The Society of Rheology 79th Annual Meeting
Salt Lake City, Utah

Meeting Schedule

Monday, October 8, 2007

8:30		F. Waleffe (PL1)		
9:20		Coffee		
9:45	SC1	FM1	MR1	PS1
10:10	SC2	FM2	MR2	PS2
10:35	SC3	FM3	MR3	PS3
11:00	SC4	FM4	MR4	PS4
11:25	SC5	FM5	MR5	PS5
11:50		Lunch		
1:30	SC6	FM6	MR6	PS6
1:55	SC7	FM7	MR7	PS7
2:20	SC8	FM8	MR8	PS8
2:45	SC9	FM9	MR9	PS9
3:10		Coffee		
3:35	SC10	FM10	MR10	PS10
4:00	SC11	FM11	MR11	PS11
4:25	SC12	FM12	MR12	PS12
4:50	SC13	FM13	MR13	PS13
5:15		End		

Tuesday, October 9, 2007

8:30		J. F. Brady (PL2)		
9:20		Coffee		
9:45		FM14	MR14	PS14
10:10	SC15	FM15	MR15	PS15
10:35	SC16	FM16	MR16	PS16
11:00	SC17	FM17	MR17	PS17
11:25	SC18	FM18	MR18	PS18
11:50		Lunch		
1:30	SC19	FM19	MR19	PS19
1:55	SC20	FM20	MR20	PS20
2:20	SC21	FM21	MR21	PS21
2:45	SC22	FM22	MR22	
3:10		Coffee		
3:35	SC23	FM23	MR23	BS1
4:00	SC24	BE1	MR24	BS2
4:25	SC25	BE2	SM1	BS3
4:50	SC26	BE3	SM2	BS4
5:15		End		
5:30		Business Meeting		
7:00		Awards Reception		
8:00		Awards Banquet		

Wednesday, October 10, 2007

8:30		J. A. Lewis (PL3)		
9:20		Coffee		
9:45	SC27	BE4	SM3	BS5
10:10	SC28	BE5	SM4	BS6
10:35	SC29	BE6	SM5	BS7
11:00	SC30	BE7	SM6	BS8
11:25	SC31	BE8	SM7	BS9
11:50		Lunch		
1:30	SC32	BE9	SM8	BS10
1:55	SC33	BE10	SM9	BS11
2:20	SC34	BE11	SM10	BS12
2:45	SC35	BE12	SM11	BS13
3:10		Coffee		
3:35	SC36	BE13	SM12	BS14
4:00	SC37	BE14	SM13	BS15
4:25	SC38	BE15	SM14	BS16
4:50	SC39	BE16	SM15	BS17
5:15	SC40		SM16	
5:40		End		
6:00		Poster Session & Reception		

Thursday, October 11, 2007

8:05	SC41	BE17	SM17	SG1
8:30	SC42	BE18	SM18	SG2
8:55	EP1	BE19	SM19	SG3
9:20	EP2		SM20	SG4
9:45		Coffee		
10:10	EP3	BE21	SM21	SG5
10:35	EP4	BE22	SM22	SG6
11:00	EP5	BE23	SM23	SG7
11:25	EP6	BE24	SM24	SG8
11:50	EP7	BE25	SM25	SG9
12:15		End		

Session Codes

BE = Blends, Emulsions and Multiphase Fluids
BS = Biological and Self-assembled Systems
EP = Rheology in Energy Production
FM = Non-Newtonian Fluid Mechanics
MR = Microrheology, Microfluidics and Confined Systems
PL = Plenary Lectures
PS = Polymer Solutions
SC = Suspensions, Colloids and Granular Media
SG = Solids and Glasses
SM = Entangled Solutions and Melts

Monday, October 8

Morning

8:30 **PL1.** Exact coherent states: controlling turbulence and transition. *F. Waleffe* Grand Ballroom C

9:20 COFFEE

	Alpine East	*Alpine West*	*Canyon B*	*Canyon A*
	Suspensions, Colloids & Granular Media	**Non-Newtonian Fluid Mechanics**	**Microrheology, Microfluidics & Conf Sys**	**Polymer Solutions**
9:45	**SC1.** Molecular hydrodynamics in dilute suspensions. *S. Kohale and R. Khare*	**FM1.** Modeling the inhomogeneous response in steady and transient flows of wormlike micellar solutions. *L. Zhou, P. A. Vasquez, L. P. Cook and G. H. McKinley*	**MR1.** From bulk microrheology to tribology. *C. Clasen, P. Kavehpour and G. H. McKinley*	**PS1.** Comparison of the viscosity and elasticity yield of water soluble polymers. *F. Meyer and W.-M. Kulicke*
10:10	**SC2.** An O(N) Green's function method to calculate hydrodynamic interactions of particles in unbounded and confined geometries. *S. G. Anekal, J. P. Hernandez-Ortiz, P. T. Underhill and M. D. Graham*	**FM2.** Flow of viscoelastic wormlike micelle solutions through a periodic array of cylinders. *G. R. Moss and J. P. Rothstein*	**MR2.** Microfluidic rheometry on a chip. *C. J. Pipe, G. H. McKinley, M. Yi, S.-G. Baek and R. Clark*	**PS2.** Inter- and intramolecular interactions of associative polymers in solution. *R. L. David and J. A. Kornfield*
10:35	**SC3.** The analysis of self-diffusion and migration of spheres in nonlinear shear flow using a traction-corrected boundary element method. *I. Marc, S. Feng, A. Graham and L. A. Mondy*	**FM3.** Stretching, coiling and folding of viscoelastic micellar jets. *M. Varagnat, T. Majmudar and G. H. McKinley*	**MR3.** Multi-sample micro-capillary rheometry. *K. B. Migler, D. Moon and A. J. Bur*	**PS3.** Viscoelasticity, gels and glasses in block copolymer micellar solutions. *N. Merlet and M. Cloitre*
11:00	**SC4.** Elongational viscosity of particle-filled polymeric fluids by direct simulations. *W. R. Hwang and M. A. Hulsen*	**FM4.** The trouble with CaBER: the effect of stretch parameters on extensional rheology measurements. *E. Miller and J. P. Rothstein*	**MR4.** Nonlinear rheometry of microgel dispersions in confined geometries. *P. Erni, C. Clasen and G. H. McKinley*	**PS4.** Correlating the extensional viscosity of automotive basecoats with their appearance. *D. Bhattacharya, K. S. Seo and C. Williams*
11:25	**SC5.** Dynamics of a sphere suspended in a viscoelastic liquid subjected to simple shear flow. *G. D'Avino, F. Greco, M. A. Hulsen and P. L. Maffettone*	**FM5.** Yielding in uniaxial extension of entangled polymer melts, solutions and blends. *Y. Wang and S.-Q. Wang*	**MR5.** Flow of polymer solutions in planar 90 degree micro-bends. *S. Gulati, C. S. Dutcher, D. Liepmann and S. J. Muller*	**PS5.** Evaluating tackiness of polymer containing lubricants by open-siphon method: experiments, theory and observations. *V. A. Levin, R. J. Stepan and A. I. Leonov*

11:50 LUNCH

Afternoon

	Alpine East	*Alpine West*	*Canyon B*	*Canyon A*
	Suspensions, Colloids & Granular Media	**Non-Newtonian Fluid Mechanics**	**Microrheology, Microfluidics & Conf Sys**	**Polymer Solutions**
1:30	**SC6.** Far-field multiparticle interactions in weakly viscoelastic flows. *R. J. Phillips*	**FM6.** Using LAOS and rheological fingerprinting to physically interpret the nonlinear behavior of a biopolymer gel. *R. H. Ewoldt, T. S. Ng and G. H. McKinley*	**MR6.** Multilayer microfluidic flows of suspensions and flow focusing. *M. U. Larsen and N. C. Shapley*	**PS6.** Rheological characterization and fiber spinning of cellulose ionic liquids solutions. *S. S. Rahatekar, J. P. Plog, A. Rasheed, R. Jain, S. Kumar and J. W. Gilman*
1:55	**SC7.** Rigid rods in nonhomogeneous shear flow. *M. J. Green, R. C. Armstrong and R. A. Brown*	**FM7.** Normal stress difference of PIB/PB based Boger fluid under large amplitude oscillatory shear flow. *J. G. Nam, K. H. Ahn and S. J. Lee*	**MR7.** Examining and influencing order in the flow of worm-like micelles through porous media. *B. D. Figura, R. K. Prud'homme, P. Sullivan and J. Crawshaw*	**PS7.** Is the Blob model applicable to dilute polyelectrolyte solutions undergoing shear flow?. *J. R. Prakash and S. K. Pattanayek*
2:20	**SC8.** Modeling fiber interactions in non-dilute fiber suspensions. *J. Ferec, G. Ausias, M.-C. Heuzey and P. J. Carreau*	**FM8.** Nonlinear elastic instabilities in shear flows with straight streamlines. *R. Sureshkumar, B. Sadanandan, A. Morozov, W. van Saarloos and S. Fielding*	**MR8.** Micro-cantilever based rheology of polymer solutions. *R. Motamedi and P. Wood-Adams*	**PS8.** Solvent effects on polyelectrolyte charge, conformation and viscosity in solution. *R. H. Colby and S. Dou*

2:45	**SC9.** Hindered rising functions for concentrated polydisperse suspensions. *B. Dai, A. Graham, S. Feng, S. Altobelli and K. Rasmussen*	**FM9.** Purely elastic instabilities in a cross-slot flow. *R. J. Poole, M. A. Alves, A. Afonso, F. T. Pinho and P. J. Oliveira*	**MR9.** Electrophoretic stretching of DNA using microscale T-scale junctions. *J. Tang and P. S. Doyle*	**PS9.** Dynamics of single DNA molecules in oscillatory shear flow. *D. G. Thomas and B. Khomami*
3:10		COFFEE		
3:35	**SC10.** Flow of small cohesive particles in a channel. *S. K. Ahuja*	**FM10.** A mechanism for oscillatory instability in viscoelastic cross-slot flow. *L. Xi and M. D. Graham*	**MR10.** DNA relaxation dynamics when confined in a nano/microfluidic channel. *C.-C. Hsieh, A. Balducci and P. S. Doyle*	**PS10.** Studies of polymer collisions: electrophoresing DNA colliding with a single post or an array of posts. *A. Mohan, J. M. Kim and P. S. Doyle*
4:00	**SC11.** Dynamics and self-organization of flowing granular chains. *A. Shen*	**FM11.** Low inertia mixing of viscous fluids by a chemically triggered shear flow instability. *T. I. Burghelea, K. Wielage-Burchard, I. A. Frigaard and M. D. Martinez*	**MR11.** A general method to study equilibrium partitioning of macromolecules into confining geometries. *Y. Wang, G. H. Peters, F. Y. Hansen and O. Hassager*	**PS11.** Rheological characterization with DPD. *T. F. Clarke and R. C. Armstrong*
4:25	**SC12.** Microstructural investigations of yielding behaviour in field-responsive fluids. *C. C. Ekwebelam and H. See*	**FM12.** The effects of poly(ethylene oxide) on the stability boundaries of flow regimes in co- and counter-rotating Taylor-Couette flow. *C. S. Dutcher and S. J. Muller*	**MR12.** DPD simulation of depletion layer and polymer migration in micro- and nanochannels for dilute polymer solutions. *D. A. Fedosov, B. Caswell and G. E. Karniadakis*	**PS12.** Dynamics of the coil-stretch transition in long, flexible polymers subjected to mixed linear flow fields. *B. D. Hoffman and E. Shaqfeh*
4:50	**SC13.** Effects of oxidation on magnetorheology. *S. Sunkara, T. W. Root, D. J. Klingenberg and J. C. Ulicny*	**FM13.** Self-sustaining process in plane Couette flow of viscoelastic fluids. *A. Morozov*	**MR13.** Stochastic Rotation Dynamics (SRD) simulation of electrokinetic polymer motion in a microchannel with spatially varying wall charge. *N. Watari and R. Larson*	**PS13.** Capillary breakup and shear rheology of dumbbell polymers. *C. Bailly, M. Rajan, U. S. Agarwal, C.-Y. Liu and P. Lemstra*
5:15		END		

Tuesday, October 9

Morning

8:30 **PL2.** Single particle motion in colloids: from microrheology to osmotic propulsion. *J. F. Brady* Grand Ballroom C

9:20 COFFEE

	Alpine East	*Alpine West*	*Canyon B*	*Canyon A*
	Suspensions, Colloids & Granular Media	**Non-Newtonian Fluid Mechanics**	**Microrheology, Microfluidics & Conf Sys**	**Polymer Solutions**
9:45		**FM14.** Near-transition dynamics of viscoelastic turbulence and drag reduction in plane Poiseuille flow. *L. Xi, W. Li and M. D. Graham*	**MR14.** Direct and inverse modeling for stochastic data in microbead rheology. *C. Hohenegger, L. Yao, J. Fricks, T. Elston, M. G. Forest, D. B. Hill and R. Superfine*	**PS14.** Brownian dynamics simulations of dilute polymer chains with bending and torsional potentials. *S. Jain and R. Larson*
10:10	**SC15.** Non-Boltzmann distribution of polymers and suspensions in dissipative systems: cross-stream migration vs. differential relaxation. *T. M. Squires*	**FM15.** Settling of an isolated spherical particle in a yield stress fluid. *A. M. Putz, T. I. Burghelea, I. A. Frigaard and M. D. Martinez*	**MR15.** The effect of tracer-medium interactions on microrheology measurements. *I. C. Carpen*	**PS15.** Two-dimensional turbulence in dilute polymer solutions - computational prediction through a microscopic-continuum interaction approach. *S. M. Mitran*
10:35	**SC16.** Shear-induced migration of suspensions in 1D, 2D, and 3D open flows. *J. F. Gilchrist and C. Gao*	**FM16.** 3D viscoelastic flow computations of a falling sphere in a Couette flow. *P. D. Anderson and M. A. Hulsen*	**MR16.** Oscillatory laser tweezer microrheology of a colloidal suspension. *I. Gopal and E. M. Furst*	**PS16.** Kinetic models for flows of biaxial liquid crystal polymers. *S. Sircar and Q. Wang*
11:00	**SC17.** Concentration, velocity and pressure distributions for a concentrated suspension flowing through an abrupt, annular contraction-expansion. *T. Moraczewski and N. C. Shapley*	**FM17.** Friction drag behavior of dilute polymeric solutions in prototypical complex kinematics flows: a multiscale simulation approach. *A. P. Koppol, R. Sureshkumar and B. Khomami*	**MR17.** Real Space Imaging of flow and yielding in soft particle pastes. *F. Monti, J. Seth, M. Cloitre and R. Bonnecaze*	**PS17.** Study of elongational properties of short glass fiber reinforced thermoplastics. *M. F. Naccache, A. A. Abdu, P. R. Souza Mendes, C. Mobuchon, M.-C. Heuzey and P. J. Carreau*
11:25	**SC18.** The particle pressure in sheared suspensions and an osmotic interpretation of particle migration phenomena. *J. F. Morris and Y. Yurkovetsky*	**FM18.** New formulation for stress calculation: application to flow in a T-junction with viscoelastic fluids. *H. M. Matos, M. A. Alves and P. J. Oliveira*	**MR18.** High throughput rheology using driven and diffusive microbeads. *R. C. Spero, O. Sul, J. Cribb, S. Lord, L. Vicci and R. Superfine*	**PS18.** Modeling polymer-particle nanocomposite flows. *Q. Wang, M. G. Forest and R. Zhou*

11:50 LUNCH

Afternoon

	Alpine East	*Alpine West*	*Canyon B*	*Canyon A*
	Suspensions, Colloids & Granular Media	**Non-Newtonian Fluid Mechanics**	**Microrheology, Microfluidics & Conf Sys**	**Polymer Solutions**
1:30	**SC19.** NMR measurement of irreversibility and particle migration in dilute sheared Brownian suspensions. *J. D. Seymour, J. R. Brown, S. L. Codd, E. O. Fridjonsson and G. R. Cokelet*	**FM19.** On a method for non-Newtonian compressible flow calculations. *A. S. Duarte and P. J. Oliveira*	**MR19.** Linear-to-nonlinear microrheology transitions: extensions of the Ferry shear wave method. *M. G. Forest, D. B. Hill, B. Lindley, S. M. Mitran, R. Superfine, L. Yao and J. Cribb*	**PS19.** Investigating the dispersion of nanoparticles in a polymer solution. *D. R. Gollamandala and I. C. Carpen*
1:55	**SC20.** Isochronal stress-strain response and 'aging' of concentrated latex suspensions. *G. B. McKenna, T. Narita and F. Lequeux*	**FM20.** Spurious modes in the computation of incompressible viscoelastic flows: diagnosis and correction. *S. M. Mitran and L. Yao*	**MR20.** Linking probe dynamics and transport to intracellular rheology. *S. A. Vanapalli, Y. Li, M. H. Duits and F. Mugele*	**PS20.** Nano-rod suspension flows: a 2D Smoluchowski-Navier-Stokes solver. *R. Zhou, M. G. Forest and Q. Wang*
2:20	**SC21.** A Hertzian model for the deformation and cracking of saturated colloidal packings. *W. B. Russel, N. Wu and W. Man*	**FM21.** Dimensionless non-Newtonain fluid mechanics. *P. R. de Souza Mendes*	**MR21.** Time-cure superposition for self-assembled oligopeptide hydrogels using microrheology. *T. H. Larsen and E. M. Furst*	**PS21.** Dimensional percolation & induced electrical conductivity of sheared nano-rod dispersions in a weakly conducting matrix. *X. Zheng, M. G. Forest, R. Zhou, R. Vaia and M. Arlen*

2:45	**SC22.** Micromechanical approach to the rheology of suspensions: microstructure and effective behavior. *X. Chateau and K. Luu Trung*	**FM22.** Polydomain simulation of liquid crystalline polymer orientation in channel flows. *J. Fang and W. R. Burghardt*	**MR22.** Microrheological investigation of acrylate photopolymerization kinetics. *R. P. Slopek and V. Breedveld*	
3:10	COFFEE			
				Biological and Self-assembled Systems
3:35	**SC23.** Influence of short-range interactions on wall-slip in microgel pastes. *J. Seth, R. Bonnecaze and M. Cloitre*	**FM23.** The interplay of thermal-induced and flow-enhanced crystallization in the analysis of steady state and transient high-speed fiber spinning. *A. J. McHugh and W. Kohler*	**MR23.** Microfluidic interfacial tensiometry. *J. A. Pathak, S. D. Hudson and S. P. Forry*	**BS1.** Water-based interpenetrating networks with tunable properties. *S. Choudhary and S. R. Bhatia*
		Blends, Emulsions and Multiphase Fluids		
4:00	**SC24.** Rheological measurements of colloidal glasses and shear-induced crystals coupled with Light Scattering Echo. *N. Koumakis and G. Petekidis*	**BE1.** Component terminal dynamics from tracer blends. *I. Zeroni, S. N. Ozair and T. P. Lodge*	**MR24.** Dynamics of microfluidic droplet breakup of viscoelastic polyelectrolyte solutions. *G. Christopher and S. Anna*	**BS2.** Self-assembly of hydrophobically-modified hyaluronic acid into physical gels. *M. A. Kandadai, J. J. Magda, G. D. Smith, D. Bedrov, J. Mays and G. Sakellariou*
			Entangled Solutions and Melts	
4:25	**SC25.** Effects of particle hardness on shear thickening colloidal suspension rheology and STF-composite performance. *N. J. Wagner, D. Kalman and J. Houghton*	**BE2.** Viscoelastic and dielectric behavior of a miscible polyisoprene/poly(4-t-butyl styrene) blend. *H. Watanabe*	**SM1.** Using cone-partitioned plate to achieve steady state measurements in both controlled stress and controlled speed shear of entangled polymer solutions. *S. S. Ravindranath and S.-Q. Wang*	**BS3.** Cooperative networks: viscoelastic control in solutions of wormlike micelles and polymers. *M. W. Liberatore and N. Work*
4:50	**SC26.** Flow mechanics of filled polymer melts. *B. J. Anderson and C. F. Zukoski*	**BE3.** Concentration fluctuation effects on blend dynamics. *W. Liu, R. H. Colby and D. Bedrov*	**SM2.** Differences between annealing and geometrical methods used to generate primitive path networks. *S. Shanbhag and M. Kroger*	**BS4.** The effect of branching on the shear and extensional rheology of wormlike micelle solutions. *M. Chellamuthu and J. P. Rothstein*
5:15	END			
5:30	BUSINESS MEETING Canyon A			
7:00	AWARDS RECEPTION Grand Ballroom C			
8:00	AWARDS BANQUET Grand Ballroom C			

Wednesday, October 10

Morning

8:30 **PL3.** Novel ink designs for direct writing in three dimensions. *J. A. Lewis* Grand Ballroom C

9:20 COFFEE

	Alpine East	*Alpine West*	*Canyon B*	*Canyon A*
	Suspensions, Colloids & Granular Media	**Blends, Emulsions and Multiphase Fluids**	**Entangled Solutions and Melts**	**Biological and Self-assembled Systems**
9:45	**SC27.** Rheological studies of fluorocarbon-based microemulsion gels with triblock copolymers. *X. Pan and S. R. Bhatia*	**BE4.** Rheological characterization of blends of linear and long-chain branched polypropylene. *P. J. Carreau and S. H. Tabatabaei*	**SM3.** Constraint release relaxation in entangled polyisoprene systems. *H. Watanabe*	**BS5.** Microstructural dynamics of salt-responsive block copolypeptide hydrogels. *V. Breedveld and J. Sato*
10:10	**SC28.** Rheological properties of stable responsive block copolymer micelles. *E. van Ruymbeke, A. Pamvouksoglou, D. Vlassopoulos, G. Petekidis, G. Mountrichas and S. Pispas*	**BE5.** Mechanical hole burning spectroscopy in an SIS tri-block copolymer. *Q. Qin and G. B. McKenna*	**SM4.** Self-consistent modeling of constraint release in single-chain mean-field slip-link models. *J. D. Schieber and R. Khaliullin*	**BS6.** Phase behavior and microstructure for colloidal systems with attractive/repulsive interparticle potentials. *M. D. Bybee and J. L. Higdon*
10:35	**SC29.** Self induced microstruture in sheared suspensions of anisotropic dicolloids. *A. Kumar and J. L. Higdon*	**BE6.** Rheology and morphology of cocontinuous polymer blends during coarsening and pinch-off. *C. R. Lopez-Barron, J. R. Bell and C. Macosko*	**SM5.** Thermodynamically guided Nonequilibrium Monte Carlo methodology for generating realistic shear flows of polymer melts. *C. Baig and V. G. Mavrantzas*	**BS7.** Correlation of chitosan's rheological properties to its ability to electrospin. *W. E. Krause, R. R. Klossner and H. A. Queen*
11:00	**SC30.** Experimental determination of the relationship between fiber orientation distribution and stress growth in start-up of flow for non-Newtonian fluids containing short glass fibers. *A. P. Eberle, D. G. Baird and P. Wapperom*	**BE7.** Preparation and rheology of double emulsion morphologies in compatibilized immiscible polymer blends. *J. D. Martin and S. Velankar*	**SM6.** Different theoretical considerations of nonlinear flow behavior of entangled polymers. *S.-Q. Wang, S. S. Ravindranath, Y. Wang and P. E. Boukany*	**BS8.** Associative polymer facilitated electrospinning of nanofibers: role of viscoelasticity. *S. Talwar, J. Hinestroza, B. Pourdeyhimi and S. Khan*
11:25	**SC31.** Effect of aggregate structure and length of carbon nanotubes on the rheological properties of nanotube/epoxy suspension. *S. S. Rahatekar, K. K. Koziol, A. H. Windle, R. Jain, S. Kumar, E. K. Hobbie and J. W. Gilman*	**BE8.** Porod SAXS studies of shear-induced droplet deformation in a concentrated immiscible polymer blend. *W. R. Burghardt and K. L. Brinker*	**SM7.** Simultaneous acquisition of rheological data and microscopic images on molten polymers. *J. Nijman, C. Küchenmeister and P. Sierro*	**BS9.** Coupling of cell orientation to alignment of collagen substrates. *J. E. Kirkwood, J. Rajadas and G. G. Fuller*

11:50 LUNCH

Afternoon

	Alpine East	*Alpine West*	*Canyon B*	*Canyon A*
	Suspensions, Colloids & Granular Media	**Blends, Emulsions and Multiphase Fluids**	**Entangled Solutions and Melts**	**Biological and Self-assembled Systems**
1:30	**SC32.** Electrical conductivity enhancement in carbon nanotube-polymer composites. *E. J. Tozzi, C. Schilling, W. Bauhofer and D. J. Klingenberg*	**BE9.** Polymer-polymer interfacial slip measurements in multilayered films. *P. C. Lee, H. E. Park and C. Macosko*	**SM8.** Stress relaxation of narrow molar mass distribution polystyrene following uniaxial extension. *J. K. Nielsen, H. K. Rasmussen and O. Hassager*	**BS10.** In vitro optical measurements of the interaction between human lung cells and single-wall carbon nanotubes. *M. L. Becker, J. A. Fagan, J. Chun, B. J. Bauer and E. K. Hobbie*
1:55	**SC33.** Rheological behavior of polycaprolactone containing rod-like hydroxyapatite nano particles. *S.-P. Sun, M. T. Shaw and M. Wei*	**BE10.** Role of desorption kinetics in surfactant-mediated microscale tipstreaming. *W. Lee, L. M. Walker and S. Anna*	**SM9.** Hidden (and not so hidden) traps in extensional rheometry of high viscosity systems: the dangers of new generation easy-to-use rheometers. *J. M. Maia*	**BS11.** Evaluating viscoelastic properties of the cornea and sclera in vitro using elevated intraocular pressure in whole eyes. *M. S. Mattson, M. E. Wiseman, C. Yu, D. M. Schwartz, R. H. Grubbs and J. A. Kornfield*

2:20	**SC34.** Using hydrodynamics to sort single wall carbon nanotubes by length. *J. Chun, J. A. Fagan, B. J. Bauer and E. K. Hobbie*	**BE11.** Numerical modeling of electrorheological emulsions. *A. Fernandez*	**SM10.** Rheological analysis of a system of well-defined sparsely long-chain branched polyethylenes with the McLeish-Larson pom-pom model. *C. W. Seay, C. D. McGrady and D. G. Baird*	**BS12.** Rheological, mechanical and failure properties of biological soft tissues at high strains and rates of deformation. *M. Sentmanat*
2:45	**SC35.** Characterizing dispersion of graphite nanocomposites via melt rheology. *H. Kim and C. Macosko*	**BE12.** Drop oscillations under simple shear in a highly viscoelastic matrix. *Y. Renardy*	**SM11.** Atomistic, nonequilibrium molecular dynamic simulations of an H-shaped polyethylene melt under shear. *C. Baig and V. G. Mavrantzas*	**BS13.** A new mechanism to explain physiological lubrication. *D. F. James and G. M. Fick*
3:10	COFFEE			
3:35	**SC36.** Rheology of clay-GCC coating colors. *S. Savarmand, P. J. Carreau, F. Bertrand and D. J. Vidal*	**BE13.** Shape dynamics of droplet/matrix systems with viscoelastic components at bulk and confined conditions: experiments and comparison with 3D simulations. *V. Kristof, R. Cardinaels, P. Moldenaers and Y. Renardy*	**SM12.** Rheological properties of molten polypropylenes containing supercritical CO_2: effects of long-chain branching, CO_2 concentration, pressure, and temperature. *H. E. Park and J. M. Dealy*	**BS14.** Viscoelasticity and conformation kinetics of smart protein bundles "forisomes". *S. Warmann, A. Shen and W. Pickard*
4:00	**SC37.** Laponite-PEO dispersions as glassy systems: rheology, dynamics and structure. *H. A. Baghdadi and S. R. Bhatia*	**BE14.** Direct numerical simulations of droplet emulsions in the viscoelastic two-phase fluid system in sliding bi-periodic frames using the level-set method. *S. J. Kim and W. R. Hwang*	**SM13.** The nonlinear rheology of entangled linear comb polymer solutions. *K. M. Kirkwood, M. Kapnistos, N. Hadjichristidis, D. Vlassopoulos and G. Leal*	**BS15.** Rheology of viscoelastic surfactant in heavy brines. *Y. Chen and Y. Christanti*
4:25	**SC38.** Structural analysis and scaling behavior of organoclay dispersions. *C. Mobuchon, P. J. Carreau and M.-C. Heuzey*	**BE15.** Two-dimensional bubble and droplet motion in a yield-stress fluid. *J. P. Singh and M. M. Denn*	**SM14.** Linear and nonlinear rheology of model Cayley-tree polymers. *E. van Ruymbeke, E. B. Muliawan, D. Vlassopoulos, S. G. Hatzikiriakos, A. Hirao and N. Hadjichristidis*	**BS16.** Phase field models for biofilm flows. *Q. Wang and T. Zhang*
4:50	**SC39.** Dispersion and rheology of single sheet graphene materials. *B. Ozbas, D. Adamson, J. Vermant, R. A. Register, I. A. Aksay and R. K. Prud'homme*	**BE16.** Viscoelastic effects on drop deformation in a converging pipe flow. *D. Zhou, P. Yue and J. J. Feng*	**SM15.** Correlations between thermorheological properties and molecular structure of long-chain branched polyethylene. *F. J. Stadler and H. Münstedt*	**BS17.** Viscoelastic properties of acellular scaffolds for the bioengineering of vocal fold tissues. *R. W. Chan*
5:15	**SC40.** Flow-induced orientation in exfoliated polystyrene/clay nanocomposites. *L. M. Dykes, W. R. Burghardt and J. M. Torkelson*		**SM16.** Linear viscoelastic response and viscosity of ring melts. *M. Hu, G. B. McKenna, J. A. Kornfield and R. H. Grubbs*	
5:40	END			
6:00	POSTER SESSION & RECEPTION Grand Ballroom C			

Thursday, October 11

Morning

	Alpine East	*Alpine West*	*Canyon B*	*Canyon A*
	Suspensions, Colloids & Granular Media	**Blends, Emulsions and Multiphase Fluids**	**Entangled Solutions and Melts**	**Solids and Glasses**
8:05	**SC41.** Brownian motion of germanium nanowires. *B. D. Marshall, D. C. Lee, B. A. Korgel and V. A. Davis*	**BE17.** Viscoelasticity and microstructure of PVC-bentonite nanocomposites. *A. Romo-Uribe, M. E. Romero-Guzmán, C. Cruz-Ramos and R. Olayo*	**SM17.** What is the size of a ring polymer in a ring-linear blend?. *B. Iyer, A. K. Lele and S. Shanbhag*	**SG1.** Impact fatigue of cross-linked rubbers in simple extension. *A. V. Gagov, A. Y. Melnikov and A. I. Leonov*
8:30	**SC42.** Rheological behavior of polyamide-6 based nanocomposites in transient flow. *M. Sepehr, K. K. Kabanemi and L. A. Utracki*	**BE18.** The effect of nanoparticles on polymer melt rheology. *J. E. Seppala and M. E. Mackay*	**SM18.** A model for predicting linear viscoelastic response of entangled flexible ring polymer melt.. *A. K. Lele, B. Iyer and V. A. Juvekar*	**SG2.** Mechanics of rubber shear springs. *A. N. Gent, J. B. Suh and S. G. Kelly*
	Rheology in Energy Production			
8:55	**EP1.** Rheology as diagnostic tool in characterizing fluids in energy recovery. *R. K. Prud'homme*	**BE19.** Rheology of polyethyleneoxide in polyisobutylene pickering emulsions. *P. Thareja and S. Velankar*	**SM19.** Rheology of oligomeric ionomer melts. *R. A. Weiss*	**SG3.** Biodegradable double networks incorporating Polyhedral Oligosilsesquioxane (POSS) moieties. *K.-M. Lee and P. T. Mather*
9:20	**EP2.** Complex fluids in flow assurance. *R. Venkatesan and A. Montesi*		**SM20.** Probe rheology II: terminal dynamics and glass transition of probe chains in a heterogeneous entangled network. *C.-Y. Liu, R. Keunings and C. Bailly*	**SG4.** Rheology, thermal transitions and small-angle X-Ray scattering of polyurea elastomers. *J. A. Pathak, P. H. Mott, C. M. Roland, D. Ho, E. Lin, M. K. Vukmir and T. H. Epps, III*
9:45		COFFEE		
10:10	**EP3.** An experimental study of non-Newtonian displacement flows in vertical eccentric annuli. *S. T. Storey, I. A. Frigaard and M. D. Martinez*	**BE21.** Small-angle X-ray scattering study of nanoclay flow-induced orientation. *A. Romo-Uribe, P. T. Mather, T. Marsh and C. Cruz-Ramos*	**SM21.** Investigation and modification of the melt rheology of olefin block copolymers. *P. Gupta*	**SG5.** Connections between the rheology of glassy materials and the mechanical unfolding of proteins. *N. Duff and D. J. Lacks*
10:35	**EP4.** Superimposed oscillation and shear: evaluation of static and dynamic sag in drilling fluids. *J. E. Maxey*	**BE22.** High rate extensional flow behavior of confectionery products – objectifying “mouthfeel”. *M. Sentmanat*	**SM22.** Viscoelasticity of polypropylene carbon nanotube composites: effect of functionalization and processing conditions. *V. K. Radhakrishnan, B. J. Downs, D. Nepal and V. A. Davis*	**SG6.** Pressure relaxation of polystyrene and comparison to the shear response. *Y. Meng and S. L. Simon*
11:00	**EP5.** Rheology of model waxy crude oils with relevance to gelled pipeline restart. *K. Oh, K. Guimaraes, J. J. Magda and M. Deo*	**BE23.** Models and experiments to understand physically blown foams. *R. R. Rao, L. A. Mondy, T. A. Baer, E. M. Russick, D. A. Adolf, A. M. Grillet, R. O. Cote, J. B. Lechman and A. M. Kraynik*	**SM23.** Effect of pressure on shear-induced crystallization of isotactic polypropylene. *J. S. Tiang and J. M. Dealy*	**SG7.** Time-resolved synchrotron study of double yield points in LLDPE. *A. Romo-Uribe, A. Manzur and R. Olayo*
11:25	**EP6.** Rheology of biomass slurries. *T. Scott, M. Ehrhardt, J. Wang, T. W. Root and D. J. Klingenberg*	**BE24.** Disjoining pressure for non-uniform thin films. *B. Dai, G. Leal, A. Redondo and A. Graham*	**SM24.** Experimentally observed criteria for flow induced crystallization in polymers. *D. Arora, F. Li and H. H. Winter*	**SG8.** Rheology of soft glasses and gels during solidification. *H. H. Winter*
11:50	**EP7.** Enzo-rheology: investigations of high-solids biomass slurries for bio-refinery applications. *M. W. Liberatore*	**BE25.** ARES-G2: a new generation of separate motor and transducer rheometers. *A. J. Franck, R. Ulbrich, M. L. Yao, C. Macosko, R. F. Garritano and J. Berting*	**SM25.** Thermoforming wedges. *K. L. Lieg and A. J. Giacomin*	**SG9.** Mode-coupling theory for linear viscoelasticity and flow behavior of colloidal suspensions near the glass transition. *J. J. Crassous, M. Siebenbürger, M. Ballauff, O. Henrich, D. Hajnal, M. Fuchs and M. Drechsler*
12:15		END		

Poster Session

Wednesday 6:00 PM Grand Ballroom C

PO1. Validating phase angles in oscillatory testing. *S. Velankar and D. Giles*

PO2. Fast sampling in oscillation mode. *A. Elmoumni, P. Hodder and B. Costello*

PO3. Response of viscoelastic fluids under combined oscillatory shear and compression flow. *J. H. Kim, J. H. Sung, J. G. Nam, K. H. Ahn and S. J. Lee*

PO4. Yield stress measurement of biofluids. *D. De Kee and K. Frederic*

PO5. Twelve years of EC-motors in rotational rheometers. *J. Laeuger*

PO6. Characterizing low viscosity material under fast deformation: experiments & frustration. *N. J. Kim, H. Kang, K. H. Ahn and S. J. Lee*

PO7. Rheological analysis of highly shear-thinning shampoo using multiple ranges of Brookfield instruments in cone-plate and coaxial-cylinder geometries. *D. J. Moonay and B. T. Sullivan*

PO8. Using capillary break-up to determine the maximum tensile strength of liquids at low stressing rates. *A. S. Lubansky, R. Brad and R. Williams*

PO9. Accurate temperature control for rotational rheometers. *J. Laeuger*

PO10. PVT instrument for pressure relaxation measurements. *Y. Meng and S. L. Simon*

PO11. Real-time determination of the gelling characteristics of time-dependent fluids. *D. M. Binding and P. M. Phillips*

PO12. Preventing wall slip in rheology experiments. *T. Chen*

PO13. Ubiquity of domain patterns in sheared viscoelastic fluids. *E. K. Hobbie*

PO14. A generalized, thermodynamically-founded Giesekus model incorporating chain finite-extensibility and bounded free energy effects. *P. Stephanou, C. Baig and V. G. Mavrantzas*

PO15. High concentration viscosity behavior of light, heavy and bitumous oils: comparison with model polymeric molecules. *R. Linscombe and G. Robinson*

PO16. 3D numerical study of multilayer coextrusion. *S. J. Kim, K.-H. Lim, P. C. Lee and C. Macosko*

PO17. Rheology of chocolate seen from a different point of view. *C. Küchenmeister, K. Oldörp and J. P. Plog*

PO18. Nonlinear dynamics of film process using PLA. *D. M. Shin, S. W. Choi, J. S. Lee, H. W. Jung and J. C. Hyun*

PO19. What do we know about chain entanglement in absence of flow?. *S.-Q. Wang*

PO20. Comparison among sliplink simulations on bidisperse linear polymers. *Y. Masubuchi, H. Watanabe, G. Ianniruberto, F. Greco and G. Marrucci*

PO21. Strain affects the solubility of elastomers. *C. C. White, D. Hunston and K.-T. Tan*

PO22. Elastic breakup of entangled polymers in uniaxial extension: is there a steady-state at high Weissenberg Numbers?. *Y. Wang and S.-Q. Wang*

PO23. Single segment conformation tensor differential toy model with inter-chain tube pressure effect. *S. D. Dhole, A. Leygue, C. Bailly and R. Keunings*

PO24. Influence of die geometry on extrudate swell and concentration defect in the extrusion of polypropylene reinforced with glass fibers. *F. Rodríguez-González, J. Pérez-González and L. de Vargas*

PO25. Step shear in entangled polymer melts: from interfacial to bulk failure at large shear deformation.. *P. E. Boukany and S.-Q. Wang*

PO26. Rheological prorperites of extracellular matrix derived hydrogels. *D. O. Freytes, S. Kolman, S. Velankar and S. F. Badylak*

PO27. New measuring cell for UV assisted thermal curing at elevated temperatures. *C. Küchenmeister, J. Nijman and K. Sugimoto*

PO28. What are the origins of stress relaxation behaviors in step shear of entangled polymer solutions?. *S. S. Ravindranath and S.-Q. Wang*

PO29. Investigation of a thermoset epoxy system. *L. E. Waguespack and S. Hayes*

PO30. Melt blown polymer nanofibers. *C. J. Ellison, A. Phatak, B. Suman, D. H. Tan, S. Kumar, C. Macosko and F. S. Bates*

PO31. Linear and nonlinear rheological characterization of telechelic polybutadienes with ionic end-groups. *F. J. Stadler, R. Keunings and C. Bailly*

PO32. Shear modulus and osmotic pressure of glucose- and pH-sensitive hydrogels. *J. J. Magda, S. Chang, F. Horkay, G. Lin, S. Lew, I.-S. Han and M.-H. Han*

PO33. Rheology, morphology and properties of immiscible blends. *G. L. Batch, C. Macosko and L. Patrick*

PO34. Viscoelastic properties of blends of hybrid copoy(POSS-PS) nanocomposite and polystyrene. *A. Romo-Uribe, M. Zarate-Hernandez and E. Ovalle-García*

PO35. Confocal microscopy of strained jammed emulsions. *J. Clara Rahola and E. R. Weeks*

PO36. On the interfacial rheology of inks. *S. Savarmand and R. J. Durand*

PO37. Spreading of non-Newtonian droplets on glass surfaces with controlled wettability. *Y. SON and C. Kim*

PO38. Nanosphere embedment as a method to extract surface rheological and surface adhesive properties. *S. A. Hutcheson and G. B. McKenna*

PO39. Structure and diffusion of polyelectrolyte chains in confined spaces of slit micro/nanochannel by Brownian dynamics simulations. *M.-S. Chun*

PO40. Nonlinear rheology of square-well colloidal dispersions. *A. J. Downard, J. W. Swan, J. F. Brady and Z.-G. Wang*

PO41. Sensitivity in slot coating flows using frequency response method. *S. H. Shim, B. K. Ryu, H. Y. Park, D. M. Shin, H. W. Jung and J. C. Hyun*

PO42. Exploring the high frequency behavior of dilute polymer chains in extensional and shear flows using Brownian Dynamics simulation with bending and torsional potentials. *S. Jain and R. Larson*

PO43. Fully three-dimensional simulations of viscoelastic flow around a linear periodic array of cylinders. *D. J. Adrian, S. D. Phillips and R. C. Armstrong*

PO44. Estimation of the repulsive force between two interacting Gaussian chains. *K. Horio, Y. Masubuchi, H. Watanabe, R. Khaliullin and J. D. Schieber*

PO45. Direct calculation of limit cycles and their stability under draw resonance mode. *J. H. Yun, D. M. Shin, J. S. Lee, H. W. Jung and J. C. Hyun*

PO46. Isotropic-nematic phase transition in a liquid crystal droplet. *X. Chen, B. Hamlington and A. Shen*

PO47. Texture orientation correlations and macromolecular alignment in thermotropic liquid crystalline copolyester. *A. Romo-Uribe*

PO48. Optical texture evolution and viscoelastic properties of liquid crystalline polymers: the effect of chemical composition. *A. Romo-Uribe, M. Domínguez-Díaz and M. E. Romero-Guzmán*

PO49. Dynamics and rheology of high molar mass polyethylene oxide solutions. *A. M. Shetty and M. J. Solomon*

PO50. Characterizing the conformational evolution and diffusion of xanthan in solvent by single molecule imaging. *D.-E. Lee, M.-S. Chun and C. Kim*

PO51. Effect of surfactants on enhanced oil recovery from kaolin. *R. Carlton, M. Vasudevan and R. Sureshkumar*

PO52. Flow kinematics of electrospinning and application to the extensional viscometry of semi-dilute polymer solutions. *M. E. Helgeson, K. N. Grammatikos, N. J. Wagner and J. M. Deitzel*

PO53. Self-similar shear thickening behavior in CTAB/NaSal surfactant solutions. *M. Vasudevan, A. Shen, B. Khomami and R. Sureshkumar*

PO54. The rheological properties of high volume fly ash cement paste. *A. Pekrioglu Balkis*

PO55. Rheology and shear-induced alignment of PP/MWCNT dispersions. *S. Pujari and W. R. Burghardt*

PO56. Investigating retardation time behavior of ageing suspensions of laponite. *Y. M. Joshi, R. Reddy, A. L. Kulkarni and R. P. Chhabra*

PO57. Universal ageing phenomena in soft glassy materials. *Y. M. Joshi and R. Ranjith*

PO58. Nanosilver particle suspension for Drop-on-Demand (DOD) inkjet printing. *J. H. Sung, A. Lee, K. H. Ahn and S. J. Lee*

PO59. Heterogeneity on stress development in suspension coating process. *S. Kim, J. H. Sung, K. H. Ahn and S. J. Lee*

PO60. Structural transitions of MR fluids in microgravity. *P. A. Vasquez, E. M. Furst and J. Agui*

PO61. Drying of particle laden non-Newtonian fluids. *J. I. Han and C. Kim*

PO62. Self organization of granular chains. *X. Zhang and A. Shen*

PO63. A rapid method to predict particle sedimentation of charge-stabilized coatings. *C. Rohn and F. Mazzeo*

PO64. Rheology of glass fibers suspensions in viscoelastic media. *B. M. Marín-Santibáñez, J. Pérez-González and L. de Vargas*

PO65. Particle interaction measurements using laser tweezer optical trapping. *M. D. Reichert, C. M. Brotherton, S. Sainis, E. Dufresne and A. M. Grillet*

PO66. Rheological characterization of concentrated pharmaceutical protein solutions. *A. Vance, P. Masatani and Z.-Q. Wen*

PO67. High speed micro-measurements of dynamic interaction of red blood cell and platelet-sized particles in sudden expansion. *R. Zhao, F. Shu, J. Marhefka, M. V. Kameneva and J. F. Antaki*

PO68. Slip detection of biocompatible materials under oscillatory shear conditions. *S. A. Klemuk and I. R. Titze*

PO69. Tuning of tissue engineering hydrogel material properties. *J. L. Vanderhooft and G. D. Prestwich*

PO70. Viscoelastic behavior of ocular lens soluble proteins. *M. A. Reilly and N. Ravi*

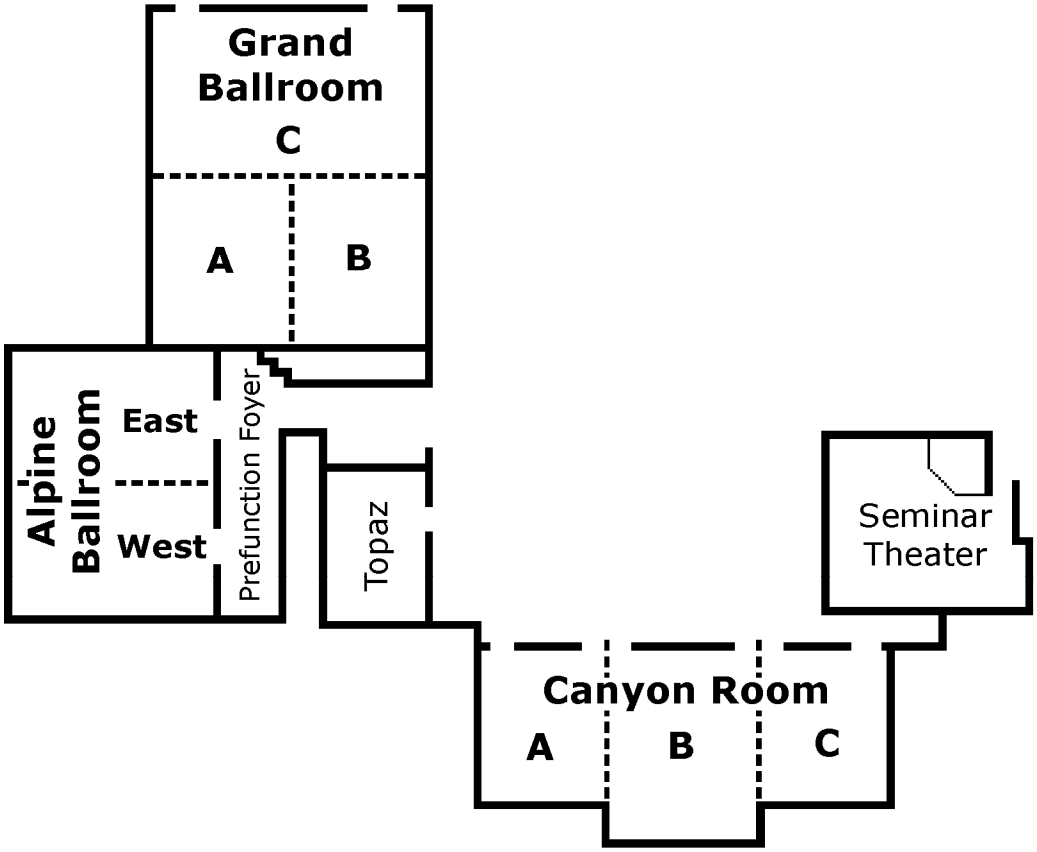
PO71. Optimized design of in situ forming vitreous substitutes. *K. E. Swindle, S. S. Dobson and N. Ravi*

PO72. Experimental and theoretical studies of the microstructure of incipient and mature blood clots. *P. R. Williams, R. L. Williams, K. M. Hawkins, P. Rees and M. R. Brown*

PO73. Non-linear rheology and ageing of hard and soft sphere glasses. *A. Le Grand, G. Petekidis and M. Ballauff*

PO74. Rheology and relaxation of an aging soft colloidal glass. *E. H. Purnomo, S. A. Vanapalli, D. van den Ende, J. Mellema and F. Mugele*

Hilton Salt Lake City Center – Second Level



Social Program

Sunday, October 7

Welcoming Reception
6:00 PM – 8:00 PM Alpine Ballroom

Tuesday, October 9

Society Business Meeting
5:30 PM Canyon A

Awards Reception
7:00 PM Grand Ballroom C
Sponsored by a generous contribution from Xpansion Instruments

Awards Banquet
8:00 PM Grand Ballroom C

Wednesday, October 10

Poster Session Reception
6:00 PM – 8:00 PM Grand Ballroom C
Sponsored by a generous contribution from Anton-Paar USA

The Society gratefully acknowledges the generous contributions of Anton-Paar USA, Malvern Instruments, and Xpansion Instruments.