



# The Society of Rheology 77<sup>th</sup> Annual Meeting

## Vancouver, British Columbia, Canada

### Meeting Schedule

Monday, October 17, 2005						Tuesday, October 18, 2005						Wednesday, October 19, 2005						Thursday, October 20, 2005				
8:30	B. Khomami (PL1)					8:30	J. Mewis (PL2)					8:30	S. Quake (PL3)					8:05	MR15	SC43	SS24	IR6
9:20	Coffee					9:20	Coffee					9:20	Coffee					8:30	MR16	SC44	SS25	IR7
9:45	FS1	SC1	SR1	IP1	MM1	9:45	FS15	SC15	SM1	SS1	MM15	9:45	BS1	SC29	SM15	MR1	8:55	MR17	SC45	SS26	IR8	
10:10	FS2	SC2	SR2	IP2	MM2	10:10	FS16	SC16	SM2	MM16	10:10	BS2	SC30	SM16	IR2	MR2	9:20	MR18	SC46	IR9		
10:35	FS3	SC3	SR3	IP3	MM3	10:35	FS17	SC17	SM3	MM17	10:35	BS3	SC31	SM17	IR3	MR3	9:45	Coffee				
11:00	FS4	SC4	SR4	IP4	MM4	11:00	FS18	SC18	SM4	SS4	MM18	11:00	BS4	SC32	SM18	IR4	MR4	10:10	MR19	BS15	SM29	IR10
11:25	FS5	SC5	SR5	IP5	MM5	11:25	FS19	SC19	SM5	SS5	MM19	11:25	BS5	SC33	SM19	IR5	MR5	10:35	MR20	BS16	SM30	IR11
11:50	Lunch					11:50	Lunch					11:50	Lunch					11:00	MR21	BS17	SM31	IR12
1:30	FS6	SC6	SR6	IP6	MM6	1:30	FS20	SC20	SM6	SS6	MS1	1:30	BS6	SC34	SM20	SS15	MR6	11:25	MR22	BS18	SM32	IR13
1:55	FS7	SC7	SR7	IP7	MM7	1:55	FS21	SC21	SM7	SS7	MS2	1:55	BS7	SC35	SM21	SS16	MR7	11:50	MR23	SM33	IR14	
2:20	FS8	SC8	SR8	IP8	MM8	2:20	FS22	SC22	SM8	SS8	MS3	2:20	BS8	SM22	SS17	MR8	12:15	End				
2:45	FS9	SC9	SR9	IP9	MM9	2:45	FS23	SC23	SM9	SS9	MS4	2:45	SC37	SM23	SS18	MR9						
3:10	Coffee					3:10	Coffee					3:10	Coffee									
3:35	FS10	SC10	SR10	IP10	MM10	3:35	FS24	SC24	SM10	SS10	MS5	3:35	BS10	SC38	SM24	SS19	MR10					
4:00	FS11	SC11	SR11	IP11	MM11	4:00	FS25	SC25	SM11	SS11	MS6	4:00	BS11	SC39	SM25	SS20	MR11					
4:25	FS12	SC12	SR12	IP12	MM12	4:25	FS26	SC26	SS12	MS7	4:25	BS12	SC40	SM26	SS21	MR12						
4:50	FS13	SC13	SR13	IP13	MM13	4:50	FS27	SM13	SS13	MS8	4:50	BS13	SM27	SS22	MR13							
5:15	FS14	SC14	SR14	MM14	5:15	FS28	SC28	SM14	SS14	MS9	5:15	BS14	SC42	SM28	SS23	MR14						
5:40	End					5:40	End					5:40	End									
6:30	Awards Reception					5:45	Society Business Meeting					6:00	Poster Session & Refreshments									
7:00	Awards Banquet																					

### Session Codes

BS = Rheology of Biomaterials and Biological Systems

FS = Non-Newtonian Fluid Mechanics and Stability

IP = Interfacial Problems in Rheology

IR = Industrial Rheology

MM = Molecular Modeling and Simulation in Rheology

MR = Microrheometry and Microfluidics

MS = Dealy Symposium: Molecular Structure and Rheology

PL = Plenary Lectures

SC = Suspensions, Colloids, and Multiphase Fluids

SM = Entangled Solutions and Melts

SR = Solution Rheology

SS = Viscoplasticity and Viscoelasticity of Solids and Semi-Solids

# Monday, October 17

## Morning

8:30	<b>PL1.</b> Modeling and simulation of dynamics of polymeric solutions: Progress and challenges. <i>B. Khomami</i> Salon 1 & 2				
9:20	COFFEE				
	<b>Oak 1 &amp; 2</b>	<b>Salon 1</b>	<b>Salon 2</b>	<b>Seymour</b>	<b>Salon 3</b>
	<b>Fluid Mechanics and Stability</b>	<b>Suspensions and Colloids</b>	<b>Solution Rheology</b>	<b>Interfacial Problems in Rheology</b>	<b>Molecular Modeling and Simulation</b>
9:45	<b>FS1.</b> Iterated stretching and multiple beads-on-a-string phenomena in dilute solutions of highly-extensible flexible macromolecules. <i>M. N. Oliveira and G. H. McKinley</i>	<b>SC1.</b> Flow phase diagram and correspondence principle for linear flows of sheared magnetic suspensions. <i>Q. Wang, G. Forest and R. Zhou</i>	<b>SR1.</b> Evolution of shear induced structures in a shear thickening micellar solution. <i>V. Herle, B. M. Marín-Santibáñez, P. A. Fischer, L. de Vargas and J. Pérez-González</i>	<b>IP1.</b> Equilibrium model for capillary driven deformation of hyperelastic porous media. <i>W. H. Hart, R. Hamm, P. Lipic, R. Singh, G. Stevens and W. Worley</i>	<b>MM1.</b> Development of mesoscopic models for non-Newtonian flow calculations. <i>P. S. Doyle and P. T. Underhill</i>
10:10	<b>FS2.</b> On the deformation and translation of multiple bubbles in a viscoelastic filament undergoing stretching. <i>K. Foteinopoulou, V. Mavrantzas and J. Tsamopoulos</i>	<b>SC2.</b> Effects of body forces on electro- and magnetorheological fluids. <i>D. J. Klingenberg, A. Smith and J. Ulicny</i>	<b>SR2.</b> Morphology and shear banding in nematic polymer driven flows based on kinetic model simulations. <i>R. Zhou, G. Forest, Q. Wang and H. Zhou</i>	<b>IP2.</b> Diffusive coarsening of foam. <i>A. M. Kraynik and S. Hilgenfeldt</i>	<b>MM2.</b> Brownian dynamics simulations with stiff FENE-Fraenkel springs as approximations to rods in bead-spring models. <i>C.-C. Hsieh and R. G. Larson</i>
10:35	<b>FS3.</b> A finite-element phase-field method for simulating interfacial dynamics in complex fluids. <i>P. Yue, C. Zhou, J. J. Feng, C. F. Ollivier-Gooch and H. H. Hu</i>	<b>SC3.</b> Magnetorheological measurements in suspensions of magnetic nanoparticles. <i>C. Rinaldi</i>	<b>SR3.</b> Property characterization of nematic nano-composite films: Homogenized averaging versus percolation. <i>G. Forest, X. Zheng, R. Zhou, R. Lipton, Q. Wang and H. Zhou</i>	<b>IP3.</b> Effect of viscoelasticity on the coalescence between a drop and a liquid-liquid interface. <i>X. Chen and J. J. Feng</i>	<b>MM3.</b> Modeling strong extensional flows of linear polymers. <i>A. N. Beris and J. Mukherjee</i>
11:00	<b>FS4.</b> The dynamics of droplet impact on thin films of wormlike micelle solutions. <i>J. Grimaldi, R. Leopard, F. Lopes and J. P. Rothstein</i>	<b>SC4.</b> Structure formation, dynamics and applications of MR fluids in microchannels. <i>S. S. Deshmukh, S. Devasenathipathy and G. H. McKinley</i>	<b>SR4.</b> The effect of insoluble surfactants on drop deformation and breakup in simple shear flow. <i>P. D. Anderson, I. Bazhlekov and H. Meijer</i>	<b>IP4.</b> Coalescence, deformation and break-up in physically compatibilized blends. <i>E. Van Hemelrijck, P. Van Puyvelde, C. W. Macosko and P. Moldenaers</i>	<b>MM4.</b> Elongational viscosity of dilute solutions of DNA molecules. <i>P. Sunthar, D. A. Nguyen, R. Dubbelboer, J. R. Prakash and T. Sridhar</i>
11:25	<b>FS5.</b> Simulation of a head-on droplet collision of non-Newtonian fluids. <i>K. Wielage, D. Bothe and H.-J. Warnecke</i>	<b>SC5.</b> Graphene nanocomposites. <i>L. C. Brinson, T. Ramanathan, A. A. Abdala, S. Stankovich, D. A. Dikin, M. Herrera, R. D. Piner, D. H. Adamson, J. Liu, R. S. Ruoff, S. T. Nguyen, I. A. Aksay and R. K. Prud'homme</i>	<b>SR5.</b> Molecular interactions between comb-like associative polymer and nonionic surfactants: Effects of surfactant mixtures and hydrophilic-lipophilic balance. <i>S. Talwar, L. F. Scanu and S. A. Khan</i>	<b>IP5.</b> Effects of flow on coupling of functional polymers at melt interfaces. <i>J. Zhang, T. P. Lodge and C. W. Macosko</i>	<b>MM5.</b> Simulation of polymer chain scission using Kramers model. <i>H. G. Sim, R. Sureshkumar and B. Khomami</i>
11:50	LUNCH				

## Afternoon

	<b>Oak 1 &amp; 2</b>	<b>Salon 1</b>	<b>Salon 2</b>	<b>Seymour</b>	<b>Salon 3</b>
	<b>Fluid Mechanics and Stability</b>	<b>Suspensions and Colloids</b>	<b>Solution Rheology</b>	<b>Interfacial Problems in Rheology</b>	<b>Molecular Modeling and Simulation</b>
1:30	<b>FS6.</b> Droplet formation and filament breakup in roll coating. <i>M. Pouran and D. F. James</i>	<b>SC6.</b> Structure and rheology of organically-modified clay dispersions. <i>J. Li and J. P. Oberhauser</i>	<b>SR6.</b> The scaling of zero-shear viscosities of semidilute polymer solutions with concentration. <i>Y. Heo and R. G. Larson</i>	<b>IP6.</b> Interfacial stick-slip transition in simple shear of entangled melts. <i>P. Boukany, P. Tapadia and S.-Q. Wang</i>	<b>MM6.</b> Computational study of spinodal decomposition in rigid rod systems. <i>M. J. Green, R. A. Brown and R. C. Armstrong</i>

1:55	<b>FS7.</b> Imaging the velocity field of viscoelastic film splitting flows. <i>M. Y. Becerra, L. F. A. Azevedo and M. S. Carvalho</i>	<b>SC7.</b> Microstructure-rheological behavior correlation of clay/anionic additives systems. <i>K. Bekkour and A. Benchabane</i>	<b>SR7.</b> Shear and extensional rheology of polymer solutions: Brownian dynamics simulations at finite concentrations. <i>C. Stoltz, J. J. de Pablo and M. D. Graham</i>	<b>IP7.</b> Rheology of particle-laden interfaces. <i>H. G. Xu and G. G. Fuller</i>	<b>MM7.</b> Network modeling of entangled wormlike micellar solutions in shearing and extensional flows. <i>P. Cook, G. H. McKinley and P. Vasquez</i>
2:20	<b>FS8.</b> Linear stability analysis of electrically-driven viscoelastic jets. <i>C. P. Carroll and Y. L. Joo</i>	<b>SC8.</b> Linear and non-linear rheology for clay nanocomposites characterization: Fast Fourier Transform rheology and conventional rheology. <i>C. Mobuchon, P. J. Carreau and M.-C. Heuzey</i>	<b>SR8.</b> Shear thinning in semidilute unentangled solutions of flexible polymers. <i>R. H. Colby, D. C. Boris, W. E. Krause and S. Dou</i>	<b>IP8.</b> Rheology of polymer blends with interfacially-active particles. <i>P. Thareja and S. Velankar</i>	<b>MM8.</b> Simulation of semidilute polymer solutions by dissipative particle dynamics. <i>S. Weitz, G. Pan, J. Potoff, C. W. Manke and A. S. Ferrante</i>
2:45	<b>FS9.</b> Multiplicity and bifurcation in dynamic solutions of film blowing process. <i>J. S. Lee, D. M. Shin, H. W. Jung and J. C. Hyun</i>	<b>SC9.</b> Large scale structures in polymer-clay hydrogels. <i>E. Loizou, L. Porcar, P. D. Butler and G. Schmidt</i>	<b>SR9.</b> Influence of configuration-dependent drag on the capillary thinning of filaments of dilute polymer solutions. <i>R. Prabhakar, J. R. Prakash and T. Sridhar</i>	<b>IP9.</b> Compression of colloidal monolayers containing ellipsoidal particles. <i>J. Vermant, M. G. Basavaraj and G. G. Fuller</i>	<b>MM9.</b> Mesoscopic simulation of polymer chains by DPD. <i>V. Symeonidis, B. Caswell and G. E. Karniadakis</i>
3:10			COFFEE		
3:35	<b>FS10.</b> Oscillatory regimes of transition from jetting to dripping of polymeric liquids. <i>J. Bico, C. Clasen, V. M. Entov and G. H. McKinley</i>	<b>SC10.</b> Melt intercalation dynamics of polystyrene and nanoclay in air and inert environments. <i>D. J. Frankowski, R. J. Spontak and S. A. Khan</i>	<b>SR10.</b> Effects of block length, pH, and ionic strength on diblock polyelectrolyte solution rheology. <i>A. S. Kimerling, S. Rochefort and S. R. Bhatia</i>	<b>IP10.</b> Single-molecule analysis of a virus particle attachment to a living cell. <i>M. I. Chang, P. Panorchan, T. Dobrowsky and D. Wirtz</i>	<b>MM10.</b> The Consistently Unconstrained Brownian Slip-link (CUBS) model with semi-flexibility and finite extensibility. <i>J. D. Schieber and T. Kitkrailard</i>
4:00	<b>FS11.</b> Extended modeling of flow-induced crystallization and the influence on rheology. <i>G. W. Peters and R. R. Steenbakkers</i>	<b>SC11.</b> Polycaprolactone/organoclay nanocomposites: Structure, rheology, and crystallization. <i>S. Acierno, E. Di Maio, S. Iannace and N. Grizzuti</i>	<b>SR11.</b> A rheological study of structural transitions in triblock copolymers swollen with nematic liquid crystal solvent. <i>R. Verduzco, N. R. Scruggs, M. D. Kempe and J. A. Kornfield</i>	<b>IP11.</b> Compression and shear viscoelasticity in polymer monolayers. <i>P. Cicuta</i>	<b>MM11.</b> Dynamic Monte Carlo for rheological properties of polymer melts. <i>J. R. Dorgan</i>
4:25	<b>FS12.</b> Transient and steady-state analysis of fiber spinning with flow-enhanced crystallization. <i>W. H. Kohler and A. J. McHugh</i>	<b>SC12.</b> A re-entrant glass transition in laponite dispersions. <i>H. Baghdadi and S. R. Bhatia</i>	<b>SR12.</b> Rheology of self-assembled block copolypeptide hydrogels. <i>V. Breedveld</i>	<b>IP12.</b> Interfacial rheology of mixed fatty alcohol monolayers. <i>K. Golemanov, G. G. Gavrancovic, G. G. Fuller and A. Lange</i>	<b>MM12.</b> Brownian dynamics simulations of polymer blend droplets. <i>B. Narayanan, V. Pryamitsyn and V. Ganesan</i>
4:50	<b>FS13.</b> Two-dimensional simulations of the pressure and the free surface oscillations in the stick-slip extrusion instability. <i>G. Georgiou, E. Taliadorou and A. N. Alexandrou</i>	<b>SC13.</b> Thermal hardening behavior in dispersions of anisotropic clay particles. <i>N. Kumar, C. Kim, D. Weitz and G. H. McKinley</i>	<b>SR13.</b> A multicomponent model for the non-Arrhenian viscosity of natural silicate melts. <i>J. K. Russell, D. Giordano and D. B. Dingwell</i>	<b>IP13.</b> Faraday instability in a surface-frozen liquid. <i>P. Huber and S. Kumar</i>	<b>MM13.</b> Kinetic theory for ellipsoidal suspensions and biaxial liquid crystal polymers. <i>Q. Wang</i>
5:15	<b>FS14.</b> Capillary instability of magnetic fluid jet conducted by the applied magnetic field. <i>J. Ma, R. Hong and J. Yang</i>	<b>SC14.</b> Effects of nano-particles on the rheology of polymer melts. <i>D. G. Baird, D. W. Litchfield and W. S. DePolo</i>	<b>SR14.</b> Thermorheological properties near the glass transition temperature of oligomeric methyl methacrylate containing polyhedral silsesquioxane nanocages. <i>E. T. Kopesky, S. G. Boyes, N. D. Treat, R. E. Cohen and G. H. McKinley</i>		<b>MM14.</b> Self-consistent Brownian dynamics simulations of ternary polymer blends. <i>B. Narayanan, V. Pryamitsyn and V. Ganesan</i>
5:40			END		
7:00			AWARDS RECEPTION	Salon 1 & 2	
7:30			AWARDS BANQUET	Salon 1 & 2	

# Tuesday, October 18

## Morning

8:30	PL2. Thixotropy or «inelastic» time dependency. <i>J. Mewis</i> Salon 1 & 2				
9:20	COFFEE				
	<b>Oak 1 &amp; 2</b>	<b>Salon 1</b>	<b>Salon 2</b>	<b>Seymour</b>	<b>Salon 3</b>
	<b>Fluid Mechanics and Stability</b>	<b>Suspensions and Colloids</b>	<b>Entangled Solutions and Melts</b>	<b>Solids and Semi-Solids</b>	<b>Molecular Modeling and Simulation</b>
9:45	<b>FS15.</b> Direct numerical simulations of sheared mesophase pitches. <i>D. Grecov and A. D. Rey</i>	<b>SC15.</b> Annular expansion flow of a concentrated suspension measured by NMRI. <i>T. Moraczewski and N. Shapley</i>	<b>SM1.</b> Hierarchical modelling of entangled polymer dynamics: the bottom up approach. <i>A. Likhtman and S. K. Sukumaran</i>	<b>SS1.</b> Predicting aging phenomena in glassy polymers with the potential energy clock model. <i>D. B. Adolf and R. S. Chambers</i>	<b>MM15.</b> Steady-state and transient analysis of film blowing with flow-enhanced crystallization. <i>L. Henrichsen and A. J. McHugh</i>
10:10	<b>FS16.</b> Computational simulations of the behavior of a model nematic LCP in a simple shear device. <i>D. H. Klein and L. G. Leal</i>	<b>SC16.</b> Rheological behavior of fiber-filled polypropylene under large amplitude oscillatory shear flow. <i>J. Férec, M.-C. Heuzey, P. J. Carreau and G. Ausias</i>	<b>SM2.</b> Primitive path identification and statistics in molecular dynamics simulations of entangled polymer melts. <i>Q. Zhou and R. G. Larson</i>		<b>MM16.</b> Modeling of non-isothermal jets in polymer melt electrospinning with and without phase transition. <i>E. Zhmayev, H. Zhou and Y. L. Joo</i>
10:35	<b>FS17.</b> Temporal and spatial visualization of shear-band formation in wormlike micelles. <i>E. Miller and J. P. Rothstein</i>	<b>SC17.</b> Stress dielectric response in polymeric suspensions. <i>Y. Peng and Y. M. Shkel</i>	<b>SM3.</b> What are the respective contributions of contour length fluctuations and tube motions to the 3.4-power law for zero-shear viscosity?. <i>C.-Y. Liu, E. van Ruymbeke, A. Leygue, R. Keunings and C. Bailly</i>		<b>MM17.</b> Microstructural modeling and flow simulations of PTFE paste extrusion. <i>P. D. Patil, S. G. Hatzikiriakos and J. J. Feng</i>
11:00	<b>FS18.</b> Visco-plastic lubrication, a nonlinearly stable multilayer shear flow. <i>I. Frigaard, C. Huen, D. M. Martinez and M. Moyers-Gonzalez</i>	<b>SC18.</b> Colloidal interaction forces and their relationship to the heterogeneous structure and dynamics of gels. <i>C. J. Dibble, M. Kogan and M. J. Solomon</i>	<b>SM4.</b> A study of the LAOS response of linear entangled polystyrene melts. <i>A. Leygue, C.-Y. Liu, C. Bailly and R. Keunings</i>	<b>SS4.</b> A Gaussian slip-link model for cross-linked polymers. <i>M. Eskandari, J. D. Schieber and H. Arastoopour</i>	<b>MM18.</b> Scaling of features of the energy landscape in stressed systems and relationship to viscoelastic processes. <i>C. Maloney and D. Lacks</i>
11:25	<b>FS19.</b> Instability of viscoelastic plane couette flow past a deformable wall. <i>V. Shankar, E. K. Hobbie and S. Kumar</i>	<b>SC19.</b> Consolidation of a colloidal dispersion under shear. <i>J. F. Morris</i>	<b>SM5.</b> Wall slip and spurt flow of polybutadiene. <i>F. Smillo, S. T. Lim and J. M. Dealy</i>	<b>SS5.</b> Viscoelastic behavior of low molecular weight sulfonated polystyrene ionomers. <i>H. Zhao and R. A. Weiss</i>	<b>MM19.</b> Cyber infrastructure for polymer rheology. <i>H. H. Winter and M. Mours</i>
11:50	LUNCH				

## Afternoon

	<b>Oak 1 &amp; 2</b>	<b>Salon 1</b>	<b>Salon 2</b>	<b>Seymour</b>	<b>Salon 3</b>
	<b>Fluid Mechanics and Stability</b>	<b>Suspensions and Colloids</b>	<b>Entangled Solutions and Melts</b>	<b>Solids and Semi-Solids</b>	<b>Dealy: Molecular Structure and Rheology</b>
1:30	<b>FS20.</b> Parallel shear of viscoelastic fluids as a control problem. <i>M. Renardy</i>	<b>SC20.</b> Yielding and flow of colloidal glasses and gels. <i>G. Petekidis, K. Pham, D. Vlassopoulos, S. Egelhaaf, W. C. Poon and P. N. Pusey</i>	<b>SM6.</b> Terminal and segmental dynamics in miscible polymer blends. <i>T. P. Lodge, J. C. Haley, I. Zeroni and S. Ozair</i>	<b>SS6.</b> Nanoscale confinement modifies physical aging in polymeric glasses. <i>R. D. Priestley, P. Rittigstein, L. J. Broadbelt and J. M. Torkelson</i>	<b>MS1.</b> Unsolved mysteries of polymer rheology. <i>R. G. Larson</i>
1:55	<b>FS21.</b> Linear stability of shear flow in the high Weissenberg number boundary layer. <i>A. Putz</i>	<b>SC21.</b> Shear thickening in polymer stabilized colloidal dispersions. <i>N. Wagner, L. Krishnamurthy and J. Mewis</i>	<b>SM7.</b> The shear rheology and single molecule fluorescence microscopy of entangled DNA in solution. <i>R. Teixeira, E. S. Shaqfeh and S. Chu</i>	<b>SS7.</b> Nanobubble inflation to measure the viscoelastic response of ultrathin polymer films: Membrane and bending limits. <i>P. A. O'Connell and G. B. McKenna</i>	<b>MS2.</b> Complex fluid interfaces. <i>G. G. Fuller</i>

2:20	<b>FS22.</b> Non-Newtonian effects in lubrication flow. <i>D. Grecov and J.-R. Clermont</i>	<b>SC22.</b> Non-monotonic variations in viscosity for dense ergodic suspensions with depletion attractions. <i>V. Gopalakrishnan and C. F. Zukoski</i>	<b>SM8.</b> Effect of edge instability on the non-linear rheology of a highly entangled polymer solution in a torque-controlled rheometer. <i>Y. W. Inn, K. F. Wissbrun and M. M. Denn</i>	<b>SS8.</b> Viscoelastic responses of hybrid poly(styrene-butadiene-styrene) triblock copolymers. <i>A. Lee and D. Drazkowski</i>	<b>MS3.</b> Interpreting the elongational behaviour of monodisperse entangled melts and solutions. <i>G. Ianniruberto and G. Marrucci</i>
2:45	<b>FS23.</b> The circular-hole pressure for non-newtonian fluids. <i>B. Caswell, V. Symeonidis and G. E. Karniadakis</i>	<b>SC23.</b> Retraction behavior of PPG drops in PEG with added Pluronic surfactants. <i>J. Martin and S. Velankar</i>	<b>SM9.</b> Exploring consequences of constitutive flow discontinuity in simple shear of entangled polymer mixtures. <i>P. Tapadia and S.-Q. Wang</i>	<b>SS9.</b> Solid and semi-solid characteristics of block copolymers with cubic phases. <i>P. Mandare and H. H. Winter</i>	<b>MS4.</b> Extensional rheology and tack of a multibranch adhesive. <i>S.-K. T. Ng, C. G. Robertson, S. Warren and G. H. McKinley</i>
3:10			COFFEE		
3:35	<b>FS24.</b> Investigation of maxwellian fluid flow in the capillary tubes and studying the effective parameter: Theoretical parameter: Theoretical approach. <i>M. Soltani</i>	<b>SC24.</b> Experiments and modeling to characterize the manufacture of a physically blown foam. <i>L. A. Mondy, R. R. Rao, T. A. Baer, D. B. Adolf, E. Russick, A. M. Kraynik, A. M. Grillet and S. A. Altobelli</i>	<b>SM10.</b> Stress relaxation dynamics in entangled linear polymer liquids following step strain flow. <i>D. C. Venerus and R. R. Nair</i>	<b>SS10.</b> High deformation rate behavior of polymeric foams filled with concentrated silica suspensions. <i>G. Bettin and G. H. McKinley</i>	<b>MS5.</b> What can be learnt from rheology with respect to branching of polymers?. <i>H. Münstedt</i>
4:00	<b>FS25.</b> Universality in rheology. <i>K. H. Ahn and S. J. Lee</i>	<b>SC25.</b> Characterization of immiscible polymer blend microstructure by Fourier transform rheology. <i>C. Carotenuto, N. Grizzuti, M. Grosso and P. L. Maffettone</i>	<b>SM11.</b> Responses of monodisperse entangled polymers to large step-strains. <i>P. Tapadia and S.-Q. Wang</i>	<b>SS11.</b> Strong through to weak sheared gels. <i>N. Altmann, J. Stokes, D. E. Dunstan and J. J. Cooper-White</i>	<b>MS6.</b> Nonlinear rheology of branched polymers. <i>L. Archer, J. H. Lee and L. Fetters</i>
4:25	<b>FS26.</b> Hydrodynamic theory of polymeric liquids: Comparison to experiments. <i>O. Mueller, M. Liu, H. Pleiner and H. R. Brand</i>	<b>SC26.</b> New formulation of a two-fluid theory to study stress induced demixing. <i>M. Minale</i>		<b>SS12.</b> Rheology of concentrated surfactants. <i>M. Y. Castro, P. Mongondry, C. W. Macosko and T. Moaddel</i>	<b>MS7.</b> The role of the chain length between branch points on branched polymer rheology. <i>R. H. Colby</i>
4:50	<b>FS27.</b> Visualization of secondary flow formation by NMR methods. <i>G. E. Pavlovskaya</i>		<b>SM13.</b> Validation of empirical rules for a standard polymer solution. <i>J. Laeuger and P. Heyer</i>	<b>SS13.</b> Yield stress effects in Taylor-Couette flows. <i>I. Frigaard, F. Lepelletier, D. M. Martinez and C. Piccolo</i>	<b>MS8.</b> Melt blown fibers from block copolymers. <i>A. S. Phatak, F. S. Bates and C. W. Macosko</i>
5:15	<b>FS28.</b> Ergodicity-breaking and conformational hysteresis in polymer dynamics near a surface stagnation point. <i>V. A. Beck and E. S. Shaqfeh</i>	<b>SC28.</b> Deformation of a drop in a polymer blend under simple shear flow. <i>S. Caserta, M. Simeone and S. Guido</i>	<b>SM14.</b> Shear flow behavior in entangled polydisperse polymer solutions. <i>A. Philips and S.-Q. Wang</i>	<b>SS14.</b> Continuous casting of a thermoplastic paste. <i>D. A. Barker and I. Wilson</i>	<b>MS9.</b> The influence of rheological knowledge in polyolefin product development. <i>S. Chum</i>
5:40			END		
5:45			SOCIETY BUSINESS MEETING	Seymour	

## Wednesday, October 19

### Morning

8:30	PL3. Some amusing examples of polymer rheology: Knotted DNA and microfluidic logic. <u>S. Ouake</u> Salon 1 & 2				
9:20	COFFEE				
	<i>Oak 1 &amp; 2</i>	<i>Salon 1</i>	<i>Salon 2</i>	<i>Seymour</i>	<i>Salon 3</i>
	<b>Biomaterials and Biological Systems</b>	<b>Suspensions and Colloids</b>	<b>Entangled Solutions and Melts</b>		<b>Microrheometry and Microfluidics</b>
9:45	<b>BS1.</b> Rheopexy of synovial fluid and reversible protein aggregation. <u>K. N. Oates, W. E. Krause, R. L. Jones and R. H. Colby</u>	<b>SC29.</b> Jamming in carbon nanotube suspensions. <u>E. K. Hobbie</u>	<b>SM15.</b> Elongational viscosity of monodisperse and bidisperse polystyrene melts. <u>J. K. Nielsen, H. K. Rasmussen and O. Hassager</u>		<b>MR1.</b> Nuclear microrheology. <u>J. S. Lee, P. Panorchan, Y. Tseng and D. Wirtz</u>
10:10	<b>BS2.</b> Microrheology of evolving extracellular matrices. <u>T. Savin and P. S. Doyle</u>	<b>SC30.</b> Colloidal particles coated and stabilized by DNA-wrapped carbon nanotubes. <u>E. K. Hobbie and B. J. Bauer</u>	<b>SM16.</b> Optical rheology of polydimethylsiloxane melt in planar extensional flow. <u>R. Subramanian</u>	<b>Industrial Rheology</b>	<b>MR2.</b> Microrheology with optical tweezers – measuring the viscoelastic properties of polymer solutions in the frequency domain using colloidal particles in oscillating traps. <u>W. J. Frith and J. Sleep</u>
10:35	<b>BS3.</b> The microrheology of semiflexible self-assembled $\beta$ -hairpin hydrogels. <u>C. Veerman, K. Rajagopal, J. Schneider, C. S. Palla and E. M. Furst</u>	<b>SC31.</b> Effect of fiber aspect ratio and surface treatment on the rheology of dispersions of carbon nanofibers. <u>S. Agarwal and R. K. Gupta</u>	<b>SM17.</b> Characterization of sparsely long chain branched polycarbonate: Observations vs. predictions from tube models and Monte-Carlo simulations. <u>E. van Ruymbeke, A. Kaivez, C.-Y. Liu, A. Leygue, R. Keunings and C. Bailly</u>	<b>IR2.</b> Gelled fibre suspensions as ‘feel & function modifiers’ for food applications. <u>B. Wolf, S. Adams and S. Singleton</u>	<b>MR3.</b> Probing the micro-structure of Carbopol using dynamic light scattering and multiple particle tracking. <u>L. Rubatat, F. Oppong, A. E. Bailey, J. R. de Bruyn and B. J. Frisken</u>
11:00	<b>BS4.</b> Shearing actin gels. <u>J. Liu, G. Koenderink, I. Cohen and D. Weitz</u>	<b>SC32.</b> Rheological characteristic of model hemi-telechelic polystyrene-POSS copolymers. <u>A. Lee and B. E. Coughlin</u>	<b>SM18.</b> Structure-property models to predict polyolefin rheology. <u>C. P. Lusignan and T. H. Mourey</u>	<b>IR3.</b> Microrheological characterization of heterogeneous fluids containing polymers, colloids, and surfactants. <u>S. Lindberg and P. Spicer</u>	<b>MR4.</b> A simple paradigm for active and nonlinear microrheology. <u>T. M. Squires and J. F. Brady</u>
11:25	<b>BS5.</b> Live-cell microrheology. <u>Y. Tseng, T. P. Kole, J. S. Lee, P. Panorchan and D. Wirtz</u>	<b>SC33.</b> Shear alignment of nanoparticle arrays templated by block-copolymer mesophases. <u>D. C. Pozzo and L. M. Walker</u>	<b>SM19.</b> Evidence of convective constraint release during hole growth in freely-standing polystyrene films at low temperatures. <u>C. B. Roth, B. Deh, B. G. Nickel and J. R. Dutcher</u>	<b>IR4.</b> Hydraulic fracturing of oil and gas wells with foams: Importance of foam rheology and recent advances in its characterization. <u>A. A. Peña, L. Schafer, L. Lin and R. Hutchins</u>	<b>MR5.</b> Particle dynamics in semiflexible polymer-colloid solutions. <u>J. Y. Huh, B. S. Chae and E. M. Furst</u>
11:50	LUNCH				

### Afternoon

	<i>Oak 1 &amp; 2</i>	<i>Salon 1</i>	<i>Salon 2</i>	<i>Seymour</i>	<i>Salon 3</i>
	<b>Biomaterials and Biological Systems</b>	<b>Suspensions and Colloids</b>	<b>Entangled Solutions and Melts</b>	<b>Solids and Semi-Solids</b>	<b>Microrheometry and Microfluidics</b>
1:30	<b>BS6.</b> Finite deformation model of the cellular recovery process. <u>A. L. Gonzalez and C. D. Eggleton</u>	<b>SC34.</b> A coarse-grained simulation of rheology of polymer nano-composites. <u>V. Pryamitsyn and V. Ganesan</u>	<b>SM20.</b> The effects of supercritical CO <sub>2</sub> and pressure on the rheological properties of high density polyethylene. <u>H. E. Park and J. M. Dealy</u>	<b>SS15.</b> Computations and analysis of Rayleigh-Bénard stability of Bingham fluids. <u>I. Frigaard, D. Vola and J. Zhang</u>	<b>MR6.</b> Flow of DNA solutions in planar micro-contractions. <u>S. Gulati, D. Liepmann and S. J. Muller</u>

- 1:55 **BS7.** Cell mechanical response, polymer physics and cellular strain. *J. Crocker, G. Massiera, B. Hoffman and K. Miranda*
- 2:20 **BS8.** The role of relaxation time in blood rheology. *G. B. Thurston and N. M. Henderson*
- 2:45
- 3:10
- 3:35 **BS10.** Deformability of red blood cells flowing in microcapillaries in a gel matrix. *G. Tomaiuolo, V. Sibillo, L. Lanzaro, M. Simeone and S. Guido*
- 4:00 **BS11.** Blood soluble drag reducing polymers improve tissue perfusion via modification of red blood cell traffic in microvessels. *M. V. Kameneva*
- 4:25 **BS12.** High-frequency relaxation of semiflexible biopolymer networks. *G. Koenderink, M. Atakhorrami, D. Mizuno, F. C. MacKintosh and C. F. Schmidt*
- 4:50 **BS13.** Cyclodextrin association networks. *X. Guo, A. A. Abdala, B. L. May, S. L. Linclon, S. A. Khan and R. K. Prud'homme*
- 5:15 **BS14.** The shear, transient and elongational rheology of PHA-based copolymers. *J. P. Eickhoff and G. M. Harrison*
- 5:40
- 6:00
- SC35.** Nanoparticles can reduce the viscosity of polymeric liquids. *M. E. Mackay, A. Tuteja and C. Hawker*
- SC37.** Constitutive modeling of suspension flow via a microstructure tensor. *J. J. Stickel, R. J. Phillips and R. L. Powell*
- SC38.** General nonlinear hydrodynamic description of non-Newtonian fluids. *H. Pleiner, J. L. Harden, M. Liu and H. R. Brand*
- SC39.** Extensional viscosity of a dilute suspension of rigid spheres in a second order fluid. *D. Ferri, F. Greco and P. L. Maffettone*
- SC40.** The effect of the form of the interparticle force used in Stokesian dynamics. *K. R. Hase, J. R. Bielenberg and A. L. Graham*
- SC42.** Nonlinear properties of hard sphere suspension in a Newtonian medium under large amplitude oscillatory shear flow. *J. G. Nam, K. Hyun, Y. J. Yim, K. S. Cho, K. H. Ahn and S. J. Lee*
- SM21.** Shear alignment of multiblock copolymers. *T. P. Lodge, F. S. Bates and L. Wu*
- SM22.** Rheology of entangled PS-POSS copolymers. *J. Wu, P. T. Mather and T. S. Haddad*
- SM23.** Extensional behavior of PBT/PE blend nanocomposites. *J. S. Hong, H. Namgung, K. H. Ahn, S. J. Lee and C. KIM*
- COFFEE
- SM24.** Flow-induced crystallization of polypropylene-clay nanocomposites: Clay disorientation kinetics and morphology. *M. A. Treece and J. P. Oberhauser*
- SM25.** Rheology and processing of nanoclay loaded polyethylene resins. *R. Devendra, S. G. Hatzikiriakos and R. Vogel*
- SM26.** Microrheological studies on the thermotropic liquid crystalline copolyesters containing layered organo nanoclays. *Y. Tang, H. Yang and P. Gao*
- SM27.** Rheological properties of polyimide and oligoimide nanocomposites based on novel silicate hydroxide particles with different morphology. *G. M. Divoux, J. U. Otaigbe, V. E. Yudin, V. M. Svetlichnyi, V. V. Gusarov and E. N. Korytkova*
- SM28.** Shear-induced banding and phase separation in solutions of wormlike micelles. *N. Wagner, M. Liberatore, F. Nettesheim and E. Kaler*
- SS16.** Parameter estimation of thixotropic Herschel-Bulkley fluids. *A. N. Alexandrou and G. Georgiou*
- SS17.** Penetration into compressible rigid-viscoplastic media. *O. Cazacu, I. R. Ionescu and T. Perrot*
- SS18.** Capillary rheology of extrudable cement-based materials. *R. Alfani, G. L. Guerrini and N. Grizzuti*
- SS19.** Free boundary problems in flows of visco-plastic fluids. *V. M. Entov*
- SS20.** Transient squeeze flow of viscoplastic materials. *G. Karapetsas and J. Tsamopoulos*
- SS21.** Paste extrusion of PTFE: Experiments and simulations. *E. Mitsoulis, I. Ochoa and S. G. Hatzikiriakos*
- SS22.** Flow of viscoplastic liquids through axisymmetric expansions-contractions. *P. R. Souza Mendes, P. R. Varges, J. Celnik and M. F. Naccache*
- SS23.** Rheology of mozzarella cheese. *E. B. Muliawan and S. G. Hatzikiriakos*
- MR7.** Electrophoresis of large DNA molecules in microcontractions. *P. S. Doyle and G. Randall*
- MR8.** Controlling dynamics and conformations of DNA in flow through post arrays. *N. P. Teclerian, S. J. Muller, V. A. Beck and E. S. Shaqfeh*
- MR9.** Polymer chain dynamics in viscous flow through ordered arrays of posts. *V. A. Beck, E. S. Shaqfeh, N. P. Teclerian and S. J. Muller*
- MR10.** A computational study of drop formation in microfluidic devices. *C. Zhou, P. Yue and J. J. Feng*
- MR11.** Effects of fluid elasticity on the dynamics of drop formation in microchannel flows. *J. Husny and J. J. Cooper-White*
- MR12.** Wall effects on drop deformation under simple shear flow. *V. Sibillo, G. Pasquariello, M. Simeone and S. Guido*
- MR13.** Formation of microspheres using a heat sensitive gel in a microfluidic device. *G. Christopher and S. Anna*
- MR14.** Surfactant effects on highly nonequilibrium surfaces: Surfactants and drop detachment. *F. Jin, N. Gupta and K. J. Stebe*
- END
- POSTER SESSION & REFRESHMENTS Salon A

# Thursday, October 20

## Morning

### Oak 1 & 2

#### Microrheometry and Microfluidics

- 8:05 **MR15.** Inertio-elastic phenomena in complex flows through microfluidic devices. *L. E. Rodd, J. J. Cooper-White, D. V. Boger and G. H. McKinley*
- 8:30 **MR16.** Flow and confinement effects on the evolution of surfactant mesophases. *M. Kerby, A. Bose, A. Tripathi and J. Lee*
- 8:55 **MR17.** Morphological dynamics of salt-responsive block copolypeptide hydrogels. *J. Sato and V. Breedveld*
- 9:20 **MR18.** Concentration effects in confined flowing polymer solutions: A computer simulation study. *J. P. Hernandez-Ortiz, H. Ma, J. J. de Pablo and M. D. Graham*
- 9:45
- 10:10 **MR19.** Quantitative prediction of experimentally observed radial migration of DNA in micro-capillary flows. *J. Sugarman, R. K. Prud'homme, H. Ma, M. D. Graham, Y.-L. Chen and J. J. de Pablo*
- 10:35 **MR20.** Drag reduction and micro-PIV measurements of the flow past ultrahydrophobic surfaces. *J. Ou and J. P. Rothstein*
- 11:00 **MR21.** Microfluidic rheometry in complex fluids using flow-induced birefringence. *J. A. Pathak and S. D. Hudson*
- 11:25 **MR22.** Micro-flow in microcapillary films. *B. Hallmark, C. Hornung, M. R. Mackley and T. R. Tuladhar*
- 11:50 **MR23.** Visco-thermal instabilities in microchannels and a novel micromixing concept based on thermally responsive polymer solutions. *B. Stoeber, D. Liepmann and S. J. Muller*

12:15

### Salon 1

#### Suspensions and Colloids

- SC43.** Effects of anionic and cationic surfactants on the sol-gel transition of methylcellulose in water. *L. Li and Q. Wang*
- SC44.** Reversible thermal gelling of crosslinked polymers in organic fluids. *G. H. Ling and M. T. Shaw*
- SC45.** Effects of halogen benzoate counterions on drag reduction, rheological properties and micelle microstructures of cationic surfactant solutions. *W. Ge, Y. Zhang, J. Schmidt, E. Kessleman, Y. Talmon and J. L. Zakin*
- SC46.** Behavior of polymer modified asphalt in steady state shearing. *Z. Vlachovicova, J. Stastna and L. Zanzotto*

#### Biomaterials and Biological Systems

- BS15.** Environmentally responsive hydrogels with tunable rigidity and constructed via peptide folding and consequent self-assembly. *D. J. Pochan, B. Ozbas, K. Rajagopal and J. Schneider*
- BS16.** Tunable hydrogels from PLA-PEO-PLA triblocks: Effect of crystallinity of the PLA block. *S. K. Agrawal, N. Sanabria-Delong, G. N. Tew and S. R. Bhatia*
- BS17.** Gelation kinetics of alginate hydrogels: Effects of PEG crosslinker concentration, arm length and arm number. *H. Hadisaputra, A. J. O'Connor and J. J. Cooper-White*
- BS18.** Phase transition of cellulosic biopolymer solutions. *C. Carotenuto, N. Grizzuti and R. Pasquino*

### Salon 2

#### Solids and Semi-Solids

- SS24.** Gas displacement of viscoplastic liquids in capillaries. *P. R. Souza Mendes, J. R. Siffert, E. S. Dutra and M. F. Naccache*
- SS25.** Measuring dough extension and memory. *S. Chakrabarti, E. Lindskog, G. Swanson and T. Sridhar*
- SS26.** Rheological model and viscoelasticity of polymeric sheets in plug-assisted thermoforming. *H. Hosseini and B. V. Berdyshev*

COFFEE

#### Entangled Solutions and Melts

- SM29.** Mechanism of shear banding in entangled micellar solutions. *Y. T. Hu*
- SM30.** Constitutive modeling of the linear and nonlinear rheology of flour-water doughs and other complex entangled materials. *S.-K. T. Ng, M. Padmanabhan and G. H. McKinley*
- SM31.** A new hybrid temperature control unit for polymer melts and semi-solids. *J. Nijman, W. Platzek and M. Feid*
- SM32.** Non-equilibrium entanglement states for polymer melts. *J. P. Ibar*
- SM33.** The importance of van Gurp-Palmen plot for analyzing polymer properties. *G. Sodeifian*

END

### Salon 3

#### Industrial Rheology

- IR6.** Accessory for cone-plate rheometry of high vapor pressure solvent samples. *J. Sato and V. Breedveld*
- IR7.** Creep and creep recovery measurements of polymer melts using a controlled stress rheometer with a magnetic levitation thrust bearing. *A. J. Franck*
- IR8.** Transient phenomena in shear flow of polymer modified asphalts. *C. Wekumbura, L. Zanzotto and J. Stastna*
- IR9.** A camera for viewing and image capture within a closed oven. *B. A. Costello, N. R. Doe, P. W. Foster and R. E. Smith*

- IR10.** Transient rheology of a polypropylene melt reinforced with long and short glass fibers. *D. G. Baird, A. Eberle and G. Velez*
- IR11.** Determination of rheological parameters for the Doufas-McHugh FIC fiber spinning model. *A.-G. Cheong and C. L. Cox*
- IR12.** Evaluation of carbon black loading effects on rate constant and activation energy of SBR/BR vulcanization using rheology tests. *M. Ghasemzadeh Barvarz and G. R. Bakhshandeh*
- IR13.** The effect of nanoclays on the processability of polyolefins. *E. B. Muliawan, N. Rathod and S. G. Hatzikiriakos*
- IR14.** Rheology metric for curing systems. *R. S. Rounds*





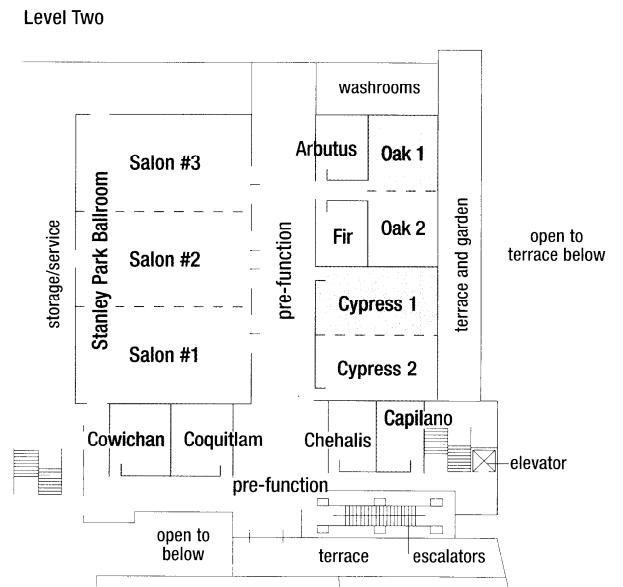
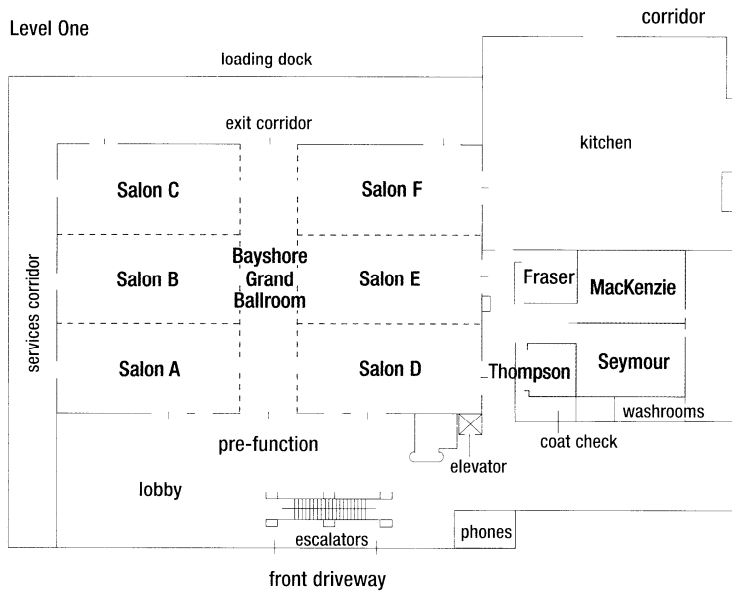
## Poster Session

Wednesday 6:00 PM Salon A

- PO1.** Investigation rheological properties of Fitofague's gelatin. *H. Alavi Talab*
- PO2.** Gelation point determination using fast Fourier transform rheometry. *J. Cho, M.-C. Heuzey, A. Begin and P. J. Carreau*
- PO3.** Hydrogels via beta-hairpin peptide self-assembly: Stiffening below a peptide fibril/ion complexation transition temperature. *B. Ozbas, K. Rajagopal, J. Schneider and D. Pochan*
- PO4.** Rheology and kinetics of thermal-induced gelation in waterborne polyurethane disperation. *S. A. Madbouly and J. U. Otaigbe*
- PO5.** Impact into a yield stress fluid. *H. Tabuteau, D. Sikorski and J. R. de Bruyn*
- PO6.** Displacing yield-stress fluids in near-horizontal eccentric annuli: Numerical simulations and experimental results. *M. Carrasco-Teja, S. T. Storey, C. Kruse, I. Frigaard, D. M. Martinez and B. R. Seymour*
- PO7.** The time independent rheological properties of low fat sesame paste/date syrup blends as a function of fat substitutes and temperature. *S. A. Razavi, M. Habibi Najafi and Z. Alaei*
- PO8.** The effect of fat substitutes on the time dependent rheological properties of low fat sesame paste/date syrup blends (Ardeh). *M. Habibi Najafi, S. A. Razavi and Z. Alaei*
- PO9.** Modification of Bostwick method to determine tomato concentrate consistency. *M. Mazaheri Tehrani and S. A. Mortazavi*
- PO10.** Rheological behaviour of soybean protein and cellulose xanthate blending solution. *C. Yin and X. Shen*
- PO11.** An overview of food texture and rheology. *S. Chakrabarti*
- PO12.** Modelling liquid phase maldistribution in paste flows. *M. J. Patel, S. Mascia, S. Blackburn and I. Wilson*
- PO13.** Investigating interactions between rheological and particle properties of topical retinol. *M. Bumiller, P. Rolfe, T. DeLuca, M. Morfesis and D. Fairhurst*
- PO14.** Study on the transferability of the time temperature superposition principle to emulsions. *R. Brummer, M. Muehlbach and R. Eggers*
- PO15.** Viscoelastic compound-drop models for neutrophil deformation and transport in capillaries. *J. J. Feng, P. Yue and C. Zhou*
- PO16.** Stability and rheological properties of fluids with monodisperse microbubbles. *Y. Shen, M. Longo and R. L. Powell*
- PO17.** Shape response vs. interfacial viscoelasticity of emulsion drops in shear flow. *P. Erni, V. Herle, P. A. Fischer and E. J. Windhab*
- PO19.** Modeling the electrorheological effect in suspensions. *F. Bautista, O. Manero and L. Rejon*
- PO20.** The extended Rutgers-Delaware rule for MR suspensions under magnetic fields. *G. Chen, L. Li and Y. Yang*
- PO22.** Mesoscopic simulations of nematic polymer flows. *H. Zhou*
- PO23.** Time dependent shear flows of particulate suspensions: Application of a new constitutive model. *J. J. Stickel, R. J. Phillips and R. L. Powell*
- PO24.** Analysis of the effect of flow-induced crystallization on the stability of fiber spinning process. *D. M. Shin, J. S. Lee, H. W. Jung and J. C. Hyun*
- PO25.** Extensional rheology of poly(acrylamide) and hydroxypropyl cellulose studied using capillary break-up. *R. L. Hough, R. English, P. A. Williams and J. R. Heaton*
- PO26.** Fluid webs: Tearing of viscoelastic films. *E. Miller, B. Gibson, E. McWilliams and J. P. Rothstein*
- PO27.** Analytical solution of Couette-Poiseuille flow of nonlinear viscoelastic fluid through annular duct. *A. Vahid and S. H. Hashemabadi*
- PO28.** Movement description of landslide Slano Blato. *A. Zupancic, M. Zumer and K. Fifer*
- PO29.** Exploring the rheological properties required for adhesive locomotion in natural and robotic snails. *R. H. Ewoldt and G. H. McKinley*
- PO30.** Rheo-particle image velocimetry of shear thickening micellar solutions. *B. M. Marín-Santibáñez, J. Pérez-González, L. de Vargas, F. Rodríguez-González and G. Huelsz*
- PO31.** Velocity profiles of a lyotropic lamellar phase under shear flow. *G. M. Wilkins, P. D. Olmsted and S. Manneville*
- PO32.** Displacements of generalized Newtonian fluids along a plane channel. *K. Wielage, J. J. Feng, I. Frigaard, M. D. Martinez and P. Yue*
- PO33.** Statistical and scaling properties of elastic turbulence. *T. I. Burghelac and V. Steinberg*

- PO34.** The rheology of aqueous cornstarch suspensions and the generation of roll waves. *N. J. Balmforth, S. Mandre and A. C. Rust*
- PO35.** Interfacial instabilities in primary cementing displacement flows. *M. A. Moyers and I. Frigaard*
- PO36.** Development of a microfluidic rheometer for measuring the complex modulus of complex fluids. *J. A. Pathak and R. F. Berg*
- PO37.** Microfluidic interfacial tensiometry. *J. A. Pathak, S. D. Hudson, J. Cabral, W. Zhang and K. L. Beers*
- PO38.** Intrinsic viscosity of polymers and biopolymers measured by microchip. *J. Lee and A. Tripathi*
- PO39.** A small deformation study of reversible networks: Borate cross-linked konjac glucomannan. *I. Ratcliffe, R. English, P. A. Williams and J. Meadows*
- PO40.** Structure function relation of crosslinking proteins in actin networks. *B. Wagner*
- PO41.** Comparative study of drag reducing ability and mechanical degradation of several blood soluble polymers. *J. N. Marhefka, P. J. Marascalco and M. V. Kameneva*
- PO42.** Structure and rheology of composite cytoskeletal networks. *S. Rammensee, P. A. Janmey and A. R. Bausch*
- PO43.** Drag reducing polymers as a potential treatment for microvascular impairment in diabetes. *P. J. Marascalco, J. N. Marhefka and M. V. Kameneva*
- PO44.** Nonlinear model for blood behavior: Application for sedentary and athletic mammals. *A. Rapa, S. Oancea and C. Daneliuc*
- PO45.** Solvent-induced sol-gel transition in lysozyme dispersions: Investigating the role of solvation in protein unfolding and aggregation. *M. A. da Silva, I. A. Farhat, E. P. Arêas and J. R. Mitchell*
- PO46.** P-V-T properties of glass and crystal polymers and their compositions with nanofillers. *E. I. Frenkin, V. G. Kulichikhin, V. E. Dreval, E. V. Kotova and A. A. Shabeko*
- PO47.** Rheology of thermoplastic elastomer nanocomposites. *G. Naderi, C. Dubois and P. G. Lafleur*
- PO48.** Electrical, rheological and dynamic mechanical properties of polycarbonate and carbon nanotube composites. *Y.-T. Sung, C. K. Kum, H. S. Lee and W. N. Kim*
- PO49.** Rheology of highly filled propylene/ethylene copolymers. *C. Huang, P. M. Wood-Adams, T. P. Karjala and P. Ansemis*
- PO50.** Extension-induced dispersion of carbon nanotube suspensions. *J. S. Hong, Y. S. Son and C. KIM*
- PO51.** Case study 2: Vane rheometry superiority over smooth geometry in evaluating solids-filled asphalt emulsions for cold-patch sealants. *D. J. Moonay and B. T. Sullivan*
- PO52.** Evaluation of two techniques for testing of polyethylene film resins. *J. S. Tiang and J. M. Dealy*
- PO53.** Using nanoindentation to measure viscoelastic properties of soft materials. *P. M. Wood-Adams, A. Fatseyeu and L. Ionescu*
- PO54.** A new extreme high-pressure / high-temperature viscometer. *W. Gusler, M. Pless, J. E. Maxey, P. Grover, J. Perez, J. Moon and T. Boaz*
- PO55.** Rheo-microscopy and Rheo Small Angle Light Scattering (Rheo-SALS) devices for investigations of structure-property relations in complex fluids. *J. Laeuger and P. Heyer*
- PO56.** Discrepancies in the specified data and presentation of a new data set for NIST Standard Reference Material® SRM 2490. *J. Laeuger, P. Heyer and C. R. Snyder*
- PO57.** Rheological testing of UV curing materials. *T. Chen, M. L. Yao, U. Russel and A. J. Franck*
- PO58.** Combinatorial rheometry of asphalt using an squeeze-flow array with a nonlinear temperature gradient. *Y. P. Patil, A. Senador, P. T. Mather and M. T. Shaw*
- PO59.** Are entanglements stable? For how long? What entanglements are we talking about?. *J. P. Ibar*
- PO60.** Effect of non-linear thermal history on the viscosity of polymer melts. *J. P. Ibar*
- PO61.** Characterization of disentangled polymer resins. *J. P. Ibar*
- PO62.** Using bead-spring repulsions to model entanglement interactions in Brownian dynamics of bead-spring chains. *S. P. Holleran and R. G. Larson*
- PO63.** Influence of molecular weight on the electrification of extruded linear polyethylene melts. *F. Rodríguez-González, J. Pérez-González, L. de Vargas and E. Moreno-García*
- PO64.** The effects of supercritical carbon dioxide and pressure on the rheological properties of high density polyethylene. *H. E. Park and J. M. Dealy*
- PO65.** Polymer melt elasticity by rotational and capillary rheometers. *S. P. Westphal*
- PO66.** Linear viscoelasticity, extensional rheology and melt fracture of polyethylene blends. *O. Delgadillo-Velazquez, S. G. Hatzikiriakos, M. Sentmanat and J. Feng*

## Floor Plan – Westin Bayshore Resort and Marina



### Social Program

**Sunday, October 16**

**Welcoming Reception**

7:00 PM – 9:00 PM Stanley Park Ballroom

*Sponsored by a generous contribution from TA Instruments*

**Monday, October 17**

**Awards Reception**

7:00 PM Salons 1 & 2

*Sponsored by a generous contribution from Xpansion Instruments*

**Awards Banquet**

7:30 PM Salons 1 & 2

**Tuesday, October 18**

**Society Business Meeting**

5:45 PM Seymour

**Wednesday, October 19**

**Poster Session Refreshments**

6:00 PM – 8:00 PM Salon A

*Sponsored by a generous contribution from Malvern Instruments*

*The Society gratefully acknowledges the generous contribution from The University of British Columbia – Faculty of Applied Science. The Society also gratefully acknowledges the generous support of the event sponsors.*