The Society of Rheology 86th Annual Meeting
Loews Philadelphia Hotel, Philadelphia, Pennsylvania

Meeting Schedule

Monday, October 6, 2014

	C-A	*C-B*	*C-C*	*W-A*	*W-B*	*W-C*
8:30			S. G. Hatzikiriakos (PL1) - *MH*			
9:20			Coffee Break			
10:00	SC1	BB1	SM1	CR1	BC1	SF1
10:25	SC2	BB2	SM2	CR2	BC2	SF2
10:50	SC3	BB3	SM3	CR3	BC3	SF3
11:15	SC4	BB4	SM4	CR4	BC4	SF4
11:40	SC5	BB5	SM5	CR5	BC5	SF5
12:05			Lunch Break			
1:30	SC6	BB6	SM6	CR6	FR1	SF6
1:55	SC7	BB7	SM7	CR7	FR2	SF7
2:20	SC8	BB8	SM8	CR8	FR3	SF8
2:45	SC9	BB9	SM9	CR9	FR4	SF9
3:10	SC10	BB10	SM10	CR10	FR5	SF10
3:35			Coffee Break			
4:00	SC11	BB11	SM11	CR11	FR6	SF11
4:25	SC12	BB12	SM12	CR12	FR7	SF12
4:50	SC13	BB13	SM13	CR13		SF13
5:15	SC14	BB14	SM14	CR14		SF14
5:40	SC15	BB15	SM15	CR15		SF15
6:05			End			

Tuesday, October 7, 2014

	C-A	*C-B*	*C-C*	*W-A*	*W-B*	*W-C*
8:30			N. J. Wagner (PL2) - *MH*			
9:20			Coffee Break			
10:00	SC16	BB16	SM16	NF1	BC6	CC1
10:25	SC17	BB17	SM17	NF2	BC7	CC2
10:50	SC18	BB18	SM18	NF3	BC8	CC3
11:15	SC19	BB19	SM19	NF4	BC9	CC4
11:40	SC20	BB20	SM20	NF5	BC10	CC5
12:05			Lunch Break / Society Business Meeting			
1:30	SC21	BB21	SM21	NF6	BC11	CC6
1:55	SC22	BB22	SM22	NF7	BC12	CC7
2:20	SC23	BB23	SM23	NF8	BC13	CC8
2:45	SC24	BB24	SM24	NF9	BC14	CC9
3:10	SC25	BB25	SM25	NF10	BC15	CC10
3:35			Coffee Break			
4:00	SC26	BB26	SM26	NF11	BC16	EF1
4:25	SC27	BB27	SM27	NF12	BC17	EF2
4:50	SC28	BB28	SM28	NF13	BC18	EF3
5:15	SC29	BB29	SM29	NF14	BC19	EF4
5:40	SC30	BB30	SM30	NF15	BC20	EF5
6:05			End			
7:00			Awards Reception			
8:00			Awards Banquet			

Wednesday, October 8, 2014

	C-A	*C-B*	*C-C*	*W-A*	*W-B*	*W-C*
8:30			S. J. Muller (PL3) - *MH*			
9:20			Coffee Break			
10:00	SC31	BB31	SM31	NF16	SF16	EF6
10:25	SC32	BB32	SM32	NF17	SF17	EF7
10:50	SC33	BB33	SM33	NF18	SF18	EF8
11:15	SC34	BB34	SM34	NF19	SF19	EF9
11:40	SC35	BB35	SM35	NF20	SF20	EF10
12:05			Lunch Break			
1:30	SC36	BB36	SM36	NF21	SG1	EF11
1:55	SC37	BB37	SM37	NF22	SG2	EF12
2:20	SC38	BB38	SM38	NF23	SG3	EF13
2:45	SC39	BB39	SM39	NF24	SG4	EF14
3:10	SC40	BB40	SM40	NF25	SG5	EF15
3:35			Coffee Break			
4:00	SC41	BB41	SM41	NF26	SG6	EF16
4:25	SC42	BB42	SM42	NF27	SG7	EF17
4:50	SC43	BB43	SM43	NF28	SG8	EF18
5:15	SC44	BB44	SM44	NF29	SG9	EF19
5:40	SC45	BB45	SM45	NF30	SG10	EF20
6:05			End			
6:05			Poster Session & Reception			

Thursday, October 9, 2014

	MH	*C-B*	*C-C*	*C-D*	*C-A1*	*C-A2*
8:00			R. H. Ewoldt (AP1) - *MH*			
8:40	SC46	BB46	SM46	SF21	SG11	EF21
9:05	SC47	BB47	SM47	SF22	SG12	EF22
9:30	SC48	BB48	SM48	SF23	SG13	EF23
9:55			Coffee Break			
10:25	SC49	BB49	SM49	SF24	SG14	EF24
10:50	SC50		SM50	SF25	SG15	EF25
11:15				SF26	SG16	EF26
11:40				SF27	SG17	EF27
12:05			End			

Session and Room Codes

AP = Award Presentations
BB = Biomaterials and Biological Systems
BC = Blends, Composites and Multiphase Systems
CC = Confined and Coupled Systems
CR = Computational Rheology
EF = Emulsions, Foams and Interfacial Rheology
FR = Food Rheology
NF = Non-Newtonian Fluid Mechanics and Stability
PL = Plenary Lectures
SC = Suspensions and Colloids
SF = Self-assembly and Flow-induced Systems/Gels
SG = Solids and Glasses
SM = Polymer Solutions and Melts

C-A = Commonwealth A
C-A1 = Commonwealth A1
C-A2 = Commonwealth A2
C-B = Commonwealth B
C-C = Commonwealth C
C-D = Commonwealth D
MH = Millennium Hall
W-A = Washington A
W-B = Washington B
W-C = Washington C

Monday, October 6

Morning

8:30 **PL1.** The wall slip of polymer melts: The rule or the exception? S. G. Hatzikiriakos Millennium Hall

9:20 COFFEE BREAK

	Commonwealth A	*Commonwealth B*	*Commonwealth C*	*Washington A*	*Washington B*	*Washington C*
	Suspensions and Colloids	**Biomaterials and Biological Systems**	**Polymer Solutions and Melts**	**Computational Rheology**	**Blends, Composites & Multiphase**	**Self-assembly & Flow-induced Sys/Gels**
10:00	**SC1.** The pressure of active matter. *J. F. Brady, S. Takatori and W. Yan*	**BB1.** Monitoring extracellular matrix (ECM) mechanics in 3D in vitro tumor models during fibrosis and invasion processes for rheology-informed cancer therapeutics. *D. P. Jones, W. Hanna, G. M. Cramer, H. El-Hamidi, L. Petrovic and J. P. Celli*	**SM1.** Viscoelastic properties of polymer electrolytes: Mechanical and light scattering studies of a model system. *Y. Wang, F. Fan, P. J. Griffin, A. Kisliuk and A. P. Sokolov*	**CR1.** Computationally efficient algorithms for incorporation of hydrodynamic and excluded volume interactions in Brownian dynamics simulations of high molecular weight polystyrene: An overview of the effective parameters in the coil-stretch transition. *A. Saadat and B. Khomami*	**BC1.** Rheological percolation in polymer nano-composites: Is there a universal scaling? *D. Rodrigue and H. Mahi*	**SF1.** Role of dynamical heterogeneity in the rheology of colloidal gels. *L. C. Hsiao, H. Kang, K. H. Ahn and M. J. Solomon*
10:25	**SC2.** Active microrheology of hydrodynamically interacting spheres: Normal stresses and osmotic pressure. *H. W. Chu and R. Zia*	**BB2.** Dynamic cell-material interactions measured by passive microrheology. *K. M. Schultz, K. A. Kyburz and K. S. Anseth*	**SM2.** Linear viscoelasticity and dielectric spectroscopy of ionomer/plasticizer mixtures: A transition from ionomer to polyelectrolyte. *Q. Chen, T. Tunic, N. Bao, J. H. Wang and R. H. Colby*	**CR2.** The effect of concentration, solvent quality and flow type on coil-stretch hysteresis in planar mixed flows of polymer solutions: A Brownian dynamics study. *C. Sasmal and J. R. Prakash*	**BC2.** Bulk and shear rheology of a silica/polystyrene nanocomposite: Reinforcement and dynamics. *R. Tao and S. L. Simon*	**SF2.** Assembly of rod-like particles in nematic liquid crystal films. *I. B. Liu, M. A. Gharbi, D. A. Beller, S. Yang, R. D. Kamien and K. J. Stebe*
10:50	**SC3.** Single particle motion in a sheared colloid dispersion. *A. S. Khair and T. Bechtel*	**BB3.** High frequency microrheology of hydrogels formed from peptide enantiomers. *E. M. Furst, P. J. Betramo, K. J. Nagy and J. P. Schneider*	**SM3.** Linear viscoelasticity of oligomeric sulfonated styrene near the sol-gel transition. *Q. Chen, C. Huang, R. H. Colby and R. A. Weiss*	**CR3.** Structure and rheology of polymer solutions from coarse-grained molecular dynamics simulations: Effects of polymer concentration, solvent quality and geometric confinement. *Y. Yang and R. Sureshkumar*	**BC3.** Application of double reptation and time-dependent relaxation theory to the linear viscoelasticity of polymer nanocomposites. *X. Chen and M. J. Sobkowicz*	**SF3.** Non-templated fabrication of partially aligned BCC thin film colloidal crystals. *M. Joy, T. Muangnapoh, M. A. Snyder and J. F. Gilchrist*
11:15	**SC4.** Force-induced diffusion in hydrodynamically-interacting colloidal dispersions. *N. J. Hoh and R. Zia*	**BB4.** Hemofoam: A biopolymer-based foam for treating non-compressible hemorrhage. *S. R. Raghavan, M. B. Dowling and J. White*	**SM4.** Deconstructing double-network hydrogels: The importance of grafted chains for achieving toughness. *R. A. Weiss, S. Shams Es-haghi and A. I. Leonov*	**CR4.** Scaling relations for structural and rheological properties of chains of different architectures in dilute solutions: A molecular simulation study. *F. Khabaz and R. Khare*	**BC4.** Tethered nanoparticle-polymer composites: Phase behavior and rheology. *R. Mangal and L. A. Archer*	**SF4.** Viscoelastic focusing of rigid colloids in Poiseuille flow. *M. P. Howard, A. Nikoubashman, N. A. Mahynski and A. Z. Panagiotopoulos*
11:40	**SC5.** Passive microrheology thanks to multi-speckle diffusing wave spectroscopy. *J. Denis, G. Brambilla and G. Meunier*	**BB5.** Micro-heterogeneity metrics for diffusion in soft matter. *P. A. Vasquez, J. Mellnik, S. McKinley, J. Witten, D. Hill and G. Forest*	**SM5.** Carrageenan aggregation and gel transition. *F. Nettesheim, D. J. Londono, P. Badrinarayanan, C. J. Rasmussen, D. J. Walls, Y. Brun, L. E. Clinger, C. D. Chan and A. Golematis*	**CR5.** Structure and rheology of surfactant micelle and micelle-nanoparticle solutions from molecular dynamics simulations. *A. Sambasivam, S. Dhakal and R. Sureshkumar*	**BC5.** Conductive nanocomposites of polyethylene/oxidized polyethylene (PE/OPE) blends with thermally reduced graphene and carbon black. *M. Z. Iqbal, T. J. Arnold, S. P. Lonkar, A. A. Abdala and M. W. Liberatore*	**SF5.** Temperature dependent self–exfoliation of clay polymer nanocomposite. *H. H. Winter and B. Momani*

12:05 LUNCH BREAK

Afternoon

	Commonwealth A	*Commonwealth B*	*Commonwealth C*	*Washington A*	*Washington B*	*Washington C*
	Suspensions and Colloids	**Biomaterials and Biological Systems**	**Polymer Solutions and Melts**	**Computational Rheology**	**Food Rheology**	**Self-assembly & Flow-induced Sys/Gels**
1:30	**SC6.** Taylor dispersion of a passive tracer in the pressure-driven flow of a concentrated suspension of rigid, non-colloidal spheres. *A. Ramachandran*	**BB6.** A multiaxial approach to shear rheology: opposite effects of axial loading on shear moduli of biopolymer networks and tissues. *A. S. van Oosten and P. A. Janmey*	**SM6.** The effect of kappa-carrageenan and salts on gelation behavior of concentrated solution of hydroxypropyl methylcellulose. *N. Almeida, L. Rakesh and J. Zhao*	**CR6.** Brownian dynamics of functionalized deformable nanocarriers. *A. Sarkar, D. M. Eckmann, P. S. Ayyaswamy and R. Radhakrishnan*	**FR1.** A critical gel fluid with high extensibility: The rheology of chewing gum. *A. M. Mannion, L. Martinetti, W. E. Voje, R. Xie, R. H. Ewoldt, L. D. Morgret, F. S. Bates and C. W. Macosko*	**SF6.** Peptide-based systems as equilibrium gels of valence-limited particles. *N. A. Dudukovic and C. F. Zukoski*

1:55	**SC7.** Hydrodynamic lift and flow-induced ordering of deformable particles under flow. *Y.-L. Chen, C.-T. Liao, Y.-F. Wu and S.-H. Wang*	**BB7.** Structure-function relations and rigidity percolation in bovine articular cartilage under shear. *J. L. Silverberg, A. R. Barrett, M. Das, P. B. Petersen, L. J. Bonassar and I. Cohen*	**SM7.** Self-healing and thermo responsive zwitterionic copolymers. *Y. Zhao, T. Bai, S. Jiang and A. Q. Shen*	**CR7.** Rheological model selection: Bayesian assessment of good fits versus credible models. *J. B. Freund and R. H. Ewoldt*	**FR2.** Gel point determination thanks to microrheology. *R. Ramsch and J. Denis*	**SF7.** Capillary-induced gelation in ternary blends of immiscible polymers and silica particles. *T. E. Domenech and S. S. Velankar*
2:20	**SC8.** Fall velocity of a dense ball in oscillatory cross-sheared concentrated suspensions. *F. Blanc, E. Lemaire and F. Peters*	**BB8.** In situ imaging of rapid articular cartilage deformation. *L. R. Bartell, L. J. Bonassar and I. Cohen*	**SM8.** A rheological study on the role of molecular structure on interfacial self-adhesion of polyethylene films at elevated temperatures. *Z. Najarzadeh and A. Ajji*	**CR8.** Non-equilibrium fluctuations in "jammed" associative polymer networks under stress. *A. R. Baljon, A. Kruisheer and M. Wilson*	**FR3.** Microrheology of yoghurt formation. *J. Denis, R. Ramsch and G. Brambilla*	**SF8.** A green solar paint from precrystallized components. *N. A. Nguyen, R. Remy and M. E. Mackay*
2:45	**SC9.** Disturbance flows produced by polymeric micelles in simple-shear fields. *B. A. Rolfe and Y. L. Joo*	**BB9.** Unraveling the nonlinear viscoelastic properties of fibrin using LAOS. *G. W. Peters, T. H. van Kempen and F. N. van de Vosse*	**SM9.** The effect of isomer type on the thermal and rheological properties of poly-(ether-imides). *M. Chellamuthu and D. Doraiswamy*	**CR9.** Structural change and oscillating dynamics of colloidal gels under oscillatory shear flow. *J. D. Park and K. H. Ahn*	**FR4.** Advanced rheometric tools for food applications. *J. Laeuger*	**SF9.** Mechanisms of shear thickening in transient guar networks. *Y. T. Hu*
3:10	**SC10.** Flow-induced microstructure and rheology of linear and branched wormlike micelles using rheo-SANS and 1-2 plane flow-SANS. *J. P. Rich, M. R. Weaver, K. M. Weigandt and G. S. Smith*	**BB10.** Interplay of platelets, fibrinogen, and erythrocytes on the viscoelastic properties of contracting clots. *V. Tutwiler, R. Litvinov, C. Nagaswami, T. Lebedeva, D. Cines and J. Weisel*	**SM10.** Mobility of nanoparticles in semi-dilute polymer solutions. *F. Babaye Khorasani, R. Poling-Skutvik, R. Krishnamoorti and J. C. Conrad*	**CR10.** Application of non-uniform magnetic fields on ferrofluid colloidal dispersions using an iterative constraint method: A Brownian dynamics study. *L. E. Wedgewood and S. H. Dubina*	**FR5.** Revealing the role of starch in a hydrating snack food bolus: Combining α-amylase mediated starch digestion with transient rheology. *M. W. Boehm, J. R. Stokes, F. J. Warren, M. E. Jackson, S. K. Baier and M. J. Gidley*	**SF10.** Water sensitive self-assembly of gelators in oil: A bioinspired strategy for sealing oil leaks from submerged tubes. *H. Oh, N. A. Yaraghi and S. R. Raghavan*
3:35			COFFEE BREAK			
4:00	**SC11.** Orthogonal superposition rheology as a tool to study structural changes in ER fluids. *C. A. Gracia-Fernández, E. Aadil, F. Aly and R. Bharath*	**BB11.** Silk e-gel viscoelasticity. *A. P. Tabatabai, D. L. Blair and D. L. Kaplan*	**SM11.** Understanding the relations between free volume and the temperature and pressure coefficients of viscosity for miscible polymer blends. *R. Cardinaels, L. Polito, J. Pionteck and P. Moldenaers*	**CR11.** Electrorheology of vesicle suspensions. *S. Veerapaneni*	**FR6.** Extensional flow to formulate micron-scale oil-in-water emulsions. *D. Song, J. Casasnovas, S. Agarwal, R. Gupta and M. Padmanabhan*	**SF11.** Computational studies of flow-induced structural changes in self-associating polymer networks. *M. Wilson and A. R. Baljon*
4:25	**SC12.** Orthogonal superposition rheometry of colloidal glasses. *A. R. Jacob, A. S. Poulos, S. Kim, J. Vermant and G. Petekidis*	**BB12.** Correlation between viscoelastic properties of cystic fibrosis mucus and patient clinical status. *G. Tomaiuolo, G. Rusciano, S. Caserta, A. Carciati, V. Carnovale, P. Abete, A. Sasso and S. Guido*	**SM12.** Dielectric relaxation of entangled monodisperse polyisoprene: Contribution of constraint release. *H. Watanabe and Y. Matsumiya*	**CR12.** Direct numerical simulations (DNS) of particles in spatially varying electric fields. *E. C. Amah, P. Singh and M. Janjua*	**FR7.** Steady state rheology of HPMC solutions with a polyol plasticizer. *C. A. Pinzon and A. Acevedo*	**SF12.** Mesoscopic modeling and simulation of transiently networked fluids/gels. *L. Zhou and L. P. Cook*
4:50	**SC13.** Mechanical anisotropy in colloidal gels: Superposition rheology and 2D-SAOS. *S. Kim, J. Mewis, C. Clasen and J. Vermant*	**BB13.** The gelation of oil using ethylcellulose. *A. G. Marangoni and M. Davidovich-Pinhas*	**SM13.** Component relaxation times in entangled binary blends of linear chains: Reptation/CLF along partially or fully dilated tube. *Y. Matsumiya, H. Watanabe and E. van Ruymbeke*	**CR13.** Numerical simulation of forced droplet formation with complex fluids. *G. E. Mårtensson, A. Mark, M. Svensson and D. Grafström*		**SF13.** Spatial mapping of flow-induced molecular alignment in a non-crystalline biopolymer fluid using double quantum filtered (DQF)^{23}Na MRI. *G. E. Pavlovskaya and T. Meersmann*
5:15	**SC14.** Rayleigh-Plateau instability of magnetorheological suspensions in toggled fields. *J. L. Bauer, J. W. Swan and E. M. Furst*	**BB14.** Composite biopolymer hydrogels with a thermally-activated component. *J. C. White and S. R. Bhatia*	**SM14.** Constitutive equations, and maximum stretch, for entangled combs and randomly branched polymers. *D. J. Read, C. Das, H. Lentzakis and D. Vlassopoulos*	**CR14.** Flows in irregular geometries simulated by Dissipative Particle Dynamics have improved convergence when guided by tailored body forces. *B. Caswell, M. Deng, A. Yazdani and G. E. Karniadakis*		**SF14.** A Janus particle viscometer. *I. Kretzschmar*
5:40	**SC15.** Understanding yield stress enhancement in magnetorheological suspensions with nonmagnetizable particles. *B. T. Wilson and D. J. Klingenberg*	**BB15.** Hybrid crosslink single polymer network hydrogels for tissue engineering and substance delivery. *J. Jancar, J. Zidek, L. Vojtova and I. Chamradova*	**SM15.** Comparison of the single molecular dynamics of linear and circular DNAs in microfluidic planar extensional flows. *Y. Li, C. A. Brockman, D. Y. Yates, K.-W. Hsiao, G. B. McKenna, C. M. Schroeder, M. J. San Francisco, J. A. Kornfield and R. M. Anderson*	**CR15.** 3D finite element formulation for flows with nonlinear partial slip condition on curved geometries. *S. Onkar, L. Fovargue, J. Abbott and S. Vaddiraju*		**SF15.** Microstructural origins of yield, strain hardening and hysteresis in thermoplastic elastomers under uniaxial deformation: An in-situ tensile-SANS study. *C. R. López-Barrón and A. P. Eberle*
6:05			END			

Tuesday, October 7

Morning

8:30 **PL2.** Rheology revealed - Measuring the atomistic-to-micron scale structure and dynamics of complex fluids and soft matter under flow with neutrons. *N. J. Wagner* (Bingham Lecture) Millennium Hall

9:20 COFFEE BREAK

	Commonwealth A	*Commonwealth B*	*Commonwealth C*	*Washington A*	*Washington B*	*Washington C*
	Suspensions and Colloids	**Biomaterials and Biological Systems**	**Polymer Solutions and Melts**	**Non-Newtonian Fluid Mech & Stability**	**Blends, Composites & Multiphase**	**Confined and Coupled Systems**
10:00	**SC16.** Rheology of non-Brownian particles suspended in a colloidal shear thickening fluid. *C. D. Cwalina and N. J. Wagner*	**BB16.** Interfacial rheological properties of vibrio cholerae biofilms. *E. C. Hollenbeck, J. Y. Lim, J. Fong, F. H. Yildiz, L. Cegelski and G. G. Fuller*	**SM16.** Dynamics of non-concatenated entangled cyclic polymers. *M. Rubinstein and S. V. Panyukov*	**NF1.** Jetting and jet break-up of complex fluids in inkjet printing. *O. G. Harlen, N. F. Morrison and C. McIlroy*	**BC6.** Advances in characterization of rheology at high strain rates related to paint atomization. *E. C. Houze, M. R. Koerner, J. R. Moore, G. H. McKinley and B. Keshavarz*	**CC1.** Probing colloidal flocculation during solvent removal in microscale droplet reactors. *S. M. Vuong, B. M. Bleier, S. L. Anna and L. M. Walker*
10:25	**SC17.** FT-rheology and MITLAOS analyses of concentrated fumed silica dispersions. *G. A. Holmes, J. E. Seppala, M. Chellamuthu and K. D. Rice*	**BB17.** Rheological properties of Pseudomonas aeruginosa biofilm formation in the presence of quorum sensing inhibitors. *U. Daalkhaijav and T. W. Walker*	**SM17.** Rheological study of crystallization behavior of PLA and PLA-reinforced flax fiber biocomposites. *A. M. Arias, M.-C. Heuzey and P. M. Wood-Adams*	**NF2.** Fiber spinning under filament pull-out conditions: A stability analysis. *P. Anderson, C. Walt, van der, M. Hulsen and A. Bogaerds*	**BC7.** Ion transport in porous battery electrodes. *A. M. Grillet, S. A. Roberts, D. E. Wesolowski, C. C. Roberts, A. N. Allen, L. A. Mondy, R. P. Grant, B. McKenzie, B. Shelden, M. J. Martinez and J. Clausen*	**CC2.** Probing aerosol particle interfaces with biphasic microfluidics. *C. S. Dutcher and A. R. Metcalf*
10:50	**SC18.** Large amplitude oscillatory shear rheology study of shear-thickening dispersions. *S. Khandavalli and J. Rothstein*	**BB18.** Rheology of extracellular matrices of swarming colonies of Pseudomonas aeruginosa. *R. De Dier, W. Sempels, J. Hofkens and J. Vermant*	**SM18.** Flow-induced crystallization of polyethylene as probed by Raman spectroscopy. *K. B. Migler, A. Hight Walker and A. P. Kotula*	**NF3.** Modeling the polymer wet spinning process. *H. Zerze and A. J. McHugh*	**BC8.** Dissipative particle dynamics studies on the controlled assembly of polymer grafted nanorods. *S. Khani, J. Maia and S. Rowan*	**CC3.** Rheological behavior of unfilled and filled, uncrosslinked and ionically crosslinked guar solutions. *A. C. Barbati, A. Robisson and G. H. McKinley*
11:15	**SC19.** Particle-scale simulation of shear thickening in dense colloidal suspensions. *R. Seto, R. Mari, J. F. Morris and M. M. Denn*	**BB19.** Interfacial rheology's role on the measurement of the bulk rheology of biological solutions. *Z. Zhang, S. Barman and G. F. Christopher*	**SM19.** SAXS/WAXS studies on the temperature and flow rate dependence of uniaxial extensional flow-induced crystallization of poly(1-butene). *E. M. McCready and W. Burghardt*	**NF4.** A regularized thin-fiber model for nanofiber formation by centrifugal spinning. *S. M. Taghavi and R. G. Larson*	**BC9.** Magnetic microdisks in a rotating magnetic field. *H. Song, T. W. Walker, A. Jander and P. Dhagat*	**CC4.** Validation via rheological experiments of theories for the flow through porous media. *M. Minale, C. Carotenuto, A. Vananroye and J. Vermant*
11:40	**SC20.** Modified DPD method for simulation of colloidal suspensions. *S. Jamali, A. Boromand and J. Maia*	**BB20.** Rheology of bacterial adhesion layers at air/water and oil/water interfaces. *P. A. Rühs, L. Böni, L. Böcker, F. Inglis, C. Jans, T. de Wouter and P. Fischer*	**SM20.** The influence of concentration on extensional rheology of polymer solutions. *Q. Huang, L. Hengeller, N. J. Alvarez and O. Hassager*	**NF5.** Fabrication of polymer nanofibers using centrifugal jet spinning. *L. Ren, R. Ozisik, S. P. Kotha and P. T. Underhill*	**BC10.** A preliminary investigation into fiber length effects on the transient rheology of long glass fiber suspensions. *M. J. Cieslinski, G. M. Lambert and D. G. Baird*	**CC5.** Viscoelastic focusing down to the nanoscale. *I. De Santo, G. D'Avino, F. Greco, P. A. Netti and P. L. Maffettone*

12:05 LUNCH BREAK / SOCIETY BUSINESS MEETING Commonwealth D

Afternoon

	Commonwealth A	*Commonwealth B*	*Commonwealth C*	*Washington A*	*Washington B*	*Washington C*
	Suspensions and Colloids	**Biomaterials and Biological Systems**	**Polymer Solutions and Melts**	**Non-Newtonian Fluid Mech & Stability**	**Blends, Composites & Multiphase**	**Confined and Coupled Systems**
1:30	**SC21.** Rheology and morphology of lyotropic nanocylinder dispersions. *V. A. Davis*	**BB21.** Using a live cell monolayer rheometer to probe the mechanics of the cytoskeleton. *C. M. Elkins, W.-J. Shen, V. K. Khor, F. B. Kraemer and G. G. Fuller*	**SM21.** The influence of hydrogen bonding on nonlinear extensional rheology of supramolecular poly(n-butyl acrylate). *A. Shabbir, S. Goldansaz, N. J. Alvarez, E. V. Ruymbeke and O. Hassager*	**NF6.** Analysis of steady and transient shear banding in the flow of polymer solutions. *M. Cromer, G. H. Fredrickson and G. Leal*	**BC11.** High pressure- and temperature-dependent viscous anomalies in polymer oil mixtures. *P. Shiller, B. LotfizadehDehkordi and G. L. Doll*	**CC6.** Direct visualization of near-wall structure of sheared monosized suspensions. *J. F. Gilchrist and T. Perera*
1:55	**SC22.** The concentration instability of a sedimenting suspension of weakly flexible fibers. *H. Manikantan, L. Li, S. E. Spagnolie and D. Saintillan*	**BB22.** In vitro live-cell imaging to determine how spatial gradients in shear stress affect migratory response of endothelial cells. *V. N. Surya, M. A. Ostrowski, E. Huang, A. R. Dunn and G. G. Fuller*	**SM22.** Slip of polydisperse polymers: Molecular weight distribution above and below the plane of slip. *S. M. Sabzevari, S. Strandman and P. M. Wood-Adams*	**NF7.** Hi-Fidelity simulation of flow-induced inhomogeneous disentanglement and shear banding in polymeric melts. *M. Mohagheghi and B. Khomami*	**BC12.** Effect of thermal history on the behavior of thixotropic elasto-visco-plastic materials. *M. Geri, G. H. McKinley, R. Venkatesan and K. Sambath*	**CC7.** Flow of particulate suspensions in the 4:1 microcontraction channel: A simulation study. *K. H. Ahn*

2:20	**SC23.** Rheo-optical response of carbon nanotube suspensions. *G. Natale, N. K. Reddy, G. Ausias, J. Ferec, M.-C. Heuzey and P. J. Carreau*	**BB23.** High resolution mapping of intracellular fluctuations using carbon nanotubes. *N. Fakhri, A. Wessel, C. Willms, D. Klopfenstein, M. Pasquali, F. MacKintosh and C. F. Schmidt*	**SM23.** Molecular scale simulations of rheological behavior – Understanding slip of molten polymers. *J. R. Dorgan and N. A. Rorrer*	**NF8.** Intriguing nonlinear instability phenomena occurring in film blowing process. *J. S. Lee, H. W. Jung and J. C. Hyun*	**BC13.** The effect of pH and salinity on the rheology of concentrated aqueous suspensions of sphalerite/silica mixtures. *D. Yang, Q. Liu, H. Zeng and L. Xie*	**CC8.** Flow-induced segregation in confined suspensions: Effect of particle shape and rigidity. *K. K. Sinha and M. D. Graham*
2:45	**SC24.** On the negative magneto-rheological effect of a rod-like hematite particle suspension by means of Brownian dynamics simulations. *A. Satoh*	**BB24.** Rheology of concentrated algae suspensions. *V. Breedveld, V. Prasad and S. Edgar*	**SM24.** Shear banding in entangled polymers in micron scale gap: A confocal-rheoscopic study. *P. Boukany and S.-Q. Wang*	**NF9.** Nonlinear elastic instability in channel flows at low Reynolds numbers. *P. E. Arratia, A. Morozov and C. Wagner*	**BC14.** Melt rheology of polypropylene-clay nanocomposites with silane coupling agents. *W. Ren and K. Jayaraman*	**CC9.** Mechanism of wall-induced drift of a single particle in viscoelastic confined flows. *R. G. Henriquez and M. D. Graham*
3:10	**SC25.** Using rheology to characterize graphene oxide. *I. M. Ismail, A. A. Abdala and C. W. Macosko*	**BB25.** Rheological properties of fire ant aggregations. *M. Tennenbaum, Z. Liu, A. Fernandez-Nieves and D. L. Hu*	**SM25.** Chain conformation, entanglements, and the origin of stress overshoot during startup shear of entangled polymer melts. *Y. Lu, L. An, S.-Q. Wang and Z.-G. Wang*	**NF10.** Elastic instabilities in the flow of complex fluids. *L. Casanellas, S. Lerouge and A. Lindner*	**BC15.** Rheological characterization of highly filled composite systems for injection molding applications. *K. A. Koppi*	**CC10.** Dynamical role of slip heterogeneities in confined flows. *A.-L. Vayssade, F. Monti, M. Cloitre and P. Tabeling*
3:35			COFFEE BREAK			
						Emulsions, Foams & Interfacial
4:00	**SC26.** Patterning surfaces with colloid-bottlebrush polymer suspensions. *C. Pellet, J.-M. Suau and M. Cloitre*	**BB26.** Characterization of aqueous alginate solutions at high concentrations with neutron scattering and rheology. *H. B. Eral, K. Bavand, G. H. McKinley and P. S. Doyle*	**SM26.** Finite cohesion due to chain entanglement in polymer melts. *S. Cheng, Y. Lu, L. An, Z.-G. Wang and S.-Q. Wang*	**NF11.** Using yield stress fluids for shaped multi-layer flow configurations. *I. Frigaard, S. Hormozi and G. Dunbrack*	**BC16.** Cocontinuous blends of immiscible polymers: Modeling stability and cocontinuity range. *A. T. Hedegaard and C. W. Macosko*	**EF1.** Understanding the physics of nanoemulsion formation. *A. Gupta, H. B. Eral, T. A. Hatton and P. S. Doyle*
4:25	**SC27.** Oscillatory rheology of colloidal near hard-sphere suspensions with ASD. *S. Marenne and J. F. Morris*	**BB27.** Viscosity and short time dynamics of concentrated solutions of proteins interacting with a short range attractive and long range repulsive interaction. *P. D. Godfrin, K. Hong, L. Porcar, P. Falus, N. J. Wagner and Y. Liu*	**SM27.** Strain hardening in startup shear. *G. Liu, M. Wang and S.-Q. Wang*	**NF12.** Macro-scale drop encapsulation in yield stress fluids. *S. Hormozi, A. Maleki Zamenjani, A. Rostai and I. Frigaard*	**BC17.** Morphological stability of PLA/PBAT and PLA/PBSA blends under shear flow. *M. Nofar, A. Maani, M.-C. Heuzey and P. J. Carreau*	**EF2.** Morphology evolution of mesoporous bicontinuous emulsions. *A. Perazzo, V. Preziosi and S. Guido*
4:50	**SC28.** The Medium Amplitude Oscillatory Shear (MAOS) of semi-dilute colloid dispersions - Third harmonic of the suspension stress. *J. W. Swan, K. Gurnon and N. J. Wagner*	**BB28.** Rheology and thermodynamics/scattering of concentrated protein solutions: pH-dependent viscoelasticity of solutions of bovine serum albumin and monoclonal antibodies. *P. Sarangapani, S. D. Hudson, A. Parupudi, P. Manikwar, J. Weaver, R. Jones, K. B. Migler and J. A. Pathak*	**SM28.** The behavior of strongly entangled polymers in strong shearing startup flows. *P. D. Olmsted, R. S. Graham and E. P. Henry*	**NF13.** Yield stress fluid droplet impact on coated surfaces. *B. C. Blackwell, M. E. Deetjen and R. H. Ewoldt*	**BC18.** Mechanical responses of a nano-sandwich of thin polymer layer/single layer graphene/thin polymer layer. *X. Li and G. B. McKenna*	**EF3.** Flow induced localized jamming in sheared dense emulsions. *S. K. Dutta and D. L. Blair*
5:15	**SC29.** Modeling thixotropic colloidal dispersions in Large Amplitude Oscillatory Shear (LAOS) experiments. *M. J. Armstrong, A. N. Beris and N. J. Wagner*	**BB29.** High temperature rheometry of lignocellulosic biomass. *D. J. Klingenberg, T. W. Root, C. T. Scott, C. Houtman, K. J. Bourne and V. Subramaniam*	**SM29.** Microscopic theory of tube constraints and elasticity in isotropic, anisotropic, confined and deformed entangled polymer liquids. *K. Schweizer, D. Sussman, W.-S. Tung, K. Winey and R. Riggleman*	**NF14.** Viscoplastic dip-coating. *M. Maillard, A.-L. Andrieu, J. Bleyer, J. Boujlel and P. Coussot*	**BC19.** The interplay between hydrodynamic and frictional forces in a shear-thickened suspension. *N. Lin, M. Hermes, B. Guy, W. Poon, Y. Su, R. Zia and I. Cohen*	**EF4.** Universal scaling characteristics of stress relaxation in jammed emulsions. *P. Boukany, S. Vasudevan and B. Tighe*
5:40	**SC30.** Study of nonlinear behavior in oscillatory shear of dense colloidal suspensions using asymptotically nonlinear material functions. *M. Agarwal, R. H. Ewoldt and C. F. Zukoski*	**BB30.** Pressure-driven flow of lignocellulosic biomass: A compressible Bingham fluid. *J. C. Duncan, A. Shahravan, M. D. Graham, D. J. Klingenberg, C. T. Scott, K. J. Bourne and R. Fleisner*	**SM30.** Almost ab initio multi-level slip-link modeling. *M. Andreev and J. D. Schieber*	**NF15.** Flow of elasto-viscoplastic materials past a flat plate. *M. R. Ferreira, S. L. Frey, M. F. Naccache and P. R. de Souza Mendes*	**BC20.** Interfacial processes at the polymer/polymer interface probed by linear viscoelasticity coupled with FTIR measurements. *J. Nasrollah Gavgani, A. Faramarzi Jolfaei, F. Goharpey, S. S. Velankar and R. Foudazi*	**EF5.** Modified dissipative particle dynamics: Common Trends in soft suspensions from emulsions to vesicles. *A. Boromand, S. Jamali and J. Maia*
6:05			END			
7:00			AWARDS RECEPTION Millennium Prefunction Area			
8:00			AWARDS BANQUET Millennium Hall			

Wednesday, October 8

Morning

8:30 **PL3.** Microfluidic tools for the manipulation and analysis of macromolecules, vesicles, capsules, and suspensions. *S. J. Muller* Millennium Hall

9:20 COFFEE BREAK

	Commonwealth A	*Commonwealth B*	*Commonwealth C*	*Washington A*	*Washington B*	*Washington C*
	Suspensions and Colloids	**Biomaterials and Biological Systems**	**Polymer Solutions and Melts**	**Non-Newtonian Fluid Mech & Stability**	**Self-assembly & Flow-induced Sys/Gels**	**Emulsions, Foams & Interfacial**
10:00	**SC31.** Correlation of dynamic viscosity, normal stresses and diffusivity of colloidal glasses with excess entropy. *K. Khalil, L. Mohan, M. Cloitre and R. T. Bonnecaze*	**BB31.** Shape transitions of vesicles in extensional flows: Dumbbells, pearling, and buckling. *V. Narsimhan, A. P. Spann and E. Shaqfeh*	**SM31.** Simple desktop calculations for slip-link predictions of entangled polymers. *M. Katzarova, L. Yang, M. Andreev and J. D. Schieber*	**NF16.** Laminar-turbulent boundary and its implication for friction drag reduction in Newtonian and viscoelastic turbulent flows. *L. Xi and M. D. Graham*	**SF16.** Rheological characterization of fracture-healing behavior displayed by a physically associating polymer gel subjected to shear deformation. *K. A. Erk and T. Thornell*	**EF6.** Drainage and stratification kinetics of foam films. *Y. Zhang, S. Yilixiati and V. Sharma*
10:25	**SC32.** Stress relaxation and aging in colloidal glasses. *L. Mohan, R. T. Bonnecaze and M. Cloitre*	**BB32.** Manipulating and separating polymers and particles at the microscale using conformation-dependent electrophoretic mobility. *H. Pandey and P. T. Underhill*	**SM32.** Molecular scale simulations of rheological behavior – Importance of polydispersity. *N. A. Rorrer and J. R. Dorgan*	**NF17.** The dynamics of burst and hibernation in Newtonian and viscoelastic turbulence. *S.-N. Wang and M. D. Graham*	**SF17.** Thin films of homopolymers and cylinder-forming diblock copolymers under shear. *A. Nikoubashman, R. L. Davis, B. T. Michal, P. M. Chaikin, R. A. Register and A. Z. Panagiotopoulos*	**EF7.** The mechanics of low-density open-cell foams: Linear elasticity and quasi-static crushing. *A. M. Kraynik, S. Gaitanaros and S. Kyriakides*
10:50	**SC33.** Probing particle-level stress fluctuations in a colloidal suspension. *N. Lin, M. Bierbaum, S. P. James and I. Cohen*	**BB33.** The rheology of nanoparticles in blood for improved cancer therapy. *E. Carboni, Y. Guo, G. Bouchillon, A. Kadilak, L. Shor and A. K. Ma*	**SM33.** Dynamics of individual molecules in entangled polymeric melts under homogenous shear flow: An atomistic simulation study. *M. H. Nafar Sefiddashti, B. J. Edwards and B. Khomami*	**NF18.** Role of geometry on large mach number instabilities around confined cylinders. *X. Shi and G. F. Christopher*	**SF18.** Interaction of nonionic block copolymer with poly(acrylic acid) and poly(ethylene oxide) in aqueous medium. *A. M. Pragatheeswaran and S. B. Chen*	**EF8.** Multiscale phenomena in liquid foam fracture. *S. Hilgenfeldt, P. S. Stewart and S. H. Davis*
11:15	**SC34.** Trapped dynamics and pair interactions of concentrated nanoparticle suspensions. *Y. H. Wen and L. A. Archer*	**BB34.** A multiscale Adhesive Dynamics model to study the interaction of nonspherical neutrophils with the endothelium. *A. D. Rocheleau, R. Sumagin and M. R. King*	**SM34.** Simulation of dilute solutions of flexible polyelectrolyte chains: Equilibrium properties and force-extension behaviour. *M. Malekzadeh Moghani and B. Khomami*	**NF19.** Models for viscoelastic fluids and their effects on flow instabilities. *Y. Guo and J. L. Bassani*	**SF19.** Structural dynamics of surfactant solutions in planar extensional flow. *B. Luo and W. Burghardt*	**EF9.** Probing foam stability in porous media with micromodels. *S. L. Biswal*
11:40	**SC35.** Jamming and yielding of binary colloidal glasses. *A. Agrawal and L. A. Archer*	**BB35.** Impact of blood rheology and hemodynamics on the adhesive landscape of functionalized nanocarriers to the blood vessel wall. *H.-Y. Yu, H. Vitoshkin, D. M. Eckmann, P. S. Ayyaswamy and R. Radhakrishnan*	**SM35.** Hi-fidelity Brownian dynamics simulation of non-equilibrium properties of macromolecules in good solvents: A bottom-up approach. *M. Malekzadeh Moghani and B. Khomami*	**NF20.** Transient response of a soft glassy fluid in porous medium. *A. Sarkar and D. L. Koch*	**SF20.** Study of diffusion effects in shear banding micellar solutions. *N. Germann, A. N. Beris and L. P. Cook*	**EF10.** Impact of rheological properties on the foaming behavior of linear and branched polylactide. *N. Najafi, M.-C. Heuzey, P. J. Carreau, D. Therriault and C. B. Park*

12:05 LUNCH BREAK

Afternoon

	Commonwealth A	*Commonwealth B*	*Commonwealth C*	*Washington A*	*Washington B*	*Washington C*
	Suspensions and Colloids	**Biomaterials and Biological Systems**	**Polymer Solutions and Melts**	**Non-Newtonian Fluid Mech & Stability**	**Solids and Glasses**	**Emulsions, Foams & Interfacial**
1:30	**SC36.** Metastability and arrested phase separation in asymmetric mixtures of soft and hard colloids. *D. Truzzolillo, J. Marakis and D. Vlassopoulos*	**BB36.** Microrheology of therapeutic protein solutions. *L. L. Josephson, W. J. Galush and E. M. Furst*	**SM36.** The general low-frequency prediction for asymptotically-nonlinear material functions in oscillatory shear. *N. A. Bharadwaj and R. H. Ewoldt*	**NF21.** Flow of thixotropic elasto-viscoplastic materials through a planar 1:4 sudden expansion. *F. Link, S. L. Frey, M. F. Naccache and P. R. de Souza Mendes*	**SG1.** Experiments needed for critical evaluation of constitutive models for glassy polymers. *J. Caruthers and G. Medvedev*	**EF11.** Scaling analysis and mathematical theory of the interfacial stress rheometer. *S. Fitzgibbon and E. Shaqfeh*
1:55	**SC37.** Rheology of a bimodal suspension containing rigid and soft particles. *N. C. Shapley, O. Isijola and A. Chaturbedi*	**BB37.** A microfluidic imaging method to study red blood cell membrane viscoelasticity. *G. Tomaiuolo, L. Lanotte, A. Cassinese and S. Guido*	**SM37.** The QL-LAOS methodology applied to viscoelastic liquids. *A. A. Alicke, M. E. Pfeiffer and P. R. de Souza Mendes*	**NF22.** "Breakage" of non-Newtonian character in flows through porous medium: Evidence from NMR data and numerical simulations. *T. Chevalier, S. Rodts, J. Bleyer, X. Chateau and P. Coussot*	**SG2.** Yielding, failure and strain hardening in uniaxial compression of polymer glasses. *P. Lin, J. Liu and S.-Q. Wang*	**EF12.** Influence of interfacial rheology on the dynamics of the tear film. *M. S. Bhamla and G. G. Fuller*

2:20	**SC38.** Effect of particle size dispersity on the rheology of depletion mixtures of polymers and bidispersed colloids. *R. Pandey and J. C. Conrad*	**BB38.** Novel stochastic method using constraints for modeling of blood rheology. *K. H. Kim and L. E. Wedgewood*	**SM38.** Normal stress differences in large-amplitude oscillatory shear flow for dilute rigid dumbbell suspensions. *A. M. Schmalzer, R. B. Bird and A. J. Giacomin*	**NF23.** Flow of a yield stress fluid in a self-affine fracture. *T. Chevalier and L. Talon*	**SG3.** The age of polymer glasses: What is the effect of stress? *T. Engels and L. Govaert*	**EF13.** Elasticity of microscale volumes of viscoelastic soft matter by cavitation rheometry. *L. Pavlovsky, M. Ganesan, J. G. Younger and M. J. Solomon*
2:45	**SC39.** Doping colloidal spheres with dimers: An additional handle on suspension rheology. *B. D. Leahy and I. Cohen*	**BB39.** Modeling of human blood rheology in transient shear flows. *A. J. Apostolidis, M. J. Armstrong and A. N. Beris*	**SM39.** Quantifying the linear and non-linear rheology of sprayable complex liquids. *B. Keshavarz, G. H. McKinley, E. C. Houze, J. R. Moore and M. R. Koerner*	**NF24.** Displacement of yield stress fluid in horizontal pipe. *G. L. Moises, I. Frigaard and M. F. Naccache*	**SG4.** Identifying structural flow defects in amorphous solids. *S. S. Schoenholz, E. D. Cubuk, J. Rieser, B. D. Malone, D. J. Durian, E. Kaxiras and A. J. Liu*	**EF14.** Targeted synthesis of core/shell microcapsules using interfacial rheology, shell micromechanics and morphology analysis. *P. Erni*
3:10	**SC40.** Dynamics of cubic colloids. *J. R. Royer, G. L. Burton, D. L. Blair and S. D. Hudson*	**BB40.** Large amplitude oscillatory shear of model synovial fluids. *Z. Zhang and G. F. Christopher*	**SM40.** The nonlinear rheology of multiscale complex fluids: Deriving empirical rules in rheology from fractional constitutive equations. *A. Jaishankar and G. H. McKinley*	**NF25.** Pair-particle trajectories in Bingham shear flow. *H. Fahs, G. Ovarlez and X. Chateau*	**SG5.** Various aspects of brittle and ductile behavior of different polymer glasses. *X. Li and S.-Q. Wang*	**EF15.** The surface tension of yield stress fluids. *P. Coussot and J. Boujlel*
3:35			COFFEE BREAK			
4:00	**SC41.** Modelling capillary break-up of particulate suspensions. *C. McIlroy and O. G. Harlen*	**BB41.** Swimming dynamics of Escherichia coli in dilute polymer suspensions. *A. E. Koser and P. E. Arratia*	**SM41.** Model-based framework rheology. *R. L. Thompson, A. A. Alicke and P. R. de Souza Mendes*	**NF26.** Large amplitude oscillatory shear for a model of thixotropic yield stress fluids. *M. Renardy and T. Wang*	**SG6.** Rheology of glass-forming polymers at the nanometer size-scale: Films and surfaces. *G. B. McKenna, H. Yoon, A. K. Torres Arellano and M. Zhai*	**EF16.** Stability of monoclonal antibody solutions subject to expansion/compression cycles at the air/water interface. *G. L. Lin, J. A. Pathak and G. G. Fuller*
4:25	**SC42.** Colloidal aggregates formation and breakup under oscillatory flow. *M. Liard, D. Lootens, N. Martys and P. Hebraud*	**BB42.** Chemical surfing of active particles and connection to chemotaxis of slime mold colonies. *H. Masoud, H. A. Stone and M. J. Shelley*	**SM42.** Chain relaxation of polystyrene-block-ethylene-co-butene-1-block-polystyrene copolymer after applying LAOS in the presence of modified graphene. *A. Faramarzi Jolfaei, J. Nasrollah Gavgani, F. Goharpey and H. Nazockdast*	**NF27.** Non-Newtonian effects in a continuous squeeze flow film of a structured liquid. *E. E. Herrera-Valencia, M. L. Sanchez Villavicencio, R. Mendoza Serna, E. Vazquez Zamora and R. R. Mora Hernandez*	**SG7.** Effect of micro and nano particles on yielding, strain softening and strain hardening of PMMA. *J. Jancar and R. S. Hoy*	**EF17.** Adsorption/desorption kinetics versus interfacial rheology of lung surfactants replacements. *E. Hermans and J. Vermant*
4:50	**SC43.** Structural origins and nonlinear mechanics during yielding of a heterogeneous colloidal gel. *J. Kim, D. Merger, M. Wilhelm and M. Helgeson*	**BB43.** Swimming dynamics of microorganisms in viscoelastic fluids near a wall. *G. Li, A. Karimi and A. Ardekani*	**SM43.** Slip heating in die drool. *P. H. Gilbert and A. J. Giacomin*	**NF28.** Finite element modeling of blood flow in the branched brachial bifurcation using non-Newtonian parameters obtained from rheological measurements of normal blood samples of variable hematocrit levels. *R. D. Wilcox*	**SG8.** Stochastic constitutive model prediction of tertiary creep and recovery in glassy polymers. *G. Medvedev and J. Caruthers*	**EF18.** Polymer structure and rheology at fluid-fluid interfaces. *J. Samaniuk and J. Vermant*
5:15	**SC44.** Bond strength in colloidal depletion gels from direct measurement of thermal rupture force distributions. *K. A. Whitaker, L. C. Hsiao, M. J. Solomon and E. M. Furst*	**BB44.** Swimming and transport in a hexatic liquid crystal. *T. R. Powers, M. S. Krieger and S. E. Spagnolie*	**SM44.** Development of an algorithm determining continuous relaxation time spectrum. *J.-E. Bae and K. S. Cho*	**NF29.** Red blood cell aggregation investigation and characterization in a microfluidic device. *R. Mehri, C. Mavriplis and M. Fenech*	**SG9.** A molecular model for mechanics of polymer glasses. *S.-Q. Wang, S. Cheng, P. Lin and X. Li*	**EF19.** Microrheology studies of the mechanical evolution of interfacial protein layers and biofilms. *D. B. Allan, L. Vaccari, D. M. Firester, A. Singh, J. Sheng, D. H. Reich, K. J. Stebe and R. L. Leheny*
5:40	**SC45.** Micromechanics and non-linear rheology of reversible colloidal gels. *B. Landrum, W. B. Russel and R. Zia*	**BB45.** Undulatory swimming in shear-thinning fluids. *D. A. Gagnon, N. C. Keim and P. E. Arratia*	**SM45.** In-situ structural and thermo-rheological characterization of model thermoplastic polyurethane systems in shear and extensional flows. *J. Maia, R. Andrade, C. Ferreira and J. Gadley*	**NF30.** Design of an experimental setup for the study of the effect of swimming microbot's morphology on the complex fluid flows in microchannels. *S. Martinez-Aranda, F. J. Galindo-Rosales and L. Campo-Deaño*	**SG10.** Resolution of the local segmetal mode in amourphous polymers: Do the chain relaxation modes affect the structural relaxation? *L. Grassia*	**EF20.** Interfacial rheology and dynamic mesostructure measurements of densely aggregated particle laden interfaces. *S. Barman and G. F. Christopher*
6:05			END			
6:05			POSTER SESSION & RECEPTION Millennium Hall			

Thursday, October 9

Morning

8:00 **AP1.** Low-dimensional material functions for describing asymptotically-nonlinear viscoelasticity. *R. H. Ewoldt* (Metzner Award Presentation) Millennium Hall

	Millennium Hall	*Commonwealth B*	*Commonwealth C*	*Commonwealth D*	*Commonwealth A1*	*Commonwealth A2*
	Suspensions and Colloids	**Biomaterials and Biological Systems**	**Polymer Solutions and Melts**	**Self-assembly & Flow-induced Sys/Gels**	**Solids and Glasses**	**Emulsions, Foams & Interfacial**
8:40	**SC46.** Manipulation of the mechanical properties of colloidal gels by steady and oscillatory shear. *G. Petekidis, E. Moghimi and N. Koumakis*	**BB46.** Swimming in circles: Using bacterial circulation as a non-contact microrheological probe. *A. A. Evans*	**SM46.** Mechanical characterization of thin polymer membranes at fuel cell operating conditions. *B. R. Caire, M. A. Vandiver, A. M. Herring and M. W. Liberatore*	**SF21.** The effect of branching on the nonlinear rheology of wormlike micelles (WLMs) using small angle neutron scattering (SANS) with spatial and temporal resolution. *M. A. Calabrese, S. A. Rogers and N. J. Wagner*	**SG11.** Accelerated assessment of the long-term performance of engineering polymers. *M. Kanters and L. Govaert*	**EF21.** Buckling of particle-laden interfaces. *T. Kassuga and J. Rothstein*
9:05	**SC47.** Study of the rheology and wall slip of carbon black suspensions for semi-solid flow batteries. *A. Helal, K. Smith, F. Fan, X. W. Chen, J. M. Nóbrega, Y.-M. Chiang and G. H. McKinley*	**BB47.** Dynamics of active suspensions in confinement: Kinetic theory and numerical simulations. *B. Ezhilan and D. Saintillan*	**SM47.** Effect of hydration on mechanical properties of anion exchange membranes. *M. A. Vandiver, B. R. Caire, Y. Li, D. M. Knauss, A. M. Herring and M. W. Liberatore*	**SF22.** Microstructure, temperature, aging and rheological studies of an ionic micellar structure composed by a p-p organic salt. *J. J. Cardiel, Y. Zhao, P. De la Iglesia, L. D. Pozzo and A. Q. Shen*	**SG12.** Aging of polymeric films used in protective glazing systems. *C. White, K. T. Tan and D. Hunston*	**EF22.** Generation of stable non-spherical capsules with controlled interfacial coverage of surface-active particles. *A. P. Kotula and S. L. Anna*
9:30	**SC48.** Shear-enhanced aggregation of uniform and Janus spheres in the dilute-sphere limit: A Brownian dynamics simulation approach. *M. Mohammadi, J. Liu, E. D. Larson and R. G. Larson*	**BB48.** Theory of locomotion in complex fluids. *G. Elfring and E. Lauga*	**SM48.** Polymer degradation in drag-reducing flows in pipes at fixed inlet pressure. *E. J. Soares, L. Silveira, G. A. Barrientos, F. Thomaz, R. T. Silva and A. S. Pereira*	**SF23.** Linear and nonlinear rheology of wormlike micelles with cationic surfactant and organic hydrotropic salt mixture. *Y. Zhao and A. Q. Shen*	**SG13.** Linear viscoelasticity of soft glassy materials. *M. Kaushal and Y. M. Joshi*	**EF23.** Measuring moduli of elastic biofilms at oil-water interfaces by pendant drop method. *L. Vaccari, D. B. Allan, N. Sharifi-Mood, J. Sheng, R. L. Leheny and K. J. Stebe*
9:55	COFFEE BREAK					
10:25	**SC49.** Nanodiamond gels: Colloidal and rheological properties. *N. A. Burns, S. R. Raghavan, A. Shojaei and S. A. Khan*	**BB49.** Emulsion-templated nanocomposite gel microparticles for lung imaging and drug delivery. *B. R. Benson, N. M. Pinkerton, B. K. Wilson, D. Adler, D. Gao, S. Mettu, R. Dagastine, P. J. Sinko, H. A. Stone and R. K. Prud'homme*	**SM49.** Rheology of enhanced oil recovery polymers for high-temperature and high-salinity reservoirs. *S. M. R. Quadri, M. R. Hashmet and A. A. Abdala*	**SF24.** The sequencing of dynamic rheological measurements. *S. A. Rogers, M. A. Calabrese and N. J. Wagner*	**SG14.** Particle rearrangements and rheology in a 2D glassy solid near yielding. *N. C. Keim and P. E. Arratia*	**EF24.** Interfacial rheology and microstructure of carbon nanotubes at an air-water interface. *S. Vora, B. Bognet, H. Patanwala, F. Chinesta and A. K. Ma*
10:50	**SC50.** Numerical computation of permeability in unstable colloidal gels. *A. M. Mertz, M. S. Ingber, A. Graham, A. Redondo and L. Gelb*		**SM50.** Effect of viscoelastic properties of polymer solutions on Stribeck scaling. *E. Pashkovski and R. Patterson*	**SF25.** A suggestive rheological behaviour of branched micellar solutions. *D. Gaudino, N. Grizzuti and R. Pasquino*	**SG15.** Evidence for deformation dependence of heat capacity in cross-linked natural rubber. *D. Nieto Simavilla, D. C. Venerus and J. D. Schieber*	**EF25.** Flow behavior of Janus monolayers. *S. Razavi, S. R. Bhatia and I. Kretzschmar*
11:15				**SF26.** Light-activated fluidic valve by triggering the ionic gelation of a biopolymer. *H. Oh, V. Javvaji, A. X. Lu, R. Hashemipour and S. R. Raghavan*	**SG16.** Direct observation of the end-to-end distance between crosslinks for silica-based model-rubber networks with mono-disperse short chains. *T. A. Tervoort, C. Clarijs and W. R. Caseri*	**EF26.** Co-continuous polymer blends with silica nanoparticles stabilized at interface. *L. Bai, C. W. Macosko and X. Cheng*
11:40				**SF27.** Migration and alignment of anisotropic planar particles with pinned contact lines at a curved interface. *N. Sharifi-Mood, L. Yao, I. B. Liu and K. J. Stebe*	**SG17.** Non-Newtonian behavior of nuclear glass melts containing insoluble PGE particles. *J. Puig, M. Neyret and P. Marchal*	**EF27.** PIV measurement of transient fluid flow due to the adsorption of particles. *N. A. Musunuri, P. Singh and I. S. Fischer*
12:05	END					

Poster Session

Wednesday 6:05 PM – 8:00 PM Millennium Hall

PO1. The non-monotonic torque response of a model cellulosic biomass slurry during settling and resuspension. *N. C. Crawford, M. A. Sprague and J. J. Stickel*

PO2. An investigation on rheological behaviour of thermally-treated digested sludge: Dependency on solid concentration. *E. Farno*

PO3. Phase behavior of dilute carbon black suspensions and carbon black stabilized emulsions. *M. P. Godfrin, A. Tiwari, A. Bose and A. Tripathi*

PO4. Damping of sloshing of a liquid bath using a thin foam layer. *F. Boulogne, A. Sauret, J. Cappello and H. A. Stone*

PO5. Electric field induced self–assembly of monolayers of sub-micron sized particles on flexible thin films. *K. Shah, M. S. Hossain, E. C. Amah, I. S. Fischer and P. Singh*

PO6. Food emulsions, interfacial properties measured with the Double Wall Ring geometry. *C. A. Gracia-Fernández, A. Elmoumni, A. Peréz-Quintáns and J. Méndez-Dónega*

PO7. Rheological characterization of a UV curing optical adhesive. *C. A. Gracia-Fernández and A. Elmoumni*

PO8. The effects of emulsifying additives on the interface of oil and water. *S. Cotts*

PO9. Effect of material rheology on polymer blend thin film morphology. *J. A. Emerson, E. M. Furst and T. H. Epps, III*

PO10. Investigation of rheological properties of emulsified asphalts to evaluate viscoelastic behaviors. *A. Golalipour and D. Salomon*

PO11. Validation of effective time translational invariance for polymer undergoing crosslinking reaction. *M. Kaushal and Y. M. Joshi*

PO12. Standard and developmental methods for performing rubber rheometry. *G. W. Kamykowski and T. R. Rauschman*

PO13. Shear rheology of imidazolium-based ionic liquids with aromatic functionality. *R. Tao and S. L. Simon*

PO14. Investigation of thermal transport in polymers using infrared thermography. *D. Nieto Simavilla, D. C. Venerus and J. D. Schieber*

PO15. Polylactic acid nanocomposites with improved toughness. *E. Acik, N. Orbey and U. Yilmazer*

PO16. Viscoelastic behavior of zinc sulfonated EPDM- zinc stearate (ZnSt) shape memory polymers. *C. Huang and R. A. Weiss*

PO17. Linear viscoelasticity and dielectric spectroscopy of ionomer/plasticizer mixtures: A transition from ionomer to polyelectrolyte. *N. Bao, Q. Chen, J. H. Wang, T. Tunic, S. Liang and R. H. Colby*

PO18. Optical observations and Raman spectroscopy during flow-induced crystallization of polyethylene. *A. P. Kotula, A. Hight Walker and K. B. Migler*

PO19. Modelling of synthesis and flow properties of propylene-diene copolymers. *C. Das, D. J. Read, J. M. Soulages and P. P. Shirodkar*

PO20. Mechanically robust anion exchange membranes at variable hydrations. *M. A. Vandiver, B. R. Caire, Y. Li, D. M. Knauss, A. M. Herring and M. W. Liberatore*

PO21. Rheological evaluation of hydroxypropyl methylcellulose (HPMC) as a gluten replacer during a simulated baking process. *M. E. Hines and T. T. Chen*

PO22. Degradation of covalently adaptable hydrogels manipulating their chemical equilibrium. *F. S. Escobar IV, M. D. Daniel, K. S. Anseth and K. M. Schultz*

PO23. Effects of association strength of noncovalent bonding on viscoelasticities of supramolecular polymer gels. *S. Matsushima, M. Hayashi, H. Yamagishi, A. Noro and Y. Matsushita*

PO24. Rheology and end-use properties of acrylic polymers for high performance elastomeric sealants. *C. L. Jackson, J. Ngunjiri, P. K. Jog, A. Liss, J. R. Lowe, M. Westmeyer, J. Rubini and M. McGinnis*

PO25. Rheology and microstructure of phase separating blends filled with graphene and carbon black. *M. Z. Iqbal, A. A. Abdala and M. W. Liberatore*

PO26. Decomposing tensile stress during startup uniaxial extension of entangled melts. *P. Lin and S.-Q. Wang*

PO27. Thermal signature of a shear crystallized semiconducting polymer solution. *R. Remy, N. A. Nguyen and M. E. Mackay*

PO28. Stress relaxation behavior of polymer glasses in extension and compression. *J. Liu, P. Lin and S.-Q. Wang*

PO29. Thermal-stiffening of dynamically asymmetric interfaces in polymer nanocomposites. *E. Senses and P. Akcora*

PO30. Mechanical and morphological characterization of thin polymer membranes under environmental control. *B. R. Caire, M. A. Vandiver, A. M. Herring and M. W. Liberatore*

PO31. Design of yield-stress fluids: A rheology-to-structure inverse problem. *A. Z. Nelson and R. H. Ewoldt*

PO32. Carboxymethyl hydroxyethyl cellulose (CMHEC) as a gelling agent in hydraulic fracturing application. *F. Song, T. T. Chen, M. Melbouci, J. Wang and B. Gonska*

PO33. Rheological characterization of end-clathrated polymers. *O. Urakawa, M. Mizohata and T. Inoue*

PO34. Detailed analysis of linear viscoelastic behavior of poly(ionic liquids) with rheo-optical methods. *A. Matsumoto and T. Inoue*

PO35. Importance of humidity control in the rheological characterization of foods. *J. P. Eickhoff, R. Roohnia and G. Arnold*

PO36. Rheological characterization of dough in shear and extension. *M. Meerts, R. Cardinaels, F. Oosterlinck, C. Courtin and P. Moldenaers*

PO37. Flow behavior of carrot suspensions as a dispersed system. *N. Younessinaki and M. G. Scanlon*

PO38. Influence of process temperature, nanoclay and glycerol content on rheological behavior of taro (Colocasia esculenta (L.) Schott) flour film-forming solutions. *A. V. Ramos, V. M. Calado and C. P. Carvalho*

PO39. Thermogelation and rheological behavior of aqueous nano fibrillated cellulose suspensions. *N. Quennouz and C. Osuji*

PO40. Chemorheology of thermal-UV dual curable organic coatings: Role of thermal radical initiator on properties of automotive clearcoats in the dual curing process. *J. W. Hwang, K. N. Kim, S. M. Noh and H. W. Jung*

PO41. Chemorheology of glycidyl azide polymer (GAP) - bi-propargyl succinate reactive system. *C. Dubois and E. Comtois*

PO42. Impact of rheology on static friction. *F. Wolf*

PO43. Rheology of soft colloids across the onset of rigidity: Scaling behavior, thermal, and non-thermal responses. *Y. Xu*

PO44. The effect of curcuminoids on gelation behavior of concentrated solution of methylcellulose. *L. Rakesh, I. Lysenko, J. Zhao, N. Almeida and A. Mueller*

PO45. An evaluation of hysteresis in the viscosity of aluminum oxide colloidal suspension in water observed during measurements. *M. T. Sharif and C. C. Tang*

PO46. Yield stress measurements on concrete and cement pastes. *J. Plog, F. De Vito and J. Nijman*

PO47. Variation in concentration of non-Newtonian fluid suspensions at bifurcations. *J. Maxey, J. F. Morris and P. Nguyen*

PO48. Rheological behavior of wall-slip dominant polybutadiene solutions. *M. Wang and S.-Q. Wang*

PO49. Rheology testing method development on gypsum material. *X. Chen*

PO50. Stress-input rheology for design intuition and user experience. *R. E. Corman, J. Godman and R. H. Ewoldt*

PO51. Analysis of cocoa content in chocolate using tribo-rheometry and its correlation to mouthfeel. *A. K. Latshaw*

PO52. Tribo-rheology of personal care products: Correlation to sensory evaluation. *K. Penfield*

PO53. Accurate measurement of low viscoelasticity near gelation point by electromagnetically spinning system. *T. Hirano and K. Sakai*

PO54. Mechano-electric transduction performance of actuation device based on liquid crystals membrane flexoelectricity. *E. E. Herrera-Valencia and A. D. Rey*

PO55. Adding an additional dimension to the measurement of viscosity: Using a biaxial confocal-rheoscope to study squishy materials. *N. Lin, J. H. McCoy, X. Cheng, B. D. Leahy, J. Israelachvili and I. Cohen*

PO56. Development of a vibrating wire rheometer. *C. Hopkins and J. de Bruyn*

PO57. Near-wall nanovelocimetry based on Total Internal Reflection Fluorescence with continuous tracking. *L. D'Eramo*

PO58. Morphology and flow behavior of multilamellar vesicles in surfactant solutions. *A. Pommella, D. Donnarumma, A. Perazzo, S. Caserta and S. Guido*

PO59. Using the immobilization cell for characterization of paint upon drying. *N. Hesse and B. Rajaram*

PO60. Shear thinning behavior of metal melts. *R. Elke, P. Kamerkar, P. Brandes and D. Schütz*

PO61. Developments in touch-screen, rotational, rheometry systems. *D. J. Moonay*

PO62. Effect of sloped die lip design on operability window and frequency response in slot coating process using viscocapillary model. *W.-G. Ahn, S. H. Lee, H. S. Ji, J. Nam and H. W. Jung*

PO63. Applications of electromagnetically spinning sphere viscometer. *M. Yasuda, T. Hirano and K. Sakai*

PO64. Oscillatory rheology at fluid-fluid interfaces: Uncoupling material and system responses. *J. Samaniuk and J. Vermant*

PO65. A new innovative method to improve process control of processed cheese via in-line viscosity measurement. *O. Reglat*

PO66. Improvements in rheomicroscopy due to stagnation plane created by counter-rotation. *T. Perera and G. Paroline*

PO67. Orthogonal superposition measurements on thermo reversible gels. *M. Namani*

PO68. Microfluidics: A rheo-optical tool to study micro-structured emulsions and their flow instabilities. *V. Preziosi, A. Perazzo, R. D'Apolito, G. Tomaiuolo, S. Caserta and S. Guido*

PO69. Rheo-optical characterization of colloidal suspensions using a novel optical device. *B. Rajaram and A. Elmoumni*

PO70. Polymer relaxation and stretching dynamics in semi-dilute DNA solutions: A single molecule study. *K.-W. Hsiao, C. A. Brockman and C. M. Schroeder*

PO71. Active fractal gels of colloidal Janus spheres. *M. E. Szakasits and M. J. Solomon*

PO72. Microrheological investigation of a biofilm and its constituent extracellular polymers. *M. Ganesan, J. G. Younger and M. J. Solomon*

PO73. Microrheology of a colloidal gel in a water-surfactant solution. *M. D. Wehrman, S. Lindberg and K. M. Schultz*

PO74. Relaxation of particle motion in bimodal suspensions during drying via multi-speckle diffusing wave spectroscopy. *G. J. Oh, J. W. Hwang, S. J. Lee and H. W. Jung*

PO75. Generalized work relations for polymer solution rheology. *F. Latinwo, P. Corona, J. Moller and C. M. Schroeder*

PO76. Diffusing wave spectroscopy: A modern light scattering technique to characterize the rheological properties of soft matter systems. *F. Mondiot, M. Reufer and A. C. Voelker*

PO77. Monitoring phases and phase transitions in two phosphatidylethanolamine monolayers using active interfacial microrheology. *S. Ghazvini and P. Dhar*

PO78. Active microrheology studies of colloidal suspensions. *S. Hurtado Parra, R. T. Stull, X. Du, E. R. Weeks, R. Zia and P. Habdas*

PO79. Experiments to interrogate polyurethane foam bubble growth. *C. O. Brady, G. Soehnel, M. M. Soehnel, B. Shelden, C. C. Roberts and L. A. Mondy*

PO80. Inferring molecular information by determination of the fitting parameters to nonlinear oscillatory shear data. *P. K. Singh and R. H. Ewoldt*

PO81. Small and large amplitude oscillatory shear analysis of ballistic witness materials. *J. E. Seppala, Y. Heo and G. A. Holmes*

PO82. Investigating rheological properties of wheat flour dough at different stages of farinogram using LAOS. *G. Yazar, O. C. Duvarci, S. Tavman and J. L. Kokini*

PO83. Comparison of the LAOS characteristics of four structured foods consisting of a concentrated emulsion (mayonnaise) , a concentrated suspension (tomato paste) and a viscoelastic network (hard and soft dough) products using LAOS. *O. C. Duvarci, G. Yazar and J. L. Kokini*

PO84. Comparison of conventional rheology and FT rheology analysis for commercial toothpaste formulations. *S. Ozkan, W. E. Prosise, F. Chen and G. Puccetti*

PO85. Spray droplet size predictions using microfluidic extensional rheometry. *S. Ozkan, S. Kamin and S. Sarkar*

PO86. Suspensions of solid particles at thermoclines. *A. Doostmohammadi and A. Ardekani*

PO87. Modeling interactions in carbon nanotube suspensions: Transient flows. *G. Natale, J. Ferec, G. Ausias, M.-C. Heuzey and P. J. Carreau*

PO88. Nanoparticle dispersion in a polymer matrix: Scientific problem and technological opportunity. *J. Jancar*

PO89. Pair-particle trajectories in Bingham shear flow. *H. Fahs, G. Ovarlez and X. Chateau*

PO91. Rapid colloidal self-assembly through periodic variation of inter-particle potentials. *S. R. Risbud and J. W. Swan*

PO92. Model for the shear viscosity of solutions of star polymers and other soft particles. *C. I. Mendoza*

PO93. Jammed soft-particle suspensions: Spatial correlations, rheology and diffusion. *A. P. Roy and C. Maloney*

PO94. Secondary-flow behavior of non-Newtonian fluids with Carreau-Yasuda model in curved rectangular microchannels. *K. Yoon, H. W. Jung and M.-S. Chun*

PO95. Molecular scale simulation of shear, parabolic, and extensional flow: Implementation and findings. *N. A. Rorrer and J. R. Dorgan*

PO96. Dynamics of deformable and orientable objects in electric field and fluid flow gradients. *H. Pandey and P. T. Underhill*

PO97. Numerical study of the three-dimensional effects of drop deformation as consequence to an imposed two-dimensional elongational flow with vorticity. *A. Sanjuan, M. A. Reyes, A. Minzoni and E. Gefroy*

PO98. Active probe rheology of polymer melts from molecular simulations: Investigation of the non-linear regime. *M. Karim and R. Khare*

PO99. Mesodynamic simulation of drug molecule distribution in lipids surfactants. *L. Rakesh*

PO100. Rheology of dispersions in the ionic liquid [Bmim][BF4]. *J. Gao, M. B. Shiflett and N. J. Wagner*

PO101. Long-time transient responses of branched wormlike micelles under nonlinear shear flows. *M. A. Calabrese, S. A. Rogers and N. J. Wagner*

PO102. Rheological behavior of silica nanoparticles measured by small angle x-ray scattering. *J. Lee, S. Narayanan, X.-M. Lin and A. R. Sandy*

PO103. Rheology of sulfonated polystryene ionomers. *S. Vorontsov, A. I. Leonov and R. A. Weiss*

PO104. Identifying the mechanisms of shear-induced clustering in polymer-colloid mixtures using 3D rheo-SANS measurements. *J. Kim and M. Helgeson*

PO105. Extensional FlowSANS at the NIST Center for Neutron Science. *K. M. Weigandt*

PO106. Gelation of patchy rods. *N. Kazem and C. Maloney*

PO107. Origin of shear thickening in semidilute wormlike micellar solutions. *J. Pérez-González, B. M. Marín-Santibáñez and F. Rodríguez-González*

PO108. Effect of curvature on shear banding of wormlike micelles in Taylor-Couette flow. *P. Cheng, G. Leal and M. Helgeson*

PO109. Multiphase waxy crude oils rheo-optical characterization. *S. Caserta, A. Perazzo and S. Guido*

PO110. Effect of droplet stiffness on the dynamics of dense emulsions. *X. Di, Z. Shao and C. Osuji*

PO111. Transient yield in reversible colloidal gels: A micro-mechanical perspective. *B. Landrum, L. C. Johnson, W. B. Russel and R. Zia*

PO112. Manipulating particle shapes: Deformation and solidification of molten wax drops at an immiscible liquid interface. *S. N. Beesabathuni, S. Lindberg, C. Wesner, M. Caggioni and A. Q. Shen*

PO113. Microfluidics based conducting polymer polyaniline particles for glucose sensing. *S. N. Beesabathuni, J.-H. Chung and A. Q. Shen*

PO114. Analysis of flow-induced structure in CTAB/NaSal aqueous solution using polarization imaging. *N. Oba and T. Inoue*

PO115. Micro-mechanics and nonlinear rheology of reversible colloidal gels: Creep and delayed yield. *B. Landrum, W. B. Russel and R. Zia*

PO116. Shear thickening fluid (STF) – nanocomposites for improved hypervelocity impact protection against micrometeoroids and orbital debris. *C. D. Cwalina, R. D. Dombrowski and N. J. Wagner*

PO117. Non-equilibrium depletion interactions in colloidal dispersions. *B. E. Dolata and R. Zia*

PO118. Diffusion and rheology in a suspension of hydrodynamically interacting colloids enclosed by a spherical cavity. *C. Aponte-Rivera and R. Zia*

PO119. Structure and rheology of binary Pluronic block copolymer mixtures in the protic ionic liquid ethylammonium nitrate. *R. Chen, C. R. López-Barrón and N. J. Wagner*

PO120. X-ray photon correlation spectroscopy studies of structural irreversibility in a colloidal gel subjected to oscillatory shear flow. *M. S. Kweon and W. Burghardt*

PO121. The use of the mathematical model of Volterra in the aggregation of deoxy-hemoglobin S molecules in sickle cell anemia. *F. E. Mensah*

PO122. Wave propagation and blood rheology. *N. H. Le, F. E. Mensah and H. T. Teju*

PO123. Development of a viscosity-pressure drop correlation model for predicting physical behavior in medical tubing. *Y. Sun, E. J. Correa and E. M. McCready*

PO124. Bacterial biofilms can increase their stiffness by making more of a soft biopolymer. *V. D. Gordon, K. Kovach and M. Davis-Fields*

PO125. Numerical and experimental modeling of blood sedimentation. *E. Niazi and M. Fenech*

PO126. Random walk simulation and one-particle tracking of fibroblast cells. *C. M. V. Galon and R. Bacabac*

PO127. A visual scripting interface for human red blood cells' osmotic characteristics. *C. M. V. Galon and R. Bacabac*

PO128. Numerical study of the influence of the swimming microbot's morphology in a blood analogue fluid flow. *S. Martinez-Aranda, F. J. Galindo-Rosales and L. Campo-Deaño*

PO129. Numerical study of the flow of a shear thickening fluid expelled out from a cell. *S. Martinez-Aranda, L. Campo-Deaño and F. J. Galindo-Rosales*

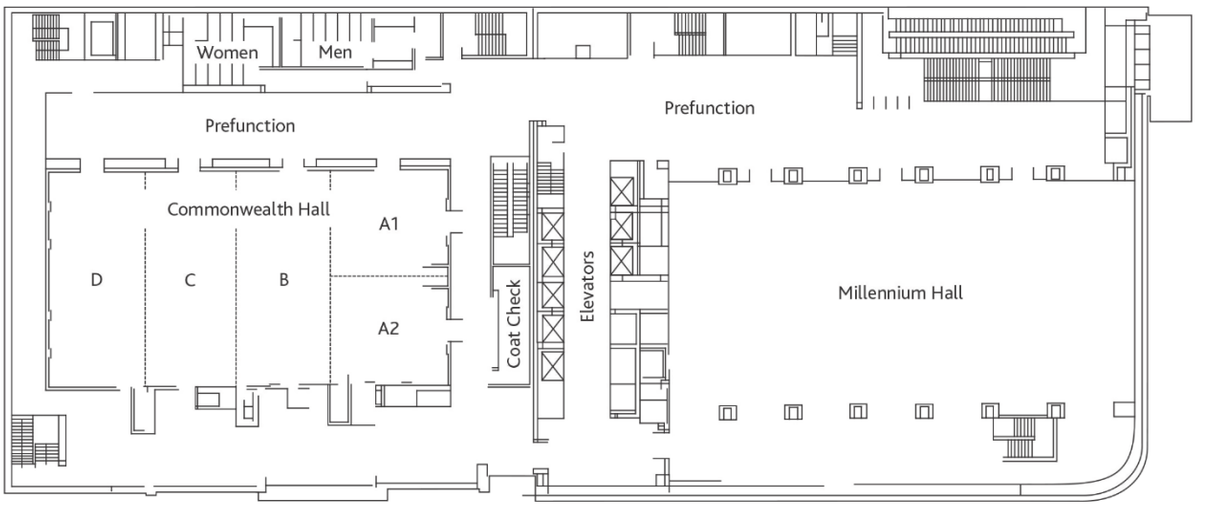
PO130. Velocity profile measurements of blood in PDMS bifurcating microchannels using micro-particle image velocimetry. *O. R. Gliah and M. Fenech*

PO131. Correlating protein-protein interactions and solution viscosities at high concentration. *M. A. Woldeyes, E. M. Furst and C. J. Roberts*

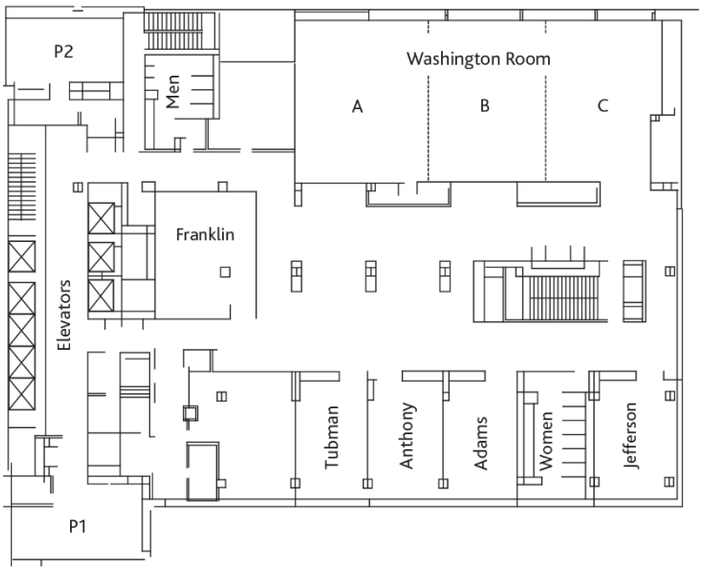
PO132. A novel method to characterize the creep recovery of soft biomaterials. *N. M. Eren, F. Breidi and O. H. Campanella*

PO133. Slip and flow dynamics of thin polymer films. *S. M. Sabzevari, J. McGraw, K. Jacobs and P. M. Wood-Adams*

Loews Philadelphia Hotel Meeting Space



Second Floor



Third Floor

Social Program

Sunday, October 5

Industry/Faculty/Student Forum: *Rheology in the Real World*
4:00 PM – 6:00 PM — Washington C
Sponsored by AIP and The Dow Chemical Company

Welcoming Reception
6:30 PM – 8:30 PM — 33rd Floor of Loews Philadelphia Hotel
Hosted by TA Instruments

Tuesday, October 7

Rocky Rheology Run
6:45 AM — Loews Philadelphia Hotel Lobby

Society Business Meeting
12:05 PM 1:30 PM — Commonwealth D

Awards Reception
7:00 PM – 8:00 PM — Millennium Prefunction Area
Sponsored by Xpansion Instruments

Awards Banquet
8:00 PM — Millennium Hall

Wednesday, October 8

Poster Session Reception
6:05 PM – 8:00 PM — Millennium Hall
Sponsored by Anton-Paar USA

The Society gratefully acknowledges the generous support of
Anton-Paar USA, Malvern Instruments, TA Instruments, Xpansion Instruments
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Center of Molecular Engineering and Thermodynamics at University of Delaware.