PO1. Optically actuated micromanipulation of silicon nanomembranes. R. J. Kershner, S. Oehrlein, R. Jacobson, F. S. Flack and M. G. Lagally

PO2. Creep properties of cell wall layers and compound corner middle lamellae in wood. *J. E. Jakes, C. R. Frihart, J. F. Beecher and D. S. Stone*

PO3. Improved solubility of drug molecules by means of the development of polymeric cocrystals: A structural and rheological study. *K. Gill, S. Janaswamy, O. H. Campanella and R. Pinal*

PO4. Effect of ultra-high pressure homogenization (UHPH) on viscosity and shear stress of fermented milky beverage. *L. P. Masson, L. Tashima, R. Deliza, V. Calado and A. Rosenthal*

PO5. Red blood cell deformation in an extensional flow microfluidic device. *J. N. Marhefka, S. D. Hudson and K. B. Migler*

PO6. Modeling the rheological properties of cheeses of different fat content. *X. Yang, N. R. Rogers, T. K. Berry and E. A. Foegeding*

PO7. Nonlinear response of the vocal fold lamina propria under large-amplitude oscillatory shear. *R. W. Chan*

PO8. A novel gelling system comprising corn arabinoxylan and locust bean gum. *S. Janaswamy, B. K. Patel, O. H. Campanella and B. R. Hamaker*

PO9. Gelation of iota-carrageenan at dilute concentrations: Roles of urea and salt. *B. K. Patel, S. Janaswamy and O. H. Campanella*

PO10. Metastability effects on complex fluids rheology: Concentrated monoclonal antibody solutions. *V. Nguyen, J. A. Pathak and A. Donnelly*

PO11. Temperature and frequency dependence of viscoelastic behavior of barium titanate ceramic. *L. Dong, D. S. Stone and R. S. Lakes*

PO12. The rheological effect of non-inertial shear induced migration of rigid polymers and nanorods at high Peclet numbers. *J. Park and J. E. Butler*

PO13. Dynamic properties of imidazolium based ionic liquids studied by mechanical spectroscopy. *N. Shamim and G. B. McKenna*

PO14. Magnetorheology of viscous ferrofluids. *D. I. Santiago-Quinones and C. Rinaldi*

PO15. Rheo-SALS investigation of shear and temperature induced phase separation in coacervate systems. *N. B. Wyatt, M. Liberatore, M. Henry and P. Dubin*

PO16. Turbulence structures in turbulent boundary layer flow of homogeneous aqueous surfactant solution at large and small drag reduction ratios. *S. Tamano, M. Itoh, S. Takeuchi and K. Yokota*

PO17. Strain-rate frequency superposition in large-amplitude oscillatory shear. *C. Kalelkar, A. K. Lele and S. Kamble*

PO18. Use of a microfluidics chip to obtain viscosity results over a wide shear rate range for solutions of peptide-modified hyaluronic acid chains or actin protein fibers. *M. A. Kandadai, J. J. Magda, D. Bedrov, G. D. Smith, J. Mays, G. Sakellariou, M. Chen, A. Elangovan and A. Ostafin*

PO19. Direct visualization of strain-induced yielding in colloidal gels. *L. C. Hsiao and M. J. Solomon*

PO20. Rheological characterization of oxide surface films on liquid metals. *R. J. Larsen, M. D. Dickey, G. M. Whitesides and D. A. Weitz*

PO21. Shear thickening, jamming, and dilation in suspensions. *E. Brown and H. M. Jaeger*

PO22. Stress activated dynamics during structural arrest of a colloidal glass. *A. S. Negi and C. O. Osuji*

PO23. Particles feel the squeeze: Rheology of squishy particle glasses. *P. Menut, J. Sprakel and D. A. Weitz*

PO24. Acrylamide gelation in the presence of montmorillonite particles. *T. F. Savart and B. J. Love*

PO25. Concentration dependent micellization of Pluronic F127 solutions and the kinetics of ordering by both rheology and DSC. *N. A. Meznarich and B. J. Love*

PO26. Imaging the effects of peptide surfactant on droplet deformation in a Taylor-Couette cell using rotationally compensated RARE (ROTACOR). *E. O. Fridjonsson, T. C. Chandrasekera, A. J. Sederman, A. J. Middelberg and M. L. Johns*

PO27. Jamming of solid-stabilized emulsions. *S. S. Datta, K. Ladavac, R. Guerra and D. A. Weitz*

PO28. Yield stress and viscosity of ice suspensions formed from water-in-oil emulsions. *P. J. Rensing, M. Liberatore, A. K. Sum, C. A. Koh and E. D. Sloan*

PO29. Effect of particle size on the nanostructure, phase behavior, and dynamic oscillatory rheology of a model nanoparticle gel. *J. M. Kim, A. P. Eberle and N. J. Wagner*

PO30. Low molecular weight polymers addition effect in bauxite slurry viscosity. *C. Nascimento, J. Sampaio and V. Calado*

PO31. Alignment of micellar hydrogels through steady shear and oscillatory flow. *T. A. LaFollette and L. M. Walker*

PO32. Microstructure and rheology of dilute Carbopol dispersions. *J. R. de Bruyn, A. E. Bailey, B. J. Frisken, I. Gutowski, D. Lee, F. K. Oppong and P. C. Wright*

PO33. Jetting and capillary break-up of viscoelastic fluids. *V. Sharma, A. M. Ardekani, J. G. Serdy, P. K. Bhattacharjee, P. Threlfall-Holmes and G. H. McKinley*

PO34. Particle self-assembly and chaining in flows of viscoelastic fluid. *A. Mirsepassi, D. Dunn-Rankin, D. Joseph and R. Rangel*

PO35. Experimental investigation on the breakup of an emulsion jet. *M. Rohani, C. D. Bolszo, D. Dunn-Rankin, F. Jabbari and V. G. Mc Donell*

PO36. Validation of the linear viscoelastic region of a silicone polymer and a worm-like micellar solution using normal force to determine the onset of non-linearity. *J. E. Langridge*

PO37. Viscoelastic properties of associating polymers having multiple associative groups. *T. Indei and J.-I. Takimoto*

PO38. Polypropylene / polyaniline-grafted-short glass fiber composites: Microstructure and thermal transitions. *C. Valerio-Cardenas, A. Romo-Uribe and R. Cruz-Silva*

PO39. Transient rheology of a polypropylene melt reinforced with long glass fibers. *K. Ortman*

PO40. Rheological characterization of intelligent hydrogels prepared via γ-ray induced polymerization of micellar monomer solutions and microemulsions. *F. J. Stadler, T. Friedrich, B. Tieke and C. Bailly*

PO41. Molecular stiffening and surface tension in ultrathin polymer films. *S. Xu and G. B. McKenna*

PO42. Rheological detection of very low levels of long chain branching in commercial polymers. *X. Chen and R. G. Larson*

PO43. X-ray scattering studies of flow-induced alignment in model polymer-clay nanocomposites. *S. Pujari, W. R. Burghardt, M.-C. Heuzey, C. Mobuchon and P. J. Carreau*

PO44. Molecular sequence segregation in molten thermotropic random copolyesteramide. *A. Romo-Uribe and A. H. Windle*

PO45. Particle tracking velocimetry studies of polymer-polymer interfaces. *G. D. Zartman, S.-Q. Wang and X. Wang*

PO46. Study on slip phenomena in mold cavity of microcellular injection molding. *J. Peng, L. Jungjoo and L.-S. Turng*

PO47. Structural recovery and physical aging of epoxy film subjected to CO_2 jump. *S. Kollengodu-Subramanian, G. B. McKenna, L. Banda and M. Alcoutlabi*

PO48. Electrical conductivity and rheology of carbon-filled polypropylene-based resins. *M. D. Via, J. A. King, F. A. Morrison, B. A. Johnson and J. M. Keith*

PO49. Magnetic microrheometry of polymer coatings. *J.-O. Song, R. M. Jacobs and L. F. Francis*

PO50. Direct measurement of deformation-induced molecular mobility in polystyrene. *B. J. Bending, H.-N. Lee and M. D. Ediger*

PO51. Effects of shear forces on the conductive network formation in multiwalled carbon nanotube/epoxy composites. *A. E. Eken, J. Kovacs, C. Schulz and W. Bauhofer*

PO52. Gelation of drilling fluids in deepwater wells. *F. P. Feitosa, V. Calado and A. L. Martins*

PO53. Dynamic rheological properties of binetworked gels. *A. Krishnan, S. A. Khan and R. J. Spontak*

PO54. Early stages in polymer crystal growth for isotactic poly-1-butene: Spherulite jamming or network percolation? *D. Arora and H. H. Winter*

PO55. Processing of PLA/clay/wood nanocomposites: Thermal-mechanical properties. *D. De Kee and Q. Meng*

PO56. Stiffening, fracture, and friction of physically associating networks by shear rheometry. *K. A. Erk and K. R. Shull*

PO57. Characterization of shape-memory polymers on DMA. *T. Chen*

PO58. Electrospinning of highly sulfonated polystyrene nanofibers and the influence of rheological behavior of the solution on electrospinnability. *C. Subramanian, R. A. Weiss and M. T. Shaw*

PO59. Crystallization kinetics and properties of annealed electrospun PLA and nylon fibers. *A. R. Cho, H. W. Jung, J. C. Hyun, D. Cho and Y. L. Joo*

PO60. Rheo-dielectric and velocity field analysis of entangled polyisoprene solution under shear flow. *K. Horio, Y. Matsumiya, T. Uneyama, Y. Masubuchi and H. Watanabe*

PO61. Further examination of elastic driven failure of entangled melts after step uniaxial extension. *S. Cheng, Y. Wang and S.-Q. Wang*

PO62. Molecular imaging of wall slip and shear banding in entangled DNA solutions. *P. E. Boukany, O. L. Hemminger, S.-Q. Wang and L. J. Lee*

PO63. Effect of interfacial crosslinking, compatibilizer concentration and volume fraction on reactively compatibilized model immiscible blends. *C. L. DeLeo, K. Walsh and S. S. Velankar*

PO64. Determination of the distribution of orientation angles of glass fibers suspended in Newtonian and Boger fluids. *B. M. Marín-Santibáñez, J. Pérez-González and L. de Vargas*

PO65. Description of the kinematics of the stick-slip capillary flow of high-density polyethylene by using PIV measurements. *F. Rodríguez-González, J. Pérez-González, B. M. Marín-Santibáñez and L. de Vargas*

PO67. Continuum based rheological modeling of polymer/layered silicate nanocomposites. *E. Nazockdast and H. Nazockdast*

PO68. Probing dough rheology using sliding plate rheometry. *R. K. Connelly, K. M. Desai and A. J. Giacomin*

PO69. Development of wall boundary model for primitive chain network simulations. *S. Okuda, Y. Inoue, Y. Masubuchi, T. Uneyama and M. Hojo*

PO70. Brownian dynamics simulations of rheology of magnetic fluids in magnetic fields. *D. Soto-Aquino and C. Rinaldi*

PO71. Application of the discrete slip-link model to bidisperse linear systems. *R. N. Khaliullin and J. D. Schieber*

PO72. Coarse projective integration circumvents the closure problem for FENE dumbbells. *G. Samaey, V. Legat and T. Lelievre*

PO74. Extensional flow of viscoelastic fluids. *F. T. Akyildiz and D. A. Siginer*

PO75. Numerical solution of the start-up of well drilling fluid flows. *C. R. Negrão, A. T. Franco, L. L. Vieira da Rocha and O. M. Gabriel*

PO76. Spontaneous flow and rheological properties of active liquid crystals. *A. Morozov*

PO77. A new jamming critical point controls the glassy dynamics of ellipsoidal particles. *C. F. Schreck and C. S. O'Hern*

PO78. Molecular hydrodynamics in nanoparticle suspensions. *S. C. Kohale and R. Khare*

PO79. Laser microrheology for soft materials. *C. Tisserand, L. Brunel and Y. Lefeuvre*

PO81. MEMs parallel plate rheometer for small amplitude oscillatory shear micro rheology measurements. *G. F. Christopher, N. G. Dagalakis, S. D. Hudson and K. B. Migler*

PO82. Dynamic self-assembly of non-colloidal particles in Couette flow. *K. Yeo and M. R. Maxey*

PO83. Self-consistent particle simulation of shear banding of anisotropic particulate suspensions in rotating Couette flow. *J. S. Myung, S. Choi, K. H. Ahn and S. J. Lee*

PO84. Field-induced motion of a ferrofluid droplet: A testbed for treatment of retinal detachment. *Y. Renardy, S. Afkhami, J. Riffle, T. St. Pierre and M. Renardy*

PO85. Static length scales in overcompressed, jammed packings of soft grains in 2D. *M. Mailman and B. Chakraborty*

PO86. Viscoelastic stress wakes for Newtonian drop in a viscoelastic matrix. *S. Afkhami, Y. Renardy and P. Yue*

PO87. Particle collision in viscoelastic fluids. *A. M. Ardekani*

PO88. Analysis of a two coupled Maxwell modes model for concentric cylinder flow. *M. Dressler*

PO89. An opposed-nozzle fixture for measuring the extensional properties of low viscosity liquids using a conventional controlled strain rheometer. *J. M. Soulages, F. Le Goupil, J. Hostettler and G. H. McKinley*

PO90. New advances in multiwave and arbitrary waveshape testing. *A. Elmoumni*

PO91. Statistical and rheological properties of quasistatically driven dense granular materials. *D. Bi and B. Chakraborty*

PO92. Another look at cone-plate rheometry and new tools for viscometry and rheological analyses with Brookfield equipment. *D. J. Moonay*

PO93. Evaluation of structured materials in the linear viscoelastic region and by large amplitude oscillatory strain (LAOS). *G. W. Kamykowski*

PO94. Master viscometer for viscosity standard of non-Newtonian fluid in Japan. *Y. Yamamoto and K. Fujii*

PO95. Dissipative particle dynamics simulation of particulate suspensions. *P. Kittipoomwong, A. Jabbarzadeh and H. See*

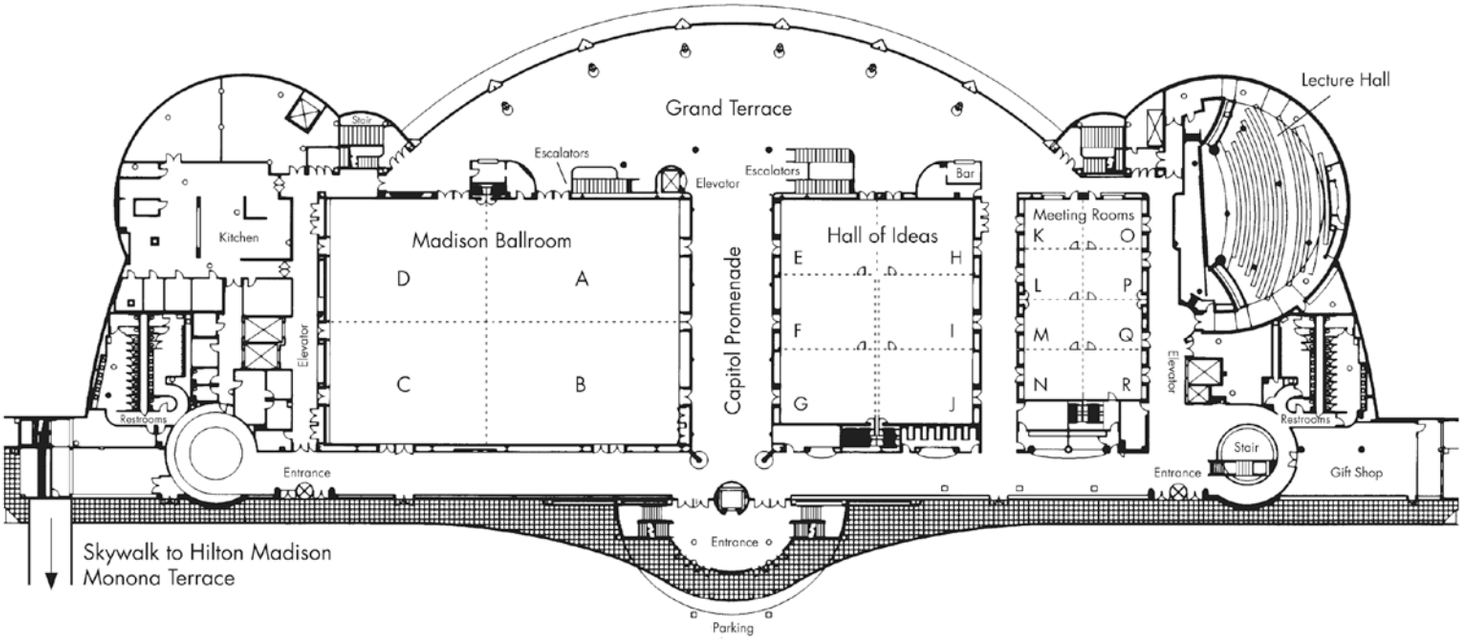
PO96. Effectiveness of solvent trap for measuring volatile samples. *M. Namani and R. Smith*

PO97. 'Psycho-tribological' measurements on cloth materials with a rheometer and a novel measuring geometry. *R. Stefanie, B. Bauer and J. Nijman*

PO98. Simultaneous observation of shear-induced structure using small angle light scattering and parallel superposition. *D. A. Bohnsack*

PO99. Cahn-Hilliard simulation of moving contact lines in viscoelastic fluids. *P. Yue and J. Feng*

Monona Terrace – Level 4



Social Program

Sunday, October 18

Industry / Faculty / Student Mixer
4:00 PM – 6:00 PM Madison Ballroom A
Sponsored by a generous contribution from the Industrial Outreach Program of the American Institute of Physics

Welcoming Reception
7:00 PM – 9:00 PM Grand Terrace – West
Sponsored by a generous contribution from Malvern Instruments

Monday, October 19

Society Luncheon
12:00 Noon – 1:45 PM Grand Terrace
Sponsored by The Society of Rheology

Society Reception
7:00 PM – 9:00 PM Grand Terrace
Sponsored by the Journal of Rheology

Tuesday, October 20

Society Business Meeting
6:10 PM Hall of Ideas, Section G or J

Awards Reception
7:00 PM Grand Terrace – East
Sponsored by a generous contribution from Xpansion Instruments

Awards Banquet
8:00 PM Madison Ballroom A – B

Wednesday, October 10

Poster Session Reception
6:10 PM – 8:10 PM Grand Terrace
Sponsored by a generous contribution from Anton-Paar USA

The Society gratefully acknowledges the generous contributions of American Institute of Physics, Anton-Paar USA, Malvern Instruments, Thermo Scientific, and Xpansion Instruments.