

The Society of Rheology 82nd Annual Meeting

Santa Fe Convention Center, Santa Fe, New Mexico

Meeting Schedule

Monday, October 25, 2010

8:30	K. S. Schweizer (PL1)					
9:20	Coffee					
9:55	SC1	GM1	SI1	FD1	CR1	BF1
10:20	SC2	GM2	SI2	FD2	CR2	BF2
10:45	SC3	GM3	SI3	FD3	CR3	BF3
11:10	SC4	GM4	SI4	FD4	CR4	BF4
11:35	SC5	GM5	SI5	FD5	CR5	BF5
12:00	Lunch					
1:30	SC6	MS1	SI6	FD6	CR6	BF6
1:55	SC7	MS2	SI7	FD7	CR7	BF7
2:20	SC8	MS3	SI8	FD8	CR8	BF8
2:45	SC9	MS4	SI9	FD9	CR9	BF9
3:10	Coffee					
3:35	SC10	MS5	SI10	FD10	CR10	BF10
4:00	SC11	MS6	SI11	FD11	CR11	BF11
4:25	SC12	MS7	SI12	FD12	CR12	BF12
4:50	SC13	MS8	SI13	FD13	CR13	BF13
5:15	SC14	MS9	SI14	FD14	CR14	BF14
5:40	End					
6:30	Society Reception					

Tuesday, October 26, 2010

8:30	T. C. McLeish (PL2)					
9:20	Coffee					
9:55	SC15	MS10	SI15	GM6	SA1	CR15
10:20	SC16	MS11	SI16	GM7	SA2	CR16
10:45	SC17	MS12	SI17	GM8	SA3	CR17
11:10	SC18	MS13	SI18	GM9	SA4	CR18
11:35	SC19	MS14	SI19	GM10	SA5	CR19
12:00	Lunch					
1:30	SC20	MS15	SI20	GM11	SA6	CR20
1:55	SC21	MS16	SI21	GM12	SA7	CR21
2:20	SC22	MS17	SI22	GM13	SA8	CR22
2:45	SC23	MS18	SI23	GM14	SA9	CR23
3:10	Coffee					
3:35	SC24	MS19	NP1	GM15	SA10	CR24
4:00	SC25	MS20	NP2	GM16	SA11	CR25
4:25	SC26	MS21	NP3	GM17	SA12	CR26
4:50	SC27	MS22	NP4	GM18	SA13	CR27
5:15	End					
5:30	Society Business Meeting					
7:00	Awards Reception					
8:00	Awards Banquet					

Wednesday, October 27, 2010

8:30	J. A. Kornfield (PL3)					
9:20	Coffee					
9:55	SC28	MS23	NM1	GM19	SA14	NP5
10:20	SC29	MS24	NM2	GM20	SA15	NP6
10:45	SC30	MS25	NM3	GM21	SA16	NP7
11:10	SC31	MS26	NM4	GM22	SA17	NP8
11:35	SC32	MS27	NM5	GM23	SA18	NP9
12:00	Lunch					
1:30	SC33	MS28	NM6	GM24	SA19	NP10
1:55	SC34	MS29	NM7	GM25	SA20	NP11
2:20	SC35	MS30	NM8	GM26	SA21	NP12
2:45	SC36	MS31	NM9	GM27	SA22	NP13
3:10	Coffee					
3:35	SC37	MS32	NM10	GR1	SA23	NP14
4:00	SC38	MS33	NM11	GR2	SA24	NP15
4:25	SC39	MS34	NM12	GR3	SA25	NP16
4:50	SC40	MS35	NM13	GR4	SA26	NP17
5:15	End					
5:30	Poster Session & Reception					

Thursday, October 28, 2010

8:05	SC41	MS36	NM14	FD15	SA27	GR5
8:30	SC42	MS37	NM15	FD16	SA28	GR6
8:55	SC43	MS38	NM16	FD17	SA29	GR7
9:20	SC44	MS39	NM17	FD18	SA30	GR8
9:45	Coffee					
10:20	SC45	MS40	NM18	FD19	SA31	GR9
10:45	SC46	MS41	NM19	FD20	SA32	GR10
11:10	SC47	MS42	NM20	FD21	SA33	GR11
11:35	SC48	MS43	NM21	FD22	SA34	GR12
12:00	MS44					
12:25	End					

Session Codes

BF = Rheology of Natural Materials: Biorheology and Food Rheology
 CR = Computational Rheology: Behavior 'in Silico'
 FD = Micro- and Nano-Fluidics
 GM = Rheology and Flow of Glass-like Materials
 GR = General Rheology
 MS = Polymer Rheology: Melts, Solutions and Blends
 NM = Nano- and Micro-Rheology: Indentation and Beyond

NP = Complex Fluids: Nanocomposites and Phase Separated Systems
 PL = Plenary Lectures
 SA = Self-Assembling, Associative, and Gel-like Systems
 SC = Suspensions, Colloids and Emulsions
 SI = Surface and Interfacial Rheology

Monday, October 25

Morning

8:30	PL1. Activated relaxation and rheology of glassy materials: From dense colloidal suspensions to amorphous polymers. <u>K. S. Schweizer</u> Sweeney F					
9:20	COFFEE					
	Sweeney A	Sweeney B	Coronado/DeVargas	Peralta/Lamy	O'Keeffe/Milagro	Kearney
	Suspensions, Colloids and Emulsions	Rheology & Flow of Glass-like Materials	Surface and Interfacial Rheology	Micro- and Nano-Fluidics	Computational Rheology: Behavior 'in Silico'	Biorheology and Food Rheology
9:55	SC1. Connecting nanoscale motion and rheology of gel-forming colloidal suspensions. <u>S. Ramakrishnan, H. Guo, J. L. Harden and R. Leheny</u>	GM1. Constitutive modeling of the finite anisotropic elasto-viscoplastic behavior of oriented polymers. <u>T. A. Tervoort and M. Hütter</u>	SI1. Near surface dynamics of polymeric and molecular glasses: When does a surface glass transition make sense? <u>J. A. Forrest, D. Qi, C. Daley, Z. Fakhraai and M. D. Ediger</u>	FD1. Cooperative effects of surfactant and viscoelasticity in microscale thread formation. <u>W. Lee, L. M. Walker and S. Anna</u>	CR1. Structural signatures of mobility on intermediate time scales in a supercooled fluid. <u>T. M. Truskett, W. P. Krekelberg and V. Ganesan</u>	BF1. The viscoelasticity of living cells. <u>C. M. Anderson and G. G. Fuller</u>
10:20	SC2. Signatures of aging: Comparison between colloidal and molecular glass. <u>X. Di, K. Z. Win, G. B. McKenna, T. Narita, F. Lequeux, S. R. Puelle and Z. Cheng</u>	GM2. Theory of physical aging, strain softening, plastic flow and strain hardening in polymer glasses. <u>K. Chen and K. S. Schweizer</u>	SI2. Two-particle interfacial microrheology at polymer-polymer interfaces. <u>Y. Song and L. L. Dai</u>	FD2. Effect of confinement on droplet deformation in microfluidic hyperbolic contractions. <u>M. K. Mulligan and J. P. Rothstein</u>	CR2. Deformation of polystyrene melts near T_g : A molecular dynamics study. <u>Y. Chung and D. Lacks</u>	BF2. Effects of metastatic potential on internal cell mechanics. <u>D. Goldstein and D. Weihls</u>
10:45	SC3. Anisotropic cooperative structural relaxation in confined colloidal liquids under oscillatory shear. <u>P. Sarangapani and Y. E. Zhu</u>	GM3. Strain hardening and its relation to Bauschinger effects in oriented polymer glasses. <u>D. Senden, J. Van Dommelen and L. Govaert</u>	SI3. Using real-time DNA imaging/rheometry to demonstrate the molecular mechanisms of wall slip in entangled fluids: Interfacial chain disentanglement versus chain desorption. <u>P. E. Boukany, S.-Q. Wang and L. J. Lee</u>	FD3. Effect of confinement on drop-drop interaction in shear flow. <u>P. D. Anderson</u>	CR3. Brownian dynamics simulations of carbon nanotubes breaking during sonication. <u>G. Pagani, M. J. Green, P. Poulin and M. Pasquali</u>	BF3. Photorheological fluids and biophotoreists based on biopolymers. <u>V. Javvaji, A. G. Baradwaj, G. F. Payne and S. R. Raghavan</u>
11:10	SC4. Influence of particle shape on activated dynamics, elasticity and kinetic arrest in dense hard and sticky colloidal suspensions. <u>R. Zhang, R. Kramb, C. F. Zukoski and K. S. Schweizer</u>	GM4. Evaluation of the Dyre shoving model using dynamic data near the T_g . <u>B. Xu and G. B. McKenna</u>	SI4. The role of symmetric grafting copolymer on the suppression of drop coalescence. <u>Y. Gong and L. G. Leal</u>	FD4. Microfluidic production of self-organized droplet arrays in a fluidic network with hydrodynamic traps. <u>S. S. Bithi and S. A. Vanapalli</u>	CR4. Micromechanical constitutive modeling of the finite deformation of semicrystalline polymers. <u>A. Sedighiamiri, L. Govaert and J. Van Dommelen</u>	BF4. Photorheology studies of collagen crosslinking pertinent to corneal tissue engineering. <u>J. Huynh, V. A. Nguyen Huu, M. Mattson, D. Schwartz and J. A. Kornfield</u>
11:35	SC5. Viscoelasticity, dynamic fragility and soft jamming in glassy suspensions of soft colloids. <u>J. Yang and K. S. Schweizer</u>	GM5. Modeling rate-dependent plasticity with microstructure. <u>M. Hütter and L. van Breemen</u>	SI5. Viscosity of polystyrene nanometer films. <u>D. Peng, Z. Yang and O. K. Tsui</u>	FD5. Making adhesion independent of rheology: Microfluidic and structural control of adhesion in soft visco-elastic surfaces. <u>A. Sharma, A. Majumder, S. S. Patil and A. Ghatak</u>	CR5. A computational study of shear banding in reversible associating polymers. <u>A. R. Baljon, J. Billen and J. Stegen</u>	BF5. Rheological advancement of insulin aggregation and misfolding. <u>K. M. Batzli and B. J. Love</u>
12:00	LUNCH					

Afternoon

	Sweeney A	Sweeney B	Coronado/DeVargas	Peralta/Lamy	O'Keeffe/Milagro	Kearney
	Suspensions, Colloids and Emulsions	Polymer Rheology: Melts/Solutions/Blends	Surface and Interfacial Rheology	Micro- and Nano-Fluidics	Computational Rheology: Behavior 'in Silico'	Biorheology and Food Rheology
1:30	SC6. Self similarity in electrorheological behavior. <u>M. Kaushal, A. K. Patel and Y. M. Joshi</u>	MS1. A study on the flow, failure and rupture mechanisms of branched polyethylene in controlled-stress uniaxial extensional flow. <u>J. Maia and R. Andrade</u>	SI6. Viscoelastic and structural changes of human Meibomian lipids with temperature. <u>D. L. Leiske, M. Senchyna, H. A. Ketelson and G. G. Fuller</u>	FD6. Micro fluidic slug flow separation of two phase immiscible liquids. <u>M. R. Mackley, D. Agar, F. S. Scheiff and N. Reis</u>	CR6. Performance of mesoscale modeling methods for predicting microstructure, mobility and rheology of charged suspensions. <u>P. R. Schunk, J. B. Lechman and F. Pierce</u>	BF6. The confined flow of red blood cells past a wall-bound leukocyte. <u>A. H. Isfahani and J. B. Freund</u>

1:55	SC7. Dispersion and rheology of polymer coated graphene. <i>S. Das, J. L. Shelburne, A. S. Wajid and M. J. Green</i>	MS2. Reversible large amplitude planar extension of soft elastomers. <i>M. Jensen, A. L. Skov, H. Rasmussen and O. Hassager</i>	SI7. Interfacial microrheology of phospholipid monolayer with cholesterol at the air-water interface. <i>K. Kim, S. Q. Choi, J. A. Zasadzinski and T. M. Squires</i>	FD7. Lubricated extensional flow in a microchannel. <i>J. Wang, D. F. James and A. Guenther</i>	CR7. Determination of local viscoelastic properties of confined polymer melts from molecular dynamics simulations. <i>S. Kohale, M. Karim and R. Khare</i>	BF7. Probing the nonlinear response of collagen gels using confocal rheology. <i>R. C. Arevalo, P. Kumar, J. Urbach and D. L. Blair</i>
2:20	SC8. Yielding of colloidal glasses under large amplitude oscillatory shear (LAOS). <i>F. Renou, A. Poulos, N. Koumakis, J. Stellbrink and G. Petekidis</i>	MS3. Uniaxial extensional flow behavior of oligomeric sulfonated polystyrene melts. <i>G. H. Ling, R. A. Weiss and Y. Wang</i>	SI8. Surface aging in blood serum using active microrheology. <i>P. Dhar and J. A. Zasadzinski</i>	FD8. An immersed boundary method for flowing DNA through microfluidic devices. <i>Y. Zhang, J. J. de Pablo and M. D. Graham</i>	CR8. Molecular scale simulation correlations to rheological characteristics of complex mixtures. <i>P. H. Koenig, B. P. Murch, P. Verstraete, K. L. Anderson, D. M. Eike, J. D. Shaffer and M. L. Hilton</i>	BF8. Morphological and rheological characterization of chitosan anisotropic gels. <i>H. Lisboa, J. P. Borges, G. Pereira, A. M. Ramos and M. T. Cidade</i>
2:45	SC9. Delayed yield of colloidal gels. <i>J. Sprakel, S. B. Lindstrom and D. A. Weitz</i>	MS4. Investigation of the rheological behavior of polymer melts in equibiaxial elongational flows. <i>D. C. Venerus, T. Kashyap, T.-Y. Shiu and R. Heimerl</i>	SI9. Bulk and surface yield stress in a concentrated monoclonal antibody solution. <i>J. A. Pathak</i>	FD9. Controlled DNA tethering and stretching with microfluidics for single-molecule electronics. <i>G. Yu, E. S. Shaqfeh and Z. Bao</i>	CR9. Effect of interparticle and particle-wall hydrodynamic interactions on effective viscosity of a cylinder-bound suspension. <i>S. Navardi and S. Bhattacharya</i>	BF9. Mixing and conveying high solids biomass using rheological modifiers. <i>J. R. Samaniuk, D. J. Klingenberg, T. W. Root and C. T. Scott</i>
3:10			COFFEE			
3:35	SC10. A scaling theory for the drainage time of the thin film between two elastic spherical capsules or vesicles pushed against each other by a constant force. <i>A. Ramachandran and L. G. Leal</i>	MS5. Slip-link simulations of entangled polymers in planar extensional and planar mixed flows with comparison to experiments. <i>A. Kushwaha and E. S. Shaqfeh</i>	SI10. Interfacial rheology of single-wall carbon nanotube membranes. <i>E. K. Hobbie</i>	FD10. Separation of macromolecules by their size: The mean span dimension. <i>Y. Wang and O. Hassager</i>	CR10. Simulation of red blood cell aggregation and blood rheology. <i>D. A. Fedosov and G. Gompper</i>	BF10. Rheology modification and enzyme kinetics of high solids cellulosic slurries. <i>J. S. Knutsen and M. W. Liberatore</i>
4:00	SC11. The dynamics of a lipid vesicle in simple shear flow. <i>H. Zhao and E. S. Shaqfeh</i>	MS6. Melt extensional viscosity for polymer processing of PVC and PLA. <i>C. L. Jackson, P. D. Van Rheenan and K. J. Calzia</i>	SI11. Structure and rheology of fiber-laden membranes via integration of nematodynamics and membranodynamics. <i>A. D. Rey and Y. K. Murugesan</i>	FD11. Rheo-optics and μ -PIV for probing the high deformation rate rheological behavior of worm-like micelles in complex microscale flows. <i>T. J. Ober and G. H. McKinley</i>	CR11. Experiments and models to understand polyurethane foam processing. <i>R. R. Rao, L. A. Mondy, M. C. Celina, D. B. Adolf, J. M. Kropka and E. M. Russick</i>	BF11. Biomass suspension rheology as a predictor of susceptibility to enzymatic hydrolysis. <i>C. J. Dibble, J. L. Jorgenson, G. T. Beckham and M. P. Tucker</i>
4:25	SC12. Dynamics of suspensions of elastic capsules flowing in confined geometries. <i>P. Pranay, K. Sinha and M. D. Graham</i>	MS7. Examining the coil-stretch transition in flexible polymers. <i>R. Radhakrishnan and P. T. Underhill</i>	SI12. Dynamic moduli of nematic liquid crystal polymers with tangential anchoring. <i>E. P. Choate and M. G. Forest</i>	FD12. Irreversible gelation of wormlike micelle solutions in microfluidic devices. <i>P. Cheung, J. Cardiel, N. Dubash and A. Shen</i>	CR12. Stabilized finite element approximation of flows of viscoplastic liquids inside a cavity. <i>D. D. dos Santos, S. L. Frey, M. F. Naccache and P. R. de Souza Mendes</i>	BF12. Dyphagia - when rheology is hard to swallow. <i>A. S. Burbidge, J. Engmann and C. J. Pipe</i>
4:50	SC13. The effect of vesicle deformability on the adhesive interactions between vesicles. <i>A. Ramachandran and L. G. Leal</i>	MS8. Dynamics of moderately entangled ring polymers. <i>R. Pasquino, S. Rogers, F. Snijkers, G. Sakellariou, N. Hadjichristidis, T. Chang, D. Vlassopoulos and M. Rubinstein</i>	SI13. Modeling dynamics and rheology of droplets of liquid crystal polymers using kinetic theories. <i>Q. Wang, M. G. Forest and X. Yang</i>	FD13. Shear induced ordering of defect textures arising from the undulation instability of layered fluids. <i>S. Chatterjee and S. Anna</i>	CR13. A simulation-based approach to obtain the constitutive equation for waxy crude oil systems. <i>F. M. Thakkar, P. S. Doyle, R. C. Armstrong and R. Venkatesan</i>	BF13. Effects of acidification on the rheology of rennet induced curd made from buffalo milk: A comparison with cow's milk. <i>I. Hussain, A. Bell and A. Grandison</i>
5:15	SC14. The viscoelasticity of low viscosity ink jet suspensions. <i>M. R. Mackley, D. C. Vadillo and A. Mulji</i>	MS9. The linear rheological responses of dense branched brush polymer. <i>M. Hu, G. B. McKenna, Y. Xia, J. A. Kornfield and R. H. Grubbs</i>	SI14. Nanomechanical properties in ultrathin polymer films: Measurement on rectangular vs circular bubbles. <i>S. Xu and G. B. McKenna</i>	FD14. Intermittent dynamics in particle-tracking biomicrorheology. <i>D. Weihs</i>	CR14. Submerging flows of non-Newtonian impinging jets. <i>S. A. Roberts, P. R. Schunk, T. A. Baer and R. R. Rao</i>	BF14. The rheology and processing of swallowing starched based fluids. <i>M. R. Mackley, C. Rowan and R. Anthony</i>
5:40			END			
6:30			SOCIETY RECEPTION New Mexico History Museum			

Tuesday, October 26

Morning

8:30	PL2. A random walk in rheology. <u>T. C. McLeish</u> Sweeney F					
9:20	COFFEE					
	Sweeney A	Sweeney B	Coronado/DeVargas	Peralta/Lamy	O'Keeffe/Milagro	Kearney
	Suspensions, Colloids and Emulsions	Polymer Rheology: Melts/Solutions/Blends	Surface and Interfacial Rheology	Rheology & Flow of Glass-like Materials	Self-Assembling/Associative/Gel-like System	Computational Rheology: Behavior 'in Silico'
9:55	SC15. Dilation and capillary forces in dense shear thickening suspensions. <u>E. Brown and H. M. Jaeger</u>	MS10. A full-chain stochastic tube model for entangled polymeric liquids at high shear rates. <u>J. Park, D. W. Mead and M. M. Denn</u>	SI15. Mechanical properties of recombinant protein interfaces. <u>V. Mitropoulos, P. Fischer and E. J. Windhab</u>	GM6. Shear banding in soft glassy materials. <u>S. M. Fielding and M. E. Cates</u>	SA1. Some minimal models of network elasticity. <u>J. F. Douglas</u>	CR15. Residual mass for the immiscible liquid-liquid displacement of two visco-plastic material in a plane channel. <u>J. F. Freitas, E. J. Soares and R. L. Thompson</u>
10:20	SC16. Shear-induced structural reordering of a model nanoparticle system with tunable interactions. <u>A. P. Eberle, N. J. Wagner and N. S. Martys</u>	MS11. Dielectric relaxation as an independent examination of relaxation mechanisms in entangled polymers using the discrete slip-link model. <u>E. Pilyugina and J. D. Schieber</u>	SI16. A new, microfluidic method for compressible and incompressible interfacial rheology. <u>J. D. Martin, K. A. Erk and S. D. Hudson</u>	GM7. Rheology of complex urethane adhesives. <u>S. S. Deshmukh, V. Ginzburg, N. Wiese, G. Jialanella, S. Chaudhary and C. Christenson</u>	SA2. Swelling behavior and rheological response of porous, sponge-like hydrogels. <u>R. C. Hedden, J. Zhao and L. Ma</u>	CR16. Dynamics of bead formation and breakup in weakly viscoelastic jets. <u>A. M. Ardekani, V. Sharma and G. H. McKinley</u>
10:45	SC17. Experimental investigation of the sedimentation behavior of concentrated suspensions in non-Newtonian fluids under simple shear flows. <u>N. Tonmukayakul, J. Morris and J. E. Bryant</u>	MS12. Rheo-dielectric behavior of entangled linear and star polyisoprene. <u>H. Watanabe and K. Horio</u>	SI17. Flow accelerates coupling reactions at polymer interfaces. <u>J. Song, R. H. Ewoldt and C. Macosko</u>	GM8. Rheology and dynamics of soft glasses. <u>P. Agarwal and L. A. Archer</u>	SA3. Deciphering the relationship between structure and rheology for poly-thiophene organogels. <u>K. Weigandt, G. Newbloom and D. C. Pozzo</u>	CR17. Active and hibernating turbulence in channel and boundary layer flow of Newtonian and polymeric fluids. <u>L. Xi, S. Tamano and M. D. Graham</u>
11:10	SC18. Capillary forces in suspension rheology. <u>E. Koos and N. Willenbacher</u>	MS13. Large amplitude oscillatory shear responses of star polymers in solution. <u>J.-E. Bae, K. S. Cho and J. H. Youk</u>	SI18. Block copolymers at the oil-water interface. <u>I. Preker and M. Gottlieb</u>	GM9. Time-aging time-stress superposition in soft glass under tensile deformation field. <u>A. Shaikat, A. Sharma and Y. M. Joshi</u>	SA4. Rheology of associating block copolymer protein hydrogels. <u>F. Wan, S. Scott, S. E. Fischer and J. L. Harden</u>	CR18. Effects of viscoelasticity on the inertial wake in flow past a circular cylinder. <u>D. H. Richter, G. Iaccarino and E. S. Shaqfeh</u>
11:35	SC19. Structural instability in sedimentation through polymer solutions. <u>R. J. Phillips and L. Talini</u>	MS14. Analysis of entangled polymer bidisperse blends and molecular probe rheology experiments with the discrete slip-link model. <u>R. N. Khaliullin, J. D. Schieber, T. Kashyap and D. C. Venerus</u>	SI19. Surface cleaning using polymer solution and other non-Newtonian fluids. <u>T. T. Hsu, C. W. Frank and G. G. Fuller</u>	GM10. A constitutive law for the flow of soft glasses. <u>J. Seth, C. Locatelli, M. Cloitre and R. Bonnecaze</u>	SA5. Nonlinear stress-strain behavior of nematic elastomers using relative rotations. <u>H. Pleiner, H. R. Brand and A. Menzel</u>	CR19. Modeling of dual cylinder wind-up extensional rheometers*. <u>K. Yu, J. Marin, M. Jensen, H. Rasmussen and O. Hassager</u>
12:00	LUNCH					

Afternoon

	Sweeney A	Sweeney B	Coronado/DeVargas	Peralta/Lamy	O'Keeffe/Milagro	Kearney
	Suspensions, Colloids and Emulsions	Polymer Rheology: Melts/Solutions/Blends	Surface and Interfacial Rheology	Rheology & Flow of Glass-like Materials	Self-Assembling/Associative/Gel-like Systems	Computational Rheology: Behavior 'in Silico'
1:30	SC20. Rheology and microscopic particle dynamics in hard sphere glasses during start-up flow. <u>N. Koumakis, M. Laurati, S. Egelhaaf and G. Petekidis</u>	MS15. Reptation dynamics of single-walled carbon nanotubes in a network. <u>N. Fakhri, F. MacKintosh, L. Cognet, B. Lounis and M. Pasquali</u>	SI20. Fracture in aqueous foam. <u>S. Hilgenfeldt, S. Arif and J.-C. Tsai</u>	GM11. The effect of molecular size on glassy dynamics. <u>R. J. Larsen and C. F. Zukoski</u>	SA6. Flow of colloidal gels in uniform and constricted microchannels. <u>J. C. Conrad and J. A. Lewis</u>	CR20. Numerical solution of the second order fluid constitutive equation for 3D free surface flows. <u>M. F. Tomé and I. F. Revoredo</u>

1:55	SC21. Microstructure evolution in near-hard-sphere particle suspensions. <u>B. Xu, C. Gao and J. F. Gilchrist</u>	MS16. Effect of entanglement elasticity on the equilibrium primitive path length distribution in polymer melts. <u>R. J. Steenbakkens and J. D. Schieber</u>	SI21. The impact of polyelectrolyte-surfactant aggregate composition on elasticity and mechanical properties of air-liquid interfaces. <u>M. D. Reichert, C. F. Brooks, A. M. Grillet, L. A. Mondy and L. M. Walker</u>	GM12. On the viscoelastic Poisson's ratio in amorphous polymers. <u>L. Grassa, A. D'Amore and S. L. Simon</u>	SA7. An experimental design approach to understand rheology of HEUR systems. <u>S. S. Deshmukh, F. Castillo, B. Hefner Jr., V. Ginzburg, R. Jones, D. Chakraborty, J. P. Chauvel Jr., A. Larre and C. Christenson</u>	CR21. Analytical rheology: Identifying and resolving degenerate structures. <u>S. Shanbhag</u>
2:20	SC22. Plastic to brittle transition in bubble rafts. <u>C.-C. Kuo and M. Dennin</u>	MS17. Microscopic definition of entanglement. <u>A. E. Likhman, M. Ponnuragan and J. Cao</u>	SI22. Modeling the boundary conditions for liquid flow at solid surfaces. <u>S. Feng, A. Graham and A. Redondo</u>	GM13. A stochastic constitutive model of glassy materials explains post-yield softening. <u>G. A. Medvedev and J. M. Caruthers</u>	SA8. Structural and rheological evolution of particulate gels. <u>X. Cao, H. Cummins and J. Morris</u>	CR22. Numerical analysis of double concentric cylinder rheometer with slotted rotor. <u>W. Wang, D. B. Khismatullin, H. Zhu and D. De Kee</u>
2:45	SC23. Transient shear-induced microstructure and rheology of dilute colloidal gels. <u>B. Rajaram and A. Mohraz</u>	MS18. Constitutive equations for the flow behaviour of entangled polymer systems. <u>W. J. Briels</u>	SI23. A computational study of the influence of viscoelasticity on the interfacial dynamics of dip coating flows. <u>A. Abedijaberi, E. S. Shaqfeh and B. Khomami</u>	GM14. Mean-field behavior and viscoplastic theory of glassy-polymeric strain hardening. <u>R. S. Hoy, C. S. O'Hern and M. O. Robbins</u>	SA9. Multi-functional soft polymer composites. <u>J. L. Lenhart, R. Mrozek, J. Andzelm and M. VanLandingham</u>	CR23. Mathematical modeling to enforce a bounded magnitude for the eigenvalues of the conformation tensor, for stable simulation of viscoelastic fluids. <u>A. Jafari, N. Fietier and M. O. Deville</u>
3:10	COFFEE					
	Nanocomposites & Phase Separated Systems					
3:35	SC24. Hydrating cement pastes: Novel rheological measurement techniques of the acceleration of gelation. <u>B. D. Figura and R. K. Prud'homme</u>	MS19. Probing state of chain entanglement during and after shear deformation. <u>X. Li, Y. Wang and S.-Q. Wang</u>	NP1. X-ray scattering measurements of particle orientation in sheared polymer nanocomposites. <u>W. R. Burghardt and S. Pujari</u>	GM15. Molecular dynamics simulations of deformation-induced accelerated dynamics in glassy polymers. <u>M. R. Warren and J. Rottler</u>	SA10. Characterization of gels by LAOS. <u>J. E. Maxey</u>	CR24. Accelerated boundary integral method in non-periodic geometries. <u>A. Kumar and M. D. Graham</u>
4:00	SC25. Viscoelasticity and shear-induced aggregation in solutions of single walled carbon nanotubes with tunable interaction potential. <u>C. C. Young, A. W. Ma and M. Pasquali</u>	MS20. Lack of unique state in steady state shear of entangled polymer solutions. <u>S. Cheng, S.-Q. Wang, S. Ravindranath, P. E. Boukany and L. J. Lee</u>	NP2. Effect of molecular weight on rheological properties of PDMS-grafted alumina in PDMS melts. <u>R. S. Ndong and W. B. Russel</u>	GM16. Experimental observation and viscoelastic model prediction of non-linear mechanical behavior of PMMA in the glass transition region. <u>E.-W. Lee, G. A. Medvedev and J. M. Caruthers</u>	SA11. Rheology and photocrosslinking of alginate hydrogels. <u>C. A. Bonino, J. E. Samorezov, O. Jeon, E. Alsberg and S. A. Khan</u>	CR25. Reptate: A free software for analysing rheology of entangled polymers. <u>A. E. Likhman and J. Ramirez</u>
4:25	SC26. Extensional rheology of carbon nanotubes in chlorosulfonic acid. <u>D. E. Tsentlovich, A. W. Ma, N. Behabtu, C. C. Young and M. Pasquali</u>	MS21. Homogeneous shear, wall slip and shear banding of entangled polymeric liquids in simple-shear rheometry: A roadmap of nonlinear rheology. <u>S.-Q. Wang, P. E. Boukany and S. Ravindranath</u>	NP3. Rheology and structure of dispersed nanoparticles in polymer melts. <u>J. Moll, S. Gong, S. K. Kumar and R. H. Colby</u>	GM17. Viscoelastic durometry. <u>A. W. Mix, C. N. Anderson and A. J. Giacomin</u>	SA12. Amphiphilic derivatives of alginate: Rheology and controlled release. <u>S. Choudhary and S. R. Bhatia</u>	CR26. Constitutive modeling of highly ordered solutions of main-chain liquid crystalline polymers containing hairpins. <u>O. I. Matveichuk and J. J. Slot</u>
4:50	SC27. Effects of polyethylene glycol modification on the magnetorheological behavior of Fe ₃ O ₄ nanoparticle magnetic fluids. <u>X. Qiao, M. Bai, K. Tao, X. Gong, R. Gu, H. Watanabe, K. Sun, J. Wu and X. Kang</u>	MS22. Nanoparticles as interface modifiers for controlling coalescence and break-up in immiscible polymer blends. <u>S. Vandebril, J. Vermant and P. Moldenaers</u>	NP4. Rheological properties of ethylene-vinyl acetate and nanocrystalline cellulose composites. <u>D. Rodrigue, H. Mahi and E. Twite-Kabamba</u>	GM18. Physical aging and structural recovery of epoxy film subjected to carbon dioxide jump. <u>S. Kollengodu Subramanian and G. B. McKenna</u>	SA13. Effect of thermodynamics, chemical kinetics, and chemical heterogeneity on thermoreversible polymer networks. <u>R. S. Hoy and G. H. Fredrickson</u>	CR27. Simulations of morphology and mechanical properties of block-copolymer gels. <u>J. Andzelm, Y. Sliozberg, T. Chantawansri, K. E. Strawhecker, J. L. Lenhart and M. VanLandingham</u>
5:15	END					
5:30	SOCIETY BUSINESS MEETING Convention Center - Sweeney B					
7:00	AWARDS RECEPTION La Fonda on the Plaza - New Mexico and Santa Fe Rooms					
8:00	AWARDS BANQUET La Fonda on the Plaza - Ballroom					

* The title of this submission has been modified to remove the name of a commercial product or company to bring the title into compliance with SOR policy.

Wednesday, October 27

Morning

8:30	PL3. Molecular aspects of flow-induced crystallization of polymers. <i>J. A. Kornfield</i> Sweeney F					
9:20	COFFEE					
	<i>Sweeney A</i> Suspensions, Colloids and Emulsions	<i>Sweeney B</i> Polymer Rheology: Melts/Solutions/Blends	<i>Coronado/DeVargas</i> Nano- & Micro-Rheology: Indentation & Beyond	<i>Peralta/Lamy</i> Rheology & Flow of Glass-like Materials	<i>O’Keeffe/Milagro</i> Self-Assembling/Associative/Gel-like Systems	<i>Kearney</i> Nanocomposites & Phase Separated Systems
9:55	SC28. Microstructure measurements of shearing concentrated, near hard sphere colloidal dispersions via 1-2 plane flow-SANS. <i>N. J. Wagner, D. Kalman and L. Porcar</i>	MS23. Effect of reactive compatibilization on coalescence and rheological properties of thermoplastic olefin blends. <i>A. Maani, M.-C. Heuzey and P. J. Carreau</i>	NM1. Modeling instrumented indentation in visco-elastic and visco-plastic materials. <i>Y.-T. Cheng</i>	GM19. Crystallization kinetics of semi-crystalline polymers: From processing to properties. <i>T. van Erp, L. Govaert and G. Peters</i>	SA14. Rapid exfoliation and physical gelation of a clay-polymer nanocomposite. <i>H. H. Winter, K. Lania, M. Dressler, D. Arora and X. Wang</i>	NP5. Microstructural properties and rheological modeling of nanocomposites. <i>M. Dressler and H. H. Winter</i>
10:20	SC29. Characterization of stiff and flexible anisotropic nanoparticles using rheo-optics. <i>N. K. Reddy, J. Vermant, J. Dhont, J. Perez-Juste, I. Santos, L. Liz-Marzan, P. Lang and R. K. Prud’homme</i>	MS24. Interfacial relaxation phenomena in immiscible blends of polypropylene/polystyrene. <i>V. Shaayegan, P. Wood-Adams and N. R. Demarquette</i>	NM2. Contact mechanics in glassy polymers. <i>L. van Breemen, L. Govaert and H. Meijer</i>	GM20. Architectural effects on the viscoelastic bulk response in polystyrene. <i>J. Guo and S. L. Simon</i>	SA15. Injectable hyaluronan-based composite hydrogels for biomedical applications. <i>J. J. Magda, M. Kandadai, M. Alcoutlabi, X. Wang, D. Baskaran, J. Mays, S. Atzet, T. Zarembinski and F. Horkay</i>	NP6. Polymer-nanoparticle blends and their unusual liquid and solid state properties. <i>J. J. Wie, J. Seppala and M. E. Mackay</i>
10:45	SC30. Laser microrheology for soft materials. <i>C. Tisserand and Y. Lefevvre</i>	MS25. Droplet dynamics in eccentric annular flow. <i>N. Germann and E. J. Windhab</i>	NM3. Extension of the beam theory for the polymer bio-transducers with low aspect ratios and viscoelastic characteristics. <i>P. Du, I.-K. Lin, H. Lu and X. Zhang</i>	GM21. Direct visualization of glassy dynamics in a model polyamide rod system. <i>A. M. Shetty, P. Spicer and M. J. Solomon</i>	SA16. Flow-induced irreversible gel formation in micellar solutions: Experiments and modeling. <i>N. Dubash, J. Cardiel, P. Cheung and A. Shen</i>	NP7. In-situ synchrotron study on uniaxial deformation of SBS grafted with polyhedral oligomeric silsesquioxanes. <i>A. Lee</i>
11:10	SC31. Rheology of suspensions of cube shaped particles. <i>R. K. Mallavajula, D. L. Koch and L. A. Archer</i>	MS26. Droplet coalescence in shear flow: From bulk to confined conditions. <i>R. Cardinaels, D. Chen, P. De Bruyn and P. Moldenaers</i>	NM4. Characterization of new surface shape memory phenomena in soft and rigid shape memory polymers. <i>P. Yang, K. A. Burke, X. Luo and P. T. Mather</i>	GM22. Irreversible aging dynamics and phase behavior of aqueous suspensions of Laponite. <i>S. Allahbakhsh and Y. M. Joshi</i>	SA17. Irreversible structural transition induced by mechanical shear in a novel peptide-amphiphile system. <i>K. A. Megley and M. Tirrell</i>	NP8. Linear viscoelasticity of chiral liquid crystals. <i>Z. Cui</i>
11:35	SC32. Heterogeneity in the simple shear flow of concentrated suspensions. <i>K. H. Ahn</i>	MS27. Dispensing of complicated fluids – the influence of the rheological properties. <i>C. Clasen, P. Paul, L. Palangetic and J. Vermant</i>	NM5. Analysis of hydrated biological tissues and tissue surrogate gels under concentrated impact loading. <i>Z. I. Kalcioğlu, M. Qu, K. E. Strawhecker, M. VanLandingham, J. F. Smith and K. J. Van Vliet</i>	GM23. Dynamics and structures of dilute magnetic colloidal suspensions confined in thin films and monolayers near the glass transitions. <i>Y. Terada and M. Tokuyama</i>	SA18. Rheological studies of irreversible gelation of wormlike micellar solution. <i>J. Cardiel, N. Dubash, P. Cheung and A. Shen</i>	NP9. Simulating obstacle-foam interaction. <i>S. Cox and T. Davies</i>
12:00	LUNCH					

Afternoon

	<i>Sweeney A</i> Suspensions, Colloids and Emulsions	<i>Sweeney B</i> Polymer Rheology: Melts/Solutions/Blends	<i>Coronado/DeVargas</i> Nano- & Micro-Rheology: Indentation & Beyond	<i>Peralta/Lamy</i> Rheology & Flow of Glass-like Materials	<i>O’Keeffe/Milagro</i> Self-Assembling/Associative/Gel-like Systems	<i>Kearney</i> Nanocomposites & Phase Separated Systems
1:30	SC33. Dynamic simulation of fiber suspensions. <i>P. Kittipoomwong, A. Jabbarzadeh and H. See</i>	MS28. Compliance issues with rheometers*. <i>W. Zheng, G. B. McKenna and S. L. Simon</i>	NM6. Nano adhesion and indentation. <i>K. M. Liechti</i>	GM24. Dynamics of a colloidal glass during stress-mediated structural arrest. <i>A. S. Negi and C. O. Osuji</i>	SA19. Exploiting molecular self-assembly to design photorheological fluids. <i>S. R. Raghavan</i>	NP10. Method for measuring the non-linear modulus filled elastomers after weathering. <i>C. C. White, D. Hunston and K. T. Tan</i>

1:55	SC34. Fiber orientation for suspensions of long fibers: Comparison of rigid and flexible models. <i>C. Zhang and D. A. Jack</i>	MS29. Assumed periodicity and dynamic shear stress transduction in rheometry. <i>C. Kolitawong, A. J. Giacomin and L. M. Johnson</i>	NM7. Geometrically-controlled mechanomotability. <i>L. Han, L. Wang, K.-K. Chia, R. E. Cohen, M. F. Rubner, M. C. Boyce and C. Ortiz</i>	GM25. Rheological fingerprinting of an aging soft colloidal glass. <i>B. M. Erwin, D. Vlassopoulos and M. Cloitre</i>	SA20. Mechanical and structural transitions in block copolymer micelle solutions. <i>L. M. Walker, V. A. Cheng and T. A. LaFollette</i>	NP11. Anomalous creep behaviour of aging polybutadiene clay nanocomposite. <i>S. Allahbashi and Y. M. Joshi</i>
2:20	SC35. Fiber orientation and stiffness predictions for thin geometries using the Fast Exact Closure. <i>B. Agboola and D. A. Jack</i>	MS30. Rod climbing revisited. <i>J. M. Dealy and P. Vu</i>	NM8. Characterizing rheological response of soft matter at small length scales. <i>M. VanLandingham, K. E. Strawhecker, Z. I. Kalcioğlu, M. Qu, K. J. Van Vliet, Q. McAllister and J. W. Gillespie</i>	GM26. Time resolved viscoelastic properties during structural arrest and aging of a colloidal glass. <i>C. O. Osuji and A. S. Negi</i>	SA21. Direct observation of flow-concentration coupling in a shear banding fluid. <i>M. E. Helgeson, L. Porcar, C. Lopez-Barron and N. J. Wagner</i>	NP12. Sedimentation in foams. <i>T. Davies and S. Cox</i>
2:45	SC36. Rheology and flow characteristics of cellulose suspensions using magnetic resonance imaging. <i>E. J. Tozzi, D. M. Lavenson, A. Sverdrberg, M. J. McCarthy and R. L. Powell</i>	MS31. Polymer solutions in co-rotating Taylor-Couette flow without vorticity. <i>C. Wagner and A. Zell</i>	NM9. Monitoring of glass transition at a polymer surface by localized surface plasmon resonance. <i>K. Kalkan, H. Lu and R. K. Putla</i>	GM27. Anomalous aging in a family of ionic liquids near the glass transition temperature. <i>N. Shamim and G. B. McKenna</i>	SA22. Diffusive and geometric effects on pressure-driven flow of wormlike micellar solutions: Boundary layers and stability. <i>M. Cromer, P. Cook and G. H. McKinley</i>	NP13. Flow-induced evolution of the microstructure of MWCNT suspensions. <i>F. Khalkhal and P. J. Carreau</i>
3:10	COFFEE					
3:35	SC37. Orientation, microstructure and rheology in sheared suspensions of anisotropic dicolloidal particles. <i>A. Kumar and J. Higdon</i>	MS32. Comparison of stress-controlled rheometer and strain-controlled rheometer for large amplitude oscillatory shear. <i>M. Lee, J.-E. Bae, H. C. Jeon, K. S. Cho and K.-W. Song</i>	NM10. Rheology of ultrathin polymer films. <i>P. A. O'Connell and G. B. McKenna</i>	GR1. Double Cross model - a novel way of modeling viscosity curves. <i>J. Wang</i>	SA23. Irreversible flow-induced structure transitions in cylindrical micelle solutions. <i>R. Sureshkumar, M. Vasudevan, E. Buse, D. Lu, A. Shen and B. Khomami</i>	NP14. The rheology and microstructure of carbon black and carbon nanotube suspensions. <i>M. R. Mackley and K. Yearsley</i>
4:00	SC38. Rheology and mass transport of biomass slurries by fiber-level simulation. <i>J. Wang and D. J. Klingenberg</i>	MS33. Secondary loops in Large Amplitude Oscillatory Shear (LAOS) - a general physical interpretation. <i>R. H. Ewoldt and G. H. McKinley</i>	NM11. Quantifying microstructure heterogeneity with particle tracking. <i>S. E. Lindberg, M. Caggioni and P. Spicer</i>	GR2. Investigations on the molecular origin of anisotropic thermal conduction in polymers. <i>D. C. Venerus, J. D. Schieber, S. Gupta, D. Nieto Simavilla and D. Sun</i>	SA24. Surfactant effect on the rheology and gelation of a model insoluble drug in aqueous HPMC solutions. <i>V. Florián-Algarín and A. Acevedo</i>	NP15. In-situ lubrication-dispersion of multi-walled carbon nanotube in polymer melt. <i>J. S. Hong, I. K. Hong, K. H. Ahn and S. J. Lee</i>
4:25	SC39. Dissipative particle dynamics modeling of blood suspensions with multiscale and low-dimensional models of red blood cells. <i>B. Caswell, W. Pan, D. Fedosov and G. E. Karniadakis</i>	MS34. A mean-field anisotropic diffusion model for unentangled polymeric liquids and semi-dilute solutions. <i>J. M. Kim, B. J. Edwards, B. Khomami and P. Stephanou</i>	NM12. MEMS parallel-plate rheometer for oscillatory shear micro-rheology measurements. <i>G. F. Christopher, K. Migler, S. D. Hudson, N. Dagalakis and J. M. Yoo</i>	GR3. Solubility study via rheological characterization for pharmaceutical materials. <i>H. Suwardie</i>	SA25. Complex fluid microstructure design, beyond rheological modification. <i>M. Caggioni, S. E. Lindberg and P. Spicer</i>	NP16. Shear banding analogies between nematic polymers and wormlike micelles. <i>M. G. Forest, P. A. Vasquez, Q. Wang and X. Yang</i>
4:50	SC40. Numerical simulations of concentrated, non-colloidal suspensions in Poiseuille flows. <i>K. Yeo and M. R. Maxey</i>	MS35. Direct observation of flexible polymer chain relaxation and dynamics using ssDNA. <i>C. Brockman, S. J. Kim, F. Latinwo and C. M. Schroeder</i>	NM13. Characterization of temporal and spatial gradients in the viscosity of liquid applied coatings. <i>J.-O. Song and L. F. Francis</i>	GR4. Linear and nonlinear viscoelastic behavior of (SIS) _p multiblock copolymer solution. <i>Y. Matsumiya and H. Watanabe</i>	SA26. Stiffening, fracture, and friction of physically associating solutions. <i>K. A. Erk and K. R. Shull</i>	NP17. Rheological properties of suspensions of multi walled carbon nanotubes in ionic liquids: Effects of solvents polarity and anion size. <i>Y. Korth and C. Friedrich</i>
5:15	END					
5:30	POSTER SESSION & RECEPTION Convention Center - Sweeney E-F					

* The title of this submission has been modified to remove the name of a commercial product or company to bring the title into compliance with SOR policy.

Thursday, October 28

Morning

	Sweeney A Suspensions, Colloids and Emulsions	Sweeney B Polymer Rheology: Melts/Solutions/Blends	Coronado/DeVargas Nano- & Micro-Rheology: Indentation & Beyond	Peralta/Lamy Micro- and Nano-Fluidics	O'Keeffe/Milagro Self-Assembling/Associative/Gel-like Systems	Kearney General Rheology
8:05	SC41. Stress relaxation in nonlinear microrheology: Startup and cessation. <u>R. N. Zia</u> and <u>J. F. Brady</u>	MS36. Non-monotonic stretch of isolated polymer chains in ultra-fast shear flows. <u>I. Saha Dalal</u> , <u>N. Hoda</u> and <u>R. G. Larson</u>	NM14. Non-linear rheology at the micro-scale. <u>E. M. Furst</u>	FD15. Making microfluidic channels from biopolymer gels - some issues and opportunities. <u>R. F. Atkinson</u> , <u>D. G. Aarts</u> and <u>A. S. Lubansky</u>	SA27. Self-assembly of side group liquid crystalline block copolymers in a nematic solvent. <u>Z. Kurji</u> , <u>R. Hule</u> , <u>P. Pirogovsky</u> and <u>J. A. Kornfield</u>	GR5. Rheology of Ziegler-Natta and metallocene high-density polyethylenes: Broad molecular weight distribution effects. <u>M. Ansari</u> , <u>S. G. Hatzikiriakos</u> , <u>A. M. Sukhadia</u> and <u>D. C. Rohlffing</u>
8:30	SC42. Microstructural theory for concentrated sheared colloidal suspensions. <u>E. Nazockdast</u> and <u>J. Morris</u>	MS37. Structures in the melt: The influence of flow and pressure. <u>T. van Erp</u> , <u>L. Balzano</u> and <u>G. Peters</u>	NM15. Direct measurement of shear-induced cross correlation of Brownian motion. <u>A. Schneider</u> , <u>A. Ziehl</u> and <u>C. Wagner</u>	FD16. Microfluidic fabrication of magnetic and fluorescent chains using polymer capsules as building blocks. <u>K. Jiang</u> , <u>C. Arya</u> , <u>D. L. DeVoe</u> and <u>S. R. Raghavan</u>	SA28. Development of an in-situ rheological method to characterize fatty acid crystallization in complex fluids. <u>P. Thareja</u> , <u>C. B. Street</u> , <u>K. Hermanson</u> , <u>M. Vethamuthu</u> and <u>N. J. Wagner</u>	GR6. Transient rheology of long glass fibers in a polymeric matrix. <u>K. C. Ortmann</u> , <u>D. Baird</u> and <u>P. Wapperom</u>
8:55	SC43. Mixing and segregation of particle suspensions in 2D chaotic flows. <u>B. Xu</u> and <u>J. F. Gilchrist</u>	MS38. A fast nucleation algorithm for the crystallisation of polymer melts. <u>K. Jolley</u> and <u>R. S. Graham</u>	NM16. Heterogeneous microstructure of biofilm probed by particle tracking microrheology. <u>H. Kang</u> , <u>S. Shim</u> , <u>J. Yoon</u> , <u>K. H. Ahn</u> and <u>S. J. Lee</u>	FD17. Transient vortex dynamics in a planar 4:1 contraction microchannel flow. <u>D. Lee</u> , <u>K. H. Ahn</u> and <u>S. J. Lee</u>	SA29. Micellization and gelation of F127 solutions with methyl paraben and the kinetics of ordering using rheology, DSC, and small angle x-ray scattering. <u>N. A. Meznarich</u> and <u>B. J. Love</u>	GR7. Changes in xanthan rheology and drag reduction with solvent conditions. <u>N. B. Wyatt</u> , <u>C. Gunther</u> and <u>M. W. Liberatore</u>
9:20	SC44. Stokesian dynamics simulations of single particle of different shapes immersed in a Newtonian fluid under shear. <u>M. Yamanoi</u> , <u>O. Pozo</u> and <u>J. Maia</u>	MS39. Flow induced crystallization of polylactide: Experiment and simulation. <u>Y. Yuryev</u> , <u>K. Jolley</u> , <u>R. S. Graham</u> and <u>P. Wood-Adams</u>	NM17. Microbead rheology of viscoelastic solids. <u>T. Indei</u> , <u>E. Pilyugina</u> , <u>A. Cordoba</u> and <u>J. D. Schieber</u>	FD18. Microfluidics enhanced enzyme immobilization for sensitive H ₂ O ₂ biosensing. <u>A. Shen</u> , <u>D. Lu</u> and <u>J. Cardiel</u>	SA30. The mathematics of myth: Yield stress behavior as a limit of nonmonotone constitutive theories. <u>M. Renardy</u>	GR8. Rheological and optical models experimental investigations of encapsulation defects in coextruded multilayer polymers. <u>K. Lammawar</u> , <u>M. Bousmina</u> and <u>A. A. Maazouz</u>
9:45	COFFEE					
10:20	SC45. A pairwise theory for the rheology of soft particle pastes. <u>L. Mohan</u> , <u>M. Cloitre</u> and <u>R. Bonnecaze</u>	MS40. Early stages in polymer crystallization: Mechanism of fluid-to-solid transition for isotactic poly-1-butene. <u>D. Arora</u> and <u>H. H. Winter</u>	NM18. Understanding nanoparticle diffusion and exploring interfacial nanorheology using molecular dynamics simulations. <u>Y. Song</u> and <u>L. L. Dai</u>	FD19. Challenges measuring the response of viscoelastic materials during LAOS experiments. <u>A. J. Franck</u>	SA31. Microscopic nature of yield stress. <u>O. Verbitsky</u> and <u>D. Wehls</u>	GR9. Is there a relation between the relaxation time measured in CaBER experiments and the first normal stress coefficient? <u>S. Gier</u> , <u>A. Zell</u> , <u>S. Rafai</u> and <u>C. Wagner</u>
10:45	SC46. The dynamics of a simple model for a yield stress fluid. <u>K. L. Maki</u> and <u>Y. Renardy</u>	MS41. Extensional flow induced crystallization of isotactic polypropylene using a filament stretching rheometer. <u>E. E. Bischoff</u> , <u>White</u> , <u>H. H. Winter</u> and <u>J. P. Rothstein</u>	NM19. Microrheological screening over a large material composition space. <u>K. M. Schultz</u> and <u>E. M. Furst</u>	FD20. Nanopattern insert molding and evaluation of pattern surface by applying automatic image analysis techniques on the S.E.M. images. <u>K. Sung Ho</u> , <u>S. In Hwan</u> , <u>S. Young Seok</u> , <u>J. Jun-ho</u> and <u>Y. Jae Ryoun</u>	SA32. Large amplitude oscillatory shear and elastic wave propagation in the VCM model for wormlike micellar solutions. <u>L. Zhou</u> , <u>P. Cook</u> and <u>G. H. McKinley</u>	GR10. Torsional flow of viscoelastic polymer solution over soft materials. <u>N. Raju</u> and <u>S. Vishwanathan</u>
11:10	SC47. Suspensions of non-interacting magnetic nanoparticles under alternating magnetic fields. <u>M. Gottlieb</u>	MS42. Criteria for shear-induced crystallization: Strain, Weissenberg Number and mechanical work. <u>D. Arora</u> , <u>J. P. Rothstein</u> and <u>H. H. Winter</u>	NM20. Electrohydrodynamic quenching in polymer melt electrospinning. <u>E. Zhmavev</u> , <u>D. Cho</u> and <u>Y. L. Joo</u>	FD21. High throughput rheology. <u>S. S. Deshmukh</u> , <u>M. Bishop</u> , <u>J. Mecca</u> , <u>E. Gee</u> , <u>D. Dermody</u> and <u>J. Ziemann</u>	SA33. Simultaneous velocimetric and rheometric (RheoPIV) study of the yielding and slip behavior of gels. <u>C. J. Dimitriou</u> , <u>G. H. McKinley</u> and <u>R. Venkatesan</u>	GR11. Sound propagation in a vibrating bed of granular material. <u>B. Mena</u> and <u>F. Lugo-Bolaños</u>

11:35	<p>SC48. Deformation of a superparamagnetic hydrophobic ferrofluid droplet in a viscous medium under uniform magnetic fields. <i>Y. Renardy, S. Afkhami, A. S. Tyler, M. Renardy, T. G. St Pierre, R. C. Woodward and J. S. Riffle</i></p>	<p>MS43. Coarse-grained simulations of polymer nucleation during strong flow. <i>R. S. Graham</i></p>	<p>NM21. Analyzing curing reactions by simultaneous rheometry and FTIR spectroscopy to determine interactions between chemical and mechanical properties of materials. <i>M. Feustel, C. Küchenmeister and J. Nijman</i></p>	<p>FD22. Fluid-structure interaction analysis on the film wrinkling problem of a film insert molded part. <i>H. OH, Y. Song and J. Youn</i></p>	<p>SA34. Elasto-viscoplastic model for thixotropic liquids. <i>P. R. de Souza Mendes</i></p>	<p>GR12. Rheological tracking of phase separation kinetics in block copolymer solutions. <i>M. Heinzer and D. Baird</i></p>
12:00	<p>MS44. Power-series approximation of relaxation time spectrum. <i>K. S. Cho</i></p>	<p>NM22. Numerical and experimental studies on flow of linear and branched polyethylenes through axisymmetric and planar die. <i>V. Ganvir, A. Lele, B. P. Gautham, R. Thaokar and H. Pol</i></p>	<p>FD23. DNA dynamics in the presence of crowding agents. <i>P. S. Doyle, J. Tang and J. Jones</i></p>	<p>GR13. Effect of drop size distribution shape upon emulsion stability. <i>I. M. Klink, R. L. Powell, R. J. Phillips and S. R. Dungan</i></p>		
12:25				END		

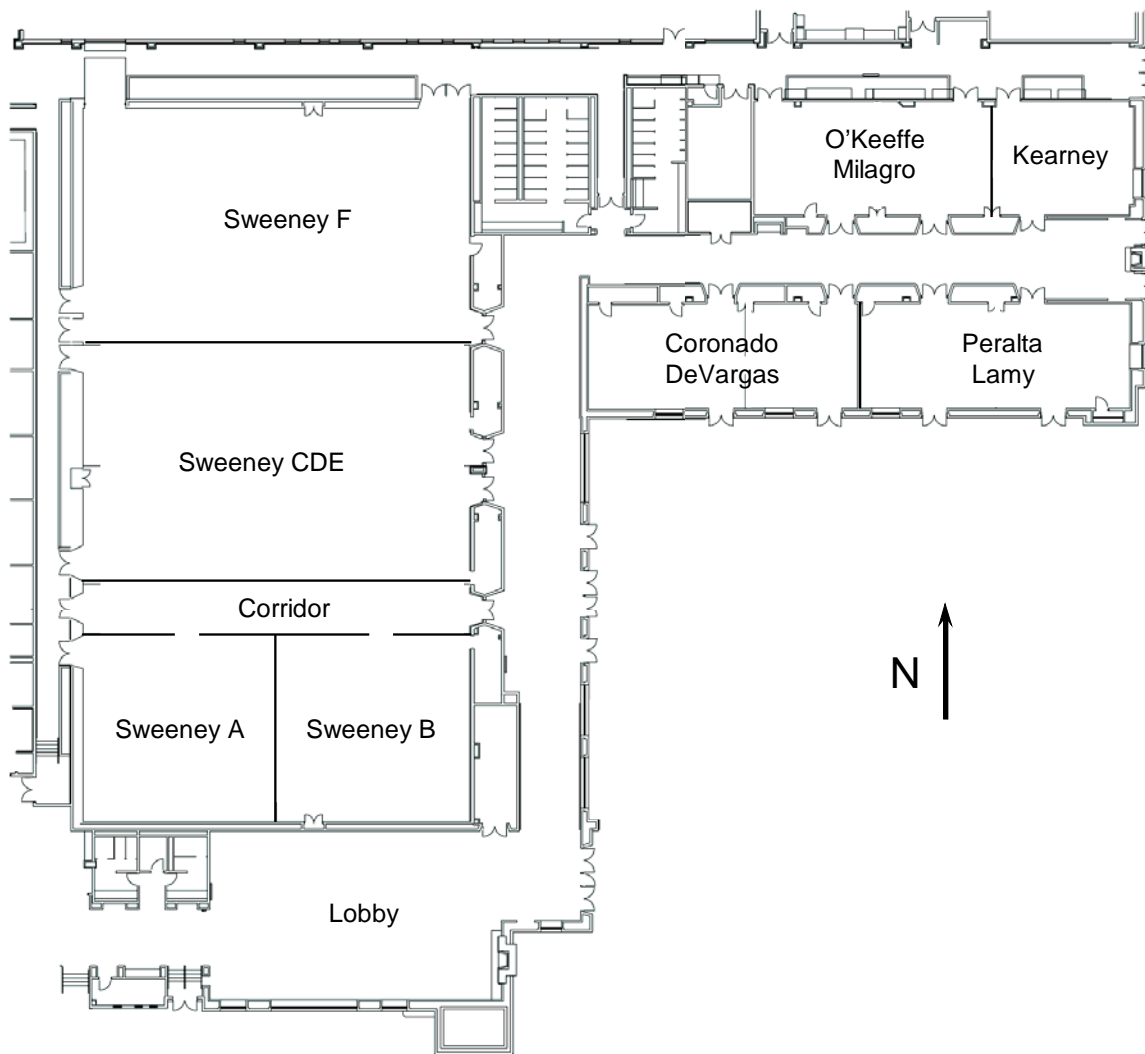
Poster Session

Wednesday 5:30 PM Sweeney E-F

- PO2.** The rheology of cellulose suspensions: Nanocrystalline cellulose (NCC) and conventional wood pulp fibre suspensions. S. Shafiei-Sabet, B. Derakhshandeh, W. Y. Hamad and S. G. Hatzikiriakos
- PO3.** The constant shear stress rheology of concentrated colloidal dispersions. J. W. Swan and J. F. Brady
- PO4.** Shear thickening of chemical mechanical polishing slurries using high shear rheology. N. C. Crawford and M. W. Liberatore
- PO5.** Mixing and segregation of particle suspensions in 2D chaotic flows. B. Xu and J. F. Gilchrist
- PO6.** Mesoscopic coarsening of colloidal gels due to shear. T. E. Kodger, J. Sprakel, S. B. Lindstrom and D. A. Weitz
- PO7.** Guided motion of self-propelled magnetic colloidal particles by Brownian dynamics simulations. G. C. Vidal-Urquiza, C. Rinaldi and U. M. Córdoba-Figueroa
- PO8.** Studies on spreading of suspensions on solid substrates. J. Han, H. Shin, C. Kim and S. J. Lee
- PO9.** Complex behaviors of alumina suspension in a modified capillary rheometer. J. H. Moon, W. Han, K. H. Ahn and S. J. Lee
- PO10.** Hyper-aging dynamics of aqueous Laponite-polyethylene oxide suspensions. S. Allahbashi and Y. M. Joshi
- PO11.** Rheological behavior and microstructures of concentrated particles gels. E. V. Tervoort, H. M. Wyss and L. J. Gauckler
- PO12.** Atomization characteristics of impinging jets of gel material containing nanoparticles. G. Baek, S. Kim and C. Kim
- PO14.** Physical aging of colloidal glasses after concentration jumps. X. Peng and G. B. McKenna
- PO15.** Frequency and interaction dependence of yielding in microgel particles. A. S. Negi and C. O. Osuji
- PO16.** Kinetic characterization of a laponite-based photorheological hydrogel system. N. A. Meznarich, A. E. Gros and B. J. Love
- PO17.** Electrorheological response of dense strontium titanate suspensions. C. S. Orellana, J. He and H. M. Jaeger
- PO18.** Static and dynamic polarized and depolarized light scattering from sepiolite suspensions. P. M. Cotts, D. Londono and N. Barney
- PO19.** Transient and oscillatory magnetorheology of dilute ferrofluids from Brownian dynamics simulations. D. Soto-Aquino, D. J. Rosso-Gonzalez and C. Rinaldi
- PO20.** Rheological characterization of a ferrofluid consisting of permanently magnetized nanoparticles. D. I. Santiago-Quinonez and C. Rinaldi
- PO21.** Non-standard geometries for rheological characterization of complex fluids. M. Namani
- PO22.** New techniques for measuring very fast changes in materials using oscillatory rheometry. J. Nijman, K. Sugimoto, U. Bauer, P. Sierro and C. Küchenmeister
- PO23.** Numerical investigation of the slotted plate rheometer for yield stress fluids. W. Wang, B. Meng and D. De Kee
- PO24.** A microfluidic device for measurement of the apparent viscosity of non-Newtonian fluids. D. Solomon and S. A. Vanapalli
- PO25.** Parallel superposition studies on paint using ARES G2 rheometer. T. Chen
- PO26.** Experimental and modeling protocols for a micro-parallel plate rheometer. P. A. Vasquez, M. G. Forest, D. B. Hill, B. Lindley, S. Mitran and R. Superfine
- PO27.** Correlation of wall slip and the second stress harmonic in Fourier space. J. E. Langridge and F. A. Mazzeo
- PO28.** Another look at cone-plate rheometry and new tools for viscometry and rheological analyses with Brookfield equipment. D. J. Moonay
- PO29.** Survey of trends in the harmonic intensity with harmonic number. D. A. Bohmsack
- PO30.** Large amplitude oscillatory strain (LAOS) testing on select materials with analysis by Fourier transform rheological methods. G. W. Kamyskowski
- PO31.** Shear flow mediated elongational flow in soft glassy materials. A. Shaukat, A. Sharma and Y. M. Joshi
- PO32.** Evidence of time dependent behaviour in gels under LAOS. J. E. Langridge and F. A. Mazzeo
- PO33.** Large amplitude oscillatory shear (LAOS) of shear thickening fluids. A. K. Gurnon and N. J. Wagner
- PO34.** Characterization of yield stress and slip behavior of skin/hair care gels using steady flow and LAOS measurements and their correlation with sensorial attributes. S. Ozkan and T. W. Gillece
- PO35.** Effect of mixing energy on the rheology and dewaterability of polymer flocculated mature fine tailings. A. Demoz and R. J. Mikula
- PO36.** Jetting of low viscoelasticity low viscosity polymeric solutions. D. C. Vadillo, M. R. Mackley and A. Mulji
- PO37.** The sensitivity and stability of non-isothermal film blowing process. H. M. Kim, H. W. Jung, J. S. Lee and J. C. Hyun
- PO38.** Rinsing of rheologically complex fluids. D. J. Giacomini, T. Walker, T. T. Hsu and G. G. Fuller
- PO39.** Operability windows and sensitivity in slot coating bead regime using 1-D and 2-D models. S. H. Lee, J. S. Lee, S. J. Kim, H. W. Jung and J. C. Hyun
- PO40.** The effect of ink rheology on impinging velocity and diameter of drop in drop-on-demand inkjet system. H. Yoo and C. Kim
- PO41.** Viscoelastic properties of ultrathin polymer films using the liquid dewetting technique. J. Wang and G. B. McKenna
- PO42.** Glass transition behavior of epoxy films subjected to CO₂ pressure changes. J. Zhao, S. K. Subramanian and G. B. McKenna
- PO43.** Modulus and work of adhesion for polystyrene surfaces: A comparison of particle embedment and AFM methods of measurement. M. Zhai and G. B. McKenna
- PO44.** Novel approach to design a reusable adhesive by using bilayers of fine-tuned rheological properties. S. S. Patil, A. Malasi, A. Majumder and A. Sharma
- PO45.** Extension of the beam theory for the polymer bio-transducers with low aspect ratios and viscoelastic characteristics. P. Du, I.-K. Lin, H. Lu and X. Zhang
- PO46.** Multiple particle collision dynamics simulation of the rheology of polymer solutions. G. A. Hegde and R. Khare
- PO47.** Nonlinear flow behavior of polybutadiene solution in the absence of wall slip. Y. Li, M. Hu and G. B. McKenna
- PO48.** Modeling of linear rheology of comb polymer melts. M. Ahmadi, C. Bailly, R. Keunings and E. van Ruymbeke
- PO49.** Non-equilibrium phenomena in reversible associating polymers. A. R. Baljon, J. Billen, J. Stegen, M. Wilson and A. Coleman
- PO50.** Rheo-SALS to study shear induced phase separation (SIPS) in aqueous solutions of cationic surfactant and salt. P. Thareja, I. Hoffmann, M. E. Helgeson, M. W. Liberatore, M. Gradzielski and N. J. Wagner
- PO51.** Effect of AN content, viscosity of SAN on the morphology and rheological properties of PC/SAN blends. H.-J. Jung, S.-S. Shin, J. T. Yoon, Y. Lee and O. O. Park
- PO52.** Rheo-NMR studies of complex spatiotemporal dynamics in wormlike micelle systems. J. R. Brown

- PO53.** Conformational dynamics of a single chain of submicron-sized polyelectrolyte in simple flow fields. *J. Y. Lee, M.-S. Chun, H. W. Jung and J. C. Hyun*
- PO54.** Rheological and thermal behavior of poly(L-lactic acid)/poly(caprolactone) melt and solution blends. *S. S. Gleiman and K. A. Rocco*
- PO55.** Effects of insoluble surfactants in head-on collisions of two equal-sized polymer drops in a polymer matrix. *C. Vannozzi*
- PO56.** Rheological behavior and relaxation phenomena of immiscible blends of polypropylene and polystyrene. *V. Shaavegan and P. Wood-Adams*
- PO57.** Effect of compatibilizer viscosity and miscibility on blend mixing and multi-layer stability. *D. Moon, Y. J. Lee, M. T. Cicerone and K. Migler*
- PO58.** Polymer-polymer interfacial slip velocity. *H. E. Park, P. C. Lee and C. Macosko*
- PO59.** Rheological and neutron reflectivity studies of grafted polystyrene against polystyrene melt under shear. *L. A. Sasa, E. J. Yearley, M. S. Jablin, R. D. Gilbertson, A. Lavine, J. Majewski and R. P. Hjelm*
- PO60.** Small-angle neutron scattering and rheological investigation of linear polystyrene in a high flow environment. *E. J. Yearley, L. A. Sasa, R. D. Gilbertson and R. P. Hjelm*
- PO61.** History effects and postcooling flow properties of waxy oils. *F. H. Marchesini, A. A. Aliche, P. R. de Souza Mendes and C. Zíglío*
- PO62.** Mechanics of microstructured emulsions. *S. S. Datta and D. A. Weitz*
- PO63.** The impact of copolymer brush stretching on the emulsification of droplets in immiscible polymer blends. *J. N. Fowler, T. Saito, R. Gao, E. Fried, T. Long and D. L. Green*
- PO64.** Vorticity and velocity banding in shear thickening solutions of wormlike micelles. *P. Fischer and J. Kohlbrecher*
- PO65.** Accurate measurements of shear induced vesicle deformation by reflection interference contrast microscopy. *J. C. Contreras-Naranjo and V. Ugaz*
- PO66.** Yielding and shear induced structure formation in emulsions with attractive interactions. *Z. Shao, A. S. Negi and C. O. Osuji*
- PO67.** Scaling of flow transitions and droplet size in a microfluidic flow focusing device. *J. H. Kim and S. A. Vanapalli*
- PO68.** The effect of interfacially segregated particles on foam shear modulus. *J. M. Kropka, L. A. Mondy and M. C. Celina*
- PO70.** Investigating the energy dissipation of a shear-thickening fluid impregnated fibers using the split Hopkinson pressure bar technique. *M. Chellamuthu, J. H. Kim and G. A. Holmes*
- PO71.** Surface mechanical properties of an epoxy nanocomposite and PS through embedment of submicron particles. *T. B. Karim and G. B. McKenna*
- PO72.** Linear viscoelastic response of graphene oxide reinforced polystyrene nanocomposites. *X. Li and G. B. McKenna*
- PO73.** Effect of treatment method on rheology of latex-blended PS/MWCNT composites. *D. K. Woo, W.-J. Noh and S. J. Lee*
- PO74.** Control of thermal degradation of polylactic acid (PLA)-clay nanocomposites during processing. *N. Najafi C., M.-C. Heuzey, P. J. Carreau and P. Wood-Adams*
- PO75.** Rheological study of the gel transition of sodium alginate solutions with dispersed particle inclusions. *M. Santiago-Vázquez, V. Florián-Algarín and A. Acevedo*
- PO76.** Effect of particle shape and concentration on the rheology and structure of thermotropic liquid crystalline polymer nanocomposites. *F. G. Miranda and A. Acevedo*
- PO77.** Rheology and phase behavior of lyotropic liquid crystalline polymers loaded with MWCNTs. *A. R. Cameron-Soto and A. Acevedo*
- PO78.** Processing of nanocomposites PLA/Graphene using a novel elongational mixing device. *F. Hassouna, R. Muller, M. Bouquey, J. Rondin, M. E. Mendoza and R. Ibarra*
- PO79.** Non-Newtonian displacement flow in a Hele-Shaw cell. *P. R. Vargas, P. R. de Souza Mendes, M. F. Naccache and A. Braghini*
- PO80.** Viscosity and accelerated aging of biomass pyrolysis oils. *M. Nolte and M. W. Liberatore*
- PO81.** Structure and micromechanics of amyloid nanofibrils. *C. C. Gelderloos*
- PO83.** Linear and nonlinear rheological investigations of high-solids biomass slurries for bio-refinery applications. *J. S. Knutsen and M. W. Liberatore*
- PO84.** High pressure rheology of methane hydrates: Effects of temperature, salt content, and hydrate structure. *E. B. Webb, M. W. Liberatore, E. D. Sloan, A. K. Sum and C. Koh*
- PO85.** Wall slip behavior of a sodium carboxyl methyl cellulose based hydrogel during drag and pressure induced flows. *S. Ozkan and D. M. Kalyon*
- PO86.** Nonlinear rheology of chewing gum. *L. Martinetti, W. Voje, R. H. Ewoldt and C. Macosko*
- PO87.** Effect of complex formation on the thermal gelation and rheology of gelatin-xanthan mixtures. *A. Gonzalez-Santana and A. Acevedo*
- PO88.** Effective viscosity of actively swimming algae suspensions. *R. H. Ewoldt, L. M. Caretta, A. Chengala and J. Sheng*
- PO89.** Rheological evaluation of Cashew gum and Arabic gum at high shear rates. *D. S. Lima, J. A. Lima, V. Calado and D. W. Barreto*
- PO90.** Rheological behavior of fermented dairy beverages obtained from the ultra-high pressure homogenization. *L. Masson, V. Calado, R. Deliza and A. Rosenthal*
- PO91.** Active microrheology of chemically active particles. *S. Shklyaev, J. F. Brady and U. M. Córdoba-Figueroa*
- PO92.** Detection of network formation during the thermal denaturation of BSA using optical passive microrheology. *C. A. Rega, H. Jankevics and S. Amin*
- PO93.** Characterization of nanoparticle dispersion by rheological and microrheological techniques. *H. Han, S. Kim and C. Kim*
- PO94.** Development of multiple-particle-tracking microrheology for fluids experiencing deterministic motion. *Y. Teng, W. Wang and D. B. Khismatullin*
- PO95.** Modeling of nanoconfinement of free radical PMMA polymerization. *F. Begun and S. L. Simon*
- PO96.** Rheological examination of sodium alginate gelation. *M. Shaw, L. Shor, J. McCutcheon, C. Subramanian and D. Anastasio*
- PO97.** Synthesis and characterization of POSS-containing polyurethane cationomers. *K. Ishida, E. Huitrón-Rattinger, A. Romo-Urbe and P. T. Mather*
- PO98.** Simulation results of a new nonlinear parameter Q from FT-rheology using a single mode Pom-Pom model. *K. Hyun and M. Wilhelm*
- PO99.** New global methods for solving frontier problems in nonlinear rheological dynamics. *T. Gomis*
- PO100.** The direct numerical simulation of dense suspensions of deformable particles. *J. R. Clausen, D. A. Reasor and C. K. Aidun*

Santa Fe Convention Center



Social Program

Sunday, October 24	Welcoming Reception 7:00 PM – 9:00 PM	Eldorado Hotel – Eldorado Court and Lobby Lounge
Monday, October 25	Society Reception 6:30 PM – 9:00 PM <i>Sponsored by a generous contribution from Malvern Instruments</i>	New Mexico History Museum
Tuesday, October 26	Society Business Meeting 5:30 PM Awards Reception 7:00 PM	Convention Center – Sweeney B La Fonda Hotel – New Mexico and Santa Fe Rooms <i>Sponsored by a generous contribution from Xpansion Instruments</i>
Wednesday, October 27	Awards Banquet 8:00 PM Poster Session Reception 5:30 PM – 7:30 PM <i>Sponsored by a generous contribution from Anton-Paar USA</i>	La Fonda Hotel – Ballroom Convention Center – Sweeney E-F

The Society gratefully acknowledges the generous contributions of Anton-Paar USA, Malvern Instruments, Thermo Scientific, Xpansion Instruments, Sandia National Laboratories, and Los Alamos National Laboratory.