



The Society of Rheology 95th Annual Meeting

Austin Marriott Downtown, Austin, Texas

Meeting Schedule

Monday, October 14, 2024

	W3	W4	W5	W6	405	501	502
8:30		K. E. Daniels & D. J. Jerolmack (PL1) - W3&4					
9:20		Coffee Break					
9:50	GN1	CS1	SL1	SM1	FI1	IR1	RS1
10:10	GN2	CS2	SL2	SM2	FI2	IR2	RS2
10:30	GN3	CS3	SL3	SM3	FI3	IR3	RS3
10:50	GN4	CS4	SL4	SM4	FI4	IR4	RS4
11:10	GN5	CS5	SL5	SM5	FI5	IR5	RS5
11:30	GN6	CS6	SL6	SM6	FI6	IR6	RS6
11:50		Lunch Break					
1:30	GN7•	CS7•	DP1	SM7•	FI5	IR7•	RS8
1:50	GN8	CS8	DP2	SM8	FI8	IR8	RS9
2:10	GN9	CS9	DP3	SM9	FI9	IR9	RS10
2:30	GN10	CS10	DP4	SM10	FI10	IR10	RS11
2:50	GN11	CS11	DP5	SM11		IR11	
3:10		Coffee Break					
3:45	GN12	CS12	DP6	SM12	FI12•	IR12	RS12•
4:05	GN13	CS13	DP7	SM13	FI13	IR13	RS13
4:25	GN14	CS14	DP8	SM14	FI14	IR14	RS14
4:45	GN15	CS15	DP9	SM15	FI15	IR15	RS15
5:05	GN16	CS16	DP10	SM16	FI16	IR16	RS17
5:25	GN17	CS17	DP11	SM17	FI17		
5:45		End					
6:30		Outing in Downtown ATX					

Tuesday, October 15, 2024

	W3	W4	W5	W6	405	501	502
8:30		M. D. Graham (PL2) - W3&4					
9:20		Coffee Break					
9:50	GN18•	CS18•	DP12		FI18	IR17	RS18
10:10	GN19	CS19	DP13•		FI19	IR18	RS19
10:30	GN20	CS20	DP14	SM18	FI20	IR19	RS20
10:50	GN21	CS21	DP15	SM20	FI21	IR20	RS21
11:10	GN22	CS22	DP16	SM22	FI22	IR21	RS22
11:30	GN23	CS23	DP17	SM23	FI23	IR22•	RS23
11:50		Lunch Break / Society Business Meeting					
1:30	GN36	CS24	DP18	SM24•	FI24	IR23	RS24•
1:50	GN24	CS25	DP19	SM25	FI25	IR24	RS25
2:10	GN26	CS26	DP20	SM26	FI26	IR25	RS26
2:30	GN27	CS27	DP21	SM27	FI27	IR26	RS27
2:50	GN28	CS28	DP22	SM28	FI28	IR27	RS28
3:10		Coffee Break					
3:45	GN29	CS29	DP23	SM29	BL1•	IR28	RS29
4:05	GN30	CS30	DP24	SM30	BL2	IR29	RS30
4:25	GN31	CS31	DP25	SM31	BL3	IR30	RS31
4:45	GN32	CS32	DP27	SM32	BL4	IR31	RS32
5:05	GN33	CS33	DP28	SM33	BL5	IR32	RS33
5:25	GN36	CS34	DP29	SM34		IR33	RS34
5:45		End					
7:00		Awards Reception					
8:00		Awards Banquet					

Wednesday, October 16, 2024

	W3	W4	W5	W6	405	501	502
8:30		M. Pasquali (PL3) - W3&4					
9:20		Coffee Break					
9:50	GN35	SM35	BL7	AM1	FI29	DR1•	TM1
10:10	GN57	SM36	BL8	AM2	FI30	DR2	TM2
10:30	GN37	SM37	BL9	AM3	FI31	DR3	TM3
10:50	GN38	SM38	BL10	AM4	FI32	DR4	TM4
11:10	GN39	SM39	BL33	AM5	FI34	DR5	TM5
11:30	GN40	SM40	BL12	AM6		DR6	TM6
11:50		Lunch Break					
1:30	GN41	CS35•		AM7		DR7	TM7
1:50	GN42	CS36	BL13	AM8	FI35	DR8	TM8
2:10	GN43	CS37	BL15	AM9	FI37	DR9	TM9
2:30	GN44	CS38	BL16	AM10•	FI1	DR10	TM10
2:50	GN45	CS39	BL17	AM11	FI39	DR11	TM11
3:10		Coffee Break					
3:45	GN46	CS40	BL18•	AM12	FR1	DR12	TM12•
4:05	GN47	CS41	BL19	AM13	FR2	DR13	TM13
4:25	GN48	CS42	BL20	AM14	FR3	DR14	TM14
4:45	GN49	CS43	BL21	AM15	FR4	DR15	TM15
5:05	GN50	CS44	BL22	AM16	FR5	DR16	TM16
5:25	GN51	CS45	BL23	AM17	FR6	DR17	TM17
5:45		End					
6:30		Poster Session & Reception					
6:30		Gallery of Rheology Contest					

Thursday, October 17, 2024

	W3	W4	W5	W6	405	501
8:00		L. C. Hsiao (MP1) - W3&4				
8:40		Short Break				
8:45	GN52	CS46	BL24	AM18	SM41•	TM18
9:05	GN53	CS47	BL25	AM19	SM42	TM19
9:25	GN54	CS48	BL26	AM20	SM43	TM20
9:45	GN55•	CS49	BL27	AM21	SM44	TM26
10:05		Coffee Break				
10:35		CS52	BL28	AM22	SM45	TM22
10:55		CS51	BL29	AM24	SM46	TM23
11:15		CS53	BL30	AM25	SM47	TM24
11:35			BL32		SM49	TM25
11:55					SM50	
12:15		End				

Session and Room Codes

AM = Additive and Advanced Manufacturing of Polymers and Particles
 BL = Biological, Living, Active, and Directed Systems
 CS = Colloids and Suspensions
 DP = Dense Particulate Systems
 DR = Data-Driven Rheology
 FI = Flow-Induced Instabilities and Non-Newtonian Fluids
 FR = Future of Rheology Speakers (mini session)
 GN = Gels and Networks
 GR = Gallery of Rheology Contest

IR = Interfacial Rheology, Surfactants, Foams, and Emulsions
 MP = Metzner Presentation
 PL = Plenary Lectures
 RS = Real-World Rheology & Sustainability
 SL = Space Applications and Low-Gravity Research (invited symposium)
 SM = Polymer Solutions Melts Blends
 TM = Techniques and Methods

405 = Room 405
 501 = Room 501
 502 = Room 502
 W3 = Waterloo 3
 W3&4 = Waterloo 3 & 4
 W4 = Waterloo 4
 W5 = Waterloo 5
 W6 = Waterloo 6

• Keynote

Monday, October 14

Morning

	Waterloo 3 Gels and Networks	Waterloo 4 Colloids and Suspensions	Waterloo 5 Space Apps and Low-Gravity Research	Waterloo 6 Polymer Solutions Melts Blends	Room 405 Flow-Induced Instb & Non-Newton Fluids	Room 501 Interfacial Rheo, Surf, Foams & Emul	Room 502 Real-World Rheology & Sustainability
8:30	PL1. Rheology of granular matter on Earth and in the solar system. <i>K. E. Daniels and D. J. Jerolmack</i> Waterloo 3 & 4						
9:20	COFFEE BREAK Waterloo 1 & 2						
9:50	GN1. Network-network interactions in multi-component gels. <i>M. Mugnai and E. Del Gado</i>	CS1. Role of polymer molecular weight distribution on extensional flow of polymer solutions and colloid-polymer suspensions. <i>D. D. Soetrisno, C. V. Martínez Narváez, M. J. Gallegos, V. Sharma and J. C. Conrad</i>	SL1. Rheology in microgravity via the ISS National Laboratory to elucidate fundamental transport phenomena. <i>P. Irace, R. Reeves and M. Roberts</i>	SM1. Teaching rheology from a microstructurally diverse perspective. <i>C. W. Macosko, R. H. Ewoldt and G. H. McKinley</i>	FI1. Effects of polymer concentration and polydispersity on elastocapillary thinning of dilute solutions. <i>V. Calabrese, A. Q. Shen and S. J. Haward</i>	IR1. Two-point microrheology of a Newtonian fluid-fluid interface. <i>G. Natale and M. De Corato</i>	RS1. Rheology-driven melt phase separation of PE/PET blends, a new approach to recycling. Part 1: PET chain-extension. <i>M. Lu, S. Vecchi, L. Hampton, E. Kone, H. Ghassemi, D. Schiraldi and J. Maia</i>
10:10	GN2. Nanodiamond-laden microgels: pH-dependent rheology and tribology. <i>S. Khan, P. Jani, S. Nadkarni, Y. C. Saraswat, L. C. Hsiao and P. Sarker</i>	CS2. Insights from compressional rheology analysis of biosludge with implications for dewatering. <i>S. Kashi Kalhour, A. Ramachandran and D. G. Allen</i>	SL2. Simulated melt pool viscosities of lunar regolith and regolith simulants: Applications for lunar construction. <i>K. D. Koube, M. Troemner, T. Nguyen and E. Jensen</i>	SM2. Cellulose nanocrystals as reinforcements in thermoplastic nanocomposites: Effect of processing route on dispersion. <i>M. Bugaut, N. Le Moigne, M. C. Heuzey, P. Carreau and A. Taguet</i>	FI2. Solid-like fracture in tar Newtonian liquids. <i>T. A. Lima, S. E. Smith, K. V. Edmond, M. Gopinadhan, E. Ulysse and N. J. Alvarez</i>	IR2. Retraction of thin liquid films with a viscous interface. <i>M. De Corato and M. M. Villone</i>	RS2. Rheology-driven melt phase separation of PE/PET blends, a new approach to recycling. Part 2: SC CO ₂ -assisted separation of depolymerized PET. <i>S. Vecchi, M. Lu, L. Hampton, H. Ghassemi, D. Schiraldi and J. Maia</i>
10:30	GN3. Shear-induced aging in polymer-silica composites. <i>D. D. Gray, S. A. Rogers and Y. H. Shim</i>	CS3. Flow of a colloidal solution in an orthogonal rheometer. <i>K. K. Yanamundra, C. C. Benjamin and K. R. Rajagopal</i>	SL3. Gas permeability of lunar regolith simulants. <i>J. Mantovani</i>	SM3. Connecting rheology and structure in composite filaments of poly(ethylene oxide) and polyarylsulfone produced via a dual-extrusion process. <i>C. D. Mansfield, C. W. Jordan, W. P. Quintana, Y. Yao, T. Chen, M. Q. Ansari, D. G. Baird and M. J. Bortner</i>	FI3. Spheres, tears, and spears: Controlling size and circularity of millimeter-sized hydrogel beads. <i>C. G. Harris, K. D. Bandettini, H. K. Gedde, L. Semprini, K. C. Fogg and W. E. Rochefort</i>	IR3. Interfacial microrheology with two-dimensional particle probes. <i>J. Samaniuk and A. Chacon</i>	RS3. Exploring hydrogel-based reversible adhesives for recyclable electronics. <i>J. W. Kopatz, K. Ghosh, E. Larkin, R. Secor, R. R. Rao, M. B. Murphy, W. L. Dorman and C. C. Roberts</i>
10:50	GN4. LAOStrain response of colloid-polymer hydrogels: Insights from rheo-SAXS and rheo-dielectric experiments. <i>G. Legrand, G. Baeza, W. Chèvremont, S. Manneville and T. Divoux</i>	CS4. Phoretic transport of colloids across complex flow landscapes. <i>A. A. Pahlavan</i>	SL4. Dissipative self-assembly and active matter behavior of magnetic colloidal suspensions in microgravity. <i>E. M. Furst and J. Conradt</i>	SM4. Rheology of post-consumer mechanically recycled polymers for targeted applications. <i>G. E. Tillinghast, J. P. Rothstein and H. H. Winter</i>	FI4. Rheological properties obtained from aqueous polymeric droplet deformations. <i>Z. He, H. Tran and M. Y. Pack</i>	IR4. Elastic properties and dynamics of lipid-laden fluid-fluid interfaces. <i>N. Kelkar and J. R. Seth</i>	RS4. Rheological properties of recycled biobased and biodegradable polybutylene succinate. <i>J. Zhang, V. Hirschberg, M. Wilhelm and D. Rodrigue</i>

11:10	GN5. Softening-stiffening transitions and yielding in composite hydrogels with a microfibrillar network. <i>Y. C. Saraswat and L. C. Hsiao</i>	CS5. The role of viscoplasticity on the flow dynamics and low-flow limit in slot coating applications. <i>I. R. Siqueira, R. L. Thompson, M. S. Carvalho and P. R. de Souza Mendes</i>	SL5. Rheology on Rockets. <i>L. Alvarez and T. Voigtmann</i>	SM5. Enhancing accuracy and reliability in time-dependent rheological analysis of biodegradable polymers: Novel approaches and implications. <i>H. Torabi, H. McGreal, H. Zarrin and E. Behzadfar</i>	FI7. Elasto-visco-plastic flow around a confined cylinder. <i>M. Mousavi, Y. Dimakopoulos and J. Tsamopoulos</i>	IR5. The steady and dynamic Poisson's ratio of polymer-laden interfaces. <i>K. Pham, B. Thompson, N. J. Wagner and M. Gottlieb</i>	RS5. Systematic characterization of shear flow-induced scission of entangled linear rubbery polymer melts. <i>J. Ahn, L. M. Walker, J. Bingaman, S. L. Scott and R. Segalman</i>
11:30	GN6. The role of fillers in the nonlinear properties of reinforced hydrogel composites. <i>I. Dellatolas, T. Divoux and I. Bischofberger</i>	CS6. Tuning the predicting the onset of desiccation cracks in air-dried aqueous suspensions of colloidal clay. <i>R. Bandyopadhyay and V. R. S. Parmar</i>	SL6. Plastocapillarity: Yield stress fluids under pure surface tension. <i>M. Jalaal</i>	SM6. Morphology of sheared multilayer films of polymer melts. <i>A. Dmochowska, G. Miquelard-Garnier and J. Peixinho</i>	FI6. Evolving fingering morphologies in a Hele-Shaw cell. <i>M. Coughlin, A. Goering, E. Dakov and X. Tang</i>	IR6. Free surface flows with Boussinesq-Scriven viscous interfaces: planar extrudate swell and slot coating. <i>I. R. Siqueira, R. L. Thompson and M. S. Carvalho</i>	RS6. Tuning bubble trajectories in a yield stress fluid. <i>M. GORAL, M. Daneshi and I. A. Frigaard</i>

11:50 LUNCH BREAK

Afternoon

	Waterloo 3 Gels and Networks	Waterloo 4 Colloids and Suspensions	Waterloo 5 Dense Particulate Systems	Waterloo 6 Polymer Solutions Melts Blends	Room 405 Flow-Induced Instb & Non-Newton Fluids	Room 501 Interfacial Rheo, Surf, Foams & Emul	Room 502 Real-World Rheology & Sustainability
1:30	GN7•. Human mesenchymal stem cell response to hydrogel viscoelasticity. <i>S. Desai, B. J. Carberry, K. S. Anseth and K. M. Schultz</i>	CS7•. Evaluating the effect of graphene oxide nanoparticles in the rheology of xanthan gum. <i>J. C. Rodriguez, N. M. Moraes, L. S. Berghe, L. R. Moraes, H. Ribeiro, R. E. Andrade and M. F. Naccache</i>	DP1. Multi-modal characterization of dense granular flows using a continuous chute-flow rheometer. <i>K. L. Henry, C. Wassgren and P. R. Mort</i>	SM7•. Molecular and structural drivers of flow behavior in dynamic covalent gels. <i>A. M. Rosales</i>	FI5. Emergence of transient reverse fingers during radial displacement of a shear-thickening fluid. <i>R. Bandyopadhyay, V. R. S. Parmar, G. Palak and S. Chanda</i>	IR7•. Surfactant effects on droplet motion in microchannels and porous media. <i>R. H. Davis, A. Zinchenko, J. Gissinger, G. Roure, R. Chattopadhyay and A. Vepa</i>	RS8. Rheological characteristics of silica-based nanofluids for enhanced geothermal system application. <i>N. Konate, R. Foudazi and S. Salehi</i>
1:50	GN8. Designing dynamic hydrogel network viscoelasticity allows favorable in-situ cargo release for drug-delivery applications. <i>S. Sen, Y. E. Song, N. Eckman, P. N. Alex and E. A. Appel</i>	CS8. Erythrocyte sedimentation: Collapse of a high-volume-fraction soft-particle gel. <i>C. Wagner and A. Darras</i>	DP2. Ductile-to-brittle transition in soft earth particulate systems. <i>S. Pradeep, P. E. Arratia and D. J. Jerolmack</i>	SM8. Dynamic rheology during recycling of photo-responsive star polymer networks. <i>M. C. Burroughs, E. L. Quirk, B. M. Wirtz, T. H. Schloemer, D. N. Congreve and D. J. Mai</i>	FI8. Viscoplastic fingerprints in two-phase flows in a pipe with a yield-stress liquid and air: Experiments, modeling, and numerical analyses. <i>D. M. Iceri, M. K. Glaucio, M. L. Helder, M. V. Miguel, B. P. Brener, R. C. Salgado, R. L. Thompson, A. Fidel-Dufour and M. S. Castro</i>	IR8. Emulsifiability of bitumens: The required properties of their endogenous surfactants. <i>S. Shweta, F. Rondelez, P. Bouriat, P. Anacleto, Y. Hung and C. Dicharry</i>	RS9. Containment strategy for subsurface hydrogen storage based on time-dependent soft solids. <i>B. Abedi, A. Orujov, E. Dabbaghi, K. Ng, J. Ackerman and S. Aryana</i>

- 2:10 **GN9.** A novel empirical and rheometric assessment of viscoelastic hydrogel implant cohesiveness. *P. Sarkar, D. J. Soares, A. McCarthy, A. Lee, T. Kean and K. Mukhopadhyay*
- 2:30 **GN10.** How viscoelastic are tissues? Insights into tissue rheology and on gels that can mimic the same. *M. Srivastava and S. R. Raghavan*
- 2:50 **GN11.** Exploring the impact of viral particle surface properties on diffusion dynamics within mucin hydrogels. *L. Martin-Alarcon, I. S. Hiremath and C. E. Wagner*
- 3:10
- 3:45 **GN12.** Chitosan hydrogels – Water retention and mechanical properties. *J. Nambisan, A. de la Cotte, J. Rojo, J. M. Ruiz-Franco and A. Fernandez-Nieves*
- 4:05 **GN13.** Enhancing rheological behavior of gelatin/GelMa hydrogels with polyvinyl alcohol for direct ink writing (DIW) process. *C. Aumtate and W. Kanabenta*
- CS9.** Experimental study of the effect of increasing xanthan gum concentration in suspensions: Analyses of rheological behavior, increase in stability, and thermal capacity. *L. H. Quitian-Ardila, L. M. Daza-Barranco, Y. J. Garcia-Blanco, G. Palaoro, R. S. Schimicoski, E. Germer, D. V. Andrade D. and A. T. Franco*
- CS10.** Varying pH to tailor the structural and rheological properties of hyaluronic acid (HA)/cellulose nanocrystals (CNCs) suspensions. *A. Bose and D. Grecov*
- CS11.** 3D printed protein/polysaccharide food simulant for dysphagia diet: Impact of cellulose nanocrystals. *C. Zhang, M. C. Heuzey and D. Therriault*
- CS12.** Revealing the particle interactions and network of lithium-ion anode slurries based on large amplitude oscillatory shear (LAOS) analyses. *Y. Ju and D. Lee*
- CS13.** Experimental and theoretical analysis of particle interactions in densely packed silicon-based anode slurries for lithium-ion batteries using microrheological modeling and large amplitude oscillatory shear (LAOS) tests. *Y. Song and D. Lee*
- DP3.** The effect of initial fabric on the rheometry of granular ensembles. *T. G. Murthy and S. V. Kumar*
- DP4.** Failure in jammed granular columns from loading and fluid saturation. *J. S. Olafsen, O.-D. S. Taylor and M. H. McKenna Taylor*
- DP5.** The complex rheology of fluidized beds made simple. *T. Kranz, M. Sperl and O. Coquand*
- DP6.** Flow transitions and effective properties in multiphase Taylor–Couette flow. *A. Shetty, M. Hunt and A. Young*
- DP7.** The manifold rheology of fluidized granular media. *Q. D'Angelo, A. Shetty, M. Sperl and T. Kranz*
- SM9.** Model vitrimers: From their precursor topology, functionality and crosslinking density to their viscoelastic properties. *H. Wang, A. Boborodea and E. van Ruymbeke*
- SM10.** Extensional rheology of nanostructured polyolefin vitrimers. *C. R. López-Barrón*
- SM11.** Megasupramolecules take to water. *J. A. Kornfield, J. R. Tawney and C. Nelson*
- SM12.** Effect of cations on rheology of gel polymer electrolytes. *F. Naderi Samani and R. Foudazi*
- SM13.** Breakup and hindered recombination of wormlike micelles at high shear rate. *P. F. Salipante, M. Cromer and S. D. Hudson*
- FI9.** Flow around a rising bubble in elasto-viscoplastic material: benchmark experiments and rheology. *O. Hajieghrary, M. Zare, M. Daneshi, J. Y. Zhu and I. A. Frigaard*
- FI10.** Bubbles in yield stress fluids: The link between rheology and bubbles stability. *M. Daneshi, E. Chaparian and I. A. Frigaard*
- FI11.** Tuning the rheology of semi-dilute emulsion of ferrofluid droplets using magnetic fields. *L. Hildebrand Pires da Cunha, R. G. dos Santos and T. F. Oliveira*
- FI12•.** A new theoretical framework for the evaluation of the Trouton ratio of viscoelastic fluids in hyperbolic tubes. *K. D. Housiadas and A. N. Beris*
- FI13.** The flow thickens: Predicting macroscopic flow resistance of viscoelastic fluid flow in porous media. *E. Y. Chen, S. J. Haward, A. Q. Shen and S. S. Datta*
- IR9.** Bilgewater emulsions: Unraveling spontaneous formation and phase behavior through tailored surfactant, oil and salt strategies. *Y. Zheng, J. Howarter, K. A. Erk and C. J. Martinez*
- IR10.** Nanoemulsion-laden hydrogels for tunable co-delivery of immiscible active ingredients. *R. E. Dowdy-Green, K. Smith, R. Waheibi, S. Sutrave and L. C. Hsiao*
- IR11.** Rheology and dispensing of real and vegan mayo: The chickpea or egg problem. *N. Nikolova, C. D. Martinez Narvaez, L. Hassan, R. A. Nicholson, M. W. Boehm, S. K. Baier and V. Sharma*
- IR13.** Thermogelation of pea protein stabilized nanoemulsions co-formulated with a polysaccharide for thermo-mechanical processing of plant-based food analogues. *D. Renggli and P. S. Doyle*
- RS10.** The roles of active materials and poly(vinylidene difluoride) in the shear rheology of lithium-ion battery slurry. *Q. Liu, Y. Gupta and J. J. Richards*
- RS11.** Aging in anode inks of low-temperature polymer electrolyte membrane water electrolyzers and the impact on processing and electrochemical performance. *S. Khandavalli, J. H. Park, R. Rice, J. Yanagisako, D. Y. Zhang, G. Bender, D. J. Myers, M. Ulsh and S. A. Mauger*
- RS12•.** Material advancements in large-scale additive construction for 100-home 3D-printed community. *D. Galvez-Moreno*
- RS13.** Bind or not to bind: Effect of binding and non-binding biopolymers on the rheology and 3D-printing of the earthen materials. *Y. Maierdan, S. J. Armistead, O. B. Carcassi, R. A. Mikofsky, L. Ben-Alon, W. V. Srubar and S. Kawashima*

COFFEE BREAK Waterloo 1 & 2

- 4:25 **GN14.** Time-resolved nonlinear rheology of interpenetrating biocomposite networks using the SPP framework. *G. Rother, W. A. Fontaine-Seiler, G. J. Donley, E. Del Gado and D. L. Blair*
- 4:45 **GN15.** Simulations of structural heterogeneity and rheology of biofilms. *M. Pourasgharoshtebin, G. F. Christopher and R. Khare*
- 5:05 **GN16.** Hyaluronic acid with tunable cholesterol contents displaying structural transition from thixotropic fluids to polymersomes. *S.-Y. Chang and J. Song*
- 5:25 **GN17.** Solvent-mediated sol-gel transition in biopolymer solutions. *R. M. Yumus, W. Yan, M. Koch, P. Dieudonné-George, D. Truzzolillo, R. H. Colby and D. Parisi*
- CS14.** Rheology-structure-function relationships in materials for advanced battery systems. *G. Rother, G. M. Veith and B. L. Armstrong*
- CS15.** Modeling electronic transport in sheared Brownian suspensions. *M. V. R. K. Majji*
- CS16.** Effect of solids content on the rheological behavior of sustainable lithium-ion battery anode slurries in large amplitude oscillatory shear. *S. S. Pole*
- CS17.** Differences in the network structure of polymer nanocomposites comprising the hybrid of graphitic/graphitic versus graphitic/MnO₂ particles. *M. Babaei, M. Heydarnejad Moghadam and F. Goharpey*
- DP8.** Shear-induced phase diagram and rheology of bidisperse jammed suspension of soft particles. *R. Alrashdan, M. Cloitre and F. Khabaz*
- DP9.** Dynamics of stress distributions in start-up shear flows in soft particle glasses. *M. Bantawa and R. T. Bonnecaze*
- DP10.** Microscopic theory of the elastic shear modulus, dynamic re-entrancy, and double yielding in ultra-dense attractive glass forming suspensions. *A. Mutneja and K. Schweizer*
- DP11.** Viscosity metamaterials. *I. Cohen*
- SM14.** The shear rheology of dilute and semidilute unentangled wormlike micellar solutions. *A. Kumar, P. Sunthar, R. F. Tabor and J. R. Prakash*
- SM15.** Flow-induced reorganization of copolymer vesicles: A novel equilibrated shear-induced structure (NOESIS). *S. Liu and R. Sureshkumar*
- SM16.** On the shear rheology of particle suspensions in polymer solutions: The effects of solution shear thinning and suspension confinement. *E. S. Shaqfeh*
- SM17.** Phage probes couple to DNA relaxation dynamics to reveal universal behavior across scales and regimes. *F. Safi Samghabadi, J. Marfai, M. Aporvari, P. Neill, R. M. Robertson-Anderson and J. C. Conrad*
- FI14.** Large Amplitude Oscillatory Extension (LAOE) of dilute polymer solutions. *S. M. Recktenwald, A. Q. Shen and S. J. Haward*
- FI15.** Experimental and numerical analysis of the rodless Weissenberg effect. *C. van der Gracht, R. Cardinaels and N. Jaensson*
- FI16.** Suppressing one- and two-degree-of-freedom vortex-induced vibrations of a cylinder through viscoelasticity in the flow. *U. N. Patel, Y. Modarres-Sadeghi and J. P. Rothstein*
- FI17.** Nonlinear dynamic flow response of soft hair beds. *J. R. Alvarado*
- IR14.** CO₂-activated rheological transitions: Reversible transitions between wormlike micelles and vesicles. *M. Srivastava, I. M. Philip and S. R. Raghavan*
- IR15.** Rheology of crude oils in flow assurance. *P. R. Vargas, E. P. Marín Castaño, C. Gonçalves, O. Karnitz, M. C. Khalil de Oliveira, M. F. Naccache and P. R. de Souza Mendes*
- IR16.** Probing microstructure of cellulose acetate stabilized Pickering emulsions through rheology and image analysis. *M. Sohail, H. Perera, R. Waheibi, T. Cao, L. C. Hsiao and S. Khan*
- RS14.** Impact of particle size distribution on the development of lunar regolith simulant geopolymers. *W. H. Hartt V and N. J. Wagner*
- RS15.** Viscoelastic insights on alkali-silica reaction (ASR) gels found in concrete. *T. L. Thornell, C. M. Strack and R. D. Moser*
- RS17.** An improved measurement procedure for cementitious pastes that yields path-independent viscosity measurements. *K. A. Snyder, G. J. Donley, N. S. Martys and E. Del Gado*

END

OUTING IN DOWNTOWN ATX Banger's Sausage House & Beer Garden (79 Rainey St., Austin, TX) until 9:00 pm

Tuesday, October 15

Morning

	Waterloo 3 Gels and Networks	Waterloo 4 Colloids and Suspensions	Waterloo 5 Dense Particulate Systems	Waterloo 6 Polymer Solutions Melts Blends	Room 405 Flow-Induced Instb & Non-Newton Fluids	Room 501 Interfacial Rheo, Surf, Foams & Emul	Room 502 Real-World Rheology & Sustainability
8:30	PL2. Data-driven and physics-aware microstructural modeling of flowing complex fluids. <i>M. D. Graham</i> (Bingham Lecture) Waterloo 3 & 4						
9:20	COFFEE BREAK Waterloo 1 & 2						
9:50	GN18•. Novel yield stress fluids based on polymers with tunable transient associations. <i>A. Chaub and M. Cloitre</i>	CS18•. Flow, clogging and avalanches in granular hydrogel mixtures. <i>A. Saeed and S. M. Hashmi</i>	DP12. Crack patterns in drying binary-mixture suspensions. <i>A. A. Pahlavan</i>		FI18. Asymptotic drag limits in turbulent Taylor–Couette flow of dilute polymeric solutions. <i>B. Khomami, N. Liu, F. Lin and J. Song</i>	IR17. Non-Newtonian interfacial rheology of sheared protein drops in microgravity. <i>P. T. Underhill, J. A. Adam, F. P. Riley, P. M. McMackin, J. M. Lopez and A. H. Hirta</i>	RS18. Intersection of rheology, machine learning and sustainability. <i>N. Tregger</i>
10:10	GN19. Herschel-Bulkley revisited: A convenient, meaningful, industrial yield stress. <i>D. J. Moonay</i>	CS19. Exploring dynamical heterogeneity in yielding of colloidal suspensions using transport coefficient approach. <i>H. He, H. Liang, M. Chu, Z. Jiang, J. J. de Pablo, M. V. Tirrell, S. Narayanan and W. Chen</i>	DP13•. Modeling of dense granular flows across particle and continuum scales. <i>I. Srivastava, J. Bell and A. Almgren</i>		FI19. On the onset of drag reduction in turbulent flow of dilute polymer solutions: Effects of flow elasticity. <i>A. Martinez Ibarra and J. S. Park</i>	IR18. Deciphering non-Newtonian droplet deposition on superhydrophobic surfaces through Protorheology. <i>K. Kamaluddin and D. Samanta</i>	RS19. Application of machine learning techniques to optimize the rheological properties of 3D printed cementitious materials. <i>M. S. Zafar, F. Javadnejad and M. Hojati</i>
10:30	GN20. Response of supramolecular polymer networks to different environments and fields. <i>V. Emanouil, B. Nikolaos and V. Dimitris</i>	CS20. Characterizing dynamic gelation of thermoresponsive microfibrillated cellulose using multiple particle tracking microrheology (MPT) and bulk rheology. <i>M. Afshang, M. Caggioni, S. Lindberg and K. M. Schultz</i>	DP14. Investigating the interplay between friction, contacts, and order: simulations in LAMMPS. <i>C. Quinones and P. Olmsted</i>	SM18. Investigating the disentanglement and recovery mechanisms of internal structure in monodisperse polystyrene. <i>M. J. Bortner, J. Seppala and M. Etemadi</i>	FI20. Nested traveling waves underlying elastoinertial turbulence. <i>M. Kumar and M. D. Graham</i>	IR19. Temperature-dependent interfacial shear rheology of octadecylamine and aminated nanoparticles at the oil-water interface. <i>F. Menke, S. Amiri, K. Rezwan, L. Colombi Ciacchi and M. Maas</i>	RS20. Improving the ecoefficiency of drilled shaft concrete foundations through rheological development and monitoring: A real-scale case study. <i>M. Rebmann, M. Quattrone, F. A. Cardoso, V. M. John and R. G. Pileggi</i>
10:50	GN21. Shear properties of metallo-supramolecular networks: Interplay between sticker and entanglement dynamics. <i>P. de Wergifosse, R. Lyons, C.-A. Fustin and E. van Ruymbeke</i>	CS21. Dynamics of liquid bridge-bound particle clusters in extensional flow. <i>S. Chaudhary, S. S. Velankar and C. M. Schroeder</i>	DP15. Investigating the impact of rolling friction on dense suspensions: A network science approach. <i>S. Sharma, C. Kier, A. Sharma and A. Singh</i>	SM20. Molecular weight determination of poly(diallyldimethylammonium chloride) and poly(acrylamide-co-diallyldimethylammonium chloride) using Rouse scaling theory. <i>B. Baniasadi, C. G. Lopez and R. H. Colby</i>	FI21. Predicting the skin-friction coefficient of polymer drag-reduced turbulent pipe flows. <i>L. Warwaruk, S. Singh, P. F. Mendez and S. Ghaemi</i>	IR20. A new instrument for measuring dilatational and shear rheology of interfacial films demonstrated for polymers and biological molecules at the air-water interface. <i>N. J. Wagner, B. Thompson, K. Pham, R. Dombrowski and A. Platchek</i>	RS21. The water demand of supplementary cementitious materials on and its impact on the rheological properties of fresh paste. <i>F. Du, J. Hubert, K. S. Chopperla, F. N. Sasha, B. O. Isgor and J. W. Weiss</i>
11:10	GN22. Linear viscoelasticity of polystyrene vitrimer networks. <i>D. Ezzeddine, D. C. Barzycki, S. Shanbhag and R. G. Ricarte</i>	CS22. Dynamics of flexible fibers in complex viscous flows in pillar arrays and their separation. <i>Z. Li, C. Bielinski, B. Delmotte, A. Lindner and O. du Roure</i>	DP16. Unraveling stress relaxation of cornstarch droplet impacting on deep pool. <i>Y. Boqian and X. Tang</i>	SM22. Examining the thermo-oxidative degradation of ethylene vinyl alcohol with time-resolved rheology. <i>D. A. Meadows, H. S. Kumar, B. S. Beckingham and V. A. Davis</i>	FI22. Drawing parallels: Small-scale canopy elastic turbulence versus large-scale inertial turbulence. <i>R. A. Lopez de la Cruz, S. J. Haward and A. Q. Shen</i>	IR21. Interfacial and bulk rheological behavior of cell spheroids by rheo-optical microscopy. <i>R. Ferraro, S. Caserta and S. Guido</i>	RS22. Squeeze cementing: Managing uncertainty in the sealing of leaking wells. <i>I. A. Frigaard, M. Izadi and E. Trudel</i>

11:30	GN23. Unraveling the relationship between rate, temperature, and damage in adhesives subject to T-peel. <i>A. J. Arrowood and G. E. Sanoja</i>	CS23. Enhanced hydrodynamics and deformation promoted by confinement in colloidal suspensions. <i>T. Sidong, E. I. Barcelos, S. Khani, F. C. Carvalho, M. F. Nacacche and J. Maia</i>	DP17. Investigating the microstructure of attractive and frictional dense suspensions via shear reversal. <i>R. Pappalardo, M. Orsi and A. Singh</i>	SM23. The effect of relaxation spectrum dispersity on the emergence of shear nonlinearities in viscoelastic fluids. <i>N. Ramlawi and R. H. Ewoldt</i>	FI23. Painting Taylor vortices with cellulose nanocrystals: Suspension supercritical spectral dynamics. <i>R. Ghanbari, S. Pashazadeh, K. Sekar, K. Nygård, A. Terry, M. Liebi, A. Matic and R. Kádár</i>	IR22•. Interfacial rheology and collapse of particle rafts. <i>X. Cheng</i>	RS23. The rheological properties of bentonite mixes used in permanently plugging oil and gas wells. <i>E. J. Rosenbaum, I. Haljasmaa and R. Spaulding</i>
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11:50 LUNCH BREAK / SOCIETY BUSINESS MEETING Waterloo 6, 12:00-1:30 pm

Afternoon

	Waterloo 3 Gels and Networks	Waterloo 4 Colloids and Suspensions	Waterloo 5 Dense Particulate Systems	Waterloo 6 Polymer Solutions Melts Blends	Room 405 Flow-Induced Instb & Non-Newton Fluids	Room 501 Interfacial Rheo, Surf, Foams & Emul	Room 502 Real-World Rheology & Sustainability
1:30	GN36. Aqueous phase alginate microrod production in a microfluidic device. <i>B. T. Smith and S. M. Hashmi</i>	CS24. Understanding the shear modulus of high-density microgel suspensions through superresolution microscopy. <i>F. Scheffold</i>	DP18. Towards a constitutive equation for rod-like suspensions that incorporates friction. <i>P. Olmsted and C. Quinones</i>	SM24•. Effects of polymer architecture on solution extensional flows. <i>S. Morozova</i>	FI24. Hardening and breaking phenomena in wormlike micellar solutions. <i>R. Pasquino, I. Cusano and N. Grizzuti</i>	IR23. Capillary bridge of polymer solution between spherical particles. <i>S. Rajesh, A. Acharya, R. Tinianov and A. Sauret</i>	RS24•. RheoSANS and capillary rheoSANS of self-assembled systems and rod-like particles. <i>K. M. Weigandt, R. P. Murphy, K. M. Rehmann, P. F. Salipante and S. D. Hudson</i>
1:50	GN24. Understanding the complex rheology of waxy crude oils: Effects of composition, cooling, and shear. <i>S. Ogunwale, L. Mahir, A. Shetty and R. Larson</i>	CS25. Stress relaxation in soft jammed materials: elasticity, plasticity, and banding. <i>V. H. A., L. Bayer and E. Del Gado</i>	DP19. Rigid structure development in dense mono- and bidisperse suspensions. <i>J. F. Morris, M. Orsi, R. Pandare, A. Santra, M. D. Shattuck and B. Chakraborty</i>	SM25. How do polymers stretch in capillary-driven extensional flows? <i>V. Calabrese, A. Q. Shen and S. J. Haward</i>	FI25. A rheo-NMR investigation of shear banding wormlike micelles. <i>A. Scigliani and H. Mohammadigoushki</i>	IR24. A simple model for the nonlinear rheology of bijels. <i>H. Ching and A. Mohraz</i>	RS25. Effects of additives on the flow behavior of lamellar structured concentrated surfactant solutions. <i>P. U. Kelkar, M. Kaboolian, E. Williams, S. Lindberg and K. A. Erk</i>
2:10	GN26. Influence of wax crystal morphology on the rheology of asphaltene-rich waxy oils: A mechanistic approach. <i>T. S. Addepalli and L. Kumar</i>	CS26. Acoustic forces in suspensions under sonication. <i>S. Sudhaman and R. T. Bonnecaze</i>	DP20. Universal scaling of shear thickening suspensions under acoustic perturbation. <i>A. R. Barth, N. Singh, M. Ramaswamy, E. X. Ong, P. Kakhandiki, A. Shetty, B. Chakraborty, J. P. Sethna and I. Cohen</i>	SM26. A cautionary tale: Polymer scission in capillary breakup extensional rheometry measurements. <i>J. Joseph and J. P. Rothstein</i>	FI26. Macroscale kinetics of shear banding flow formation in wormlike micelles. <i>A. Scigliani and H. Mohammadigoushki</i>	IR25. Can particle charge bidispersity be used to create stable Pickering drops by increasing interfacial yield stress? <i>A. Abutalebi and G. F. Christopher</i>	RS26. A process rheometer for analyzing flour effects on dough sheetability. <i>S. Chakrabarti-Bell, J. Ng, W. Hawkins and M. Patel</i>
2:30	GN27. Mathematical model of waxy oil gelation to assess material shrinkage. <i>N. de Rosso, D. Barbara, J. A. Abdala, S. M. Junqueira and C. R. Negrão</i>	CS27. Fluidization of complex suspensions through high-power ultrasound coupled to rheometry. <i>A. Poulesquen, S. Castel and S. Manneville</i>	DP21. Engineering stimuli-responsive polymeric particles for controlling dense suspension rheology. <i>C. Chen, C. V. Martínez Narváez, H. M. Jaeger, S. J. Rowan and J. J. de Pablo</i>	SM27. The importance of extensional stretching rate in stress relaxation in dilute polymer solutions. <i>A. M. Aisling, N. J. Alvarez and R. Saraka</i>	FI27. Hydrodynamics of chiral liquid crystals in confined geometries. <i>D. Grecov, I. Morawo and S. Li</i>	IR26. Elastoviscoplastic particle-laden interfaces and their relevance for the stability of multiphase materials. <i>A. Alicke and J. Vermant</i>	RS27. Influence of rheology modifiers on the microstructure evolution of drying paints. <i>S. E. Vezzetti, C. Dolan, T. Kaewpetch and J. F. Gilchrist</i>

- 2:50 **GN28.** Organogels that degrade slowly at high temperature: A solution to the 'lost circulation' problem in oil well drilling. S. R. Raghavan and F. A. Burni
- 2:50 **CS28.** Microgel stiffness determines particle self-assembly and suspension phase behavior over a broad temperature range. R. Bandyopadhyay, C. Misra, K. V. Sonali and S. K. Behera
- 2:50 **DP22.** Dynamic thickening and dethickening of 3D dense suspensions of Quincke rotors. N. Singh, A. R. Barth, E. Y. Ong, A. Shetty, B. Chakraborty, J. P. Sethna, E. R. Dufresne and I. Cohen
- 2:50 **SM28.** Anomalous extensibility in aqueous PNIPAM induced via dimethylformamide addition. D. Y. Zhang, A. Schwendinger and M. A. Calabrese
- 2:50 **FI28.** Flow-induced nematic alignment in aromatic-based polymer melts. S. Daryoush, J. D. Alexandre, E. D. Gomez, A. M. Rhoades and R. H. Colby
- 2:50 **IR27.** The frictional dynamics study of reconstituted porcine mucus and biodegradable polymeric particles system. G. Ruiz-Pulido and D. I. Medina
- 2:50 **RS28.** Integrated approach to achieving optimal fluid package compatibility for liquid products. E. A. Martin and M. Caggioni
- 3:10 COFFEE BREAK Waterloo 1 & 2
- 3:45 **GN29.** Hyperelastic swelling of stiff hydrogels. J. Wang and J. C. Burton
- 3:45 **CS29.** Viscous resuspension of rigid spherical particles: Rheology and phenomenology. M. Mahmoudian, S. A. Rogers and P. Mirbod
- 3:45 **DP23.** Inhomogeneous time-dependent Poiseuille pipe flow of aggregating concentrated suspensions. S. Jariwala, N. J. Wagner and A. N. Beris
- 3:45 **SM29.** Solvent quality inferred from extensional relaxation times of unentangled polymer solutions. C. Martínez Narváez, J. Dinic, C. Slykas, D. C. Vadillo and V. Sharma
- 3:45 **BL1•.** Biotic-abiotic material interfaces offer new opportunities for force sensing and control. M. T. Valentine
- 3:45 **IR28.** Engineering complex thin film morphologies through bubble-assisted manipulation. L. Lombardi, D. Tammaro and P. L. Maffettone
- 3:45 **RS29.** Application of rheology to pharmaceutical product development. S. Lam
- 4:05 **GN30.** The relationship between structural and rheological properties of Ca-alginate hydrogels. D. Kogan, N. Eliraz, R. Bitton and M. Gottlieb
- 4:05 **CS30.** Mapping structure and rheology of pH-responsive resins for low-VOC coatings. K. J. Patel, S. Bowles, E. Matolyak, D. Vogus, C. Wang, G. Nagy and J. J. Richards
- 4:05 **DP24.** Evidence of shear-induced dynamical heterogeneities in jammed soft suspensions. H. Pable, N. Sadeghi, R. T. Bonnecaze, M. Cloitre and F. Khabaz
- 4:05 **SM30.** Shear and extensional rheology of protein-polysaccharide mixtures. K. Al Zahabi and V. Sharma
- 4:05 **BL2.** Modeling particle-membrane interactions for biomaterial designs. M. Oi and I. Pincus
- 4:05 **IR29.** Secondary bubble entrainment via primary bubble bursting at a viscoelastic surface. J. Feng, B. Ji, Z. Yang and R. H. Ewoldt
- 4:05 **RS30.** Perception & choice: Physically-meaningful nonlinear metrics underlying human perception of firmness in viscoelastic materials. J. D. Martin, M. Jogan, S. K. Teh, E. Burgeson, S. Jamali and S. A. Rogers
- 4:25 **GN31.** Concentration-dependent network valence dictates rheology and gelation pathway of dynamic tetraPEG hydrogels. N. Conrad and A. M. Rosales
- 4:25 **CS31.** Shear induced crystallization of block copolymer micelles investigated by capillary rheoSAS. K. M. Rehmann, K. M. Weigandt, P. F. Salipante and S. D. Hudson
- 4:25 **DP25.** Rheology of bi-disperse dense fiber suspensions. M. Khan, R. D. Corder, K. A. Erk and A. M. Ardekani
- 4:25 **SM31.** Capillarity-driven pinching dynamics and extensional rheology of dilute and entangled polymer solutions. C. Slykas, C. Martinez, L. Edano, J. Merchiers, N. Reddy and V. Sharma
- 4:25 **BL3.** Impact of incorporated host-derived polymers on biofilm viscoelasticity. X. Zhou and V. D. Gordon
- 4:25 **IR30.** Growth and coalescence of nanoscopic mesas in stratifying micellar foam films. C. Xu, Y. Zhang, S. I. Kemal, Y. Vidyasagar and V. Sharma
- 4:25 **RS31.** Multiscale rheotribological origins of baseball mud gripping mechanics. S. Pradeep, X. Chen, P. E. Arratia and D. J. Jerolmack
- 4:45 **GN32.** Shear and normal stress evolution during the yielding of a Carbopol microgel. F. Accetta and D. C. Venerus
- 4:45 **CS32.** Shape memory-enabled colloidal particles for tailoring the flow behavior of suspensions. C. D. Martínez Narváez, C. Chen, S. J. Rowan and J. J. de Pablo
- 4:45 **DP27.** Start-up shear flow of soft particle glasses: Influence of mechanical memory. H. Pandya, H. Pable, M. Cloitre and F. Khabaz
- 4:45 **SM32.** Determination of uniaxial and planar extensional viscosity using high-pressure capillary rheometry. P. P. Rolfé, L. Szántó, M. Zaitloukal and A. Redmann
- 4:45 **BL4.** Characterizing the feasibility of carbon dots therapeutics to disrupt biofilm viscoelasticity. V. Sawant and G. F. Christopher
- 4:45 **IR31.** Unique rheology of self-degrading gel foams: Transitioning from liquid to solid to liquid. F. A. Burni and S. R. Raghavan
- 4:45 **RS32.** Improving recyclability of cellulose-based textile wastes. M. K. Moriam, M. Hummel and G. H. McKinley
- 5:05 **GN33.** Rheology of lyotropic liquid crystal gels of Pluronic F127 in ionic liquid and water mixtures. S. M. Tabatabaei and R. Foudazi
- 5:05 **CS33.** Examining the rheology of thermal amorphous materials by linking molecular-level information to a thermally activated elastoplastic model. M. Jannesari Ghomsheh, S. Rassouli, A. Roy, D. Koch and S. Hormozi
- 5:05 **DP28.** CFD simulations of dense suspensions of spherical particles using tensorial constitutive equations. H. A. Castillo-Sánchez, R. Lange and A. Castelo
- 5:05 **SM33.** Extensional rheology of high molecular weight macrocycles. G. B. McKenna, D. Chen, J. A. Kornfield, Z. Qian, J. E. Puskas, H. Kim, K. Molnar and G. Kaszas
- 5:05 **BL5.** Measurements of cell-mediated degradation of poly(ethylene glycol)-norbornene hydrogels with non-linear cytokine gradients using multiple particle tracking microrheology. T. C. O'Shea and K. M. Schultz
- 5:05 **IR32.** Dilatation interfacial rheology and foaming behavior of Pluronic F68 aqueous solutions: Effect of sodium dodecyl sulfate. S. A. Onyembe and R. Foudazi
- 5:05 **RS33.** Refining the optimally windowed chirp technique for time-resolved mechanical spectroscopy of mutating systems. D. C. Vadillo, A. Perego, M. Das and G. H. McKinley

5:25 **GN56.** Rheology of polyampholyte ionomers. N. Sadeghi and F. Khabaz

CS34. Rheology of non-Brownian suspensions of breakable particles. J. BLIN, W. Chèvremont, G. Baeza and T. Divoux

DP29. Rheology and 3D rotational dynamics of sheared dense colloidal suspensions. A. H. Walker, D. L. Blair, J. Urbach, E. Del Gado and E. Moghimi

SM34. Equibiaxial elongation of entangled polyisobutylene melts: Experiments and theoretical predictions. S. M. Arzideh, A. Córdoba, J. G. Ethier, J. D. Schieber and D. C. Venerus

IR33. Towards a universal model for foaming behavior of surfactants: Per- and polyfluoroalkyl substances (PFAS) case study. M. Zhou and R. Foudazi

RS34. Viscoelasticity and flow of thermoplastic poly(urethane)s (TPUs) over a range of flow types and strain amplitudes. E. Pashkovski, R. More, N. King and G. H. McKinley

5:45

7:00

8:00

END

AWARDS RECEPTION Pre-function Area outside Waterloo 3 & 4, until 8 pm

AWARDS BANQUET Waterloo 3 & 4

Wednesday, October 16

Morning

	Waterloo 3 Gels and Networks	Waterloo 4 Polymer Solutions Melts Blends	Waterloo 5 Biological, Living, Actv & Dirc Sys	Waterloo 6 Additive and Adv Manufc of Polym & Partc	Room 405 Flow-Induced Instb & Non-Newt Fluids	Room 501 Data-Driven Rheology	Room 502 Techniques and Methods
8:30	PL3. The nexus of materials, energy, and carbon dioxide—and how rheology is impacting it. <u>M. Pasquali</u>						
9:20	COFFEE BREAK Waterloo 1 & 2						
9:50	GN35. Bacterial nanocellulose in deep eutectic solvents - Hybrid flows and formulations. <u>F. Babayekhorasani, M. Hosseini, S. Bryant and P. T. Spicer</u>	SM35. The role of Kuhn segment extension in flow-induced crystallization in extensional flow of entangled polyethylene melts. <u>B. J. Edwards, H. Nafar Sefiddashti and B. Khomami</u>	BL7. Chemotactic response of bacteria to ephemeral nutrient plumes in heterogenous flow fields. <u>A. A. Pahlavan</u>	AM1. Spinnability and extensional rheology of polyvinylpyrrolidone solutions. <u>L. Edano, C. Slykas, V. Trada, C. D. Martinez Narvaez, N. Reddy and V. Sharma</u>	FI29. On the use of the Astarita flowfield to develop a Generalized Newtonian Fluid model incorporating flow type (GNFFTy). <u>R. J. Poole</u>	DR1•. Deep neural operator for bridging scales in multiscale bubble growth dynamics. <u>Z. Li</u>	TM1. Long-term stress relaxation prediction of elastomeric materials by numerical modeling. <u>H. Lee, A. Perego, A. Hedegaard, C. Murphy, J. Martin, M. Wald, S. Plugge, P. Bieber and D. Gries</u>
10:10	GN57. Development of a new thixo-elasto-viscoplastic model and its application in explaining various start-up flow and slip-assisted gel structure breakage. <u>L. Kumar</u>	SM36. Formation of flow-induced precursors above the equilibrium melting temperature. <u>B. J. Jacob, X. Zhang, J. Kim, A. M. Rhoades and R. H. Colby</u>	BL8. Elongated, stressed bacteria actively wiggle across streamlines at low Reynolds number. <u>R. Z. DeCurtis, Y. Ahn, J. Hill and S. M. Hashmi</u>	AM2. Spreading dynamics of non-Newtonian filaments in Direct-Ink-Writing. <u>A. Azimi Yancheshme and N. J. Alvarez</u>	FI30. The shear rheology of a single flat elastic particle via molecular dynamics-towards Oldroyd-A. <u>L. R. Debono and H. J. Wilson</u>	DR2. Learning tensorial rheological models through neural operators. <u>D. Mangal, M. Saadat and S. Jamali</u>	TM2. Measurement of viscoelastic properties using a rotating object: 2D numerical simulations. <u>H. D. You, X. Gao and W. R. Hwang</u>
10:30	GN37. Rheology of soft gelling networks for ionotronic tactile sensors. <u>P. H. Wink Reis, H. Hong, O. D. Velev and L. C. Hsiao</u>	SM37. Flow-induced nematic alignment as a stabilizing mechanism for crystal-mobile polymers against edge fracture. <u>A. Bhadu, S. Xu, E. C. Lloyd, K. Page, J. Macgraw, X. Zhang, R. J. Hickey, A. M. Rhoades and R. H. Colby</u>	BL9. Locomotion in yield stress fluids: A drag and thrust analysis. <u>F. Nazarinasrabad and H. Mohammadigoushki</u>	AM3. Controlling spreading and coalescence of deposited filaments in DIW printing. <u>N. J. Alvarez, H. Yoon, A. A. Yancheshme, R. Butler, A. H. Ibrahim, M. Idrees and G. R. Palmese</u>	FI31. Lopsided elastic dumbbell model. <u>A. J. Giacomini, N. Phan-Thien and M. Kanso</u>	DR3. Obtaining rheological constitutive equations for geopolymer systems from scarce data via rheology informed neural networks (RhINNs). <u>D. Dabiri, W. H. Hartt V, E. Del Gado, N. J. Wagner and S. Jamali</u>	TM3. Influence of initial phase angle on optimally windowed strain-controlled chirp rheometry. <u>M. Das, D. C. Vadillo, A. Perego and G. H. McKinley</u>
10:50	GN38. Tuning the mechanical properties of organophilic clay dispersions: Particle composition and preshear history effects. <u>G. Petekidis, N. A. Burger, B. Loppinet and A. Clarke</u>	SM38. Shear-induced spherulite aggregation accelerates gelation in isotactic polypropylene. <u>P. Roberts and A. P. Kotula</u>	BL10. Measuring human mesenchymal stem cell migration and remodeling in hydrogels with a gradient in elastic modulus. <u>Z. Imran and K. M. Schultz</u>	AM4. New insights into the printability of additive-free MXene dispersions through large amplitude oscillatory shear rheology. <u>F. Mekunye and V. A. Davis</u>	FI32. An eigenvalue-free implementation of the log-conformation formulation. <u>F. Becker, K. Rauthmann, L. Pauli and P. Knechtges</u>	DR4. Modeling nonlinear rheology of concentrated nanoemulsions in gel and glass states. <u>B. Valipourgoodarzi and R. Foudazi</u>	TM4. Unraveling the dynamics: Advanced techniques for time-resolved rheology in evolving polymer systems. <u>S. Barber, E. Hoque and B. M. Yavitt</u>
11:10	GN39. Elucidating the role of physicochemical bonds on gel rheology. <u>E. Nikoumanesh and R. Poling-Skutvik</u>	SM39. Influence of deformation-induced concentration fluctuations on segmental friction in polymer blends. <u>Y. Wang, S. Patil, S. Cheng and C. Do</u>	BL33. Can biofilm viscoelasticity provide a pathogen-agnostic approach to treating biofilm infections? <u>V. D. Gordon, M. Wells and X. Zhou</u>	AM5. Theory of spreading viscoelastic droplets in microgravity. <u>L. Heitmeier and T. Voigtmann</u>	FI34. The effect of viscoelasticity in a thin squeezed film. <u>U. Akuz, H. Ahmed, L. Lombardi, P. L. Maffettone and L. Biancofiore</u>	DR5. Data-driven constitutive meta-modeling of non-linear rheology via multi-fidelity neural networks. <u>M. Saadat, W. H. Hartt V, N. J. Wagner and S. Jamali</u>	TM5. Operational limits of Marsh Funnel Protorheology tests. <u>S. Gupta and R. H. Ewoldt</u>

Waterloo 3 & 4

COFFEE BREAK Waterloo 1 & 2

11:30	GN40. Criticality enhances the reinforcement of disordered networks by rigid inclusions. <i>B. W. Tantor</i> , <i>J. L. Shivers</i> , <i>F. Jingchen</i> and <i>F. C. MacKintosh</i>	SM40. Spatial heterogeneity in block copolymers and its impact on dynamics. <i>B. W. Tantor</i> , <i>L. M. Hoover</i> and <i>G. B. McKenna</i>	BL12. In situ rheology of mucus on live airway epithelial cell cultures. <i>M. Braunreuther</i> , <i>M. A. Liegeois</i> , <i>C. Milla</i> , <i>J. V. Fahy</i> and <i>G. G. Fuller</i>	AM6. Effects of in-nozzle configuration and deposition condition on fiber alignment in fused filament fabrication. <i>H. M. K. Nguyen</i> and <i>D. W. Oh</i>	DR6. Efficient multiscale-modeling of rheologically complex flows using Gaussian process regression. <i>B. S. Siddani</i> , <i>I. Srivastava</i> , <i>W. Zhang</i> , <i>A. Nonaka</i> , <i>A. Almgren</i> and <i>J. Bell</i>	TM6. Measurement of viscoelastic property of a liquid in a pressure-driven flow by flow rate fluctuation. <i>M. J. Seong</i> and <i>W. R. Hwang</i>
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11:50 LUNCH BREAK

Afternoon

	Waterloo 3 Gels and Networks	Waterloo 4 Colloids and Suspensions	Waterloo 5 Biological, Living, Actv & Dirc Sys	Waterloo 6 Additive and Adv Manufc of Polym & Partc	Room 405 Flow-Induced Instb & Non-Newt Fluids	Room 501 Data-Driven Rheology	Room 502 Techniques and Methods
1:30	GN41. Visualization of plastic events in colloidal gels. <i>P. Lehericey</i> , <i>V. Niggel</i> , <i>L. Isa</i> and <i>J. Vermant</i>	CS35•. Optimizing polymer bridging in colloidal suspensions. <i>R. Poling-Skutvik</i> and <i>D. P. Keane</i>		AM7. Correlating microstructural and rheological variations in ABS with interlayer bond formation in MatEx AM. <i>J. Lee</i> , <i>N. Patil</i> and <i>J. H. Park</i>		DR7. Graph neural network in prediction of force chain networks in dense suspensions. Part 1: scalability and methods. <i>A. Aminimajd</i> , <i>J. Maia</i> and <i>A. Singh</i>	TM7. Advanced extensional rheometry on a rotational rheometer platform. <i>J. A. Rodríguez Agudo</i> , <i>J. Haerberle</i> and <i>J. Laeuger</i>
1:50	GN42. Tuning the mechanical strength of colloidal gels by oscillatory shear. <i>S. Sudhaman</i> and <i>R. T. Bonnecaze</i>	CS36. Stretching and break-up of non-Brownian suspensions. <i>A. Sauret</i> , <i>A. Sauret</i> and <i>V. Thievenaz</i>	BL13. Resonant deformation fields and strain propagation dynamics of topological biopolymer blends. <i>R. M. Robertson-Anderson</i>	AM8. Capillary extrusion of polymer nanocomposites: Wall slip and flow instabilities. <i>S. Cheng</i> and <i>J. Zheng</i>	FI35. Viscoelastic friction reduction in the infinite length journal bearing. <i>J. K. Schuh</i>	DR8. Graph neural network in prediction of force chain networks in dense suspensions. Part 2: rheological perspective. <i>A. Aminimajd</i> , <i>J. Maia</i> and <i>A. Singh</i>	TM8. Measuring normal stress differences with CPP-R (CPP with Ring collar). <i>B. Li</i> and <i>D. Vlassopoulos</i>
2:10	GN43. Building a network-based approach for the rheology of reactive gels in construction materials. <i>D. Mangal</i> , <i>R. A. Campbell</i> , <i>A. Demirjian</i> , <i>E. Del Gado</i> and <i>S. Jamali</i>	CS37. Ion specific effects and the role of polymeric additives on the rheology of cellulose nanofibrils. <i>R. Wattana</i> and <i>C. Osuji</i>	BL15. Investigation of shear and extensional rheology of silk fibroin in applications of tissue engineering. <i>L. Brunmaier</i> , <i>K. Huse</i> and <i>T. W. Walker</i>	AM9. Uniaxial extension of polymer nanocomposites: the effect of nanoparticle dispersion and the polymer-nanoparticle interactions. <i>S. Patil</i> , <i>I. Maki</i> , <i>J. Zheng</i> and <i>S. Cheng</i>	FI37. Shear thinning of small-molecular liquids: Phenomenological models and molecular mechanisms. <i>V. Jadhao</i> and <i>W. Li</i>	DR9. Data-driven discovery of molecular structure patterns in shear thinning of lubricants. <i>W. Li</i> and <i>V. Jadhao</i>	TM9. Anticipating edge fracture with operational limit lines. <i>M. C. Marsh</i> , <i>R. C. Gergely</i> and <i>R. H. Ewoldt</i>
2:30	GN44. Gelation kinetics and structural evolution of aluminosilicate gels measured via paired rheology and stopped-flow SAXS. <i>T. M. Egnaczyk</i> , <i>W. H. Hartt V</i> , <i>R. P. Murphy</i> and <i>N. J. Wagner</i>	CS38. Rheological characterization of a class of thermal elasto-viscoplastic materials. <i>S. Rassouli</i> , <i>M. Jannesari Ghomsheh</i> , <i>A. Roy</i> , <i>D. Koch</i> and <i>S. Hormozi</i>	BL16. Microrheological characterization of <i>Pseudomonas aeruginosa</i> and <i>Staphylococcus aureus</i> biofilms using video particle tracking. <i>Y. Mao</i> and <i>J. Ali</i>	AM10•. Autonomous process parameter discovery in thermoplastic material extrusion additive manufacturing. <i>J. Seppala</i> , <i>J. R. Read</i> , <i>J. A. Warren</i> and <i>N. Gershenfeld</i>	FI11. Darwin drift for rising bubbles in elastoviscoplastic fluids. <i>M. Zare</i> and <i>I. A. Frigaard</i>	DR10. Discovery of nonlinear constitutive models from oscillatory shear measurements. <i>S. Shanbhag</i>	TM10. Controlling local compliance to probe biaxial failure of soft elastomers in a cruciform geometry. <i>C. W. Barney</i>

2:50	GN45. Network characteristics during gelation and coarsening of attractive colloidal particles. <i>P. Haghighi and S. Jamali</i>	CS39. Confocal rheometry of shear-assembled bidisperse colloidal gels. <i>R. Waheibi and L. C. Hsiao</i>	BL17. Characterizing the morphologies and rheological properties of chromosome territories in normal and cancer cells by CRISPR live-cell imaging. <i>Y.-C. Chung and L.-C. Tu</i>	AM11. Predicting extrudability of colloidal inks using dripping-onto-substrate rheometry for 3D printing. <i>N. Hoque and G. F. Christopher</i>	FI39. The rheological behaviour and flow dynamics of granular flows in rotary drums: A continuum simulation with $\mu(I)$ -rheology. <i>A. Balachsis, Y. Dimakopoulos and J. Tsamopoulos</i>	DR11. Data-driven protorheology: Using neural networks to infer viscosity from videos of inverted vials. <i>I. Arretche, C. Armstrong, M. T. Hossain, J. J. Lessard, R. Tiwari, M. Zakowrotny, M. Berkley, A. Kim, P. Kaur, P. H. Geubelle, J. S. Moore, N. R. Sottos, R. H. Ewoldt and S. H. Tawfick</i>	TM11. Extensional rheology of yield stress fluids. <i>S. Sepahvand, L. Edano, N. Nikolova, S. Mahammad and V. Sharma</i>
3:10	COFFEE BREAK Waterloo 1 & 2						Future of Rheology Speakers (mini ses)
3:45	GN46. Rheology and thixotropy of non-equilibrium colloidal gels. <i>S. M. Hosseini and J. S. Park</i>	CS40. Rheological behavior of nanostructured complex fluids with two-dimensional (2D) materials. <i>R. E. Andrade, N. M. Moraes, M. Dias, C. Maronezze, H. Ribeiro, L. R. Moraes, Y. Soares and M. F. Naccache</i>	BL18•. Object transport by confined active suspensions. <i>J. B. Freund</i>	AM12. A rheology-based strategy for designing 3D printing processes. <i>E. Caron, L. Farràs-Tasias and F. H. Marchesini</i>	FR1. Time-resolved structure-property relations in model soft gel networks under large amplitude oscillatory shear. <i>G. J. Donley, M. Bantawa and E. Del Gado</i>	DR12. ML-based prediction of hydrogel photocrosslinking kinetics and their viscoelastic properties. <i>D. B. Camasao, C. Schmitt and A. Hadj Henni</i>	TM12•. NIST's approach to advance metrology and standards development in additive manufacturing. <i>C. I. Higgins</i>
4:05	GN47. Rheology of bimodal attractive colloidal gels. <i>R. A. Campbell, C. Zhuang, A. Mohraz and S. Jamali</i>	CS41. Brittle and ductile yielding in soft materials. <i>K. M. Kamani and S. A. Rogers</i>	BL19. Collective microroller kinematics and dynamics resulting from imposed torque and friction. <i>J. F. Gilchrist, S. R. Wilson-Whitford, M. C. Roffin, J. Gao, B. Sauder, A. Oh, M. G. Sisca and T. S. Richardson</i>	AM13. Printability criterion of highly filled pastes for direct-ink writing based on Small-Amplitude Oscillatory Shear (SAOS). <i>J. J. Griebler, J. W. Kopatz, A. S. Tappan, S. A. Rogers and A. M. Grillet</i>	FR2. The dynamic response of concentrated electrolytes. <i>E. S. Krucker-Velasquez, A. Alexander-Katz and J. W. Swan</i>	DR13. Widefield spatiotemporal imaging of attractive nanoemulsions to understand intermittent flows in capillary channels. <i>C. L. Weeks, W. Tang and L. C. Hsiao</i>	TM13. Dynamic diffusive interfacial transport (D-DIT): Tracking water concentration with short-wave IR (SWIR). <i>P. U. Kelkar, K. A. Erk and S. Lindberg</i>
4:25	GN48. Dampened elasticity in soft matter and the Deborah function. <i>H. H. Winter</i>	CS42. Electric Double Layer (EDL) repulsive force being responsible for the time-dependent behavior of clay gels in the structural rejuvenation mode: Direct evidence and unusual salt effects. <i>Y.-K. Leong</i>	BL20. Thermo-responsive rheology of expandable droplets. <i>J. A. Díaz A and L. Y. Galeano Tirado</i>	AM14. Feedstock metrology for direct ink writing of ceramics. <i>B. E. Dolata, L. O. Grant, B. G. Bush and R. A. Maier</i>	FR3. Transient and periodic exponential shear flows: Rheometric techniques for measuring the transient planar extensional viscosity of complex fluids and soft solids. <i>L. A. Kroo and G. H. McKinley</i>	DR14. A diagnostic tool to characterize battery slurries through machine learning of sensor signals during pipe flow. <i>S. Kang, C. H. Ahn, H. Jin and K. H. Ahn</i>	TM14. A viscoelastic monitoring method with a rotating object in a liquid pool. <i>H. W. Choi, H. J. Ahn, J. H. Lee and W. R. Hwang</i>
4:45	GN49. Microstructure and dynamics of double colloidal gels. <i>A. I. Kaltashov and S. Jamali</i>	CS43. Nonlinear rheology and microstructural behavior of semidilute solutions of rod-like particles across six decades of shear rate. <i>P. F. Salipante, L. Cunha and S. D. Hudson</i>	BL21. Hydrodynamic diffusion in apolar active suspensions. <i>Z. Ge and G. J. Elfring</i>	AM15. Effect of the nanostructure on the yield stress of block copolymer/epoxy inks. <i>D. Oladeji and D. V. Krogstad</i>	FR4. The microstructure and shear rheology of a model thermoreversible colloidal suspension by Rheo-SANS. <i>K. Suman and N. J. Wagner</i>	DR15. CFD investigation of mixing performance and flow patterns in a generic bioreactor with Newtonian and non-Newtonian fluids. <i>R. E. Lopez</i>	TM15. Multimodal high-throughput capillary rheometry. <i>R. P. Murphy</i>

- 5:05 **GN50.** Predicting colloidal gel stability with poroviscoelastoplastic modeling. A. I. Ojoawo and R. T. Bonnecaze
- CS44.** LAOS behavior of ultrasoft clay-based muds. M. Santagata, W. D. Hurdle, M. Sasar and K. Garzon-Sabogal
- BL22.** Simultaneous measurement of thermophoretic and Brownian particle motion in linearly viscoelastic non-Newtonian fluids using multiple particle tracking microrheology. N. Hasanova, M. C. Roffin, X. Cheng, K. M. Schultz and J. F. Gilchrist
- AM16.** Printing of fine, continuous, and soft fibers in complex 3D trajectories via embedded solvent exchange. W. Eom, M. T. Hossain, D. Fudge, R. H. Ewoldt and S. H. Tawfick
- FR5.** Linking structural and rheological memory in disordered soft materials. K. M. Kamani, Y. H. Shim, J. J. Griebler, S. Narayanan, Z. Qingteng, R. L. Leheny, J. Harden, A. Deptula, R. Espinosa-Marzal and S. A. Rogers
- DR16.** Super resolution of material structure from low resolution measurements. C. D. Young
- TM16.** Fluid mechanics of thin liquid films: From measuring viscosity to detecting diseases. M. S. Tirumkudulu and M. A. Mir
- 5:25 **GN51.** Topological data analysis for particulate gels. A. Smith, G. J. Donley, E. Del Gado and V. Zavala
- CS45.** Irreversible aging and Thixotropy of colloidal silica (Ludox) dispersion. V. Kumar and Y. M. Joshi
- BL23.** In-silico rheology of passive asters. S. Varchanis, D. B. Stein and M. J. Shelley
- AM17.** Electrothermal free-form additive manufacturing of nanotube-loaded thermosets. A. Sarmah, E. Harkin and M. J. Green
- FR6.** Constitutive relations for modelling the viscoelastic response of colloidal solutions that exhibit shear-induced phase transitions. K. K. Yanamundra, S. P. Pillai, C. C. Benjamin and K. R. Rajagopal
- DR17.** Strategy to identify the correlation between rheology and 3d printability through predictive model for 3d printability based on rheological analysis and machine learning. E. H. Jeong, H. J. Jang, J. H. Choi, H. B. Park, J. W. Lee, S. Y. Bae, C. K. Yoon and J. D. Park
- TM17.** In-situ measurement of fiber orientation and transient rheology of fiber-filled polymer melts in shear flow. T. Egelmeers, N. Jaensson, P. Anderson and R. Cardinaels

5:45

END

6:30

POSTER SESSION & RECEPTION Waterloo 3 & 4, until 8:30 pm

6:30

GALLERY OF RHEOLOGY CONTEST Waterloo 3 & 4; Online voting 10 am - 8 pm

Thursday, October 17

Morning

8:00	MP1. Seeing is believing: Confocal rheometry of colloidal gels and suspensions. <u>L. C. Hsiao</u> (Metzner Award Presentation) Waterloo 3&4					
8:40	SHORT BREAK					
	Waterloo 3	Waterloo 4	Waterloo 5	Waterloo 6	Room 405	Room 501
	Gels and Networks	Colloids and Suspensions	Biological, Living, Actv & Dirc Sys	Additive and Adv Manufc of Polym & Partc	Polymer Solutions Melts Blends	Techniques and Methods
8:45	GN52. Modeling the rheology of gelation using recovery rheology. <u>J. Shi, D. C. Vadillo, A. Hedegaard and S. A. Rogers</u>	CS46. An explanation of double overshoot yielding. <u>J. J. Griebler, A. Dobo, E. E. Miczuga and S. A. Rogers</u>	BL24. Mucin-derived hydrogels for biomedical adhesives and coatings. <u>G. Degen, C. Stevens, G. Carcamo-Oyarce, J. Song, R. Bej, P. Tang, R. Haag, K. Ribbeck and G. H. McKinley</u>	AM18. Designing microgel particles as support materials for embedded 3D-bioprinting. <u>C. S. O'Bryan</u>	SM41•. Modeling the flow-induced demixing of blended polymers with molecular simulations. <u>G. Joe and T. C. O'Connor</u>	TM18. Rheological and mechanical analysis of polymeric foam materials under tensile, compressive, and shear deformations. <u>S. Jin, L. Pham, F. Santos, H. Bahreinizad, S. Subramanian, S. Chowdhury and G. B. McKenna</u>
9:05	GN53. Towards elastic and tough polymer networks through controlled gelation. <u>A. Z. Dookhith, Z. Zhang, V. Ganesan and G. E. Sanoja</u>	CS47. Is shear thickening homogeneous in the absence of attractive interactions. <u>E. Moghimi, J. Urbach and D. L. Blair</u>	BL25. Plug-and-play patterning: Bioprinting via rheologically-dictated advective assembly extrusion. <u>P. J. McCauley, C. A. Fromen and A. V. Bayles</u>	AM19. Creating biopolymer gels in 3D using electric fields: 3D-printing without heat or light. <u>W. Xu and S. R. Raghavan</u>	SM42. Dynamic bonds drive broad fluctuations of chain stretch in elongated associating polymer melts. <u>S. Liu and T. C. O'Connor</u>	TM19. Time-dependent capillary micromechanics: Studying viscoelastic behavior at microscopic scales. <u>K. J. Bakal and H. M. Wyss</u>
9:25	GN54. Effects of resin purity on the structure and rheology of amine-cured epoxy blends. <u>A. P. Kotula, S. K. Romberg, J. W. Woodcock and G. A. Holmes</u>	CS48. Antifoam hinders air release in lubricating oil. <u>C. Xu, S. G. Calhoun, E. B. Mock, J. Zawala and G. G. Fuller</u>	BL26. Interfacial rheology and density fluctuations of crowded Pseudomonas aeruginosa cells at fluid-fluid interfaces. <u>J. John, A. Geppert, R. Poopalarajah, E. Ravzi, L. Howell, J. Harrison and G. Natale</u>	AM20. Machine learning guided inverse design of multimaterial additive manufacturing coextrusion nozzles. <u>J. E. Nam, Y. P. Medapati and A. V. Bayles</u>	SM43. Predicting the specific work of mechanical degradation in flowing polymer melts. <u>N. Chongvimansin and T. C. O'Connor</u>	TM20. Rheofluidics: Single-drop oscillatory rheology with microfluidics. <u>S. Aime, M. Milani, W. Wang and D. Weitz</u>
9:45	GN55•. Gelation dynamics in elastomers with branched architecture. <u>B. M. Yavitt, S. Barber and E. Hoque</u>	CS49. Rheology of semi-dilute suspension of colloidal rods under shear: Long-range hydrodynamic interactions effects. <u>L. Hildebrand Pires da Cunha, P. F. Salipante and S. D. Hudson</u>	BL27. Mechanical properties of Staphylococcus aureus and Pseudomonas aeruginosa polymicrobial biofilms grown in chronic wound based models. <u>B. Bhattarai and G. F. Christopher</u>	AM21. Interface evolution in polymer-ceramic electrolytes explored by coupled rheology and spectroscopy. <u>J. M. McCollum and R. Shepherd</u>	SM44. A new numerical method for linear rheology of living polymers. <u>J. D. Peterson and C. Love</u>	TM26. Using ideal porous media, or static mixers, for yield stress measurement. <u>W. H. Hartt IV</u>
10:05	COFFEE BREAK Waterloo 1 & 2					
10:35	CS52. Rheo-optical investigation of the nonaffine dynamics of soft particle glasses. <u>C. Marraffa, S. Aime and M. Cloitre</u>	BL28. Arbitrary Lagrangian–Eulerian finite element method for lipid membranes. <u>A. Sahu</u>	AM22. Spatially controlled ultraviolet light generation for additive manufacturing of polymer nanocomposites. <u>Q. Zhou, B. M. Wirtz, M. C. Burroughs, T. H. Schloemer, D. N. Congreve and D. J. Mai</u>	SM45. Accurately capturing shear and extensional rheology of xanthan gum: A FENE-Fraenkel constitutive equation with distinct orientation and stretch timescales. <u>I. Pincus, S. Yamani, J. R. Prakash and G. H. McKinley</u>	TM22. Characterising rough and adhesive single-particle contacts. <u>S. W. Scherrer, L. Isa and S. N. Ramakrishna</u>	
10:55	CS51. Numerical simulation of parallel plate rheometric flows of non-colloidal suspensions in viscoplastic fluids. <u>C. O. Negrao and N. de Rosso</u>	BL29. Step-down transience in human blood at low shear rates. <u>S. M. Farrington, F. Moran, N. J. Wagner and A. N. Beris</u>	AM24. Modeling direct ink write for filled silicones. <u>R. R. Rao, A. Kucala, J. W. Kopatz and A. M. Grillet</u>	SM46. Development of the Mead “Semi-Toy” polydispersity model for linear and/or star polymers in arbitrary flows. <u>D. W. Mead</u>	TM23. Measuring and modeling non-Gaussian deformations of polymers using in situ scattering in a capillary rheometer. <u>A. Datta, S. Powers, W. Xiaoyan, K. M. Weigandt, R. P. Murphy, P. T. Underhill and M. Helgeson</u>	

11:15	<p>CS53. Investigation of induced microstructural transformations in ferrofluid-heavy crude oil mixtures by applying nonlinear rheology and magnetometry. <u>M. D. Contreras-Mateus</u>, A. Chaves-Guerrero, F. H. Sánchez and N. N. Nassar</p>	<p>BL30. Microcirculatory blood flow with aberrant levels of red blood cell aggregation. <u>X. Cheng</u>, E. Iffrig, W. A. Lam and M. D. Graham</p>	<p>AM25. Correlating extensibility with printability in direct-ink writing of dense colloidal inks. <u>C. Saengow</u>, S. Sen, J. Yus, K. M. Chang, E. E. Lovrich, A. G. Hoika, A. A. Pfeil, N. Haug, A. J. Wagoner Johnson and R. H. Ewoldt</p>	<p>SM47. Modelling the nonlinear shear rheology of unentangled and entangled linear polymer melts. <u>M. Dalne</u>, S. Costanzo, D. Vlassopoulos, M. Rubinstein and E. van Ruymbeke</p>	<p>TM24. In-line evaluation of lithium ion battery anode slurries under pressure-driven pipe flow conditions through rheological, electrochemical, and machine-learning based methods. <u>C. H. Ahn</u>, S. Kang and K. H. Ahn</p>
11:35		<p>BL32. Role of gravity in active bio-soft-matter evolution under flow: Life support technologies applications. D. Marra, M.-F. Noirot-Gros, M. Petala, R. C. de Almeida, S. Ortega, M. Holynska, R. Briandet, T. Karapantsios and <u>S. Caserta</u></p>		<p>SM49. Nonlinear rheology of conjugated polymers with flexible alkyl side chains. <u>J. Zheng</u> and S. Cheng</p>	<p>TM25. Simultaneous flow and impedance measurements on a combined motor transducer rheometer. <u>K. J. Whitcomb</u>, S. Merrullo and Y. Kawata</p>
11:55				<p>SM50. Polymer drag reduction in dispersed oil-water flow in tubes. K. C. Barbosa, <u>E. J. Soares</u>, M. C. Khalil and O. Karnitz Junior</p>	
12:15			END		

Poster Session

Wednesday, October 16 6:30 PM – 8:30 PM Waterloo 3 & 4

- PO1.** Controlled rheology platform for understanding the printability of nanoparticle suspensions. *E. Hoque, S. Barber and B. M. Yavitt*
- PO2.** Exploring the interplay of rheological quantities and mechanical properties in 3D-printed lattice structures: A Doehrlert design approach. *L. Farràs-Tasias, M. Vermeerbergen, F. A. Gilabert Villegas, L. Cardon and F. H. Marchesini de Oliveira*
- PO3.** Enhancing rheology and printability of fruit and vegetable-based inks with microalgae-derived polysaccharides for 3D food printing. *J. Wu and A. Q. Shen*
- PO4.** Rheology and additive manufacturing of bio-stabilized earthen materials. *Y. Maierdan and S. Kawashima*
- PO5.** Dynamics of complex fluids in the inkjet printing process. *M. Zare and G. H. McKinley*
- PO6.** Critical roles of rheology in the manufacturing of lithium-ion batteries. *Q. Liu and J. J. Richards*
- PO7.** Engineering of yield-stress media for improved cell culture. *L. C. Wong, C. J. K. Wong, S. M. E. Chong, R. Abdul Jalil, A. Franco-Obregón and A. Z. Nelson*
- PO8.** Rheological evaluation of dual physical cross-linked double network graphene oxide/ poly(acrylamide-co-acrylic acid) nanocomposite hydrogels for biomedical application. *Z. Mohammadi and F. Goharpey*
- PO9.** Effects of active colloids on the interfacial rheology of a viscoelastic protein interface. *J. John and G. Natale*
- PO10.** Measuring the effect of culturing parameters on the viscoelastic properties of cancer cell spheroids using Capillary Micromechanics. *K. J. Bakal, M. Janssen, R. Kieltyka and H. M. Wyss*
- PO11.** A structural biologist's perspective on transthyretin aggregation in fluid flow. *I. Ritsch, J. Dyson and P. Wright*
- PO12.** Morphology, repulsion, and ordering of red blood cells in viscoelastic confined flows. *S. M. Recktenwald, Y. Rashidi, I. Graham, P. E. Arratia, F. Del Giudice and C. Wagner*
- PO13.** Blood rheology for astronaut cardiovascular health diagnostics. *S. M. Farrington, J. Bockrath, N. J. Wagner and A. N. Beris*
- PO14.** Assessing the impact of ethanol on the drying and rheological behavior of Li-ion battery anode slurries. *M. S. Park, J. H. Kim and K. Hyun*
- PO15.** Simulations of the deposition of colloidal particles from an evaporating sessile droplet subject to dispersion and coagulation. *A. Abdallah and L. Biancofiore*
- PO16.** Microstructure aligned printing (MAP) for colloidal inks. *A. Cazares and G. F. Christopher*
- PO17.** Rheo-NMR velocimetry of nanocrystalline cellulose and hectorite nanoclay suspensions. *M. A. Stanley, M. C. Young, J. S. Jayaratne, S. L. Codd, D. S. Bajwa, J. N. Wilking and J. D. Seymour*
- PO18.** A comparison of sunscreen formulations using maleic anhydride modified lignin as an UV blocking additive. *A. L. Alves, G. R. Moraes and V. M. A. Calado*
- PO19.** Brownian motion effect on particle migration of bidisperse colloidal suspensions under planar Poiseuille flow. *J. H. An, B. Chun and H. W. Jung*
- PO20.** Stratification of bimodal particles in vertical suspension drying processes: Role of diffusiophoretic velocity of larger particle. *H. Kim, J. Yun, B. Chun and H. W. Jung*
- PO21.** Control of coffee-ring patterns of sessile suspension droplets by encapsulating silica particles with thermo-responsive block copolymers. *S. H. Kim, Y. Huh, Y.-Y. Won, B. Joona and H. W. Jung*
- PO22.** Quantitative metrics to assess evidence of time-temperature superposition (tTS). *A. S. Modi, N. Ramlawi, A. Hedegaard, E. L. Breedlove, J. W. McAllister, H. Lee, B. Rajabifar and R. H. Ewoldt*
- PO23.** The piblin and hermes Python packages: Fundamental reusable functionality for measurement data science with applications in rheology. *A. Perego, D. C. Vaddillo, M. Mills and G. H. McKinley*
- PO24.** Critical-like slowdown in thermal soft-sphere glasses via energy minimization. *R. S. Hoy, K. A. Interiano-Alberto and P. K. Morse*
- PO25.** Sedimentation of a rigid particle in yield stress fluids undergoing shear flow. *R. Alrashdan, N. Sadeghi and F. Khabaz*
- PO26.** Startup shear flow of soft particle glasses: A thermodynamic framework. *N. Sadeghi, H. Pable and F. Khabaz*
- PO27.** Predicting the shear stress distribution in soft particle glasses using structural fingerprinting. *H. Pandya, P. Cuddihy, A. Shahmohammadi and F. Khabaz*
- PO28.** Unifying intrusion dynamics in granular media for space exploration. *J. G. Ruck, S. Pradeep, J. Bush and D. J. Jerolmack*
- PO29.** Characterizing the microstructure of shear jammed dense suspensions: A Network Science Approach. *S. Sharma, A. Sharma and A. Singh*
- PO30.** Rheological analysis of Ni-rich cathode slurries with oxalic acid additive for controlling gelation. *J. Kang, M. K. Kim, J. H. An and H. W. Jung*
- PO31.** Extrapolation and interpolation of force chain networks in dense suspensions employing graph neural network. *A. Aminimajid, J. Maia and A. Singh*
- PO32.** The FEM simulation of the particle migration in the flowing suspension. *H. Zeng*
- PO33.** Rheological manifestations of dispersion changes in $\text{LiMn}_{0.6}\text{Fe}_{0.4}\text{PO}_4$ electrode slurry. *J. Kim and J. D. Park*
- PO34.** Designing lunar construction materials: Effects of low Earth orbit on material properties of lunar simulant geopolymer binders. *T. M. Egnaczyk, W. H. Hartt V and N. J. Wagner*
- PO35.** Leveraging viscoelastic flow instabilities for remediation of soiled porous media. *E. Y. Chen and S. S. Datta*
- PO36.** The persistence of stress singularities in Oldroyd-B fluids. *S. Varchanis and D. B. Stein*
- PO37.** Exploring the instabilities of a three-dimensional viscoplastic Rayleigh-Bénard convection. *M. A. Ferrari, P. R. Santos, L. A. Hegele and A. T. Franco*
- PO38.** Flow of wormlike micellar solutions over concavities. *F. Hillebrand, S. Varchanis, C. C. Hopkins, S. J. Haward and A. Q. Shen*

- PO39.** Numerical simulation of EOR in heterogeneous disordered porous medium with non-Newtonian fluids with yield stress. *A. C. Zotelle, V. G. Poletto, S. M. Junqueira, J. V. L. Marchiori and R. P. Pedroni*
- PO40.** Light-induced decrease in the molecular weight and its influence on polymer drop splashing. *M. A. Upoma, H. Tran and M. Y. Pack*
- PO41.** Flow-induced nematic alignment in aromatic-backbone thermoplastics: A time-temperature-shear study of the isotropic-to-nematic transition. *S. Daryoush, J. D. Alexander, E. D. Gomez, A. M. Rhoades and R. H. Colby*
- PO42.** On designing a wavy sinusoidal micromixer for efficient mixing of viscoelastic fluids harnessing elastic instability and elastic turbulence phenomena. *S. Gupta and C. Sasmal*
- PO43.** Particle-filled emulsion drops show flow-induced partial coalescence, but only transiently. *J. Vaswani, C. M. Schroeder and S. S. Velankar*
- PO44.** Integrating reaction-diffusion and cellular automata: A unified framework for dynamic pattern formation and evolution. *S. Mirfendereski, E. Coleman and A. Gupta*
- PO45.** Exploring multi-stability in three-dimensional viscoelastic flow around a free stagnation point. *D. W. Carlson, A. Q. Shen and S. J. Haward*
- PO46.** Tunable hydrogel networks by varying secondary structure of hydrophilic peptoids. *A. Pineda-Hernandez, D. Castilla-Casadiego, L. Morton and A. M. Rosales*
- PO47.** Strain shift measured from stress-controlled oscillatory shear: Evidence for a continuous yielding transition and new techniques to determine recovery rheology measures. *J. J. Griebler, G. J. Donley, V. E. Wisniewski and S. A. Rogers*
- PO48.** Characterizing dynamic gelation of thermoresponsive microfibrillated cellulose using Multiple Particle Tracking microrheology (MPT) and bulk rheology. *M. Afshang, K. M. Schultz, S. Lindberg and M. Caggioni*
- PO49.** Tuning nonmonotonic flow behavior in dynamic covalent hydrogels through crosslinking chemistry and network structure. *A. D. Crowell, T. M. FitzSimons, E. V. Anslyn and A. M. Rosales*
- PO50.** Gelation behavior of Pluronic F127 in ionic liquid and water mixtures. *S. M. Tabatabaei and R. Foudazi*
- PO51.** Electrorheological properties of PVC gels with different plasticizer concentrations. *K. Furuse, K. Kaneko, K. Asaka and T. Hanasaki*
- PO52.** Fabrication of Mxene/CNT/polydopamine based ternary aerogel and its multi-functional nanocomposite. *S. Lee, D. Kim and D. G. Seong*
- PO54.** Brittle-to-ductile rheology in composite hydrogels with a microfibrinous network. *C. Xu, Y. C. Saraswat and L. C. Hsiao*
- PO55.** Chemical and thermal sensitivity of parabolic focal conic defects in concentrated surfactant solutions. *M. Kaboolian, P. U. Kelkar, S. Lindberg and K. A. Erk*
- PO56.** Influence of surfactants, polymers and proteins on foam film drainage. *C. Xu, C. D. Martinez Narvaez, H. Lena, P. Kotwis and V. Sharma*
- PO57.** Characterization of a thermoplastic elastomer (TPE) foaming using rheology and image analysis. *H. Y. Song, H. J. Kong and K. Hyun*
- PO58.** Measuring non-recoverable strain during yield via microstructure deformation. *B. KC and G. F. Christopher*
- PO59.** Interfacial rheology of aqueous solutions of Pluronic F68 and sodium dodecyl sulfate. *S. A. Onyembe and R. Foudazi*
- PO60.** Hybrid synthesis of bottlebrush DNA polymers for single-molecule rheology. *M. C. Burroughs, L. Nieman, A. C. Conyer, L. X. Wang and D. J. Mai*
- PO61.** Effect of oxidation and molecular weight on the extensional rheology of PEEK. *T. A. Lima and N. J. Alvarez*
- PO62.** Phase separation dynamics in block copolymer solutions from rheological analysis. *I. Perma, R. Ferraro, G. Paradiso, G. Gamberoni, S. Coppola and S. Caserta*
- PO63.** Transient structure-property-processing relations of yield-stress bottlebrush block copolymer solutions. *J. Shi, Y. L. Kamble, X. Huan, Y. Diao, D. S. Guirounet and S. A. Rogers*
- PO64.** Relaxation time and high shear rate viscosity of sulfonated poly (ether ether ketone). *B. Baniasadi, C. G. Lopez and R. H. Colby*
- PO65.** Rheology during crystallization of PEO-based gel polymer electrolytes. *F. Naderi Samani and R. Foudazi*
- PO66.** Modeling the nonlinear rheology and supramolecular dynamics of flowing complex coacervates. *B. Xu and T. C. O'Connor*
- PO67.** Predicting the flow-induced phase behavior of linear polymer blends with molecular dynamics simulations. *G. Joe and T. C. O'Connor*
- PO68.** Examining the rheological behavior of PVC using both slit capillary and oscillatory shear rheology. *N. C. Crawford*
- PO69.** Continuous spun fibers via centrifugal force spinning. *L. Edano, C. Slykas, T. Vihar, C. Martinez, N. Reddy and V. Sharma*
- PO70.** Is there a relation between polymer rheology and retention in porous media? *M. S. Azad*
- PO71.** In situ internal pipeline coating using a frontally polymerizable thermoset resin. *C. Saengow, P. Krishnan, J. C. Cooper, K. Sampat, J. S. Moore, N. R. Sottos and R. H. Ewoldt*
- PO72.** Understanding the role of crosslink density and linear viscoelasticity on the shear failure of pressure-sensitive-adhesives. *A. J. Arrowood, M. A. Ansari, M. Ciccotti, K. M. liechti, R. Huang and G. E. Sanoja*
- PO73.** Large Amplitude Oscillatory Extension (LAOE) of complex fluids in planar elongation. *S. M. Recktenwald, A. Q. Shen and S. J. Haward*
- PO74.** Influence of viscoelastic properties on hollow fiber formation in melt spinning. *K. Ernst, H. Perera, H. Tafreshi and S. Khan*
- PO75.** Fiber spinning from polymer solutions. *A. Bhadu, A. N. McClellan and R. H. Colby*
- PO76.** Temperature dependence of kinetic friction: A handle for plastics sortation? *J. Thomas, C. R. Snyder and K. B. Migler*
- PO77.** Synergistic effects of pressure and shear flow on polymer crystallization. *B. J. Jacob, J. Lauger, X. Zhang, M. Thiele, M. Nemeth, A. M. Rhoades and R. H. Colby*
- PO78.** Influence of rheology on melt blowing of nonwoven mats with applications to biodegradable polymers. *O. Roy, Z. Zhang, C. Song, A. Shih and R. Larson*
- PO79.** Characterizing the rheological behavior of protein-polysaccharide complexes. *S. Mohammadkhah, S. Prottasha, A. Witherspoon and S. Khan*
- PO80.** Pinching dynamics, extensional rheology, and stringiness of saliva substitutes. *K. Al Zahabi, L. Hassan, R. Maldonado, M. W. Boehm, S. K. Baier and V. Sharma*
- PO81.** Sedimentation behaviour of baritine: Influence of wellbore inclination and rheological behavior. *R. S. Schimicoscki, A. C. Severino, Y. J. Garcia-Blanco, L. H. Quitian-Ardila, E. Germer and A. T. Franco*

- PO82.** Rheological properties and printability of plant-based emulsions: Towards high-quality 3D printed meat analogs. *E. Caron, A. Aliche, D. Van de Walle, K. Dewettinck and F. H. Marchesini*
- PO83.** Rheological characterization of NMC-based dry powder cathode in lithium-ion batteries. *B. Abedi and M. Staub*
- PO84.** Enhancing 3D food printing: A rheological study of sugar icing for optimized print quality. *N. T. Pottackal, V. Kumar, A. Rajappan, Y. M. Joshi and D. J. Preston*
- PO85.** Exploration of anisotropic properties and structure of conventional meat and plant-based meat analogues. *Y. Jiang, W. S. Ko, B. G. Lim and A. Z. Nelson*
- PO86.** Rheological analysis of a bentonite-based fluid and its impact on drill column entrapment. *R. M. Duarte Junior, C. C. Neto, G. Mühlstedt and C. O. Ribeiro Negro*
- PO87.** Eggless vegan food emulsions. *N. Nikolova, L. Hassan, C. D. Martinez Narvaez, M. W. Boehm, S. K. Baier and V. Sharma*
- PO88.** OHSI – Onset Heat Size Index: A new parameter to predict workability of cement-clay blends. *M. F. Iqbal and N. Garg*
- PO89.** Effects of isocyanurate structures blocked with dual-curable amine-based blocking agent on thermal crosslinking characteristics for eco-friendly automotive clearcoats. *H. Moon, M. Park, S. M. Noh and H. W. Jung*
- PO91.** Pinch-off dynamics of water containing perfluorooctanoic acid. *B. Valipourgoodarzi, M. Zhou and R. Foudazi*
- PO92.** Rheology in microgravity to elucidate fundamental transport phenomena. *P. Irace, R. Reeves and M. Roberts*
- PO93.** Filament stretching dynamics of extensible yield-stress fluids. *S. Sen, M. T. Hossain and R. H. Ewoldt*
- PO94.** Sticking to the point... Influence of relative humidity and temperature on flowability of spray dried powders. *J. P. Eickhoff and A. Shetty*
- PO95.** Temperature scanning stress relaxation (TSSR) on elastomers. *T. W. Hunt*
- PO96.** Measures of the first normal stress difference in Large Amplitude Oscillatory Shear. *N. King, E. Pashkovski, P. Reid, R. Paige, R. More and G. H. McKinley*
- PO97.** Evaluation of the rheological properties and structure of complex fluids using a novel rheo-optical system based on 2D polarization analysis. *T. Sato, Y. Yamagata, T. Onuma and K. Miyamoto*
- PO98.** Direct investigation of hair care deposition and removal. *N. Hasanova, A. Weeks, S. Gao, J. K. Riley and J. F. Gilchrist*
- PO99.** Updated rheological tools for testing non-Newtonian materials – Bring back the joy! *D. J. Moonay*
- PO100.** Simple 2D texture mapping of characteristic food samples from rheological data. *F. Meyer and J. Nijman*
- PO101.** Establishing an operational window for high-throughput viscosity inference using the Tilted-Vial Test. *R. Tiwari, C. Armstrong, M. T. Hossain, I. Arretche, M. Zakoworotny and R. H. Ewoldt*
- PO102.** Inferring extensional viscosity in filament extrusion under gravity-driven stretching. *T. A. Livesay, C. Osmond, M. T. Hossain and R. H. Ewoldt*
- PO103.** Flow around a solid particle in elasto-viscoplastic material: Benchmark experiments and rheology. *O. Hajieghrary, D. Adriany, I. A. Frigaard and I. A. Frigaard*
- PO104.** Design and characterization of optical tweezers for nanomechanical testing. *M. A. Pitell and E. M. Furst*
- PO105.** Diagnosing dispersion in electrode slurries through sequence of physical processes (SPP) analysis. *H. J. Choi, H. J. Lee, K. H. Ahn and J. D. Park*
- PO106.** A novel calibration procedure for orthogonal superposition measurements. *J. L. Waeterloos and C. Clasen*

Gallery of Rheology

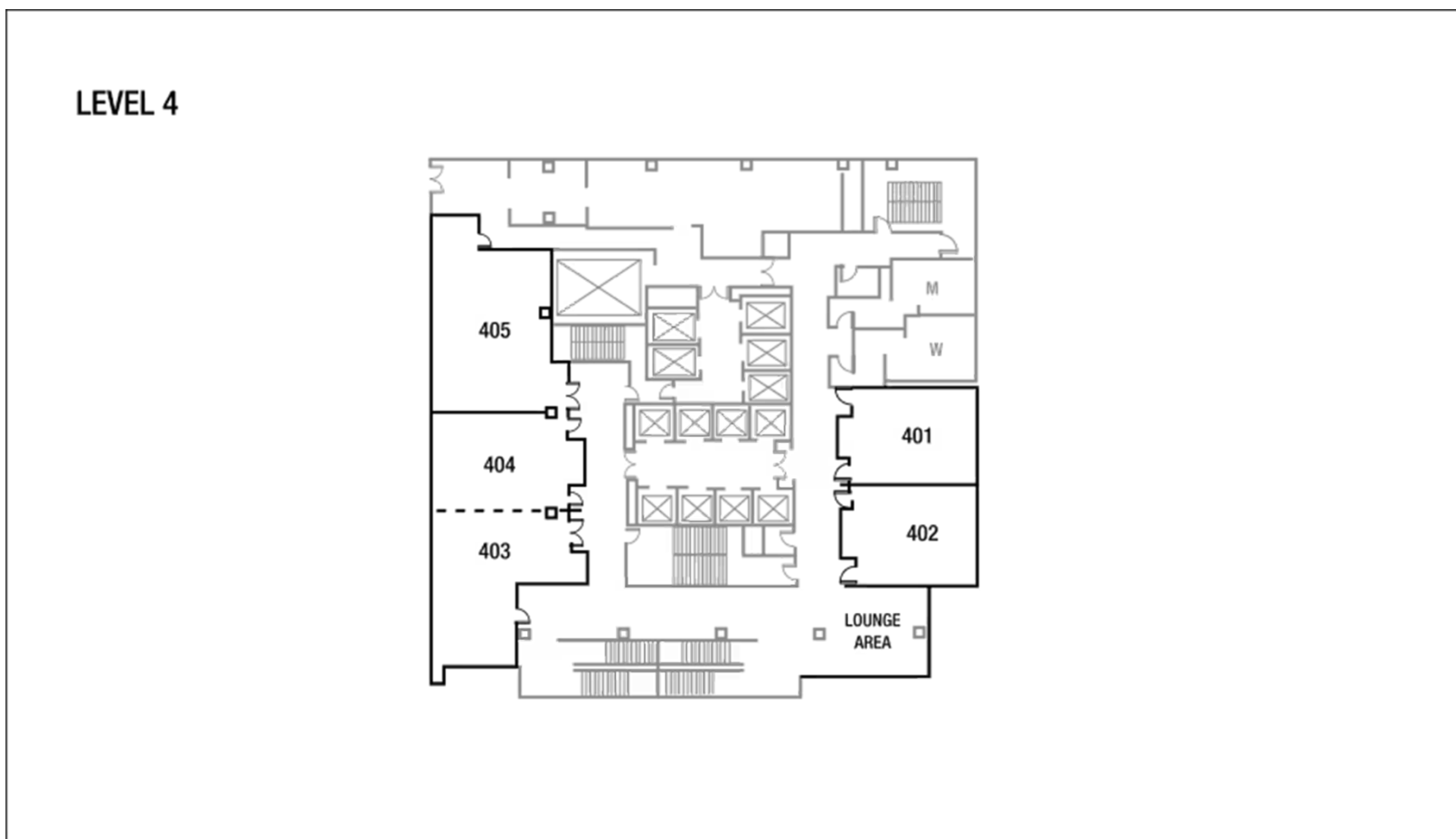
Preview: Starts Monday 1:30 PM at Waterloo 1 & 2

Contest: Wednesday 6:30 PM – 8:30 PM (Online voting 10:00 AM – 8:00 PM) at Waterloo 3 & 4

- GR1.** Hydrate tree. *E. P. Marín Castaño, L. Rodrigues da Costa Moraes, P. Ribeiro Vargas, P. R. de Souza Mendes and M. F. Naccache*
- GR2.** Dual network biocomposite hydrogels with a microfibrillar network. *Y. C. Saraswat and L. C. Hsiao*
- GR3.** Painting Taylor vortices with cellulose nanocrystals. *R. Ghanbari, A. Terry, K. Nygård, R. Kádár, K. Sekar, A. Kumar Sonker, M. Bek, A. Akas Mishra and V. Ghai*
- GR4.** Stars on Earth - Taare zameen par. *A. Bhadu, A. M. Rhoades and R. H. Colby*
- GR5.** To fall or not to fall: The physics of sandcastles. *J. S. Olafsen, O.-D. S. Taylor and M. H. McKenna Taylor*
- GR6.** Alginate gel growth and deposition in microfluidic flow. *B. T. Smith and S. M. Hashmi*
- GR7.** The fast and the curious: Bacterial drift. *J. John, A. Geppert, R. Poopalarajah, E. Ravzi, L. Howell, J. Harrison and G. Natale*
- GR8.** Rheo-optics of viscoelastic microgels by cross-slot microfluidics. *A. I. Cirillo, F. Gallo, E. Longo, J. Claussen, G. Tomaiuolo and S. Guido*
- GR9.** Frozen hydrates. *E. P. Marín Castaño, L. Rodrigues da Costa Moraes, P. Ribeiro Vargas, P. R. de Souza Mendes and M. F. Naccache*
- GR10.** Liquid crystalline surfactant phases hydrating in confined environments. *P. U. Kelkar, K. A. Erk and S. Lindberg*
- GR11.** Flow instability of polymer melt with CPP-RS (CPP with ring like step). *B. Li and D. Vlassopoulos*
- GR12.** Hi, I'm semi-crystalline PEO. *A. Bhadu, A. M. Rhoades and R. H. Colby*
- GR13.** Viscoelastic vortex street. *U. N. Patel, Y. Modarres-Sadeghi and J. P. Rothstein*
- GR14.** A wrinkle in space. *J. A. Adam, P. M. McMackin, F. P. Riley, S. R. Griffin, J. M. Lopez, P. T. Underhill and A. H. Hirs*
- GR15.** Rock and “roll” of friction in microstructural description of shear jamming in dense suspensions. *S. Sharma, A. Sharma and A. Singh*
- GR16.** Viscoelasticity. *M. T. Hossain, M. C. Marsh and R. H. Ewoldt*
- GR17.** Smear-ulites. *P. Roberts and A. P. Kotula*
- GR18.** Drop impact of viscoelastic liquids on powder beds. *S. Rajesh, T. Meiller and A. Sauret*
- GR19.** Stress-birefringent droplet spread. *O. D'Angelo, T. Voigtmann and M. Jalaal*

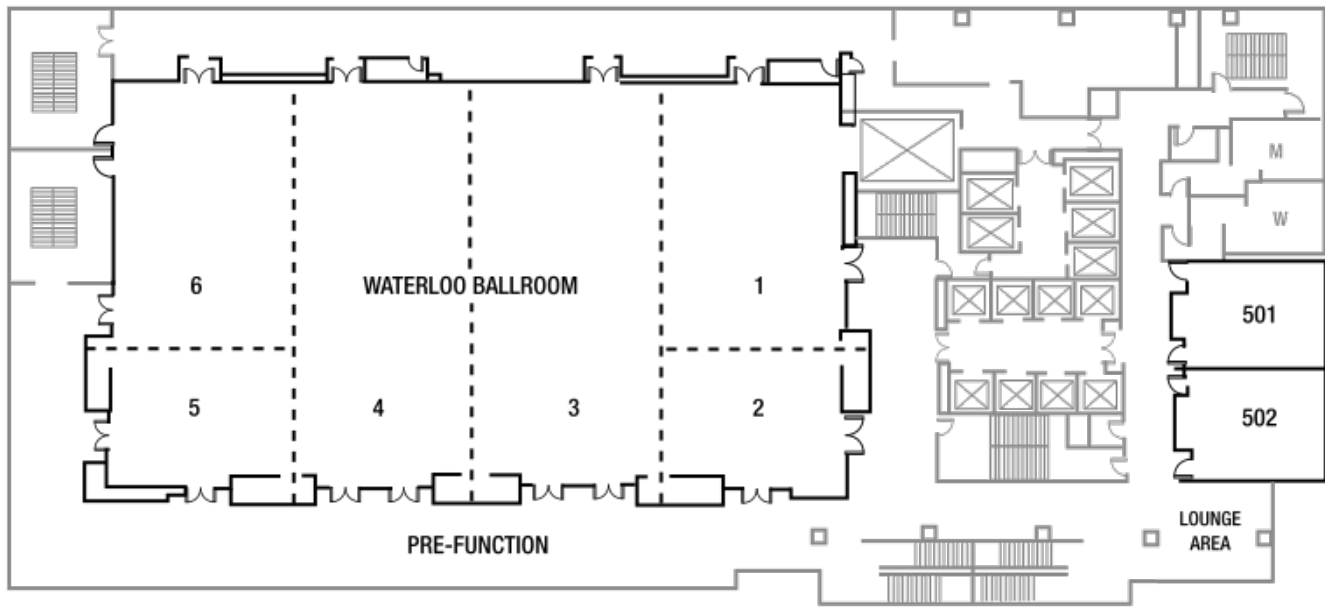
- GR20.** Salt hive emulsion. *E. P. Marín Castaño, L. Rodrigues da Costa Moraes, P. Ribeiro Vargas, P. R. de Souza Mendes and M. F. Naccache*
- GR21.** Thermally formed flowers: pFCDs in surfactant lamellae. *M. Kaboolian and K. A. Erk*
- GR22.** A window into start up of steady shear. *A. Bhadu, A. M. Rhoades and R. H. Colby*
- GR23.** Measuring viscoelastic properties of cancer cell spheroids using Capillary Micromechanics. *K. J. Bakal, M. Janssen, R. Kieltyka and H. M. Wyss*
- GR24.** Egg-sploring a critical gel using protorheology. *M. C. Marsh, M. T. Hossain and R. H. Ewoldt*

Austin Marriott Downtown Meeting Space



Austin Marriott Downtown Meeting Space

LEVEL 5



Social Program and Special Events

Sunday, October 13

Rheology Research Symposium (continued from Saturday, October 12)

Welcoming Reception

6:00 PM – 8:00 PM Waterloo 3 & 4

Student Trivia Night

7:30 PM – 9:30 PM Central District Brewing
Sponsored by American Institute of Physics

Monday, October 14

Exhibits

8:30 AM– 4:00 PM (through Wed) Waterloo 1 & 2

Space Applications Lunch, by invitation only

12:00 noon – 1:30 PM Rooms 604 & 605

Gallery of Rheology Preview

1:30 PM – Wed 4:00 PM Waterloo 1 & 2

Outing in Downtown ATX

6:30 PM – 9:00 PM Banger's Sausage House & Beer Garden
Reception sponsored by TA Instruments

Tuesday, October 15

Society Business Meeting

12:00 PM – 1:30 PM Waterloo 6

Awards Reception

7:00 PM – 8:00 PM Pre-function Area outside Waterloo 3 & 4

Awards Banquet

8:00 PM Waterloo 3 & 4

Wednesday, October 16

Poster Session and Reception

6:30 PM – 8:30 PM Waterloo 3 & 4
Reception sponsored by Anton-Paar USA

Gallery of Rheology Contest

6:30 PM – 8:30 PM Waterloo 3 & 4
Online voting 10 AM – 8 PM

The Society of Rheology gratefully acknowledges the generous support of Anton-Paar USA, TA Instruments, American Institute of Physics and the Cockrell School of Engineering, University of Texas at Austin.