



The Society of Rheology 85th Annual Meeting

Hilton Montréal Bonaventure, Montréal, Québec, Canada

Meeting Schedule

Monday, October 14, 2013

	WS	VL	OT	MH	CS
8:30		T. van de Ven (PL1) - WS			
9:20		Coffee Break			
10:00	SC1	IP1	MB1	PS1	EM1
10:25	SC2	IP2	MB2	PS2	EM2
10:50	SC3	IP3	MB3	PS3	EM3
11:15	SC4	IP4	MB4	PS4	EM4
11:40	SC5	IP5	MB5	PS5	EM5
12:05		Lunch Break			
1:30	SC6	IP6	MB6	PS6	EM6
1:55	SC7	IP7	MB7	PS7	EM7
2:20	SC8	IP8	MB8	PS8	EM8
2:45	SC9	IP9	MB9	PS9	EM9
3:10		Coffee Break			
3:35	SC10	MS1	MB10	PS10	EM10
4:00	SC11	MS2	MB11	PS11	EM11
4:25	SC12	MS3	MB12	PS12	EM12
4:50	SC13	MS4	MB13	PS13	EM13
5:15	SC14	MS5	MB14	PS14	EM14
5:40		End			
6:00		Industry/Faculty/Student Forum and Mixer <i>Rheology in the Real World</i>			

Tuesday, October 15, 2013

	WS	VL	OT	MH	CS
8:30		G. H. McKinley (PL2) - WS			
9:20		Coffee Break			
10:00	SC15	MS6	MB15	PS15	BM1
10:25	SC16	MS7	MB16	PS16	BM2
10:50	SC17	MS8	MB17	PS17	BM3
11:15	SC18	MS9	MB18	PS18	BM4
11:40	SC19	MS10	MB19	PS19	BM5
12:05		Lunch Break / Society Business Meeting			
1:30	SC20	IP10	MB20	NF1	BM6
1:55	SC21	IP11	MB21	NF2	BM7
2:20	SC22	IP12	MB22	NF3	BM8
2:45	SC23	IP13	MB23	NF4	BM9
3:10		Coffee Break			
3:35	SC24	GS1	MB24	NF5	SG1
4:00	SC25	GS2	MB25	NF6	SG2
4:25	SC26	GS3	MB26	NF7	SG3
4:50	SC27	GS4	MB27	NF8	SG4
5:15	SC28	GS5	MB28	NF9	SG5
5:40		End			
7:00		Awards Reception			
8:00		Awards Banquet			

Wednesday, October 16, 2013

	WS	VL	OT	MH	CS
8:30		P. Carreau (PL3) - WS			
9:20		Coffee Break			
10:00	SC29	GS6	MB29	NF10	SG6
10:25	SC30	GS7	MB30	NF11	SG7
10:50	SC31	GS8	MB31	NF12	SG8
11:15	SC32	GS9	MB32	NF13	SG9
11:40	SC33	GS10	MB33	NF14	SG10
12:05		Lunch Break			
1:30	SC34	GS11	MB34	NF15	BM10
1:55	SC35	GS12	MB35	NF16	BM11
2:20	SC36	GS13	MB36	NF17	BM12
2:45	SC37	GS14	MB37	NF18	BM13
3:10		Coffee Break			
3:35	SC38	GS15	MB38	NF19	BM14
4:00	SC39	GS16	MB39	NF20	BM15
4:25	SC40	GS17	MB40	NF21	BM16
4:50	SC41	GS18	MB41	NF22	BM17
5:15		End			
5:30		Poster Session & Reception			

Thursday, October 17, 2013

	WS	VL	OT	MH	CS
8:00		P. T. Underhill (AP1) - WS			
8:40	SC42	GS19	MB42	NF23	BM18
9:05	SC43	GS20	MB43	NF24	BM19
9:30	SC44	GS21	MB44	NF25	BM20
9:55		Coffee Break			
10:25	SC45	GS22	MB45	NF26	BM21
10:50	SC46	GS23	MB46	NF27	BM22
11:15	SC47	GS24	MB47	NF28	BM23
11:40	SC48	GS25	MB48	NF29	BM24
12:05	SC49	GS26	MB49	NF30	BM25
12:30		End			

Session and Room Codes

AP = Award Presentations
 BM = Rheology and Processing of Bio-based Materials
 EM = Experimental Methods
 GS = Gels and Self-assembled Systems
 IP = Interfacial Phenomena
 MB = Polymer Melts and Blends
 MS = Rheology at the Microscopic Scale
 NF = Non-Newtonian Flows

PL = Plenary Lectures
 PS = Polymer Solutions
 SC = Suspensions and Colloids
 SG = Solids, Glasses and Composites

CS = Côte-St-Luc
 FN = Salons Fontaine C-H
 MH = Mont-Royal/ Hampstead
 OT = Outrent
 VL = Verdun/Lachine
 WS = Westmount

Monday, October 14

Morning

8:30	PL1. Rheology of cellulose hydrogels. <i>T. van de Ven, L. Jowkarderis and R. Hill</i> Westmount				
9:20	COFFEE BREAK				
	<i>Westmount</i>	<i>Verdun/Lachine</i>	<i>Outremont</i>	<i>Mont-Royal/ Hampstead</i>	<i>Côte-St-Luc</i>
	Suspensions and Colloids	Interfacial Phenomena	Polymer Melts and Blends	Polymer Solutions	Experimental Methods
10:00	SC1. Coarsening in colloidal gels: Micromechanics and rheology. <i>R. N. Zia, B. J. Landrum and W. B. Russel</i>	IP1. Template induced directed self-assembly of an intrinsically disordered protein at model hydrophobic interfaces: Can studying interfacial phenomenon tell us more? <i>P. Dhar</i>	MB1. Structure and rheological properties of a semiconducting polymer gel to manufacture a solar cell. <i>M. E. Mackay, N. Nguyen and H. Shen</i>	PS1. On the eigenfunctions for Hookean and FENE dumbbells. <i>M. Renardy</i>	EM1. Unambiguous determination of the yielding transition in elasto-visco-plastic materials undergoing large amplitude oscillatory shear. <i>S. A. Rogers and G. H. McKinley</i>
10:25	SC2. Fluid flow through networks in the collapse of colloidal gels. <i>A. M. Mertz, A. L. Graham, S. Feng, A. Redondo and M. Ingber</i>	IP2. Dynamic contact angles of Newtonian and viscoelastic fluids on hydrophobic and superhydrophobic surfaces. <i>J.-H. Kim and J. Rothstein</i>	MB2. Does confinement promote coalescence in sheared immiscible blends? <i>P. De Bruyn, R. Cardinaels and P. Moldenaers</i>	PS2. Quantifying chain deformation in Couette flow using FRET. <i>N. Y. Chan, M. Chen, T. A. Smith and D. E. Dunstan</i>	EM2. Inline rheology measurement of foods, personal care products and oilfield fluids using a non-invasive rheometer. <i>E. J. Tozzi and M. J. McCarthy</i>
10:50	SC3. Anomalous large-scale dynamics of colloidal gels probed by dynamic microscopy. <i>Y. Gao and M. E. Helgeson</i>	IP3. Simultaneous interfacial rheology and mesostructure measurement of particle laden interfaces using a modified double wall ring interfacial rheometer. <i>S. Barman and G. F. Christopher</i>	MB3. Entanglement and tube diameter in blends of stiff and flexible chains studied by primitive path analysis. <i>J.-I. Takimoto, S. K. Sukumaran and Y. Suzuki</i>	PS3. Drag reduction induced by flexible and rigid molecules in a turbulent flow into a rotating cylindrical double gap device: Comparison between poly(ethylene oxide), polyacrylamide, and xanthan gum. <i>A. S. Pereira, R. M. Andrade and E. J. Soares</i>	EM3. Effect of wall-slip phenomena on yield stress measurements in cyclopentane hydrate slurry. <i>A. Ahuja, P. U. Karanjkar, G. Zyliftari and J. F. Morris</i>
11:15	SC4. Effects of particle scale dynamics on the structural evolution of anisotropic colloid-polymer systems. <i>S. Kishore, Y. Chen, S. Srivastava and S. R. Bhatia</i>	IP4. Interfacial dilatational rheology. <i>G. J. Elfring, L. G. Leal and T. Squires</i>	MB4. A thermo-rheological study on the structure property relationships in the reinforcement of nylon 6-POSS blends. <i>R. J. Andrade, J. Maia and R. Huang</i>	PS4. The role of normal stresses in shear, in flows with extension. <i>D. F. James</i>	EM4. A Jeffreys rheology framework for gels under LAOS. <i>P. R. de Souza Mendes, A. A. Alicke, R. T. Leite and R. L. Thompson</i>
11:40	SC5. Flow behavior and dynamics of colloid-polymer depletion mixtures in confinement. <i>R. Pandey and J. C. Conrad</i>	IP5. Probing dilational interfacial stresses of complex interfaces using a microscale spherical bubble. <i>A. P. Kotula and S. L. Anna</i>	MB5. Dynamic dilution effect in binary blends of linear polymers. <i>E. van Ruymbeke and H. Watanabe</i>	PS5. Estimation of the first normal stress difference from the shear viscosity data. <i>V. Sharma</i>	EM5. Elements of the rheology of waxy oils. <i>R. Venkatesan</i>
12:05	LUNCH BREAK				

Afternoon

	<i>Westmount</i>	<i>Verdun/Lachine</i>	<i>Outremont</i>	<i>Mont-Royal/ Hampstead</i>	<i>Côte-St-Luc</i>
	Suspensions and Colloids	Interfacial Phenomena	Polymer Melts and Blends	Polymer Solutions	Experimental Methods
1:30	SC6. Effects of cell density and biopolymer addition of the flow behaviour of concentrated mammalian cell suspensions. <i>B. G. Maisonneuve, D. C. Roux and J. J. Cooper-White</i>	IP6. Quasi-linear rheological models and elastic contributions to pressure-area isotherm measurements. <i>J. Vermant, T. Verwijlen and L. Imperiali</i>	MB6. Role of extensional viscosity in the formation and control of cocontinuous polymer blends. <i>A. T. Hedegaard, M. Trifkovic, L. Gu and C. W. Macosko</i>	PS6. Emulsification in viscoelastic solutions. <i>C. Locatelli-Champagne, R. Bonnecaze and M. Cloitre</i>	EM6. Linear oscillatory dynamics of flexoelectric membranes embedded in viscoelastic media with applications to outer hair cells. <i>M. Abou-Dakka, E. E. Herrera-Valencia and A. D. Rey</i>
1:55	SC7. Margination and segregation of self-propelled particles in blood flow. <i>A. Kumar and M. D. Graham</i>	IP7. Computational investigation of the effect of insoluble surfactant on drop formation in a microfluidic device. <i>P. Jang Min, M. A. Hulsen and P. Anderson</i>	MB7. Analysis of the phase structure of molten polymer blends using a modified Gramespacher-Meissner model. <i>M. Mihalic and A. Schausberger</i>	PS7. Role of secondary protein content in the rheology of synovial fluid. <i>Z. Zhang and G. F. Christopher</i>	EM7. Temperature-step rheology to probe unusual materials: From nanoscale materials to ancient fossil resins. <i>G. B. McKenna, W. Jinhua, J. Zhao and A. K. Torres Arellano</i>

- 2:20 **SC8.** Numerical simulation study of the deterministic vector separation of rigid particles and deformable capsules over slanted open cavities. *J. A. Bernate, Y. Mengfei, H. Zhao, S. Risbud, C. Paul, M. Dallas, K. Konstantopoulos, G. Drazer and E. Shaqfeh*
- 2:45 **SC9.** Self-propelled soft-core dumbbells for the simulation of living fluids. *D. F. Hinz, A. Panchenko, T.-Y. Kim and E. Fried*
- 3:10
- 3:35 **SC10.** Shear-induced diffusion of cubic colloids. *J. R. Royer, D. L. Blair and S. D. Hudson*
- 4:00 **SC11.** Suspension of cubic particles under shear. *R. K. Mallavajula, L. A. Archer and K. L. Donald*
- 4:25 **SC12.** Modeling tube-tube interactions in carbon nanotube suspensions. *G. Natale, G. Ausias, M.-C. Heuzey, P. Carreau and J. Ferec*
- 4:50 **SC13.** Rheological hysteresis of periodically functionalized multi-walled carbon nanotubes non-Brownian suspensions. *S. Sadeghi and U. Sundararaj*
- 5:15 **SC14.** The use of interaction tensors to describe and predict rod interactions in rod suspensions. *J. Férec, E. Abisset-Chavanne, G. Ausias and F. Chinesta*
- 5:40
- 6:00
- IP8.** Interfacial shear rheology and drop-drop coalescence. *D. Harbottle, K. Moorthy and Z. Xu*
- IP9.** Exploring the kinematics of extensional coalescence of drop pairs and chains. *A. S. Burbidge and D. Z. Gunes*
- Rheology at the Microscopic Scale**
- MS1.** Nonlinear signatures of entangled polymer solutions in active microbead rheology. *P. A. Vasquez, J. A. Cribb, G. Forest and R. Superfine*
- MS2.** Limitation in single-bead passive microrheology. *T. Indei, J. D. Schieber, A. Cordoba, M. Karim and R. Khare*
- MS3.** Microviscosity measurements of protein solutions. *L. L. H. Josephson and E. M. Furst*
- MS4.** Microrheology of polysaccharides found in the extracellular matrix of bacterial biofilms. *M. Ganesan, J. G. Younger and M. J. Solomon*
- MS5.** High frequency dynamics of a liquid crystalline, cyanobacterial, sulfated polysaccharide studied by DLS/DWS microrheology. *T. Narita, G. Ducouret, M. Kawai, T. Mitsumata, M. K. Okajima and T. Kaneko*
- MB8.** Rheological and electrical determination of phase separation and localization phenomena in poly (methyl methacrylate) (PMMA) / poly (styrene-co-acrylonitrile) copolymer (SAN) / multi-walled carbon nanotube nanocomposites. *A. Sarvi, S. Sadeghi and U. Sundararaj*
- MB9.** Rheology of PP/PPMA and PP/PPAA blends and its incidence on the crystalline structure of their cast films. *A. Saffar, A. Ajji, P. Carreau and M. R. Kamal*
- COFFEE BREAK
- MB10.** The rheological behavior of poly(lactic acid)/poly(butylene succinate) blends. *H. Eslami and M. R. Kamal*
- MB11.** Effects of montmorillonite on the rheological properties of SBS/asphalt/sulfur blends. *M. Jasso, J. Statna, D. Bakos and L. Zanzotto*
- MB12.** Constitutive model for flow-induced orientation and disentanglement in extensional flows of entangled polymer melts and solutions. *D. S. Priyanka and R. G. Larson*
- MB13.** Rate-dependent strain hardening of commercial polyethylene resin observed with an extension rheometer. *T. Li, W. Lin and J. W. Teh*
- MB14.** Entangled comb polymers in uniaxial extension: Experiments and modeling. *H. Lentzakis, D. Vlassopoulos, D. J. Read and C. Das*
- PS8.** Is DNA a good model polymer? *A. Muralidhar, D. R. Tree, P. S. Doyle and K. D. Dorfman*
- PS9.** Single molecule studies of DNA collapse in slit-like confinement. *J. J. Jones and P. S. Doyle*
- PS10.** Crooks fluctuation theorem for flowing polymer solutions. *F. Latinwo and C. M. Schroeder*
- PS11.** Coarse-grained model of polymer electrophoresis including conformation-dependent mobility. *H. Pandey and P. T. Underhill*
- PS12.** Blob-theoretic predictions for coil-stretch hysteresis in extensional flows of self-concentrating polymer solutions. *R. Prabhakar*
- PS13.** Brownian dynamics simulations of semidilute polymer solutions undergoing planar mixed flow. *A. Jain, R. Hartkamp, C. Sasmal, A. S. Mehrotra, B. D. Todd, R. Prabhakar and J. R. Prakash*
- PS14.** Stress relaxation of entangled polystyrene solution after constant-rate, uniaxial elongation. *Y. Matsumiya, Y. Masubuchi, H. Watanabe, Q. Huang, H. K. Rasmussen, N. J. Alvarez and O. Hassager*
- EM8.** Investigation of anisotropic thermal transport in polymers using infrared thermography. *D. Nieto Simavilla and D. C. Venerus*
- EM9.** Extensional flow and small angle neutron scattering. *K. M. Weigandt and R. L. Jones*
- EM10.** Precision rheometry: Surface tension effects on low-torque measurements in rotational rheometers. *M. T. Johnston and R. H. Ewoldt*
- EM11.** An enhanced rotational rheometer system with two motors. *J. Laeuger*
- EM12.** Orthogonal superposition (OSP) of small strain oscillation shear on steady or oscillation shear on a rotational rheometer. *A. J. Franck*
- EM13.** Effects of instrument inertia on the variation of experimental data in creep measurements. *A. Maani and P. Carreau*
- EM14.** Parallel-plate geometry correction for transient rheometric experiments. *P. R. de Souza Mendes and A. A. Alicke*
- END
- Industry/Faculty/Student Forum and Mixer: *Rheology in the Real World* Salon Lachine

Tuesday, October 15

Morning

8:30	PL2. Power-law gels, Scott-Blair and the fractional calculus of soft networks. <i>G. H. McKinley</i> (Bingham Lecture) Westmount				
9:20	COFFEE BREAK				
	<i>Westmount</i>	<i>Verdun/Lachine</i>	<i>Outremont</i>	<i>Mont-Royal/ Hampstead</i>	<i>Côte-St-Luc</i>
	Suspensions and Colloids	Rheology at the Microscopic Scale	Polymer Melts and Blends	Polymer Solutions	Rheo. & Proc. of Bio-based Materials
10:00	SC15. Rheology and microstructure of concentrated, near hard-sphere colloidal dispersions under steady shear and LAOS in all three planes of shear. <i>A. K. Gurnon, L. Porcar and N. J. Wagner</i>	MS6. Carbon nanotubes as mechanical probes of equilibrium and non-equilibrium biopolymer networks. <i>N. Fakhri, M. Pasquali, F. C. MacKintosh and C. F. Schmidt</i>	MB15. Structural response of a pre-aligned cylindrical block copolymer to uniaxial extensional flow. <i>E. McCready and W. Burghardt</i>	PS15. Instability mechanisms in the viscoelastic flow past bluff bodies. <i>V. Citro, L. Brandt and F. Giannetti</i>	BM1. Quantifying structural protein contributions to cell mechanics with a live cell monolayer rheometer. <i>C. M. Elkins, W.-J. Shen, V. Khor, F. Kraemer and G. G. Fuller</i>
10:25	SC16. Examining the shear-induced thickening of fumed silica CMP slurries using high shear rheo-SALS. <i>M. W. Liberatore, N. Crawford, K. Williams and D. Boldridge</i>	MS7. Shear rheology of deformable microgel particles in direct confinement. <i>B. D. Jofore, P. Moldenaers and C. Clasen</i>	MB16. Thermo-rheological behavior of TPUs under high-strain extensional flow and its relation with morphology development and rupture dynamics. <i>R. J. Andrade and J. Maia</i>	PS16. Why the true strain hardening in extension and shear indicates the limitation of the tube model? <i>S.-Q. Wang, G. Liu and H. Sun</i>	BM2. Attractive interactions among intermediate filaments control networks mechanics. <i>N. Willenbacher</i>
10:50	SC17. Modeling the thixotropic behavior of concentrated suspensions in large amplitude oscillatory shear (LAOS) experiments. <i>M. J. Armstrong, A. N. Beris, N. J. Wagner and J. M. Kim</i>	MS8. A vesicle instability at low reduced volume in extensional flow. <i>A. P. Spann, V. Narsimhan and E. Shaqfeh</i>	MB17. Mechanical characterization tools for thin polymer membranes at fuel cell operating conditions. <i>B. R. Caird, M. A. Vandiver, Y. Li, D. M. Knauss, A. M. Herring and M. W. Liberatore</i>	PS17. A rheological approach to determine the phase behavior and critical solution temperatures of polymer solutions. <i>M. Pakravan, M.-C. Heuzey and A. Ajji</i>	BM3. Single particle tracking for understanding E. coli biofilm structure and dynamics. <i>A. Birjiniuk, E. Nance, J. Hanes, K. Ribbeck and P. S. Doyle</i>
11:15	SC18. Discontinuous shear thickening as a dynamic jamming transition of frictional particles. <i>R. Seto, R. J. Mari, J. F. Morris and M. M. Denn</i>	MS9. Escape of a knot from a polymer under various states of tension. <i>B. Renner and P. S. Doyle</i>	MB18. Crystallization of polypropylene: The effect of different parameters and testing suspension models to describe shear effects. <i>M. Derakhshandeh, S. G. Hatzikiriakos and A. K. Doufas</i>	PS18. Thermal stability and rheological properties of viscoelastic surfactant in high-temperature high-salinity environment. <i>M. S. Kamal, I. A. Hussein, A. S. Sultan and H. Ming</i>	BM4. Effect of viscoelasticity on the collective behavior of the suspension of motile cells. <i>A. Karimi and A. M. Ardekani</i>
11:40	SC19. Shear-induced irreversible breakdown of shear thickening fluids. <i>J. E. Seppala, R. L. Jones, K. D. Rice and G. A. Holmes</i>	MS10. Conformational dynamic behavior of single polyelectrolyte chains confined in micro and nanochannels. <i>K. Yoon, H. W. Jung and M.-S. Chun</i>	MB19. Shear-induced crystallization of polypropylene: A rheological study with in-situ DSC and WAXD. <i>P. C. Roozmond and G. Peters</i>	PS19. Rheological characterization and mass spectrum analysis of guar gum solution after mannanase treatment. <i>B. Zhang, M. Weinschank, G. P. Matthew, A. H. Davenport and M. A. Wall</i>	BM5. Upstream migration of endothelial cells in response to impinging fluid flows. <i>M. A. Ostrowski, E.-H. Huang, N. F. Huang, T. W. Walker, J. P. Cooke, A. R. Dunn and G. G. Fuller</i>
12:05	LUNCH BREAK / SOCIETY BUSINESS MEETING Salon Westmount				

Afternoon

	<i>Westmount</i>	<i>Verdun/Lachine</i>	<i>Outremont</i>	<i>Mont-Royal/ Hampstead</i>	<i>Côte-St-Luc</i>
	Suspensions and Colloids	Interfacial Phenomena	Polymer Melts and Blends	Non-Newtonian Flows	Rheo. & Proc. of Bio-based Materials
1:30	SC20. Concentrated hard sphere crystals under oscillatory shear: Stresses and dynamics. <i>N. Koumakis, J. F. Brady and G. Petekidis</i>	IP10. Droplets break-up in high internal phase emulsion under flow. <i>V. Mansard, T. Squires and J. Mecca</i>	MB20. Flow induced crystallization of isotactic polypropylene. <i>F. G. Hamad, S. T. Milner and R. H. Colby</i>	NF1. Displacement flow of yield stress fluids in highly inclined pipes. <i>K. Alba, S. M. Taghavi, J. de Bruyn and I. Frigaard</i>	BM6. A new extended non-homogeneous constitutive model for human blood. <i>A. Jafari and R. G. Owens</i>
1:55	SC21. Shear thickening behavior of colloidal suspensions under bi-axial shear. <i>N. Lin and I. Cohen</i>	IP11. Liquid foams: Fracture dynamics and film instability. <i>S. Hilgenfeldt, P. Stewart and S. H. Davis</i>	MB21. SAXS/WAXS studies of flow-induced crystallization of poly(1-butene) in shear flow. <i>B. Luo and W. Burghardt</i>	NF2. Utilizing an elasto-viscoplastic model to predict the downhole pressure profile after primary cementing. <i>F. H. Marchesini and R. M. Oliveira</i>	BM7. A constitutive model for the nonlinear viscoelastic behavior of the fibrin network in blood clots. <i>T. van Kempen, F. van de Vosse and G. Peters</i>

2:20	SC22. The viscometric functions of concentrated shear-thickening colloidal suspensions. <i>C. D. Cwalina and N. J. Wagner</i>	IP12. Micro and macrorheological methods at fluid-fluid interfaces. <i>J. R. Samaniuk and J. Vermant</i>	MB22. Stress overshoots in simple shear flow of entangled combs. <i>F. Snijkers, D. Vlassopoulos, T. Chang, G. Ianniruberto and G. Marrucci</i>	NF3. Finite element approximations for the flow of thixotropic elasto-viscoplastic materials through an abrupt expansion. <i>C. E. Fonseca, F. B. Link, S. Frey, M. F. Naccache and P. R. de Souza Mendes</i>	BM8. Research review on molecular dynamics and rheological properties of the gel of the deoxy-hemoglobin S molecules in sickle cell anemia. <i>F. E. Mensah</i>
2:45	SC23. Constant pressure simulation of dense colloidal suspensions. <i>M. Wang and J. F. Brady</i>	IP13. Free impinging jet microreactors: Controlling reactive flows via fluid viscoelasticity and capillarity. <i>P. Ermi</i>	MB23. Dielectric relaxation of monodisperse linear polyisoprene: Contribution of constraint release. <i>H. Watanabe and Y. Matsumiya</i>	NF4. Residual deposits of yield stress fluids at the wall in Poiseuille flows along uneven channel. <i>A. Roustaei and I. Frigaard</i>	BM9. Segregation of particles subject to magnetic forces in cellular blood flow in a model microvessel. <i>J. B. Freund</i>
3:10			COFFEE BREAK		
		Gels and Self-assembled Systems			Solids, Glasses and Composites
3:35	SC24. Rheology of a concentrated bimodal suspension. <i>K. Yu and N. C. Shapley</i>	GS1. Stress diffusion in shear-banding wormlike micelles. <i>S. Lerouge, M. A. Fardin and O. Radulescu</i>	MB24. Rheological properties of Pd-diimine polyethylenes of complex chain architectures. <i>Z. Ye and R. Subramanian</i>	NF5. A canonical framework for modeling elasto-viscoplasticity in complex fluids. <i>C. J. Dimitriou and G. H. McKinley</i>	SG1. Formation of fractal-like structure in organoclay based polypropylene nanocomposites. <i>T. Domenech, R. Zouari, E. Peuvrel-Disdier and B. Vergnes</i>
4:00	SC25. Colloidal microstructure in sheared Boger fluids. <i>M. T. Perera and J. F. Gilchrist</i>	GS2. Structure formation in extensional flow of wormlike micellar solutions as revealed by capillary breakup extensional rheometry experiments. <i>N. Willenbacher</i>	MB25. Non-kinematic approach to the Leonov model. <i>K. S. Cho</i>	NF6. Stretch and relax: A filament calculation with yield stress properties. <i>Y. Renardy and H. Grant</i>	SG2. Varying effects of extrusion on structure and rheology of polypropylene-layered silicate nanocomposites. <i>W. Ren, K. Jayaraman and A. K. Chaudhary</i>
4:25	SC26. Diffusion and transport of nanoparticles in arrays of nanoposts. <i>K. He, F. Babaye Khorasani, J. C. Conrad and R. Krishnamoorti</i>	GS3. Flow pattern change through a formation of flow-induced structure in wormlike micelle solutions past arrays of microposts. <i>F. Mikami, T. Kumagai, H. Yoshikawa and M. Yasu</i>	MB26. A priori predictions of the shear rheology of polymer melts. <i>J. R. Dorgan and N. A. Rorrer</i>	NF7. Computations of shear thickening liquid in stretching free surface flow using a simple generalized Newtonian constitutive model. <i>J. A. Lee, S. Khandavalli, J. Rothstein and M. Pasquali</i>	SG3. Relationship between rheological and electrical percolation of nanocomposites based on iPP and TiO ₂ . <i>A. Zohrevand, A. Ajji and F. Mighri</i>
4:50	SC27. Capillary thinning dynamics of suspensions near pinch-off. <i>W. Mathues and C. Clasen</i>	GS4. NMR velocimetry of wormlike micelle solution flow in pipes and capillaries – apparent wall slip and shear banding. <i>W. H. Hartt and L. A. Bacca</i>	MB27. Polymerisation-to-processing molecular rheology modelling of long chain branched polymers. <i>T. C. McLeish, D. J. Read and C. Das</i>	NF8. Bifurcation phenomena in strong extensional flows. <i>F. A. Cruz, R. J. Poole, A. M. Afonso, F. T. Pinho, P. J. Oliveira and M. A. Alves</i>	SG4. Morphology and viscoelastic properties of ethylene-octene copolymer/nanosilica composites with varying polymer/filler interactions. <i>M. Bailly, K. Petrie, M. Kontopoulou, P. Xiang and Z. Ye</i>
5:15	SC28. Holistic modeling to predict stability of oil well cement slurries. <i>V. S. Goel, P. Otieno and R. Morgan</i>	GS5. Flow-induced gelation in a non-ionic wormlike micellar solution. <i>C. Joshua, L. Tonggu, L. Wang and A. Shen</i>	MB28. Equilibrium rheology predictions of the mobile slip-link model. <i>J. D. Schieber, T. Indei, M. Andreev and R. Steenbakkers</i>	NF9. Homogeneous planar elongational flow and elastic instabilities in an optimized-shape cross-slot extensional rheometer. <i>S. J. Haward and G. H. McKinley</i>	SG5. Rheological behavior of compatibilized polypropylene/flax fibre composites. <i>H. Sojoudiasli, P. Carreau and M.-C. Heuzey</i>
5:40			END		
7:00			AWARDS RECEPTION	Salon Bonaventure (lobby level)	
8:00			AWARDS BANQUET	Outremont Ballroom (lower level)	

Wednesday, October 16

Morning

8:30	PL3. Rheological characterization of polymer nanocomposites. <i>P. Carreau</i> Westmount				
9:20	COFFEE BREAK				
	<i>Westmount</i>	<i>Verdun/Lachine</i>	<i>Outremont</i>	<i>Mont-Royal/ Hampstead</i>	<i>Côte-St-Luc</i>
	Suspensions and Colloids	Gels and Self-assembled Systems	Polymer Melts and Blends	Non-Newtonian Flows	Solids, Glasses and Composites
10:00	SC29. Universal scaling of microscopic and macroscopic behavior in spherical non-colloidal suspensions with a non-Newtonian fluid matrix. <i>N. S. Martyis, D. Lootens, W. L. George, P. Hébraud and M. Liard</i>	GS6. Dynamic rheology and microstructure of shear-banding wormlike micellar solutions using 1-2 plane flow-SANS. <i>A. K. Gurmon, C. R. Lopez-Barron, L. Porcar and N. J. Wagner</i>	MB29. A coarse-grained model for entangled polymer dynamics: Comparison with experimental rheological data. <i>A. Ramirez-Hernandez and J. J. de Pablo</i>	NF10. Different scaling laws for the thinning of a weakly elastic jet. <i>W. Mathues, C. McIlroy, O. G. Harlen and C. Clasen</i>	SG6. The role of concentration on shear stress growth and orientation evolution of long glass fiber suspensions. <i>M. J. Cieslinski, J. T. Hofmann and D. G. Baird</i>
10:25	SC30. Kinetic theory based models for high concentrated suspensions in generic suspending fluids. <i>E. Abisset-Chavanne, R. Mezher, J. Ferec, G. Ausias and F. Chinesta</i>	GS7. Aging and temperature studies of flow-induced structured phase in wormlike micellar solutions. <i>J. J. Cardiel, T. Lige, W. Liguio and A. Shen</i>	MB30. Atomistic simulation of dynamics of individual molecules in entangled polymers undergoing homogenous shear flow. <i>H. Nafar, B. J. Edwards and B. Khomami</i>	NF11. Drop-on-demand printing of complex liquids. <i>N. F. Morrison and O. G. Harlen</i>	SG7. Modeling yielding and strain hardening in glassy polymers. <i>R. G. Larson and W. Zou</i>
10:50	SC31. Mesoscale simulation of colloidal suspensions at equilibrium. <i>S. Jamali, A. Boromand and J. Maia</i>	GS8. Transient dynamics of a thermodynamically consistent model for wormlike micellar solutions. <i>N. Germann, L. P. Cook, A. N. Beris and N. J. Wagner</i>	MB31. Inference of polymer structure by simultaneous analysis of chromatographic and rheological measurements. <i>S. Shanbhag</i>	NF12. Reconstructed dynamics of in situ mechanical pressure fluctuations during the extrusion flow of polymer melts. <i>R. Kádár, I. C. Naue and M. Wilhelm</i>	SG8. Time-strain superposition in soft glasses. <i>S. Srivastava and L. A. Archer</i>
11:15	SC32. Numerical studies of inertial suspensions of non-Brownian rigid spheres: Steady and periodic shear. <i>L. Brandt, J. Rabault and F. Picano</i>	GS9. A free-energy density for wormlike micelles. <i>M. Asgari, B. Seguin and E. Fried</i>	MB32. Dominance of intermolecular friction in fast deformation of polymer melts close to T_g , breaking away from the rubber elasticity model. <i>H. Sun and S.-Q. Wang</i>	NF13. Consequences of stress-concentration coupling in the flow of polymer solutions. <i>M. Cromer, Y. Dhane, G. Fredrickson and L. G. Leal</i>	SG9. Rheological hysteresis in soft glassy materials. <i>T. Divoux, V. Grenard and S. Manneville</i>
11:40	SC33. Secondary convection due to second normal stress differences: A new mechanism for the mass transport of solutes in the pressure-driven flow of concentrated, non-colloidal suspensions. <i>A. Ramachandran</i>	GS10. Creep, fracture and yielding of protein gels. <i>C. Perge, M. Leocmach, N. Taberlet, T. Divoux and S. Manneville</i>	MB33. Linear viscoelasticity of polyether-ester-sulfonate copolymer ionomers. <i>Q. Chen, G. J. Tudryn, H.-S. Shiau and R. H. Colby</i>	NF14. Numerical study of secondary flows of FENE rheological models in curved ducts. <i>J. M. Malheiro, P. J. Oliveira and F. T. Pinho</i>	SG10. Determination of the glass transition of sub-micron polymer films on a silicon wafer by DMA. <i>C. L. Jackson, R. C. Cieslinski, A. L. Roy and O. Ongayi</i>
12:05	LUNCH BREAK				

Afternoon

	<i>Westmount</i>	<i>Verdun/Lachine</i>	<i>Outremont</i>	<i>Mont-Royal/ Hampstead</i>	<i>Côte-St-Luc</i>
	Suspensions and Colloids	Gels and Self-assembled Systems	Polymer Melts and Blends	Non-Newtonian Flows	Rheo. & Proc. of Bio-based Materials
1:30	SC34. Bond strength in colloidal gels measured from thermal rupture force distributions. <i>K. A. Whitaker, L. C. Hsiao, M. J. Solomon and E. M. Furst</i>	GS11. Equilibrium configurations of high density lipoproteins. <i>A. Biria and E. Fried</i>	MB34. Not all slip is the same. <i>J. R. Dorgan and N. A. Rorrer</i>	NF15. Computationally challenging 3D multiscale FENE dumbbell simulations on multi-GPU systems. <i>A. Rüttgers</i>	BM10. Red blood cell suspensions with polymer additives: Orientation, migration and margination dynamics. <i>K. K. Sinha and M. D. Graham</i>

1:55	SC35. Microrheology of soft particle pastes: Forced motion of a tagged particle in a jammed suspension. <i>L. Mohan, M. Cloitre and R. Bonnecaze</i>	GS12. Molecular features inferred from macroscopic rheology: Asymptotically-nonlinear material functions of LAOStrain (large-amplitude oscillatory shear strain). <i>N. A. K. Bharadwaj and R. H. Ewoldt</i>	MB35. Slip at the interface between immiscible polymer melts undergoing capillary flow. <i>S. K. Sukumaran, R. Komuro, M. Sugimoto and K. Koyama</i>	NF16. Different levels of approximation for the Reynolds stress tensor obtained from DNS of a FENE-P viscoelastic model in a drag reducing turbulent flow. <i>R. L. Thompson, L. Thais and G. Mompean</i>	BM11. A structural parameter thixotropic model for the transient shear flow of blood. <i>A. J. Apostolidis, M. J. Armstrong and A. N. Beris</i>
2:20	SC36. Capillary driven percolating networks in ternary particulate suspensions. <i>T. Domenech and S. Velankar</i>	GS13. Stochastic modeling and simulations of transient networks: Soft materials, gels and concentrated surfactants. <i>Y. Zeng, L. P. Cook and L. Zhou</i>	MB36. Viscoelasticity of diblock single-ion conducting ionomers. <i>J.-H. H. Wang and R. H. Colby</i>	NF17. Nonlinear dynamics of turbulent drag reduction by polymers. <i>S.-N. Wang, L. Xi, F. Hahn and M. D. Graham</i>	BM12. Meltability and viscoelastic behavior of mozzarella cheese with methocel as a water binder. <i>R. Subramanian</i>
2:45	SC37. Shear-induced structuration of suspensions of attractive particles. <i>N. Taberlet, V. Grenard and S. Manneville</i>	GS14. Linear viscoelasticity and swelling of complex coacervates formed from mixing aqueous solutions of polyanions and polycations. <i>F. Hamad, Q. Chen and R. H. Colby</i>	MB37. Investigation of morphology developments in block-copolymers via mesoscale simulations. <i>S. Khani, S. Jamali and J. Maia</i>	NF18. Polymer induced breakdown of large-scale Taylor vortex structures and the resulting drag enhancement in turbulent Taylor-Couette flows: Direct numerical simulations and mechanistic insight. <i>N. Liu and B. Khomami</i>	BM13. Capturing the temporal rheological properties of a hydrating starch based snack food: Elucidating the structure-function relationships for starch using α -amylase. <i>M. W. Boehm, J. E. Moore, F. J. Warren and J. R. Stokes</i>
3:10			COFFEE BREAK		
3:35	SC38. Size segregation in sheared two-dimensional polydisperse foam. <i>H. Mohammadigoushki and J. J. Feng</i>	GS15. Dynamics and microstructure of metallo-supramolecular networks. <i>H. Goldansaz, D. Auhl, C. Bailly and E. van Ruymbeke</i>	MB38. Physical origin of non-linearities in homopolymers and polymer nanocomposites. <i>E. Senses and P. Akcora</i>	NF19. Rheo-ultrasonic imaging of secondary flows in a Taylor-Couette device. <i>M. A. Fardin, C. Perge and S. Manneville</i>	BM14. Real-time monitoring of rheology in a fed-batch recycle reactor using a non-invasive rheometer. <i>E. J. Tozzi, M. J. Cardona, R. L. Powell and M. J. McCarthy</i>
4:00	SC39. Behavior of a static bubble in a yield stress fluid. <i>G. Samson, A. Phelipot-Mardelé and C. Lanos</i>	GS16. Viscoelasticity and shear-induced structure in nanoemulsion transient gels. <i>J. Kim, Y. Gao, E. Peirtsegaie, C. Hebebrand and M. E. Helgeson</i>	MB39. Clay platelets pin interfaces in polymer blends. <i>M. Trifkovic, A. T. Hedegaard and C. W. Macosko</i>	NF20. High Deborah number elastic instabilities around microfluidic confined cylinders. <i>S. Kenney, K. Poper, G. Chapagain and G. F. Christopher</i>	BM15. Numerical simulation of the flow of compressible viscoplastic biomass in a pipe. <i>A. Shahravan, J. C. Duncan, M. D. Graham and D. J. Klingenberg</i>
4:25	SC40. Particle sedimentation in emulsions under flow. <i>J. Maxey and Y. Hu</i>	GS17. Rheological observations near the gel point. <i>H. H. Winter</i>	MB40. Effect of particle size and shape on oscillatory and transient shear rheology of polymer nano-composites. <i>H. Mahi Hassanabadi, D. Rodrigue, M. Abbasi and M. Wilhelm</i>	NF21. Flow-induced microstructure of nematic liquid crystals between eccentric rotating cylinders. <i>N. Noroozi and D. Grecov</i>	BM16. Effects of degree of sulfation and ultrasound treatment (sonication) on the rheology and microstructure of cellulose nano-crystal (CNC) aqueous suspensions. <i>S. Shafiei-Sabet, W. Y. Hamad and S. G. Hatzikiriakos</i>
4:50	SC41. Bubble migration in two-dimensional foam under inhomogeneous shear: Effects of non-Newtonian rheology. <i>H. Mohammadigoushki and J. J. Feng</i>	GS18. Gelation and crosslinking in multi-functional thiol and multi-functional acrylate systems involving an in situ comonomer catalyst. <i>A. K. Higham, L. A. Garber, D. C. Latshaw II, C. K. Hall, J. A. Pojman and S. A. Khan</i>	MB41. Melt rheological characteristics of PET and PET nanocomposites after solid-state polymerization. <i>M. Dini, P. Carreau, M. R. Kamal and M.-T. Ton-That</i>	NF22. Rotation of an ellipsoidal particle in a viscoelastic liquid in an unconfined shear flow by numerical simulations. <i>G. D'Avino, F. Greco, M. A. Hulsen and P. L. Maffettone</i>	BM17. Macroscopic vs. microscopic rheological response of nanocrystalline cellulose suspensions. <i>B. Derakhshandeh, G. Petekidis and S. G. Hatzikiriakos</i>
5:15			END		
5:30			POSTER SESSION & RECEPTION Salons Fontaine C-H (lower level)		

Thursday, October 17

Morning

8:00	<i>Westmount</i>	<i>Verdun/Lachine</i>	<i>Outremont</i>	<i>Mont-Royal/ Hampstead</i>	<i>Côte-St-Luc</i>
	Suspensions and Colloids	Gels and Self-assembled Systems	Polymer Melts and Blends	Non-Newtonian Flows	Rheo. & Proc. of Bio-based Materials
	API. Active matter: Suspensions of self-propelled particles. <i>P. T. Underhill</i> (Metzner Award Presentation) Westmount				
8:40	SC42. Enhancing rotational diffusion using oscillatory shear. <i>B. D. Leahy, X. Cheng, D. C. Ong, C. Liddell-Watson and I. Cohen</i>	GS19. Microrheological characterization of cell-mediated hydrogel degradation. <i>K. M. Schultz and K. S. Anseth</i>	MB42. Silica/poly (2-vinyl pyridine) nanocomposites: Segmental dynamics of polymers and the nanoparticle network. <i>S. Gong, J. F. Moll, Q. Chen, S. K. Kumar and R. H. Colby</i>	NF23. Dilute rigid dumbbell suspensions in large-amplitude oscillatory shear flow: Shear stress response. <i>R. B. Bird, A. J. Giacomin, C. Aummate and A. M. Schmalzer</i>	BM18. Apparent yield stress measurements of cellulose nanofiber suspensions. <i>B. Nazari and D. W. Bousfield</i>
9:05	SC43. A hexatic-to-disorder transition in colloidal assembly near electrodes: Stronger flow yields less order. <i>C. S. Dutcher, T. J. Woehl, N. H. Talken and W. D. Ristenpart</i>	GS20. Control over the structure of conjugated polymers through kinetics of self-assembly. <i>P. de la Iglesia, G. Newbloom and D. C. Pozzo</i>	MB43. Rheological properties of polypropylene incorporating nanocrystalline cellulose. <i>V. Khoshkava and M. R. Kamal</i>	NF24. Coarse-grain tunable dissipative particle dynamics. Part 2: Droplet dynamics in micro- and nano-emulsions. <i>A. Boromand and J. Maia</i>	BM19. The rheology of paper coatings that contain cellulose nanofibers. <i>F. Richmond, A. Co and D. W. Bousfield</i>
9:30	SC44. The electrorheology of suspensions containing interfacially active constituents. <i>C. McIntyre, H. Yang and P. F. Green</i>	GS21. Predicting tack response of crosslinked and uncrosslinked gels using fractional constitutive equations. <i>A. Jaishankar and G. H. McKinley</i>	MB44. Role of small chains in interfacial slip of linear polymer melts. <i>S. M. Sabzevari, I. Cohen and P. Wood-Adams</i>	NF25. The effect of nanoparticle colloidal dispersions rheology on liquid transfer during gravure printing. <i>S. Khandavalli, J. A. Lee, M. Pasquali and J. Rothstein</i>	BM20. Modeling and simulation for effective solids handling of flexible fibers. <i>Y. Guo, J. S. Curtis, C. Wassgren, W. Ketterhagen and B. Hancock</i>
9:55			COFFEE BREAK		
10:25	SC45. Inertia and damping in models of jammed soft-particle suspensions. <i>C. E. Maloney, K. Karimi and A. Roy</i>	GS22. Impact of dispersed nanoparticulate material on the gelation of thermoreversible block copolymer solutions. <i>L. Walker, V. A. Cheng and M. M. Dao</i>	MB45. Analysis of helical instability in film blowing process. <i>I. Kwon, J. S. Lee, H. W. Jung and J. C. Hyun</i>	NF26. High-Deborah-number flows in microfluidic analogues of porous media. <i>F. A. Cruz and M. A. Alves</i>	BM21. Application of poly(lactic acid) stereocomplex in modification of PLA rheological properties. <i>S. Saeidlou, M. A. Huneault, H. Li and C. B. Park</i>
10:50	SC46. Shear induced diffusion in colloidal glasses. <i>N. Koumakis, J. F. Brady and G. Petekidis</i>	GS23. Formation of interconnected morphologies of symmetrical block copolymer/nanorod composites under cylindrical confinement: A coarse-grained molecular dynamics study. <i>J. H. Park and Y. L. Joo</i>	MB46. The effect of polymer rheological behavior on the morphology of co-extruded multi-layered PP/foamed PP structures. <i>S. Lee, J. Du, E. Baer and J. Maia</i>	NF27. Simulation of macromolecules immersed in stretching flow by dissipative particle dynamics; interpretation of response modes by proper orthogonal decomposition. <i>B. Caswell, M. Deng, L. Grinberg and G. E. Karniadakis</i>	BM22. Shear-induced isothermal crystallization kinetics of linear and LCB-PLA: Impact of shear and molecular structure. <i>N. Najafi, M.-C. Heuzey, P. Carreau and D. Theriault</i>
11:15	SC47. Slow relaxation and dynamics in soft particle glasses. <i>L. Mohan, M. Cloitre and R. Bonnecaze</i>	GS24. Rheological expression of clay self-exfoliation in a polymer nanocomposite. <i>H. H. Winter</i>	MB47. Die drool theory. <i>A. M. Schmalzer and A. J. Giacomin</i>	NF28. Numerical simulation of extension rate in a co-rotating twin screw mixer. <i>M. L. Rathod and J. L. Kokini</i>	BM23. A rheological study of the crystallization behaviour of PLA-reinforced crystalline nanocellulose bio-nanocomposites. <i>A. M. Arias, M.-C. Heuzey and M. A. Huneault</i>
11:40	SC48. Dispersant and thermal rheological fluid function of side-chain crystalline block co-polymer. <i>S. Yao, T. Okuma, S. Ichikawa and D. Tatsumi</i>	GS25. A continuum mechanical model for instability of discoidal high-density lipoproteins. <i>M. Maleki and E. Fried</i>	MB48. On negative pressures reported in modeling of rotating polymer melt processing machinery. <i>J. Vlachopoulos, A. Goger and M. R. Thompson</i>	NF29. Locomotion of helical bodies in viscoelastic fluids. <i>S. E. Spagnolie, B. Liu and T. R. Powers</i>	BM24. Plasticized chitosan/metalocene polyethylene blends: Effect of formulation on properties. <i>M. Matet, M.-C. Heuzey and A. Aji</i>
12:05	SC49. Thixotropic rheological behavior of Maya crude oil. <i>S. Mortazavi Manesh and J. M. Shaw</i>	GS26. Microstructural evolution of a polymer-like micellar solution during shear start-up and cessation. <i>C. R. Lopez-Barron, A. K. Gurnon, L. Pocar and N. J. Wagner</i>	MB49. Compressional flow accelerates interfacial reactions between nylon-6 and polyethylene-graft-maleic anhydride. <i>C. M. Thurber, S. Anderson and C. W. Macosko</i>	NF30. Dynamics of a bubble raft under oscillatory compression. <i>K. Feitosa, N. A. Hagans and C. E. O'Dea</i>	BM25. Rheological characterization of canola oil based bio-lubricants. <i>A. A. Elemsimit and D. Grecov</i>
12:30			END		

Poster Session

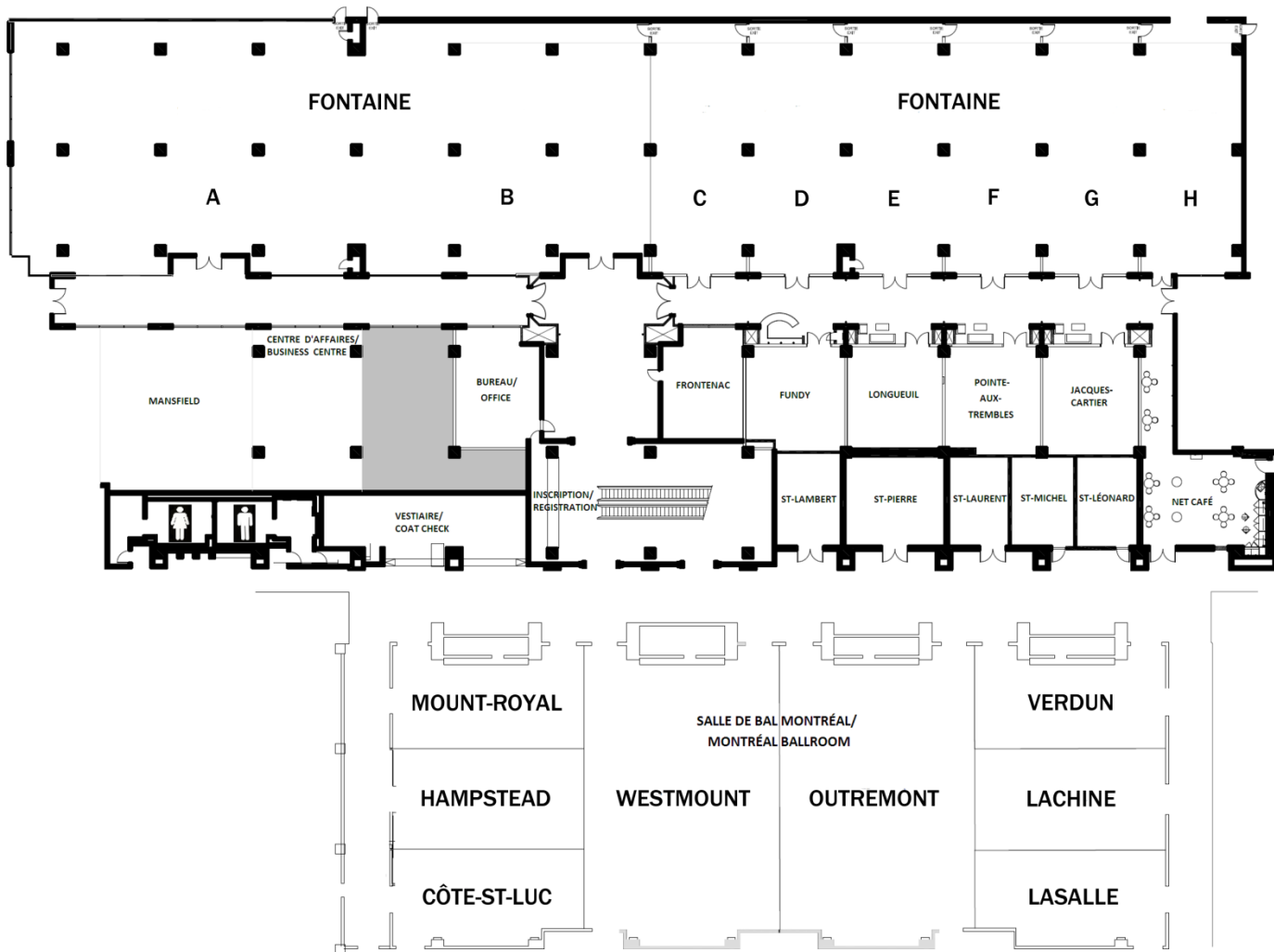
Wednesday 5:30 PM Salons Fontaine C-H, lower level

- PO1.** Interpreting LAOStrain and LAOStress from the perspective of model-based framework rheology. *R. L. Thompson and P. R. de Souza Mendes*
- PO2.** Numerical simulation of the non-isothermal re-start problem of waxy crude oils. *L. E. B. Sampaio, R. Sargentini and R. L. Thompson*
- PO3.** Kinetic theory description and advanced simulation of evolving microstructures. *F. Chinesta, E. Abisset-Chavanne and A. Ammar*
- PO4.** Different levels of approximation for the Reynolds stress tensor obtained from DNS of a FENE-P viscoelastic model in a drag reducing turbulent flow. *R. L. Thompson, L. Thais and G. Mompean*
- PO5.** Interface displacement in viscoelastic coextrusion: Numerical simulation. *B. Debbaut*
- PO7.** Prediction of air bubble dispersion in a viscous fluid in a twin-screw continuous mixer using FEM simulations of dispersive mixing. *J. L. Kokini and K. V. Vyakaranam,*
- PO8.** Modelling the jetting of dilute polymer solutions in drop-on-demand inkjet printing. *C. McIlroy, O. G. Harlen and N. F. Morrison*
- PO9.** CFD simulations of electrohydrodynamic jets of viscoelastic fluids. *M. A. d'Avila and N. C. Lima*
- PO10.** Properties of polydisperse polymer melts subject to confinement and flow as determined by dynamic Monte Carlo simulations. *N. A. Rorrer and J. R. Dorgan*
- PO11.** A study on an algorithm determining discrete relaxation spectrum. *J.-E. Bae and K. S. Cho*
- PO12.** Stochastic motion of a pair of Brownian particles in non-adsorbing polymer solutions. *M. Karzar-Jeddi, R. Tuinier, T. Taniguchi and T.-H. Fan*
- PO13.** Rheology of linear and branched polylactides. *S. Nouri, C. Dubois and P. G. Lafleur*
- PO15.** Nonequilibrium work relations for dilute polymer solutions. *F. Latinwo and C. M. Schroeder*
- PO16.** SAXS/WAXS studies of flow-induced crystallization of poly(1-butene) in uniaxial extensional flow. *E. McCready and W. Burghardt*
- PO17.** Effect of chelating agent on the rheology and interfacial properties of ethoxylated surfactants and polymer systems used in chemical EOR. *I. A. Malik, U. A. Mubaiyedh, I. A. Hussein and A. S. Sultan*
- PO18.** Effect of electrolytes on interface induced disassembly of a self-assembled polyelectrolyte/surfactant nanoparticle complex. *Y. Gao, B. Liang, M. R. Chowdhury, P. Dhar and J.-T. Liang*
- PO19.** Effect of nanoparticle and copolymer domain geometries on the rheological properties of block copolymer nanocomposites. *L. G. Amurin, R. S. Andrade, B. D. Defendi, N. R. Demarquette and D. J. Carastan*
- PO20.** The importance of chemical structure in the extensional rheology of entangled linear polymers. *N. J. Alvarez, Q. Huang, L. Hengeller and O. Hassager*
- PO21.** Extensional rheology of entangled polystyrene solutions suggests importance of nematic interactions. *Q. Huang, N. J. Alvarez, Y. Matsumiya, H. K. Rasmussen, H. Watanabe and O. Hassager*
- PO22.** Uniaxial extension of entangled polymer melts and solutions at fast rates. *H. Sun and S.-Q. Wang*
- PO23.** Shear-induced structures and flow instabilities. *C. Perge, M. A. Fardin, N. Taberlet and S. Manneville*
- PO24.** Pressure-driven oscillatory flows of wormlike micellar mixtures. *L. Zhou and L. P. Cook*
- PO25.** Effect of carbon-based nanofillers on the rheological and electrical properties of polymer nanocomposites. *S. J. Lee, H. Y. Yeom, H. Y. Na and K. H. Ahn*
- PO26.** Prediction of viscosity behavior of n-alkanes under ambient and high pressure and temperature conditions. *F. M. Thakkar, I. Rudra, R. Cracknell, D. Doyle, B. De Kraker, R. S. Payal and S. Balasubramanian*
- PO27.** The evolving rheology of polyurethane foam during expansion. *L. A. Mondy, A. M. Grillet, N. B. Wyatt, R. R. Rao, M. M. Soehnel, B. Shelden and C. C. Roberts*
- PO28.** Shear rheometry characterization of healing behavior displayed by a thermoreversible physically associating polymer gel subjected to shear-induced fracture. *A. Bawiskar and K. A. Erk*
- PO29.** Morphological and rheological properties of immiscible polymer blends based on virgin and recycled polyethylene and polypropylene. *Y. Kazemi, A. Cloutier and D. Rodrigue*
- PO30.** A rheo-optical study of monodisperse H-polyisoprenes to delineate the nature of "strain hardening" in uniaxial extension. *G. Liu, K. Ntetsikas, A. Avgeropoulos and S.-Q. Wang*
- PO31.** Spatiotemporal structure evolution and metastable states in shear banding wormlike micelles probed using LAOS and small angle neutron scattering. *A. K. Gurnon, C. R. Lopez-Barron, L. Porcar and N. J. Wagner*
- PO32.** Effective blending of ultrahigh molecular weight polyethylene with high density polyethylene achieved via solid-state shear pulverization. *M. F. Diop and J. M. Torkelson*

- PO33.** Surface transitions of macromolecules under flow. *R. L. Jones, T. Perevozchikova and K. M. Weigandt*
- PO34.** Decrease in viscosity of polyisoprene solutions on addition of multi-walled carbon nanotubes. *R. Ge and J. de Bruyn*
- PO35.** The influence of hydrophobic interactions on the aggregation of long semi-flexible molecules with end patches. *E. M. Charry, J. E. Perilla, M. Lisal and C. M. Colina*
- PO36.** Start-up of steady uniaxial extension of (ABA)_n multiblock copolymer systems. *A. M. Mannion, F. S. Bates and C. W. Macosko*
- PO37.** Control over the structure of conjugated polymers through kinetics of self-assembly. *P. de la Iglesia, G. Newbloom and D. C. Pozzo*
- PO38.** Break up of macroscopic multilayer polymeric films by nucleation and growth of holes induced by inhomogeneity. *V. Solouki Bonab, F. Goharpey and R. Foudazi*
- PO39.** Rheological properties of chitosan-based solutions for electrospraying and electrospinning processes. *N. H. Ardila, M. Arkoun, M.-C. Heuzey and A. Ajji*
- PO40.** Non-hydrodynamic interactions due to block-copolymer dry-brushes affecting the coalescence rate of viscous polymeric drops. *C. Vannozzi*
- PO41.** A bio-inspired model of mechanical energy harvesting based on flexoelectric membranes. *A. D. Rey, P. Servio and E. E. Herrera-Valencia*
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- PO44.** Measuring interfacial viscoelastic properties of emulsifiers and proteins. *K. E. Lilja*
- PO45.** Rheological control of composite hydrogels via pH tuning of mussel-inspired coordinate crosslinks. *S. C. Grindy, N. Holten-Andersen, D. G. Barrett and P. B. Messersmith*
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- PO47.** Biomechanics of vitreous gel: A rheological study. *P. S. Kashani, J.-P. Hubschman and H. P. Kavehpour*
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- PO60.** Interfacial rheology and microstructure of carbon nanotubes at the air-water interface. *S. Vora, B. Bognet, H. Patanwala, Y. Guo and A. Ma*
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- PO66.** Structure and rheology of aging colloidal gels by dynamic simulation. *B. J. Landrum, W. B. Russel and R. N. Zia*
- PO67.** Shear-induced structure and migration of colloidal particles in concentrated polymer solutions. *V. Breedveld and E. C. Peterson*
- PO68.** Electrosterically-stabilized nanocrystals of cellulose: Effect of salt and pH. *G. Lenfant, P. Carreau, M.-C. Heuzey and T. van de Ven*
- PO69.** Natural convection of a Bingham fluid in a vertical channel. *I. Karimfazli and I. Frigaard*

- PO70.** Role of microstructure and manufacturing in transport properties of highly porous ceramics. *C. C. Roberts, D. A. Barringer, A. M. Grillet, L. A. Mondy, D. Ingersoll, T. Chavez and C. B. Diantonio*
- PO71.** Frozen-in patterns in yield stress fluid. *S. Hormozi, G. Dunbrack, A. Maleki Zamenjani and I. Frigaard*
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- PO78.** Rheo-SANS and flow-SANS for simultaneous probing of rheology and flow-induced microstructure at Oak Ridge National Laboratory. *J. P. Rich and G. S. Smith*
- PO79.** Determination of dynamic viscoelastic functions from creep test. *M. K. Kim and K. S. Cho*
- PO80.** Accuracy of micro-particle image velocimetry applied to blood micro flows for velocity profile measurements. *K. L. Pitts and M. Fenech*
- PO81.** Improving the image quality of rheo-optical measurements. *P. Sierro, F. Soergel and J. Nijman*
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- PO83.** Investigation of flow instabilities in coaxial measuring systems using a dual motor rheometer. *P. A. Kamerkar and J. Lauger*
- PO84.** Effects of rheology on tribology. *F. Wolf*
- PO85.** Mechanical and morphological characterization tools for thin polymer membranes at fuel cell operating conditions. *B. R. Caire, M. A. Vandiver, Y. Li, D. M. Knauss, A. M. Herring and M. W. Liberatore*
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- PO87.** Estimation of error and bracketing of the value of the zero-shear-rate viscosity. *M. Shaw*
- PO88.** Process control via in-line viscosity measurement with non-Newtonian fluids: A new innovative method. *O. Reglat*
- PO89.** Rheology as a tool to assess the release of alpha-lipoic acid from emulsions. *V. B. Isaac, J. D. Moraes, B. G. Chiari and M. A. Correa*
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- PO99.** Extrusion of plastic scintillators with high fluorescent dopant loading. *P. Meysing, J. R. Dorgan, A. Mahl and U. Greife*
- PO100.** Capillary imbibition of a yield stress fluid. *C. Barentin and B. Geraud*

Hilton Montréal Bonaventure Meeting Space



Social Program

Sunday, October 13

Welcoming Reception

6:30 PM – 8:30 PM Salon Bonaventure (lobby level)

Hosted by TA Instruments

Monday, October 14

Industry/Faculty/Student Forum and Mixer

Rheology in the Real World

6:00 PM – 7:30 PM Salon Lachine

Tuesday, October 15

Society Business Meeting

12:05 PM Salon Westmount

Awards Reception

7:00 PM – 8:00 PM Salon Bonaventure (lobby level)

Sponsored by a generous contribution from Xpansion Instruments

Awards Banquet

8:00 PM Outremont Ballroom (lower level)

Wednesday, February 13

Poster Session Reception

5:30 PM – 7:30 PM Salons Fontaine C-H (lower level)

Sponsored by a generous contribution from Anton-Paar USA

Poster competition prizes are sponsored by the Canadian Society of Rheology.

The Society gratefully acknowledges the generous support of Anton-Paar USA, TA Instruments, Xpansion Instruments and the Canadian Society of Rheology.