The Society of Rheology 88th Annual Meeting
Grand Hyatt Tampa Bay, Tampa, Florida

Meeting Schedule

Monday, February 13, 2017

	A1	*A2*	*WI*	*SC*	*SE*
8:30			E. M. Furst (PL1) - *A2*		
9:20			Coffee Break		
10:00	SC1	BA1	SG1	EF1	SM1
10:25	SC2	BA2	SG2	EF2	SM2
10:50	SC3	BA3	SG3	EF3	SM3
11:15	SC4	BA4	SG4	EF4	SM4
11:40	SC5	BA5	SG5	EF5	SM5
12:05			Lunch Break		
1:30	SC6	BA6	SG6	EF6	SM6
1:55	SC7	BA7	SG7	EF7	SM7
2:20	SC8	BA8	SG8	EF8	SM8
2:45	SC9	BA9	SG9	EF9	SM9
3:10			Coffee Break		
3:35	SC10	BA10	SG10	EF10	SM10
4:00	SC11	BA11	SG11	EF11	SM11
4:25	SC12	BA12	SG12	EF12	SM12
4:50	SC13		SG13	EF13	SM13
5:15	SC14	BA14	SG14	EF14	SM14
5:40			End		

Tuesday, February 14, 2017

	A1	*A2*	*WI*	*SC*	*SE*
8:30			M. Cates (PL2) - *A2*		
9:20			Coffee Break		
10:00	SC15	BA15	SG15	EF15	SM15
10:25	SC16	BA16	SG16	EF16	SM16
10:50	SC17	BA17	SG17	EF17	SM17
11:15	SC18	BA18	SG18	EF18	SM18
11:40	SC19	BA19	SG19	EF19	SM19
12:05			Lunch Break / Society Business Meeting - *A2*		
1:30	SC20			EF20	SM20
1:55	SC21	BA21	SG21	EF21	SM21
2:20	SC22	BA22	SG22	EF22	SM22
2:45	SC23	BA23	SG23	EF23	SM23
3:10			Coffee Break		
3:35	SC24	NF1	MF1	EF24	SM24
4:00	SC25	NF2	MF2	EF25	SM25
4:25	SC26	NF3	MF3	EF26	SM26
4:50	SC27	NF4	MF4	EF27	SM27
5:15	SC28	NF5	MF5	EF28	
5:40			End		
7:00			Awards Reception - *FS*		
8:00			Awards Banquet - *Audubon BC*		

Wednesday, February 15, 2017

	A1	*A2*	*WI*	*SC*	*SE*
8:30			Z. Dogic (PL3) - *A2*		
9:20			Coffee Break		
10:00	SC29	NF6	MF6		SM28
10:25	SC30	NF7	MF7		SM29
10:50	SC31	NF8	MF8		SM30
11:15	SC32	NF9	MF9		SM31
11:40	SC33	NF10	MF10		SM32
12:05			Lunch Break		
1:30	SC34	NF11	MF11	AT1	SM33
1:55	SC35	NF12	MF12	AT2	SM34
2:20	SC36	NF13	MF13	AT3	SM35
2:45	SC37	NF14	MF14	AT4	SM36
3:10			Coffee Break		
3:35	SC38	NF15	SL1	AT5	SM37
4:00	SC39	NF16	SL2	AT6	SM38
4:25	SC40	NF17	SL3	AT7	
4:50	SC41	NF18	SL4	AT8	
5:15	SC42	NF19	SL5	AT9	
5:40			End		
6:00			Poster Session & Reception - *FS*		

Thursday, February 16, 2017

	A1	*A2*	*WI*	*SC*
8:00		E. Van Ruymbeke (AP1) - *A2*		
8:40	SC43	NF20		AT10
9:05	SC44	NF21	SL7	AT11
9:30	SC45	NF22	SL8	AT12
9:55		Coffee Break		
10:25	SC46	NF23	SL9	AT13
10:50	SC47	NF24	SL10	AT14
11:15	SC48	NF25	SL11	
11:40	SC49			
12:05		End		

Session and Room Codes

AP = Award Presentations
AT = Advanced Techniques and Methods
BA = Biorheology & Active Fluids
EF = Emulsions, Foams & Interfacial Rheology
MF = Micro/Nano Fluidics and Probe Rheology
NF = Non-Newtonian Fluid Mechanics & Instabilities
PL = Plenary Lectures
SC = Suspensions, Colloids and Granular Media
SG = Self-assembled Systems, Gels and Liquid Crystals
SL = Solids & Composites
SM = Polymer Solutions & Melts

A1 = Audubon B
A2 = Audubon DEF
FS = Foyer-Stairs/Windows
SC = Sandhill Crane
SE = Snowy Egret
WI = White Ibis

Monday, February 13

Morning

8:30 **PL1.** Microrheology's place in the rheologist's toolbox. *E. M. Furst* Audubon DEF

9:20 COFFEE BREAK

	Audubon B	*Audubon DEF*	*White Ibis*	*Sandhill Crane*	*Snowy Egret*
	Suspensions, Colloids & Granular Media	**Biorheology & Active Fluids**	**Self-assembled Sys, Gels & Liq Crystals**	**Emulsions, Foams & Interfacial Rheology**	**Polymer Solutions & Melts**
10:00	**SC1.** Phase behavior and dynamics of polymer-bridged colloidal latex particle suspensions simulated by a novel hybrid population balance - Brownian dynamics method. *E. Hajizadeh, Y. Shi and R. G. Larson*	**BA1.** Network formation in an infinite sea of water: Concentration-dependent rheology of hagfish defense gel. *G. Chaudhary, D. S. Fudge and R. H. Ewoldt*	**SG1.** Rheo-structural characterization of aluminosilicate fluids during the gelation process. *A. Poulesquen, J.-B. Champenois and T. Piallat*	**EF1.** The effect of a yield stress on the drainage of the thin film between two colliding Newtonian drops. *S. Goel and A. Ramachandran*	**SM1.** Solution rheology of dry native cellulose in ionic liquids. *R. H. Colby and B. Nazari*
10:25	**SC2.** Interplay of enthalpic and entropic contributions in grafted polymer chains of self-suspended hairy nanoparticles. *S. Choudhury, A. Agrawal and L. A. Archer*	**BA2.** Effect of oleic acid plasticizer and glutaraldehyde crosslinker on zein protein gel formation. *E. A. Barber and J. L. Kokini*	**SG2.** Processing-dependent gelation of aqueous methylcellulose. *A. Z. Nelson, Y. Wang, A. S. Margotta and R. H. Ewoldt*	**EF2.** A new mechanism for the wetting of a surface by the droplets of an emulsion. *S. G. Borkar and A. Ramachandran*	**SM2.** A multi-fluid model of phase-inversion membrane formation. *D. R. Tree and G. Fredrickson*
10:50	**SC3.** Polyelectrolyte - particle assembly in mixed hydrodynamic fields. *N. Wilkinson, A. Metaxas and C. Dutcher*	**BA3.** Using solution shear to test the effects of protein conformational flexibility on dense liquid protein clusters. *M. C. Byington, M. S. Safari, J. C. Conrad and P. G. Vekilov*	**SG3.** Hardening and yielding in colloidal gels. *M. Bouzid and E. Del Gado*	**EF3.** The role of elasticity in bubble breaking. *D. Tammaro, R. Pasquino, M. M. Villone, G. D'Avino, E. Di Maio, N. Grizzuti and P. L. Maffettone*	**SM3.** Dynamics of polymer-grafted nanoparticles in solutions of linear polymer investigated using neutron and x-ray scattering techniques. *R. Poling-Skutvik, J. C. Conrad and R. Krishnamoorti*
11:15	**SC4.** Soft colloid - polymer mixtures at extreme size ratios: Gelation and confinement effects. *D. Vlassopoulos, D. Truzzolillo and M. C. Merola*	**BA4.** Towards modeling biodistribution of nanoparticles in vivo. *R. R. Rao, J. Clausen, J. Lechman, J. Wagner, S. Roberts, M. Ferraro, J. Brinker, K. Butler and Z. Liu*	**SG4.** The rheology and microstructure of aging thermoreversible colloidal gels & attractive driven glasses. *M. B. Gordon, C. J. Kloxin and N. J. Wagner*	**EF4.** Direct numerical simulation of a bubble suspension in small amplitude oscillatory shear flow. *P. Anderson, C. Mitrias, M. Hulsen and N. Jaensson*	**SM4.** Microscopic origin of elastic instability in flow of polymer solutions through porous media: Using micro-fluidics and DNA imaging. *P. E. Boukany, D. Kawale and S. Sachdev*
11:40	**SC5.** The effect of dispersion level of CNTs introduced by ultrasonic treatment on linear and nonlinear viscoelastic behaviors of PP/CNT nanocomposites. *A. I. Isayev, J. Zhong and T. Liang*	**BA5.** Mechanical characterization of corneal cells for investigating their conformability with contact lenses. *J. Pokki, M. C. Merola, E. C. Hollenbeck, N. Nabar and G. G. Fuller*	**SG5.** Isotropic-nematic phase transition in liquid crystal. *C. Zhang, A. Acharya and N. Walkington*	**EF5.** Modeling microstructural inertia effects in dilute emulsions. *P. M. Mwasame, N. J. Wagner and A. N. Beris*	**SM5.** Stress-gradient-induced polymer migration in solutions flowing between rotating concentric and eccentric cylinders. *E. Hajizadeh and R. G. Larson*

12:05 LUNCH BREAK

Afternoon

	Audubon B	*Audubon DEF*	*White Ibis*	*Sandhill Crane*	*Snowy Egret*
	Suspensions, Colloids & Granular Media	**Biorheology & Active Fluids**	**Self-assembled Sys, Gels & Liq Crystals**	**Emulsions, Foams & Interfacial Rheology**	**Polymer Solutions & Melts**
1:30	**SC6.** Anomalous stress buildup under constant strain in an aging soft glassy material: A critical evaluation. *A. Shukla and Y. M. Joshi*	**BA6.** Shear thinning of blood and the clustering of red blood cells in microcapillary flow. *C. Wagner*	**SG6.** Microstructure, rheology and suspension stability of surfactant micelle-acrylate copolymer compositions. *M. S. Vethamuthu*	**EF6.** A thermodynamically consistent macroscopic model for dilute emulsion behavior. *P. M. Mwasame, N. J. Wagner and A. N. Beris*	**SM6.** Weld formation in polymer extrusion additive manufacturing processes. *J. E. Seppala, S. H. Han, K. E. Hillgartner, C. S. Davis and K. B. Migler*

1:55	**SC7.** Aging in soft solids: Elastically driven, intermittent relaxation. *E. Del Gado, M. Bouzid, J. Colombo and L. Vieira Barbosa*	**BA7.** Regulating fibrin formation, structure, and mechanical strength. *U. Daalkhaijav, J. L. Sylman, O. J. McCarty and T. W. Walker*	**SG7.** Mesoscopic modelling for rheology of branched micellar solutions. *W. Zou and R. G. Larson*	**EF7.** Effects of hydrodynamic interactions on interfacial particle microstructure deformation under shear and aggregation kinetics using a Stokesian approach. *N. Laal-Dehghani and G. F. Christopher*	**SM7.** Understanding the fused deposition modeling (3D printing) process. *M. E. Mackay, Z. R. Swain, C. R. Banbury, D. D. Phan and D. A. Edwards*
2:20	**SC8.** Relaxation of colloidal glasses after flow interruption. *A. R. Jacob and G. Petekidis*	**BA8.** Sub-cellular modeling of platelet transport and adhesion in micro-channels with constrictions. *A. Yazdani, G. E. Karniadakis and B. Caswell*	**SG8.** Static and dynamic signatures of branching in wormlike micelles (WLMs). *M. A. Calabrese, S. A. Rogers, L. Porcar and N. J. Wagner*	**EF8.** Coalescence inhibition through asphaltene adsorption. *S. Bochner de Araujo, M. C. Merola, D. Vlassopoulos and G. G. Fuller*	**SM8.** Disentanglement in polymer melts during additive manufacturing. *P. D. Olmsted and C. McIlroy*
2:45	**SC9.** Yielding of attractive colloidal glasses during start-up shear. *E. Moghimi and G. Petekidis*	**BA9.** Investigation of the human blood rheology in transient flows. *J. S. Horner, A. N. Beris, N. J. Wagner and D. S. Woulfe*	**SG9.** Reinterpreting viscoelasticity in terms of Laun's elastic strain and an equilibrium shift: Application to worm-like micelles. *C.-W. Lee, J. D. Park and S. A. Rogers*	**EF9.** Fluid to solid phase transition of asphaltenes laden interfaces. *S. Darjani, J. Koplik and V. Pauchard*	**SM9.** Pinch-off dynamics, dripping-onto-substrate (DoS) rheometry and printability of dilute and semi-dilute polymer solutions. *J. Dinic, L. N. Jimenez, M. Biagioli and V. Sharma*
3:10			COFFEE BREAK		
3:35	**SC10.** Rheology and hydrodynamic diffusion in suspensions of flow-aligning ring-shaped particles in a low Reynolds number simple shear flow. *N. S. Borker, D. L. Koch and A. D. Stroock*	**BA10.** Squeezing of vesicles through narrow tubes. *J. M. Barakat and E. S. Shaqfeh*	**SG10.** Rheology of lyotropic nanomaterial dispersions. *V. A. Davis*	**EF10.** Deposition behavior of asphaltene-stabilized water-in-oil emulsions with its interfacial rheology at oil-brine interface. *Y.-J. Lin, P. He and S. L. Biswal*	**SM10.** Modulus increase and crystallization evolution during gel spinning and post drawing of UHMWPE fibers. *C. K. Henry, G. R. Palmese and N. J. Alvarez*
4:00	**SC11.** Structure and rheology in sheared suspensions of fibers. *J. E. Butler*	**BA11.** The drift volume in viscous flows. *N. G. Chisholm and A. S. Khair*	**SG11.** Using μ^2rheology to characterize repeatable phase transitions of a rod-like colloidal gel. *M. Wehrman, S. Lindberg and K. M. Schultz*	**EF11.** Interfacial viscoelasticity of therapeutic protein solutions. *A. Kannan, I. C. Shieh, D. L. Leiske, G. Lin and G. G. Fuller*	**SM11.** Model-guided experimental design of flow-induced crystallization of poly(1-butene) under uniaxial extensional flow as measured by small-angle x-ray scattering. *M. S. Kweon and W. R. Burghardt*
4:25	**SC12.** A three-fluid model for predicting the behavior of concentration heterogeneities in concentrated lignocellulosic biomass. *J. C. Duncan, D. J. Klingenberg, M. D. Graham and C. T. Scott*	**BA12.** Nanorheology with nanopropellers in biological fluids. *H.-H. Jeong, Z. Wu, T. Qiu, D. Walker, A. Mark, U. Choudhury and P. Fischer*	**SG12.** Rheo-SANS of lyotropic cellulose nanocrystal dispersions. *A. D. Haywood, K. Weigandt and V. A. Davis*	**EF12.** Can pendant drop instruments measure rheology? *M. Nagel and J. Vermant*	**SM12.** Flow-induced crystallization. *R. H. Colby, B. Nazari, J. Seo, A. M. Rhoades and R. Schaake*
4:50	**SC13.** Effect of temperature on rheology of fiber suspensions in water as suspending liquid. *S. Burlawar, D. J. Klingenberg, T. W. Root and C. T. Scott*		**SG13.** Morphology of carbon nanotube liquid crystal solutions. *V. Jamali, F. Mirri, F. C. Mackintosh, P. van der Schoot and M. Pasquali*	**EF13.** Effect of non-ionic and ionic surfactant on interfacial rheology of particle laden interfaces. *S. E. Rahman and G. F. Christopher*	**SM13.** Flow-induced crystallization of polycaprolactone as probed by simultaneous Raman spectroscopy, rheology, and optical microscopy. *A. Kotula and K. B. Migler*
5:15	**SC14.** Shear thickening and mechanical gelation of flexible non-Brownian fiber suspensions. *A. Perazzo, J. K. Nunes, S. Guido and H. A. Stone*	**BA14.** Rheology of active colloidal suspensions. *U. Choudhury, D. P. Singh, T. Qiu, H.-H. Jeong, A. Mark and P. Fischer*	**SG14.** Adhesive hard rods: A thermoreversible model system to quantify the effects of particle shape anisotropy and short-range attractions on dynamic arrest transitions. *R. P. Murphy and N. J. Wagner*	**EF14.** Stability and interfacial rheology of nanoemulsion-based antimicrobial delivery systems stabilized by lecithin or Tween 20. *J. J. Nash and K. A. Erk*	**SM14.** Viscoelastic and orientational relaxation of linear and ring Rouse chains undergoing reversible end-association and dissociation. *H. Watanabe, Y. Matsumiya and Y. Kwon*
5:40			END		

Tuesday, February 14

Morning

8:30 **PL2.** Frictional rheology of very dense suspensions. *M. Cates* (Bingham Lecture) Audubon DEF

9:20 COFFEE BREAK

	Audubon B	*Audubon DEF*	*White Ibis*	*Sandhill Crane*	*Snowy Egret*
	Suspensions, Colloids & Granular Media	**Biorheology & Active Fluids**	**Self-assembled Sys, Gels & Liq Crystals**	**Emulsions, Foams & Interfacial Rheology**	**Polymer Solutions & Melts**
10:00	**SC15.** A hierarchy of granular continuum models: From flow fields to traction applications. *K. Kamrin*	**BA15.** Shear rheology of active Brownian suspensions. *S. Takatori and J. F. Brady*	**SG15.** Quasi-properties and fractional constitutive equations for protein gels: Connecting gel microstructure to power-law linear rheology. *T. Divoux, B. Keshavarz, M. Leocmach, T. Gibaud, S. Manneville and G. H. McKinley*	**EF15.** Rheology of emulsions stabilized by solid particles: The role of nanoparticles at the liquid-liquid interface. *M. Derakhshandeh, M. Trifkovic and S. Bryant*	**SM15.** Modeling extensional viscosity of linear and LCB polymers by dynamic dilution and interchain tube pressure. *M. H. Wagner and E. Narimissa*
10:25	**SC16.** Granular physics in yield-stress fluids: Carbopol suspensions versus wet concrete. *J. A. Koch, D. I. Castaneda, D. A. Lange and R. H. Ewoldt*	**BA16.** Linear viscoelasticity of a dilute active suspension. *T. M. Bechtel and A. S. Khair*	**SG16.** Rheology-structure relationships in “ductile” and “brittle” fats. *B. A. Macias-Rodriguez and A. G. Marangoni*	**EF16.** Localizing graphene on the interface of cocontinuous polymer blends. *L. Bai, X. Cheng and C. W. Macosko*	**SM16.** Resuscitating the dual slip link model: Linears, stars, and blends. *S. Shanbhag*
10:50	**SC17.** Powder flowability study to optimize mixing and predict final product properties: A study on PVC formulations. *S. Reynaud*	**BA17.** Microscopic dynamics of bacterial “superfluids” under planar oscillatory shear. *S. Guo, D. Samanta, Y. Peng, X. Xu and X. Cheng*	**SG17.** From non-linear rheology to the onset of macroscopic failure: An integral constitutive model for biopolymer gels. *B. Keshavarz, T. Divoux, S. Manneville and G. H. McKinley*	**EF17.** Microstructure and rheology of particulate suspensions in a binary fluid. *D. E. Trystan and S. Velankar*	**SM17.** Brownian dynamics simulations of single comb DNA molecules. *A. Saadat, D. J. Mai, B. Khomami and C. M. Schroeder*
11:15	**SC18.** Elongational flows of some non-colloidal suspensions. *R. I. Tanner and S. Dai*	**BA18.** Effective rheology and transition to spontaneous flows in confined active suspensions. *R. Alonso-Matilla, M. Theillard and D. Saintillan*	**SG18.** Strain-stiffening and negative normal stress in alginate hydrogels. *S. Hashemnejad and S. Kundu*	**EF18.** Tuning the phase separated morphology in carbon nanotube filled blends with a random or block copolymer: Part 1. Effects on the electrical conductivity. *R. Cardinaels, A. Bharati and P. Moldenaers*	**SM18.** Nonlinear rheology and dynamics of dendritically branched macromolecules in shear and uniaxial extension. *Q. Huang, S. Costanzo, C. Das and D. Vlassopoulos*
11:40	**SC19.** Calculating effective viscosity using boundary integral equations. *L. Bystricky, S. Shanbhag and B. Quaife*	**BA19.** Geometry-dependent viscosity reduction and mixing in active fluids. *J. Dunkel and J. Slomka*	**SG19.** Rheology of pluronic-hyaluronic acid thermoreversible gelling systems. *R. Koduvayur Ananthanarayanan and A. P. Deshpande*	**EF19.** Tuning the phase separated morphology in carbon nanotube filled blends with a random or block copolymer: Part 2. Effects on the microcapacitor network. *A. Bharati, R. Cardinaels, M. Wübbenhorst and P. Moldenaers*	**SM19.** High temperature extensional rheology of linear, branched and hyper-branched polycarbonates. *S. Sur, M. Chellamuthu and J. P. Rothstein*

12:05 LUNCH BREAK / SOCIETY BUSINESS MEETING Audubon DEF

Afternoon

	Audubon B	*Audubon DEF*	*White Ibis*	*Sandhill Crane*	*Snowy Egret*
	Suspensions, Colloids & Granular Media	**Biorheology & Active Fluids**	**Self-assembled Sys, Gels & Liq Crystals**	**Emulsions, Foams & Interfacial Rheology**	**Polymer Solutions & Melts**
1:30	**SC20.** Dynamics and rheology of colloidal dispersion near to the glass transition concentration. *X. Peng, Q. Li and G. B. McKenna*			**EF20.** Dynamics and mechanics of nanoparticle-surfactant complex coated fluid-fluid interfaces. *S. M. Kirby, S. L. Anna and L. M. Walker*	**SM20.** PLA branching with multi-functional aziridine. *L. Gu, J. W. Schaefer, D. C. Morse and C. W. Macosko*
1:55	**SC21.** Testing the paradigms of the glass transition in colloids. *J. Wang, X. Peng, Q. Li, G. B. McKenna and R. N. Zia*	**BA21.** Active-to-passive transitions in microtubule based biopolymer gels. *C. Dessi, D. Chen, Z. Dogic and D. Blair*	**SG21.** Modeling of fluids with transient mesoscale structures. *L. Zhou and L. P. Cook*	**EF21.** Nanoparticle-surfactant films: Coalescence and interfacial rheology. *J. Forth, A. Toor, T. P. Russell, S. Bochner de Araujo, M. C. Merola and G. G. Fuller*	**SM21.** Tunable rheology of dendronized polymers. *S. Costanzo, L. Scherz, T. Schweizer, M. Kröger, G. Floudas, D. A. Schlüter and D. Vlassopoulos*

2:20	**SC22.** A reinterpretation of the rheological behavior of hard-sphere colloidal glass under shear start-up. *J. D. Park and S. A. Rogers*	**BA22.** Bacteria and transport of colloids at fluid interfaces. *L. Vaccari, M. Molaei, R. L. Leheny and K. J. Stebe*	**SG22.** Influence of thermal and deformation history on the viscoelastic properties of well-defined entangled segmented copolymers. *G. P. Baeza, A. Sharma, A. Louhichi, C. Fitié, H. Goldansaz, D. Vlassopoulos and E. Van Ruymbeke*	**EF22.** Interfacial stability and bubble formation with amphiphile – metal oxide particle complexes. *C. Sharkey and S. L. Anna*	**SM22.** Strain hardening in immiscible PE/PP blends via interfacial reinforcement with PE-cb-PP comb-block copolymers. *C. R. López-Barrón, A. Tsou, P. Jiang and D. Crowther*
2:45	**SC23.** Shear transformation avalanches determine the Herschel-Bulkley exponent in soft glassy solids. *C. E. Maloney, A. P. Roy and K. Karimi*	**BA23.** Effects of bacteria mobility on the formation of P. Aeruginosa pellicles. *L. Qi and G. F. Christopher*	**SG23.** Viscoelasticity and its temperature-dependence in thermosensitive copolymer-laponite nanocomposite systems in the limiting ranges of low and high nanoparticle impact. *I. Boucenna, F. Carn and A. Mourchid*	**EF23.** Modeling of geopolymer foam swelling to determine optimum rheological properties of a geopolymer paste. *A. Marchal, S. Petlitckaia and A. Poulesquen*	**SM23.** Influence of the entanglements on steady elongational viscosity for monodisperse polymer melts. *T. Shahid, C. Clasen, F. Oosterlinck and E. Van Ruymbeke*
3:10			COFFEE BREAK		
		Non-Newt Fluid Mech & Instabilities	**Micro/Nano Fluidics & Probe Rheology**		
3:35	**SC24.** Why not friction and hydrodynamics? A generalized model of the dynamics and structure of dense colloidal suspensions. *J. Maia, A. Boromand, B. Grove and S. Jamali*	**NF1.** Thermal Marangoni migration of droplets in an Oldroyd-B fluid under creeping flow conditions. *P. Capobianchi, M. Lappa and M. S. Oliveira*	**MF1.** Particle migration in electro-hydrodynamic bidirectional flows of a viscoelastic fluid. *D. Li and X. Xuan*	**EF24.** Domain and nanoridge growth kinetics in stratifying, micellar foam films. *Y. Zhang and V. Sharma*	**SM24.** Polydisperse linear entangled polymer model incorporating the binary entanglement pair dynamics for the application to shear modification. *D. W. Mead, S. Monjezi and J. Park*
4:00	**SC25.** Active microrheology of dense colloidal suspensions. *O. Sedes, A. Singh, B. Chakraborty and J. F. Morris*	**NF2.** Dynamics of dimples on bubbles approaching free interfaces in wormlike micellar solutions. *V. Chandran Suja, A. Kannan, A. Kubicka and G. G. Fuller*	**MF2.** Mean squared displacement: Uncertainty estimation. *B. R. Crysup and S. Shanbhag*	**EF25.** Visualizing the smart foam rheology in crude oil displacement on a pore scale micromodel. *Y. Zeng, S. Xiao, E. D. Vavra, M. C. Puerto, G. J. Hirasaki and S. L. Biswal*	**SM25.** Nonequilibrium molecular dynamics simulations of entangled polymer melts and solutions undergoing planar elongational flows. *M. H. Nafar Sefiddashti, B. J. Edwards and B. Khomami*
4:25	**SC26.** Flow of non-equilibrium states of attractive colloids: Insights from experiments and computer simulations. *G. Petekidis*	**NF3.** Forced spreading of films and droplets of colloidal suspensions. *L. Espin and S. Kumar*	**MF3.** Sticky-probe microrheology. *D. E. Huang and R. N. Zia*	**EF26.** Applicability of time-temperature superposition and strain-rate frequency superposition for skin care products. *M. Hasebe and H. Bui*	**SM26.** Affine vs. non-affine deformation in fast flow of entangled polymers: New insight from small-angle neutron scattering. *C. N. Lam, Z. Wang, W. Wang, J. Liu, K. Hong, L. Porcar, W.-R. Chen and Y. Wang*
4:50	**SC27.** Gravitational collapse of colloidal gels and connections to kinetic "arrest". *R. N. Zia and P. Padmanabhan*	**NF4.** Influence of the yield stress on the evolution of a bubble population in a viscoplastic fluid, consequences on the macroscopic swelling of bitumen drums. *A. Marchal, A. Poulesquen, B. Vergnes and R. Valette*	**MF4.** No tracking necessary: Probe microrheology by differential dynamic microscopy. *A. V. Bayles, T. M. Squires and M. E. Helgeson*	**EF27.** Electrohydrodynamics of leaky dielectric drops in strong electric fields: Simulations and theory. *D. Das and D. Saintillan*	**SM27.** Nonlinear stress relaxation of miscible polyisoprene/poly(p-tert-butyl styrene) blends in pseudo-monodisperse state. *Y. Matsumiya and H. Watanabe*
5:15	**SC28.** Elasto-kinetic transition for sheared granular flows: From soft to hard particles. *A. Favier de Coulomb, M. Bouzid, P. Claudin, E. Clement and B. Andreotti*	**NF5.** Color interferometry applied to yield-stress fluid drop impacts on heated surfaces. *B. C. Blackwell, A. Wu, M. J. Sarvaiya and R. H. Ewoldt*	**MF5.** Characterization of gelling suspensions by differential dynamic microscopy. *S. Shahsavari, M. Caggioni, W. H. Hartt and G. H. McKinley*	**EF28.** Rheology of pollution preventing inks based on a combination of microemulsion and resin. *S. Moka and A. N. Bhaskarwar*	
5:40			END		
7:00			AWARDS RECEPTION Foyer-Stairs/Windows		
8:00			AWARDS BANQUET Audubon BC		

Wednesday, February 15

Morning

8:30 **PL3.** Spontaneous flows in soft active matter. *Z. Dogic* Audubon DEF

9:20 COFFEE BREAK

	Audubon B	*Audubon DEF*	*White Ibis*	*Sandhill Crane*	*Snowy Egret*
	Suspensions, Colloids & Granular Media	**Non-Newt Fluid Mech & Instabilities**	**Micro/Nano Fluidics & Probe Rheology**		**Polymer Solutions & Melts**
10:00	**SC29.** Pairwise interparticule interactions determine discontinuous shear thickening transition in non-coloidal suspensions. *J. Comtet, G. Chatté, A. Niguès, L. Bocquet, A. Siria and A. Colin*	**NF6.** Flow of viscoelastic fluids through a sharp microfluidic bend: Role of wormlike micelles structure. *M. Y. Hwang, H. Mohammadigoushki and S. J. Muller*	**MF6.** Microrheological characterization of covalently adaptable hydrogels pushed out of equilibrium. *F. Escobar, D. D. McKinnon, K. S. Anseth and K. M. Schultz*		**SM28.** Linear rheology of entangled bulk polymers functionalized with metal-ligand interactions. *F. Zhuge, J. Brassinne, C.-A. Fustin, J.-F. Gohy and E. Van Ruymbeke*
10:25	**SC30.** A rheological signature of frictional interactions in shear thickening colloids. *J. R. Royer, D. Blair and S. Hudson*	**NF7.** Viscoelastic fluid-structure interactions between a non-Newtonian fluid flow and flexible circular cylinder. *A. A. Dey, Y. Modarres-Sadeghi and J. P. Rothstein*	**MF7.** Probing the structure of mucin gels using microscale and macroscale rheometry. *C. E. Wagner, B. S. Turner, G. H. McKinley and K. Ribbeck*		**SM29.** Design and intuition with continuous spectra. *R. E. Corman and R. H. Ewoldt*
10:50	**SC31.** Tunable shear thickening: From understanding suspension thickening to controlling viscosity on the fly. *N. Lin, C. Ness, J. Sun, B. Guy, M. Hermes, W. Poon, M. Cates and I. Cohen*	**NF8.** Viscoelastic micellar material formation at the interface of immiscible fluids. *Z. Niroobakhsh and A. Belmonte*	**MF8.** Serpentine channels: Micro-rheometers for fluid relaxation times of complex fluids. *A. Lindner, L. Casanellas, R. Poole, S. Lerouge, M. Alves and C. Wagner*		**SM30.** Dynamics of polyelectrolytes in shear and extensional flows. *L. N. Jimenez, J. Dinic, N. Parsi and V. Sharma*
11:15	**SC32.** Towards a predictive description of shear thickening suspensions. *A. Singh, J. F. Morris and M. M. Denn*	**NF9.** Growth of viscoelastic instabilities around a linear cylinder array. *X. Shi and G. F. Christopher*	**MF9.** The role of sample rheology on matrix effect in microfluidic immunoassays. *A. I. Barbosa and N. M. Reis*		**SM31.** Continuous relaxation spectra for MAOS characterization. *L. Martinetti, P. K. Singh, J. M. Soulages and R. H. Ewoldt*
11:40	**SC33.** Rheological characterization of colloidal silica suspensions for 3D printing of optical glass monoliths. *N. Dudukovic, D. Nguyen, T. Yee, J. Destino, C. Meyers, E. Duoss and R. Dylla-Spears*	**NF10.** Elastic turbulence in channel flows at low Reynolds number. *B. Qin and P. E. Arratia*	**MF10.** Steady-state shape and moduli determination for an elastic capsule in a microfluidic T-junction. *A. Koolivand and P. Dimitrakopoulos*		**SM32.** Predicting flow properties of polymer melts via polymerization kinetic modeling and computational rheology. *J. M. Soulages*

12:05 LUNCH BREAK

Afternoon

	Audubon B	*Audubon DEF*	*White Ibis*	*Sandhill Crane*	*Snowy Egret*
	Suspensions, Colloids & Granular Media	**Non-Newt Fluid Mech & Instabilities**	**Micro/Nano Fluidics & Probe Rheology**	**Advanced Techniques & Methods**	**Polymer Solutions & Melts**
1:30	**SC34.** Turning a microscope into a rheometer. *N. Lin, M. Bierbaum, P. Schall, J. Sethna and I. Cohen*	**NF11.** Distinguishing shear banding from shear thinning in Taylor-Couette flows. *P. Cheng, M. Burroughs, G. Leal and M. E. Helgeson*	**MF11.** Bubble pinch-off mechanisms in a microfluidic expansion channel. *D. Vecchiolla, V. Giri and S. L. Biswal*	**AT1.** Frequency-sweep MAOS: Faster and cheaper medium-amplitude oscillatory shear. *P. K. Singh, J. M. Soulages and R. H. Ewoldt*	**SM33.** Melt extensional rheology: SER vs. FSR and internal energy buildup. *P. Lin, Z. C. Zhao, J. Liu, Z.-G. Wang and S.-Q. Wang*
1:55	**SC35.** Microrheology as a powerful tool to monitor particulation of bovine serum albumin. *R. Sadeghi and J. L. Kokini*	**NF12.** Jetting flow of a shear banding fluid in a rectangular duct. *P. Salipante, C. Little and S. Hudson*	**MF12.** Microliter-scale phase separating polymer droplets to estimate partition coefficients of single walled carbon nanotubes. *C. W. Nelson and S. L. Anna*	**AT2.** Natural decomposition of the relaxation spectrum through combined implementation of Fourier, Laplace and Z transforms. *D. Yao*	**SM34.** The melt rheology of poly(ethylene oxide) powder mixtures of varying initial molecular weight distribution subject to non-oxidative thermal degradation. *C. D. Mansfield, M. Q. Ansari and D. G. Baird*

2:20	**SC36.** Modelling the flow of suspensions with large inclusions, from one millimeter to one centimeter in size, in complex geometries: Application to the development of Standard Reference Materials for calibration of rheometers. *N. S. Martys, C. F. Ferraris, W. L. George, S. G. Satterfield and D. Lootens*	**NF13.** Stress-concentration coupling in polymer solutions under strong flow. *M. Cromer, G. Leal and G. Fredrickson*	**MF13.** Elasto-inertial separation of particles by size in straight rectangular microchannels. *D. Li, X. Lu and X. Xuan*	**AT3.** Extremely strong depth dependence of the hardness of PDMS: Analysis of effects of false surface detection. *Z. Qian and G. B. McKenna*	**SM35.** Polymer orientation contributions. *P. H. Gilbert and J. Giacomin*
2:45	**SC37.** Adjusting the electrorheological effect in silicate cage structures: Changing the number of cyanopropyl functional groups attached to the T8-cages. *J. Omambala, C. McIntyre and A. Gallo*	**NF14.** Stability of shear banded flow for a viscoelastic constitutive model with thixotropic yield stress behavior. *Y. Renardy and M. Renardy*	**MF14.** Reducing transport energy barrier in crowded environments with weak interactions. *Y.-L. Chen, F.-T. Chien, W. Chien and P.-K. Lin*	**AT4.** Prediction of cryogenic viscosities: Arrhenius or erroneous? *C. Roberts, D. Barringer, A. L. Graham and A. Mertz*	**SM36.** A force-level theory of tube deformation, microscopic yielding, emergent convective constraint release and nonlinear rheology of entangled polymer liquids. *K. Schweizer and D. Sussman*
3:10			COFFEE BREAK		
			Solids & Composites		
3:35	**SC38.** Rheology of hydrate particulate suspensions. *M. Geri and G. H. McKinley*	**NF15.** Surface textures and non-Newtonian fluids for decreased friction. *J. K. Schuh and R. H. Ewoldt*	**SL1.** Questions in non-equilibrium materials: Is there an ideal glass transition and are colloidal dispersions good models of glasses? *G. B. McKenna, X. Peng, J. Zhao and Q. Li*	**AT5.** Polymer chain stretching during uniaxial deformation: An in-situ, time-resolved SANS study in polymer melts. *C. R. López-Barrón, J. J. Richards and Y. Zeng*	**SM37.** From wall slip to shear banding: A journey through creep. *S. Ge, X. Y. Zhu, M. C. Wang and S.-Q. Wang*
4:00	**SC39.** Rheological properties of suspensions with red mud as a supplementary cementitious materials: Monitoring flow and consolidation. *R. C. O. Romano, H. M. Bernardo, M. A. Cincotto and R. G. Pileggi*	**NF16.** Viscosity measurement of rapidly evolving biopolymer solutions and modeling of laminar pipe flow – mixing, MRI-velocimetry, and simulation. *W. H. Hartt, E. Tozzi, S. D. Joshi, R. D. Johnson and L. A. Bacca*	**SL2.** Theory of spatially heterogeneous activated relaxation, elasticity and vitrification in free standing thin films. *K. Schweizer and S. Mirigian*	**AT6.** Unearthing the power of small-angle neutron scattering for molecular rheology of polymers. *Z. Wang, C. N. Lam, W.-R. Chen and Y. Wang*	**SM38.** Shear-banding of entangled polymer solutions under planar large amplitude oscillatory shear. *S. Shin, K. D. Dorfman and X. Cheng*
4:25	**SC40.** Dependence of rheological properties on filler size in particle-filled crosslinked systems. *M. Mermet-Guyennet, M. Dingreve, M. Habibi, N. Martzel, R. Sprik, M. M. Denn and D. Bonn*	**NF17.** A high-order immersed boundary method for solving polymeric flow problems on arbitrary smooth domains. *D. B. Stein and B. Thomases*	**SL3.** Imaging the microstructural indentation response of thin films on glass. *L. R. Bartell, N. Lin, J. L. Lyon, M. L. Sorensen, G. S. Glaesemann, D. A. Clark, M. J. Lockhart, M. E. DeRosa and I. Cohen*	**AT7.** Development of µRheo-SANS at NIST. *D. Seeman, J. Weston, D. Blair, P. Salipante, S. Hudson and K. Weigandt*	
4:50	**SC41.** Effect of deformation history on capillary attractive particulate suspensions. *J. Yang and S. Velankar*	**NF18.** Large-amplitude oscillatory shear flow from Oldroyd 8-constant framework: Normal stress differences. *C. Saengow and J. Giacomin*	**SL4.** The effect of testing conditions on the mechanical properties of polymers during fatigue testing. *D. Rodrigue, V. Hirschberg and M. Wilhelm*	**AT8.** Flow elasticity of driven colloidal suspensions. *Z. Wang, L. Porcar, Y. Wang, L. E. Sanchez-Diaz, C. N. Lam, Y. Liu, T. Iwashita, T. Egami and W.-R. Chen*	
5:15	**SC42.** Non-Newtonian rheological characteristics of oil-based metal oxide nanofluids. *S. M. Hasan and J. Shelton*	**NF19.** A finitely extensible coil model for nonlinear viscoelasticity. *D. Yao*	**SL5.** Multiplicity of morphologies in poly (L-lactide) bioresorbable vascular scaffolds. *K. Ramachandran and J. A. Kornfield*	**AT9.** Dielectric RheoSANS: An instrument for the simultaneous interrogation of rheology, microstructure and electronic properties of complex fluids. *J. J. Richards, J. B. Hipp, N. J. Wagner and P. D. Butler*	
5:40			END		
6:00			POSTER SESSION & RECEPTION Foyer-Stairs/Windows		

Thursday, February 16

Morning

8:00 **AP1.** From simple polymers to supramolecular assemblies: Understanding and predicting the rheology of complex polymeric structures. *E. Van Ruymbeke* (Metzner Award Presentation) Audubon DEF

	Audubon B	*Audubon DEF*	*White Ibis*	*Sandhill Crane*
	Suspensions, Colloids & Granular Media	**Non-Newt Fluid Mech & Instabilities**	**Solids & Composites**	**Advanced Techniques & Methods**
8:40	**SC43.** Rheological properties of CNC and hydrophobic CNC suspensions in a polar solvent. *H. Sojoudi, M.-C. Heuzey and P. J. Carreau*	**NF20.** Revolving flow and heat transfer of a non-Newtonian fluid over an infinite stretchable disk. *B. Sahoo, I. Schevchuk and P. Griffiths*		**AT10.** Discretized modeling of viscoelastic liquids during centrifugal spinning. *M. J. Divvela and Y. L. Joo*
9:05	**SC44.** Quantitative nonlinear thixotropic model with stretched exponential response in transient shear flows. *Y. Wei, M. J. Solomon and R. G. Larson*	**NF21.** Understanding viscoelastic suspensions via numerical simulation. *E. S. Shaqfeh, S. Krishnan, M. Yang, W. Murch and G. Iaccarino*	**SL7.** The quest for an effective viscosity model for polymer nanocomposites. *M. Giovino, J. Pribyl, B. Benicewicz and L. Schadler*	**AT11.** Rheological measurement system using disk-type electromagnetically spinning technique. *T. Hirano and K. Sakai*
9:30	**SC45.** Percolation behavior of carbon black suspensions in polar aprotic solvents. *J. B. Hipp, J. J. Richards and N. J. Wagner*	**NF22.** Drag reduction and rheological properties of a viscoelastic mixed cationic / zwitterionic surfactant system exhibiting dilution precipitation. *A. Maxson, C. Poore, L. Watson and J. Zakin*	**SL8.** Shear and extensional rheology of linear low density polyethylene/graphene nanocomposites. *S. C. Mun and C. W. Macosko*	**AT12.** Near-wall velocimetry on a rheometer by evanescent wave dynamic light scattering. *A. Giuliani, R. McEnzie and B. Loppinet*
9:55	COFFEE BREAK			
10:25	**SC46.** Kaolinite suspension as a model fluid for fluid dynamics studies of fluid fine tailings. *B. Derakhshandeh*	**NF23.** Ink transfer of non-Newtonian fluids in gravure printing: The effect of shear and extensional deformation. *S. Khandavalli and J. P. Rothstein*	**SL9.** Stress growth and fiber orientation dynamics of glass-fiber reinforced polypropylene under non-lubricated squeeze flow. *G. M. Lambert and D. G. Baird*	**AT13.** Customized 3D-printed tool geometries for rheometry of soft matter. *D. A. Bikos and T. G. Mason*
10:50	**SC47.** The effect of pre hydration on the rheological properties of Portland cement with and without superplasticizer. *D. F. Ferraz, A. C. Martho, D. M. Aleixo, R. C. O. Romano and R. G. Pileggi*	**NF24.** Quantitative predictions of the breakup times of inviscid-elastic filaments of dilute polymer solutions. *T. Shahid, W. Mathues, E. Van Ruymbeke and C. Clasen*	**SL10.** Study on thixotropic behavior of ballistic clay backing materials by rubber process analyzer. *R. Tao, K. D. Rice and A. M. Forster*	**AT14.** Fluidized bed rheology for granular media. *J. Laeuger and D. Schuetz*
11:15	**SC48.** The effect of polysaccharide gum on large amplitude oscillatory shear (LAOS) behavior of corn starch suspensions. *M. Gao, D. C. Ozlem and J. L. Kokini*	**NF25.** Non-uniform flow of glasses: The “shear-gradient concentration coupling instability”. *J. K. Dhont*	**SL11.** Assessing the orientation relaxation of thermotropic liquid crystalline polymers below their melting point using dynamic mechanical analysis. *M. Q. Ansari, C. D. Mansfield and D. G. Baird*	
11:40	**SC49.** Effect of HEC on gelling properties of CNC and ECNC suspensions. *G. Lenfant, M.-C. Heuzey, T. T. van de Ven and P. J. Carreau*			

12:05 END

Poster Session

Wednesday 6:00 PM – 8:00 PM Foyer-Stairs/Windows

PO1. Rheological investigation of nanocurcumin with carboxymethyl cellulose. *L. Rakesh and N. Ventimiglia*

PO2. Molecular dynamics investigation of temperature and pH driven drug release from carbon nanotubes with antioxidant. *L. Rakesh and S. Bedford*

PO3. Kinetic modeling of the modulus change in sealants exposed to outdoor and laboratory weathering. *C. C. White and D. Hunston*

PO4. Effect of hydration on mechanical properties of anion exchange membranes for fuel cells. *G. A. Ozioko and M. W. Liberatore*

PO5. Characterizing the effect of relative humidity on rheological properties. *B. Rajaram, T. Chen and A. J. Franck*

PO6. Tunable shape memory properties of lignin-rubber composites: Shape fixity and shape recovery. *N. A. Nguyen, R. Boy and A. K. Naskar*

PO7. New insights into the use of a rotational rheometer as tribometer. *J. Laeuger and K. Pondicherry*

PO8. High-pressure linear viscoelasticity measurements of polymer solutions and gels. *K. A. Dennis, Y. Gao, A. Phatak and E. M. Furst*

PO9. Fitting data is subjective: Implications for inferring structure from rheology. *P. K. Singh and R. H. Ewoldt*

PO10. Human perception of viscosity: Visual and haptic discriminability. *J. Martin and M. Jogan*

PO11. Comparison of industrial instruments yield test methods. *D. J. Moonay*

PO12. Utilization of the cone partitioned plate geometry for enhanced material characterization. *J. P. Eickhoff and G. Arnold*

PO13. Quality control illustrated on the industrial powder coating process using a rotational rheometer. *A. M. Shetty, D. Schütz, R. Elke, O. Sack and K. Hartmann*

PO14. Polymeric thickeners and surfactants: Rheology and texture in water-based cosmetics. *C. M. Crane and H. S. Bui*

PO15. Deformation behavior of fast curing epoxy based carbon prepreg during compression molding process. *D. G. Seong and D. Bae*

PO16. Rheology of molten metals. *A. M. Grillet and N. Argibay*

PO17. Fast temperature screening for viscosity determination by microfluidics. *A. Patricia and J. Munhall*

PO18. Passive microrheology: Non contact measurement of gel point of biopolymers. *R. Ramsch and J. Munhall*

PO19. Thermal and viscoelastic properties of miscible polymer blend with hydrogen bonding interaction: Poly(2-vinyl pyridine) / poly(2-hydroxyethyl methacrylate). *Y. Okada, O. Urakawa and T. Inoue*

PO20. Nonlinear relaxation modulus via dual-frequency medium amplitude oscillatory shear (MAOS): General framework and case study for a dilute suspension of Brownian spheroids. *T. M. Bechtel and A. S. Khair*

PO21. Manipulating of Colloidal gels by oscillatory shear. *E. Moghimi, A. R. Jacob, N. Koumakis and G. Petekidis*

PO22. Non-linear shear flow of model hard sphere and interpenetrable soft colloidal glasses. *A. R. Jacob, A. Poulos, S. Kim, J. Vermant and G. Petekidis*

PO23. Viscoplastic adaptation of collagen networks upon repeated cycles of stress. *F. Burla and G. H. Koenderink*

PO24. Molecular mechanisms of strain-stiffening in a transient polymer network studied with experimental medium-amplitude oscillatory shear (MAOS). *O. Carey-De La Torre and R. H. Ewoldt*

PO25. Shear-induced structural transitions in ultra-low interfacial tension microemulsions. *J. Weston and K. Weigandt*

PO26. A multiscale model for the rheology of thixotropic suspensions. *P. M. Mwasame, N. J. Wagner and A. N. Beris*

PO27. Large amplitude oscillatory shear measurements on linear and branched polyolefins: Comparisons using parallel plate, cone and partitioned plate, and closed cavity systems. *N. D. Hesse and A. J. Franck*

PO28. Investigating the role solid-liquid interfaces and flow on aggregate formation for the NIST IgG1 mAb. *C. K. Kalonia*

PO29. The role of surface charge convection in the electrohydrodynamics and breakup of fluid drops. *R. Sengupta, L. M. Walker and A. S. Khair*

PO30. Visualizing nanoscopic topography, patterns, flows and instabilities in stratifying freestanding thin films. *Y. Zhang, S. Yilixiati and V. Sharma*

PO31. Dripping-onto-substrate (DoS) rheometry of complex fluids. *J. Dinic, L. N. Jimenez and V. Sharma*

PO32. Measurement of two-dimensional viscosity of liquid surface by electro-magnetically spinning system. *K. Sakai, M. Hosoda and T. Hirano*

PO33. Emulsion drops spreading on liquid surfaces. *N. Sanatkaran, R. Foudazi and A. Y. Malkin*

PO34. Modeling of stable emulsions using a diffuse interface model with a surfactant phase and interfacial viscosity. *S. A. Colbert-Kelly, T. Keller, G. McFadden and F. R. Phelan, Jr.*

PO35. Experimental observation of generalized plasma skimming effect in microvascular networks. *T.-R. Lee and S. J. Kim*

PO36. Migration of an elastic capsule in microfluidic channels. *Y. Wang and P. Dimitrakopoulos*

PO37. Deviations from Einstein viscosity in polymer nanocomposites. *M. Giovino, J. Pribyl, B. Benicewicz and L. Schadler*

PO38. Gelation of polymer-grafted silica nanoparticles studied with X-ray photon correlation spectroscopy (XPCS) and rheology. *D. Bahadur and S. Ramakrishnan*

PO39. Effect of particle roughness on hydrodynamic diffusion in steady shear. *P. Pham, B. Metzger and J. E. Butler*

PO40. The onset of the collective motion of active fluids. *Y. Peng, K. Zhang and X. Cheng*

PO41. Determining the role of TIMPs in matrix remodeling during 3D hMSC motility. *M. Daviran, S. M. Longwill and K. M. Schultz*

PO43. Active microrheology in a colloidal glass. *M. Gruber, G. C. Abade, M. Fuchs and A. M. Puertas*

PO44. Rheology of pendular networks in particle-containing polymer blends. *J. Yang and S. Velankar*

PO45. Normal stress differences of model attractive colloids: Towards tests of theories for shear-induced migration. *N. Park and J. C. Conrad*

PO46. Rigidity percolation for anisotropic thermoreversible colloidal gels and glasses composed of adhesive hard rods. *R. P. Murphy and N. J. Wagner*

PO47. Structure and dynamics of nanoparticles and polymer in model polymer solutions with particle-particle interactions. *R. Poling-Skutvik, J. C. Conrad and R. Krishnamoorti*

PO48. Rheological characterization of biomass granular suspensions for renewable fuels. *J. Bice, D. Kim, M. Ladisch and K. A. Erk*

PO49. Effect of interaction type and nanoparticles ratio of modified CNT-graphene hybrids on rheological and electrical properties of SEBS nanocomposites. *M. Heydarnejad Moghadam, F. Goharpey, H. Nazockdast and S. Kazem Farahzadi*

PO50. Functionalized graphene nanosheets-induced electrical conductivity in a dynamically asymmetric LCST polymer blend. *S. Kazem Farahzadi, F. Goharpey, J. Khademzadeh Yeganeh and M. Heydarnejad Moghadam*

PO51. State transitions in shear thickening suspensions. *R. Maharjan and E. Brown*

PO52. Microstructure, rheology and heterogeneity in colloidal gels. *S. Jamali, G. H. McKinley and R. C. Armstrong*

PO53. Jammed micro-organogels for 3D printing with oily soft matter. *C. S. O'Bryan, T. Bhattacharjee and T. E. Angelini*

PO54. Polymer physics scaling laws in yielding of jammed microgels. *T. Bhattacharjee, C. S. O'Bryan, W. G. Sawyer and T. E. Angelini*

PO55. Rheological aspects of film formation from suspensions of montmorillonite clay (MMT) in dilute poly(vinyl alcohol) solutions. *J. Liu, S. Chavez, L. Sun and M. T. Shaw*

PO56. Role of chain scission in cross-slot flow. *A. Kalb and M. Cromer*

PO57. Determination of characteristic lengths and times for wormlike micellar solutions from rheology using a mesoscopic simulation method. *W. Zou, X. Tang, M. Weaver, P. Koenig and R. G. Larson*

PO58. Understanding steady and dynamic shear banding in a model wormlike micellar solution. *M. A. Calabrese, S. A. Rogers, L. Porcar and N. J. Wagner*

PO59. Flow-visualization study of a worm-like micellar system. *E. A. Caicedo-Casso and K. A. Erk*

PO60. Shear induced orientation effects in optical active samples characterized with polarized light imaging. *L. Völker-Pop, G. Arnold, T. Nill and J. Laeuger*

PO61. Flexible molecules in viscoelastic solutions undergoing planar extensional flow. *G. Juarez*

PO62. Constitutive model that predicts stress overshoot and shear thinning for entangled melts. *H. Taghipour and E. Van Ruymbeke*

PO63. Entanglements in glassy polymer crazing: Crosslinks or tubes? *R. S. Hoy, T. Ge, S. Anogiannakis, C. Tzoumanekas and M. O. Robbins*

PO64. Nonlinear uniaxial extension behavior of polyisoprene melts: Polymer melts and mixtures. *J. Liu, Y. Feng, K. Misichronis, K. Ntetsikas, J. Mays, A. Avgeropoulos and S.-Q. Wang*

PO65. Extensional rheology and final morphology of LDPE fibers. *S. L. Wingstrand, M. van Drongelen, K. Mortensen, R. S. Graham, Q. Huang and O. Hassager*

PO66. Molecular dynamic simulation on rupture-like failure in startup uniaxial extension. *Y. Zheng, M. Tsige and S.-Q. Wang*

PO67. Elastic yielding of melt-stretched glassy polymers below glass transition temperature. *Z. Zhao, P. Lin and S.-Q. Wang*

PO68. Exploring the nature of mechanical stress of polymers in melt and glassy states. *X. Li, M. Tsige and S.-Q. Wang*

PO69. Instability growth in 2D array of confined cylinders and its role on oil displacement. *X. Shi and G. F. Christopher*

PO70. Solution rheology of a methyl methacrylate based resin system. *D. S. Cousins, Y. Suzuki and J. R. Dorgan*

PO71. DMA, sound damping and application properties of acrylic polymers for liquid applied sound damping (LASD) materials. *C. L. Jackson and J. Gimbal*

PO72. Formulation and validation of an efficient computational model for a dilute, settling suspension undergoing rotational mixing. *M. A. Sprague, J. J. Stickel, H. Sitaraman, N. C. Crawford and P. F. Fischer*

PO73. Sinking bubbles. *J. A. Koch and R. H. Ewoldt*

PO74. Characterizing relaxation behavior of weak gels under steady shear using Orthogonal Superposition. *S. K. Cotts*

PO76. Continuous sheathless separation of normal and drug-treated Cryptococcus neoformans in viscoelastic fluid flow through a straight rectangular microchannel. *D. Li, P. Walker, J. Sparks, L. Kozubowski and X. Xuan*

PO77. Continuous separation of micron and submicron particles via elasto-inertial pinched flow fractionation. *Q. Chen, D. Li, J. Lin, M. Wang and X. Xuan*

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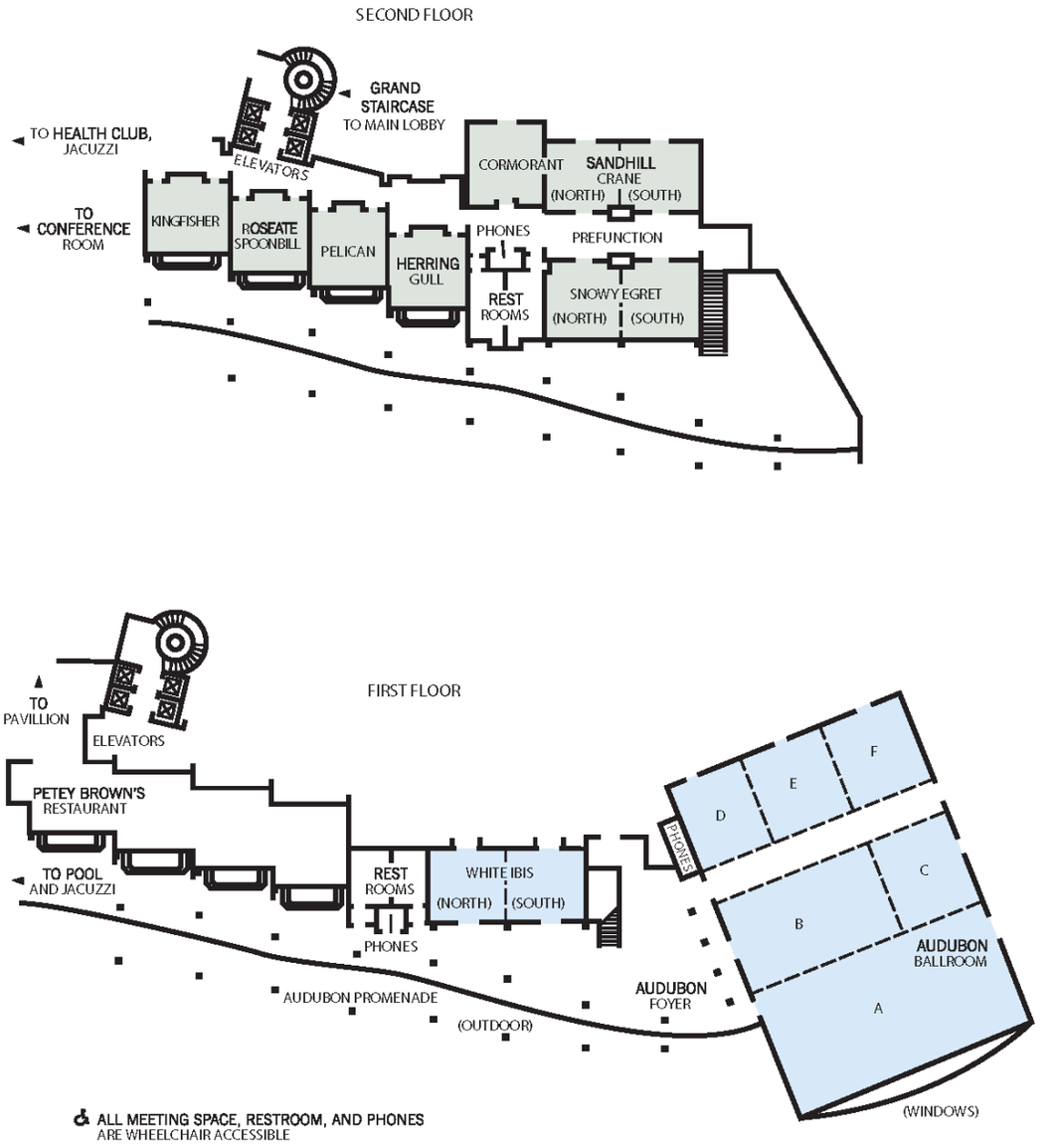
Grand Hyatt Tampa Bay Meeting Space



Social Program

Sunday, February 12	**Student-Industry Forum: *Careers in Rheology***	
	4:00 PM – 6:00 PM	White Ibis
	Sponsored by AIP and The Dow Chemical Company	
	Welcoming Reception	
	6:30 PM – 8:30 PM	Audubon DEF
	Hosted by TA Instruments	
Tuesday, February 14	**Society Business Meeting**	
	12:05 PM – 1:30 PM	Audubon DEF
	Awards Reception	
	7:00 PM – 8:00 PM	Foyer-Stairs/Windows
	Sponsored by Malvern Instruments	
	Awards Banquet	
	8:00 PM	Audubon BC
Wednesday, February 15	**Poster Session Reception**	
	6:00 PM – 8:00 PM	Foyer-Stairs/Windows
	Sponsored by Anton-Paar USA	

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