

THE SOCIETY OF RHEOLOGY

97th Annual Meeting

Boston, Massachusetts

October 25–29, 2026



LOCAL COMMITTEE

Gareth McKinley
Safa Jamali
Sara Hashmi
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TECHNICAL CHAIRS

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Thermo Fisher Scientific (4)



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AMETEK Brookfield (6)

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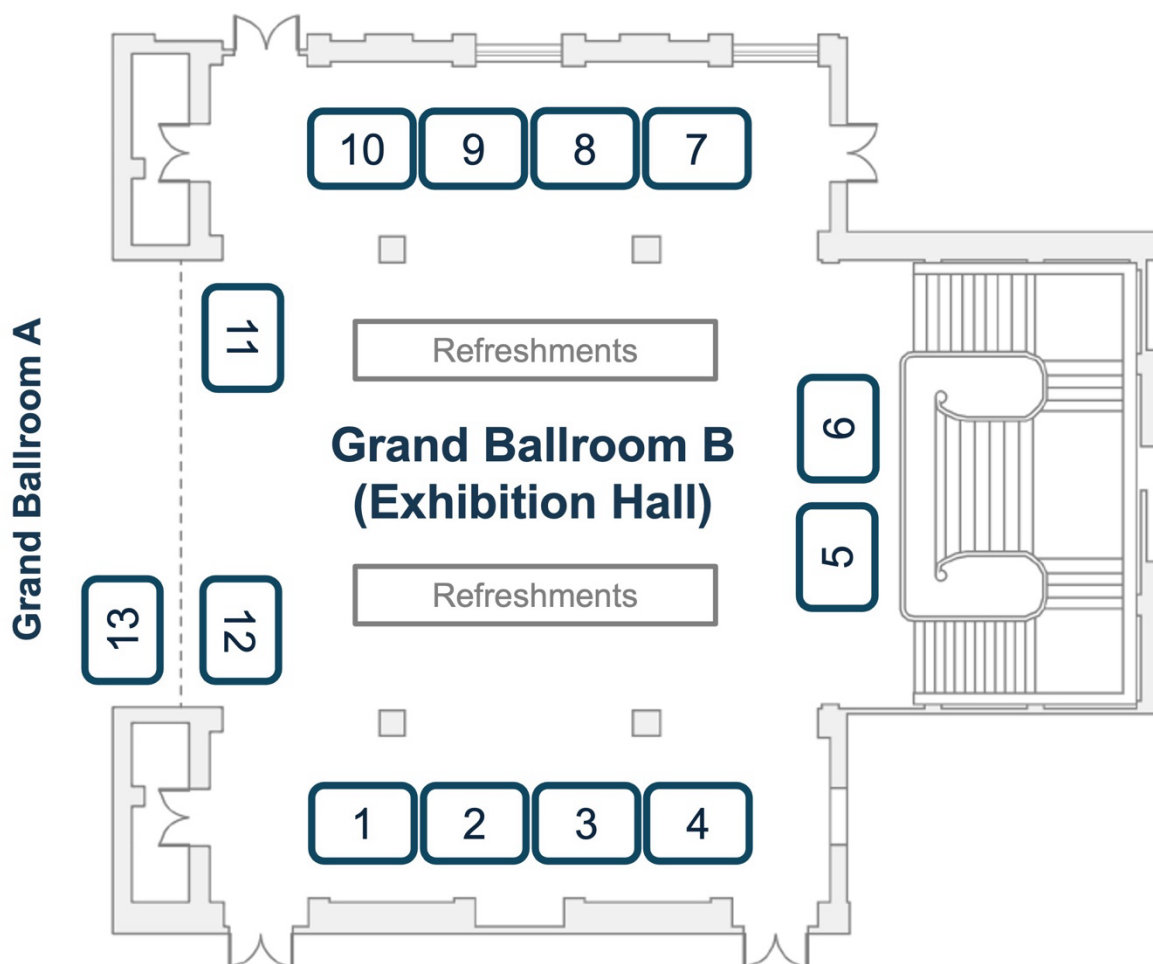
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The Society of Rheology 97th Annual Meeting

Hilton Boston Park Plaza, Boston, MA

Meeting Schedule

Monday, October 26								Tuesday, October 27							
	GBA	STA	ST1	ST2	LOF	PSC	CK		GBA	STA	ST1	ST2	LOF	PSC	CK
8:30	H. A. Stone (PL1) - GBA							8:30	R. Bonnecaze (PL2) - GBA						
9:20	Flows of Complex Fluids: Material Design, Pressure Drop, Dispersion, Biological Condensates							9:20	From Soft Particle Glasses to the Future of Suspension Rheology						
9:50	CS1	GN1	ML1	FI1	AM1	BL1	TR1	9:50	CS18	GN18	ML16	FI18	SM1	BL12	AR1
10:10	CS2	GN2	ML2	FI2	AM2	BL2	TR2	10:10	CS19	GN19	ML17	FI19	SM2	BL13	AR2
10:30	CS3	GN3	ML3	FI3	AM3	BL3	TR3	10:30	CS20	GN20	ML18	FI20	SM3	BL14	AR3
10:50	CS4	GN4	ML4	FI4	AM4	BL4	TR4	10:50	CS21	GN21	ML19	FI21	SM4	BL15	AR4
11:10	CS5	GN5	--	FI5	AM5	BL5	TR5	11:10	CS22	GN22	ML20	FI22	SM5	BL16	AR5
11:30	CS6	GN6	--	FI6	AM6	BL6	TR6	11:30	--	GN23	ML21	FI23	SM6	--	AR6
11:50	Lunch Break / Student-Industry Forum							11:50	Lunch Break / Society Business Meeting						
1:30	CS7	GN7	ML5	FI7	AM7	BL7	TM1	1:30	CS23	GN24	ML22	FI24	SM7	BL17	AR7
1:50	CS8	GN8	ML6	FI8	AM8	BL8	TM2	1:50	CS24	GN25	ML23	FI25	SM8	BL18	AR8
2:10	CS9	GN9	ML7	FI9	AM9	BL9	TM3	2:10	CS25	GN26	ML24	FI26	SM9	BL19	AR9
2:30	CS10	GN10	ML8	FI10	AM10	BL10	TM4	2:30	CS26	GN27	ML25	FI27	SM10	BL20	AR10
2:50	CS11	GN11	ML9	FI11	--	BL11	TM5	2:50	CS27	--	ML26	FI28	SM11	BL21	AR11
3:10	Coffee Break							3:10	Coffee Break						
3:45	CS12	GN12	ML10	FI12	AM11	RB1	TM6	3:45	--	SE1	IR1	FI29	SM12	BL22	AR12
4:05	CS13	GN13	ML11	FI13	AM12	RB2	TM7	4:05	--	SE2	IR2	FI30	SM13	BL23	AR13
4:25	CS14	GN14	ML12	FI14	AM13	RB3	TM8	4:25	--	SE3	IR3	FI31	SM14	BL24	AR14
4:45	CS15	GN15	ML13	FI15	AM14	RB4	TM9	4:45	--	SE4	IR4	FI32	SM15	BL25	AR15
5:05	CS16	GN16	ML14	FI16	AM15	RB5	TM10	5:05	--	SE5	IR5	FI33	SM16	BL26	AR16
5:25	CS17	GN17	ML15	FI17	AM16	RB6	TM11	5:25	--	SE6	IR6	--	--	BL27	AR17
5:45	End							5:45	End						
5:45	ASTM-SOR Joint Session (LOF), until 6:45							6:30	Awards Reception						
								7:30	Awards Banquet						
Wednesday, October 28								Thursday, October 29							
	GBA	STA	ST1	ST2	LOF	PSC	CK		GBA	STA	ST1	ST2	LOF	PSC	CK
8:30	R. Zia (PL3) - GBA							8:00	J. Richards (MP1) - GBA						
9:20	From Brownian Suspensions to Living Cells: A Next Frontier in Rheology in Biotechnology							8:40	Microscopic Origin of Electron Transport in Suspensions of Conducting Particles						
9:50	CS28	GN28	IR7	FR1	SM17	BL28	AR18	9:00	SR6	GN45	IR24	FI44	SM34	TM18	AR34
10:10	CS29	GN29	IR8	FR2	SM18	BL29	AR19	9:20	SR7	GN46	IR25	FI45	SM35	TM19	AR35
10:30	CS30	GN30	IR9	FR3	SM19	BL30	AR20	9:40	SR8	GN47	IR26	FI46	SM36	TM20	AR36
10:50	CS31	GN31	IR10	FR4	SM20	BL31	AR21	10:00	SR9	GN48	IR27	FI47	SM37	TM21	AR37
11:10	CS32	GN32	IR11	FR5	SM21	--	AR22	10:25	CS39	GN49	IR28	BL37	SM38	TM22	AR38
11:30	CS33	GN33	IR12	FR6	SM22	--	AR23	10:45	CS40	GN50	IR29	BL38	SM39	TM23	AR39
11:50	Lunch Break							11:05	CS41	GN51	IR30	BL39	SM40	TM24	AR40
1:30	SR1	GN34	IR13	FI34	SM23	BL32	AR24	11:25	--	GN52	IR31	BL40	SM41	TM25	AR41
1:50	SR2	GN35	IR14	FI35	SM24	BL33	AR25	11:45	--	--	--	BL41	SM42	TM26	AR42
2:10	SR3	GN36	IR15	FI36	SM25	BL34	AR26	12:05	End						
2:30	SR4	GN37	IR16	FI37	SM26	BL35	AR27								
2:50	SR5	GN38	IR17	--	SM27	BL36	--								
3:10	Coffee Break														
3:45	CS34	GN39	IR18	FI38	SM28	TM12	AR28								
4:05	CS35	GN40	IR19	FI39	SM29	TM13	AR29								
4:25	CS36	GN41	IR20	FI40	SM30	TM14	AR30								
4:45	CS37	GN42	IR21	FI41	SM31	TM15	AR31								
5:05	CS38	GN43	IR22	FI42	SM32	TM16	AR32								
5:25	--	GN44	IR23	FI43	SM33	TM17	AR33								
5:45	End														
6:30	Poster Session & Reception														

Session and Room Codes

AM = Additive and Advanced Manufacturing
AR = Applied Rheology for Industrial Applications
BL = Biomaterials, Bio-fluid Dynamics, and Biorheology
CS = Colloidal Suspensions and Granular Materials
FI = Flow-Induced Instabilities and Non-Newtonian Fluids
FR = Special Session: Future of Rheology (Mini Session)
GN = Self-Assemblies, Gels, and Networks
IR = Interfacial Rheology, Surfactants, Foams, and Emulsions

ML = AI and ML in Rheology
MP = Metzner Award Presentation
PL = Plenary Lectures (incl. Bingham Lecture)
RB = Special Session: Rheology in Biopharmaceuticals, Bioprinting, and Tissue Engineering
SE = Rheology and Sustainability for Energy and Production
SM = Polymer Solutions, Melts, and Blends
SR = Rheology of Field-Responsive Materials and Soft Robotics
TM = Techniques and Methods: Rheometry, Tribometry, Spectroscopy, and Microscopy
TR = Special Session: Tribo-rheology: Flow and Friction in Predicting Texture and Performance
PO = Poster Session
GI = Gallery of Rheology (Images)
GV = Gallery of Rheology (Videos)

GBA = Grand Ballroom A (Mezzanine, 2nd Floor)
STA = Statler (Mezzanine, 2nd Floor)
ST1 = Studio 1 (Lobby Level)
ST2 = Studio 2 (Lobby Level)
LOF = The Loft (Lobby Level)
PSC = Park/Scollay (Lobby Level)
CK = Copley/Kenmore (Lobby Level)

Posters: Georgian/Arlington/Berkeley/Clarendon (Mezzanine, 2nd Floor)

Shaded = Keynote

Monday, October 26

8:30

PL1. Flows of Complex Fluids: Material Design, Pressure Drop, Dispersion, Biological Condensates. [H. A. Stone](#) (Grand Ballroom A)

9:20

COFFEE BREAK

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-I)	Statler Self-Assemblies, Gels & Networks (GN-I)	Studio 1 AI and ML in Rheology (ML-I)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-I)	The Loft Additive and Advanced Manufacturing (AM-I)	Park/Scolley Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-I)	Copley/Kenmore Tribo-rheology
9:50	CS1. Wall bounded flow of dense frictional suspensions. O. Ayar , R. Pappalardo and A. Singh	GN1. Temperature-dependent self-assembly of nonionic surfactant on silica nanoparticles probed using neutron scattering. E. Robson , G. Rother and B. Bharti	ML1. Learning constitutive laws from partial flow measurements: From theory to computation to experiment. M. P. Brenner	FI1. Microscopic origins of reverse flow in shear-banding entangled polymeric liquids. M. Boudaghi , B. Khomami and B. Edwards	AM1. Which rheological properties best predict direct ink writing printability? R. G. Larson , C.-P. Chu , A. Shetty and O. Roy	BL1. Up, up, and away: Biogenic bubbles enable microbial escape from physical confinement. S. S. Datta , B. V. Hokmabad , T. Appleford , M. Ramaswamy , H. N. Luu and M. Jalaal	TR1. Lubricity of charged hydrogels. R. M. Espinosa-Marzal
10:10	CS2. Statistical and microstructural signatures of discontinuous shear thickening. B. Adu-Poku , M. Orsi , R. Pandare , B. Chakraborty , J. Morris , C. N. Lal , J. Jaquette , L. Cummings and L. Kondic	GN2. Rheology and structure during self-assembly of poloxamer solutions. R. Foudazi and S. M. Tabatabaei	ML2. Graph-based prediction of flow curves in soft particle glasses. R. Alrashdan and F. Khabaz	FI2. Shear banding and coarsening in blood rheology: An evolving power-law framework. L. Fusi , A. Farina and R. Tozzi	AM2. Rheology-guided design of 3D printing processes. E. Caron , L. F. Tassias , F. Gilbert and E. H. Marchesini	BL2. Extreme amplification of swimming speeds in helical-shaped motile bacteria under extreme confinement. P. Lele	TR2. Flow and friction in cosmetics: Tuning material properties for adsorption, adhesion, lubrication, and sensorial performance. G. S. Luengo
10:30	CS3. Identifying and characterizing self-organized particle networks in shear thickening suspensions. A. Bathina and E. Del Gado	GN3. Generalized form factor model for small angle scattering of block copolymer micelles. K. Rehmann and K. Weigandt	ML3. Graph-based multiscale modeling of speed-dependent particle rheology in stirred media mills. C. A. Ayuk and O. Ogunmodimu	FI3. A multi-fidelity framework for predicting strain-hardening in wormlike micellar solutions. S. Zolfaghari , S. Jamali , N. Lauriello and R. Pasquino	AM3. Predictive link between thixotropic rheology and filament spreading in colloidal suspensions. P. Garshasbi , A. A. Yancheshme and N. J. Alvarez	BL3. How microbes can leverage complex fluids. A. Mathijssen	TR3. Triborheology and tribochemistry of ionic liquids in lubrication. J. Ou
10:50	CS4. Connecting topology of force contact networks and rheology of dense suspensions. C. N. Lal , B. Adu-Poku , R. Pandare , M. Orsi , J. Morris , J. Jaquette , L. Cummings and L. Kondic	GN4. Modeling the viscoelasticity of polyelectrolyte complex (PEC) hydrogels. F. Albreiki , S. Srivastava , H. Tran and T. Divoux	ML4. Learning features of semiflexible chain deformation from rheo-scattering measurements. J. Lin , J. Zhang , A. Datta , A. Mangesh , M. Graham and M. Helgeson	FI4. Flow-induced reorganization and rheology of amphiphilic molecular assemblies: Insights from molecular dynamics simulations. R. Sureshkumar and M. Samie	AM4. Extensional rheology and die-swell mapping enable printability assessment in direct ink writing. J. Wu , M. Abdelgawad , M. Rosti and A. Shen	BL4. Bacterial sedimentation: Effects of activity? H. Nam	TR4. From flow to friction: Connecting rheology and tribology in soft matter systems. J. R. Stokes
11:10	CS5. Shear thickening in golfball particle suspensions. N. Windbacher and L. Isa	GN5. Metal-coordinated hydrogels with pH-responsive mechanical properties. S. Cotton		FI5. Entangled network dynamics in nematic liquid crystal poly(p-phenylene terephthalamide). E. Egli , J. Pretko , C. Seay and S. Lustig	AM5. Yield stress materials for functional, multi-scale additive manufacturing. E. Garcia-Tuñón	BL5. Growth gel stiffness and liquid-film thickness govern collective dynamics and spreading of bacterial swarms. E. Robson , M. Benton and B. Bharti	TR5. From structure to perception: Integrating rheology, tribology, and sensory science for next-generation food design. M. Martinez-Villagran
11:30	CS6. Intrinsic rheology and shear thickening of graphite anode slurries revealed by LF-DEM simulations. R. Seto , S. Makino , Y. Yamawaki , H. Nakano and H. Nakamura	GN6. Flow-induced assembly of micro-gels in microchannels. T. O. Obidara and S. Hashmi		FI6. Flow-induced structures in lyotropic chromonic liquid crystals. D. Jia , Z. Mou , R. Zhang and I. Bischofberger	AM6. Toward reliable rheological measurements of dense ceramic suspensions for additive manufacturing: Insights from a NIST interlaboratory study. R. Tao , R. Maier and S. Hales	BL6. Hydrodynamic trapping and dispersion of microswimmers in porous media. B. Chen and J. Brady	TR6. Linking microstructure, rheology, and tribology to sensory design in personal care formulations. T. Moaddel
11:50	LUNCH BREAK / STUDENT-INDUSTRY FORUM, 12:00-1:15 pm (Tremont & White Hill, ticket required)						

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-II)	Statler Self-Assemblies, Gels & Networks (GN-II)	Studio 1 AI and ML in Rheology (ML-II)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-II)	The Loft Additive and Advanced Manufacturing (AM-II)	Park/Scollay Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-II)	Copley/Kenmore Techniques and Methods (TM-I)
1:30	CS7. What is 'yielding'? Distinguishing between the onset of mechanical hysteresis and the onset of microscopic irreversibility. <u>C. Maloney</u> , <u>D. Vandembroucq</u> and <u>A. Elgailani</u>	GN7. Co-design of mechanics and flow in dynamic covalent networks. <u>A. S. Kuenstler</u>	ML5. A generic-informed neural network for thermodynamic structure-preserving constitutive modeling of viscoelastic fluids. <u>I. G. de Beristain</u> , <u>D. N. Simavilla</u> and <u>M. Ellero</u>	FI7. Fiber orientation in short-fiber suspensions with weakly viscoelastic fluids in internal flows with wall slip. <u>K. Housiadas</u> , <u>A. N. Beris</u> and <u>S. Advani</u>	AM7. Design and characterization of nanostructured 3D-printable epoxy inks for direct ink writing. <u>T. Khmiadashvili</u> , <u>D. Krogstad</u> and <u>Y.-M. Wang</u>	BL7. 'Both sides now': Simultaneously measuring and modeling biomolecular rheology using differential dynamic microscopy. <u>A. Shandilya</u> , <u>C. Gupit</u> , <u>J. M. Uruena</u> , <u>M. Valentine</u> and <u>M. E. Helgeson</u>	TM1. Full-field imaging of complex fluids in a cone-and-plate geometry on a separated-motor-transducer rheometer. <u>S. S. K. Ganugapati</u> , <u>L. Kroo</u> and <u>G. Herring</u>
1:50	CS8. Yielding of amorphous materials. <u>S. M. Fielding</u> , <u>A. Nicholas</u> and <u>S. Walker</u>	GN8. Local stresses and mechanophore activation in crosslinked rubbery networks under nonlinear chain extension. <u>J. Lies</u> , <u>X. Gatica</u> and <u>L. Walker</u>	ML6. Learning the stress tensor from velocimetry and microstructure measurements in a flowing complex fluid. <u>A. Mangesh</u> and <u>M. D. Graham</u>	FI8. Geometry-induced disturbances and elasticity-particle coupling in wavy-channel suspension flow. <u>M. Mahmoudian</u> , <u>A. Kuzdas</u> and <u>P. Mirbod</u>	AM8. Modeling direct ink write for sinusoidal patterns of filled silicones. <u>R. R. Rao</u> , <u>A. Kucala</u> , <u>M. Golobic</u> and <u>T. Weisgraber</u>	BL8. Linking viscosity to protein-protein interactions in mAb solutions using small-volume microcapillary rheometry and adhesive sphere modeling. <u>P. F. Salipante</u> , <u>S. Hudson</u> and <u>V. Prabh</u>	TM2. Rheo-IRIS: Full-field rheo-polarized imaging of complex fluids. <u>A. M. Shetty</u> , <u>M. Araida</u> , <u>T. Sato</u> and <u>J. Laeuger</u>
2:10	CS9. Unified yielding framework for soft particulate systems under steady shear. <u>S. Pradeep</u> , <u>P. E. Arratia</u> and <u>D. Jerolmack</u>	GN9. Tuning bond exchange rate to control long-time mobility and creep in vitrimer-like networks. <u>A. Mamat</u> , <u>R. Alrashdan</u> , <u>M. Cloitre</u> and <u>F. Khabaz</u>	ML7. Combining computational topology and machine learning to predict the permeability of porous media. <u>L. Kondic</u> , <u>C. Lalu</u> , <u>E. Dagdelen</u> , <u>A. Karlekar</u> , <u>M. Arora</u> , <u>M. Illingworth</u> , <u>J. Jaquette</u> and <u>L. Cummings</u>	FI9. Connecting discrete and continuum descriptions of suspension flow around an obstacle. <u>A. Rahmani</u> , <u>B. Chen</u> , <u>T. Zhou</u> , <u>J. Brady</u> and <u>J. Morris</u>	AM9. Linking rheology to printability in extrusion-based additive manufacturing of wood-reinforced earthen materials. <u>B. Gyawali</u>	BL9. Comparative rheology of biological fluids: From viscoelastic behavior to clinical applications. <u>S. Guido</u> and <u>G. Tomaiuolo</u>	TM3. Neutron interferometric microscopy of small forces and heterogeneous structures. <u>K. Weigandt</u> , <u>D. Hussey</u> , <u>R. Murphy</u> , <u>P. Kienzle</u> , <u>N. Klimov</u> , <u>P. Bajcsy</u> , <u>C. Wolf</u> , <u>Y. Kim</u> , <u>M. C. Daugherty</u> , <u>S. Robinson</u> , <u>P. Sathe</u> , <u>D. Jacobson</u> , <u>J. LaManna</u> and <u>H. King</u>
2:30	CS10. Bidisperse colloidal gel rheology and microstructure analyzed through topological data analysis. <u>C. L. Weeks</u> , <u>R. Waheibi</u> and <u>L. Hsiao</u>	GN10. Molecular architecture of block copolymers for improved rheo-mechanical properties of vitrimers. <u>F. Asempour</u> and <u>M. Maric</u>	ML8. Using quantum computing to represent material microstructure in flow. <u>G. Shukla</u> and <u>P. T. Underhill</u>	FI10. Linearized instability of Couette flows in discontinuous shear-thickening fluids. <u>K. K. Yanamundra</u> and <u>L. Fusi</u>	AM10. 3D-printing of elasto-visco-plastic food pastes: Predicting the extrusion properties. <u>P. D. Anderson</u> , <u>Y. Bugday</u> , <u>M. Spanjaards</u> , <u>A. Aliche</u> and <u>R. van der Sman</u>	BL10. Rheology of biological liquids using advanced analytical approach. <u>F. Bauer</u> , <u>E. Bradt</u> , <u>T.-C. Bauer</u> , <u>S. Hild</u> , <u>A. Gruber</u> , <u>T. Rossmann</u> , <u>F. Ruiz-Navarro</u> , <u>J. Oberndorfer</u> , <u>H. Stefanits</u> , <u>A. Niedermayer</u> , <u>T. Voglhuber-Brunnmaier</u> , <u>H. H. Winter</u> and <u>M. Kracalik</u>	TM4. Correlation of dynamic scaffold rheology with molecular release during material degradation. <u>N. Wu</u> and <u>K. M. Schultz</u>
2:50	CS11. Particle-size-dependent yielding and thixotropic evolution in Laponite-based non-colloidal suspensions. <u>L. H. Quittan A</u> , <u>R. Schimicoscki</u> , <u>D. V. Andrade</u> and <u>A. Franco</u>	GN11. Role of catalyst mobility on the linear viscoelasticity of associative dynamic covalent networks. <u>S. Kannapadi</u> , <u>R. Ghanta</u> , <u>J. Rivera-Otero</u> , <u>A. Cook</u> , <u>E. Granzeier</u> , <u>F. Scanu</u> , <u>J. Griebler</u> , <u>S. Rogers</u> and <u>A. Kuenstler</u>	ML9. RheoCNN: Predicting rheology through the microstructure. <u>S. M. Hosseini</u> and <u>J. S. Park</u>	FI11. Emergent yielding from structural load transfer in disordered soft solids. <u>L. Kumar</u>		BL11. Rheology and dynamics of marine biofouling organisms. <u>A. H. Walker</u> and <u>D. Blair</u>	TM5. Rheo-Raman spectroscopy for thermoset characterization to gelation and beyond. <u>A. Kotula</u>
3:10	COFFEE BREAK						

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-III)	Statler Self-Assemblies, Gels & Networks (GN-III)	Studio 1 AI and ML in Rheology (ML-III)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-III)	The Loft Additive and Advanced Manufacturing (AM-III)	Park/Scolley Rheology in Biopharmaceuticals, Bioprinting, & Tissue Engineering	Copley/Kenmore Techniques and Methods (TM-II)
3:45	CS12. Playing with polydispersity. <u>R. Crothers</u> , <u>M. Reijneveld</u> , <u>R. Dullens</u> and <u>D. Blair</u>	GN12. Connecting viscoelastic response and structure in colloidal protein-galactomannan gels via rheology and ultra-small angle neutron scattering (USANS). <u>J. J. Griebler</u> , <u>N. Smith</u> , <u>G. Rother</u> , <u>S. Mohammadkhah</u> , <u>S. Khan</u> , <u>K. Weigandt</u> and <u>R. Corder</u>	ML10. Neural network informed design (NNID) for emulsion systems. <u>B. Valipourgoorazi</u> and <u>R. Foudazi</u>	FI12. Numerical simulation of thixo-viscoelastoplastic fluids considering Bautista-Manero-Puig model-variants with plastic features under apparent and true yield-stress approaches. <u>J. E. Lopez-Aguilar</u> , <u>M. Figueroa-Landeta</u> and <u>O. Manero</u>	AM11. In-situ rheology measurements of UV photocuring using x-ray photon correlation spectroscopy for vat photopolymerization additive manufacturing. <u>D. Rau</u> , <u>L. Wiegart</u> , <u>E. Oduro</u> , <u>B. Huang</u> and <u>L.-H. Cai</u>	RB1. Directed self-assembly of nanostructured polymers through 3D printing. <u>E. Davidson</u>	TM6. Nonlinear rheology of glassy polymers using LAOS and mechanical spectral hole burning. <u>R. Gilman</u> and <u>G. McKenna</u>
4:05	CS13. The mechanics of colloidal contacts. <u>M. A. Pittell</u> and <u>E. Furst</u>	GN13. Controlled enzymatic hydrolysis of guar gum for functional substitution of locust bean gum in complex gel systems. <u>S. Mohammadkhah</u> , <u>A. Eissa</u> , <u>N. West</u> and <u>S. Khan</u>	ML11. Physics-informed neural network modelling of nonlinear & non-periodic stress profiles generated by humans pressing soft stuff. <u>B. Bongcaron</u> , <u>D. Mangal</u> , <u>S. Jamali</u> , <u>M. Jogan</u> and <u>J. Martin</u>	FI13. Drag and yielding of rotating bodies in simple yield-stress fluids. <u>H. Mohammadigoushki</u> , <u>F. Nazari</u> and <u>K. Shoele</u>	AM12. Optorheological insights on composition-process-property relationships of digital light processing of ceramics. <u>S. O. Gundogdu</u> and <u>A. Gozen</u>	RB2. Engineering living displays using pigment producing microbes. <u>L. Deravi</u>	TM7. Transient capillary rheometry of molten polymers with processing aids. <u>X. Jia</u> and <u>S. G. Hatzikiriakos</u>
4:25	CS14. Reconfigurable colloids for fluid flow modulation. <u>J. A. Diaz Amaya</u> and <u>L. G. Tirado</u>	GN14. Nonlinear rheology of self-assembled food gels for mimicking animal fat and protein structures. <u>Y. Wang</u> , <u>C. C.-Y. Yiu</u> and <u>C. Selomulya</u>	ML12. Generative models for viscoelastic flows through joint sparse observations and PDE constraints. <u>D. Dabiri</u> and <u>S. Jamali</u>	FI14. Starting up a viscoplastic fluid below the yield stress in long pipelines. <u>C. Negroao</u>	AM13. Engineering interfacial microstructure in additively-manufactured gradient colloidal gels. <u>A. J. Kaltashov</u> and <u>S. Jamali</u>	RB3. Modeling leukocyte and endothelium deformations during inflammation. <u>S. Yang</u> and <u>Q. M. Qi</u>	TM8. High-speed transient data for advanced rheological testing. <u>P. Nacke</u> , <u>J. Haeberle</u> and <u>J. Laeuger</u>
4:45	CS15. A discrete element model for collision of wet granular materials. <u>R. Chattopadhyay</u> and <u>R. Davis</u>	GN15. Thermally induced structural evolution in plant-based oleogels. <u>K. Suman</u> and <u>P. Acharya</u>	ML13. Identifying tensorial constitutive laws from one-dimensional time series data using automatic differentiation. <u>J. V. Roggeveen</u> , <u>A. Sunol</u> and <u>M. Brenner</u>	FI15. Not all recoverable strain is elastic. <u>J. Lee</u> and <u>S. Rogers</u>	AM14. Vibration-assisted direct powder writing (DPW) for multi-powder additive manufacturing. <u>G. Bertola</u> , <u>S. Tricarico</u> , <u>C. Maiorana</u> , <u>A. Shetty</u> and <u>A. Ma</u>	RB4. Scalable and reproducible 3D bioprinting of multicellular tissues. <u>R. Raman</u>	TM9. A novel method for time-resolved rheology of molding elastomers during gelation. <u>R. Placino</u> and <u>B. Keshavarz</u>
5:05	CS16. Memory formation in 2D granular packings of magnetic dipoles. <u>N. Pashine</u> , <u>A. Verma</u> and <u>J. Schwarz</u>	GN16. Magnetic hyperthermia in oleogels: Isolating structural contributions to heating. <u>B. Robbiani</u> , <u>L. Ea</u> , <u>C. Tougne</u> , <u>L.-M. Lacroix</u> and <u>G. Baeza</u>	ML14. Differentiable physics as a platform for constitutive discovery, control, and design of complex fluid systems. <u>A. M. Sunol</u> , <u>J. Roggeveen</u> and <u>M. Brenner</u>	FI16. Shooting the sheet: High-speed imaging of instabilities in expanding Carbopol sheets as a novel method of probing material mesostructure. <u>C. Galvin</u> , <u>B. Blackwell</u> , <u>S. Nielsen</u> and <u>M. Driscoll</u>	AM15. From rheology to voxels: Discrete 3D printing of acoustic metamaterials. <u>A. Gasmir</u> , <u>N. Aguerbi</u> , <u>G. Ovarlez</u> , <u>C. Barentin</u> and <u>J. Leng</u>	RB5. From marine slime to critical minerals. <u>S. Yang</u>	TM10. Evaluation of fiber-fiber interactions in fiber suspensions using shear reversal testing. <u>T. Takahashi</u> and <u>K. Maeda</u>
5:25	CS17. Fabrication of ordered particle monolayers via kinetic selection in field-assisted thickening coatings. <u>S. Lee</u> , <u>K. Ahn</u> and <u>J. Nam</u>	GN17. Translating biofabrication principles to synthetic nanocomposites via ion specific interactions. <u>A. Saul</u>	ML15. A fractional rheology-informed neural network for linking extrusion conditions to the viscoelastic behavior, texture, and fiber formation of plant-protein meat analogs. <u>K. Verma</u> , <u>H. Shetty</u> , <u>B. Patel</u> , <u>M. Kumar</u> and <u>O. Campanella</u>	FI17. Flow of a yield stress fluid over a rotating disc. <u>J. Krishna Udiyappan</u> and <u>M. V. Majji</u>	AM16. Characterizing ionic conductivity and network formation in a photopolymer system using a custom photorheology/dielectric spectroscopy/Raman spectroscopy setup. <u>S. Johnson</u> , <u>T. Wallin</u> and <u>S. Natarajan</u>	RB6. Haptic perception of squishy stuff: Behavior & discrimination. <u>J. Martin</u> , <u>M. Jogan</u> , <u>E. Burgeson</u> and <u>S. Rogers</u>	TM11. OTRR: Orthogonal transient recovery rheology. <u>J. L. Waeterloos</u> and <u>C. Clasen</u>
5:45	END						
5:45	ASTM-SOR JOINT SESSION (Avenue 34 – The Loft, until 6:45 pm)						

Tuesday, October 27

8:30

PL2. From Soft Particle Glasses to the Future of Suspension Rheology. R. Bonnecaze (Bingham Lecture) (Grand Ballroom A)

9:20

COFFEE BREAK

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-IV)	Statler Self-Assemblies, Gels & Networks (GN-IV)	Studio 1 AI and ML in Rheology (ML-IV)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-IV)	The Loft Polymer Solutions, Melts & Blends (SM-I)	Park/Scolloy Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-III)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-I)
9:50	CS18. From single particle rotations to frictional nematodynamics. <u>P. D. Olmsted</u> and <u>C. Quinones</u>	GN18. Modeling the recovery rheology of polymers during network formation. <u>B. Chiu</u> and <u>C. E. Sing</u>	ML16. Algorithmic alloys for modeling and control in fluid mechanics. <u>P. Koumoutsakos</u>	FI18. The exact analytical solution of the Oldroyd-B model for steady viscoelastic flows in contractions. <u>K. D. Housiadas</u>	SM1. Distributed coil-stretch transition and extensional rheology in entangled polydisperse polyethylene melts. <u>E. Tourani</u> , <u>M. H. N. Sefiddashti</u> , <u>B. J. Edwards</u> and <u>B. Khomami</u>	BL12. Oldroyd-B fluid model in the presence of no-slip boundaries. <u>T. Fai</u>	AR1. TORCh: Thermally optimized ramped chirp for efficient generation of rheological master curves. <u>D. C. Vaddilo</u> , <u>A. Perego</u> , <u>K. Whitcomb</u> , <u>R. Behling</u> , <u>A. Gill</u> , <u>M. Das</u> and <u>G.H. McKinley</u>
10:10	CS19. Hysteresis of frictional contacts in dense granular flows. <u>D. Stumpf</u> , <u>K. Henry</u> , <u>C. Wassgren</u> and <u>P. Mort</u>	GN19. MAOS signatures of a gelling polymeric system for topological inference. <u>M. C. Marsh</u> and <u>R.H. Ewoldt</u>	ML17. Stable and interpretable multi-mode rheological universal differential equations (RUDEs) for data-driven constitutive modeling. <u>M. I. Das</u> , <u>N. King</u> , <u>A. Perego</u> , <u>D. Vaddilo</u> and <u>G.H. McKinley</u>	FI19. Effect of inertia and wall slip on the pressure drop for viscoelastic flows in linear and hyperbolic contractions. <u>K. Housiadas</u> , <u>S. Gkormpatsis</u> and <u>A. Beris</u>	SM2. Modeling the impact of salt and solvation on the nonlinear rheology of polyelectrolyte coacervate adhesives. <u>B. Xu</u> , <u>A. Plucksacholatarn</u> and <u>T. C. O' Connor</u>	BL13. From bioreactor to bulk rheology: Unique properties of topology defined DNA materials and solutions. <u>N. Oldenhuis</u>	AR2. Automated, high-throughput characterization of hydrogel and polymeric biomaterial performance: Swelling, degradation, absorbency, and vapor transmission under controlled physiological environments. <u>S. Golhan</u>
10:30	CS20. Fractured flows: Bursting bubbles in dense suspensions. <u>X. Zhang</u> , <u>J. Elkhoury</u> , <u>I. Peters</u> and <u>I. Bischofberger</u>	GN20. Evolution of linear viscoelasticity across the critical gelation transition: Unification of symmetry and hyperscaling. <u>Y. M. Joshi</u>	ML18. From prediction to inverse design: A machine learning framework for rheological behavior of electrode slurries. <u>E. Jeong</u> , <u>J. D. Park</u> and <u>J. Nam</u>	FI20. Dueling rheology in a cross-slot flow instability. <u>M. Teimouri</u> , <u>L. Thorens</u> , <u>M. Majidi</u> , <u>J. Guasto</u> and <u>A. Ardekani</u>	SM3. A new approach to measuring both the steady flow curve and the planar extensional viscosity of complex fluids using exponential shear. <u>N. King</u> , <u>E. Pashkovski</u> , <u>R. Patterson</u> and <u>G.H. McKinley</u>	BL14. Tuning active cytoskeletal mechanics via programmable hydrogel inclusions and size-dependent sorting. <u>R. Robertson-Anderson</u> , <u>A. Razzaghi</u> , <u>M. Valentine</u> and <u>Q. Chen</u>	AR3. Texture design via composite microstructure. <u>M. Caggioni</u> , <u>J. Hipp</u> and <u>E. Martin</u>
10:50	CS21. Acoustic modulation of shear thickening transition in dense adhesive suspensions. <u>A. Wang</u> , <u>F. Toussaint</u> , <u>T. Gibaud</u>	GN21. Life-like condensate networks formed by liquid crystal filament. <u>C. Browne</u> , <u>P. Severino</u> , <u>Y. Zagzag</u> , <u>J. Cloutier</u> , <u>A. Boyd</u> , <u>Y. Chen</u> , <u>A. Yodh</u> and <u>C. Osuji</u>	ML19. Didymus-rho: A Python library for rheology-informed data-driven constitutive modeling of complex fluids. <u>A. Perego</u> , <u>D. Vaddilo</u> , <u>M. Schön</u> , <u>M. Das</u> , <u>G.H. McKinley</u> and <u>L. Myers</u>	FI21. Assessing blood viscoelasticity in cross-slot microchannels. <u>J. Van Hulle</u> and <u>C. Wagner</u>	SM4. MAOS signatures in stochastic polymer network theory models. <u>C. W. Mischel</u> and <u>L. Wedgewood</u>	BL15. Engineering photo-responsive mechanics of DNA-PEG composites via architectural design. <u>A. McGovern</u> , <u>G. Ramirez</u> , <u>S. Hughes</u> , <u>N. Oldenhuis</u> and <u>R. Robertson-Anderson</u>	AR4. A rheological mind: Problem solving & product development. <u>S. Reynaud</u>
11:10	CS22. A bounded window of reversibility in dense suspensions: Frequency-dependent thresholds and the role of suspending-fluid polarity. <u>M. Minale</u> , <u>S. Moliterno</u> , <u>C. Carotenuto</u> and <u>R. Griffio</u>	GN22. Temporal evolution of linear and nonlinear properties in curing and gelling systems. <u>B. Keshavarz</u>	ML20. Inferring shear-rate dependent Ψ_1 and Ψ_2 from full-profile rod-climbing. <u>R. Tiwari</u> , <u>M. T. Hossain</u> and <u>R.H. Ewoldt</u>	FI22. Development of data-assisted rheological constitutive modeling method using a sparse identification algorithm: A case study for extensional flows. <u>T. Sato</u> , <u>S. Miyamoto</u> and <u>S. Kato</u>	SM5. Structure-rheology interplay in well-defined vitrimers: Coupling dynamic exchange and mechanical reinforcement. <u>A. Russo</u> , <u>S. Bhaumik</u> , <u>K. Nietsikas</u> , <u>N. Patelis</u> , <u>N. Hadjichristidis</u> , <u>E. Nativ-Roth</u> , <u>M. Gottlieb</u> , <u>B. Loppinet</u> , <u>E. Van Ruymbeke</u> and <u>D. Vlassopoulos</u>	BL16. Scaling laws and dynamics in ultralow-concentration branched polysaccharide hydrogels. <u>J. F. Vega</u> , <u>V. Souza-Egipsy</u> , <u>J. Marchante</u> , <u>J. Ramos</u> , <u>M. Rodriguez-Carvajal</u> , <u>A. Flores</u> , <u>J. Sanjuan</u> and <u>D. Pérez-Mendoza</u>	AR5. Organizing the complexity of rheology. <u>C. W. Macosko</u> , <u>R.H. Ewoldt</u> and <u>G.H. McKinley</u>

11:30

GN23. Linear and nonlinear rheological insights into junction flexibility of covalently bonded CNT/graphene hybrids in polystyrene. *M. H. Moghadam, F. Goharpey and M. Babaei*

ML21. An LLM toolchain for rheology research. *E. M. Furst*

FI23. Influence of viscoelastic layer ordering on the stability and thickness redistribution of coextruded blown film. *Y. Dimakopoulos, P. Moschopoulos, P. Zakeri, M. Pavlidis and J. Tsamopoulos*

SM6. Influence of ineffective network strands and dangling ends on the viscoelastic response of vitrimers. *E. Van Ruymbeke, A. Q. Sedano and H. Wang*

AR6. In-line viscosity estimation using standard process measurements and the Schumer approximation. *E. A. Martin and E. Tozzi*

11:50

LUNCH BREAK / SOCIETY BUSINESS MEETING, 12:00-1:15 pm (Grand Ballroom A)

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-V)	Statler Self-Assemblies, Gels & Networks (GN-V)	Studio 1 AI and ML in Rheology (ML-V)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-V)	The Loft Polymer Solutions, Melts & Blends (SM-II)	Park/Scolley Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-IV)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-II)
1:30	CS23. Crystal-glass transition: Effect of attractive interactions. <i>J. S. Park and S. M. Hosseini</i>	GN24. Gel architecture controls dissipation in fibrous double networks. <i>R. Tchuenkam, M. Mugnai and E. Del Gado</i>	ML22. From raw data to AI-driven insights: An open-source workflow for automated rheological model selection & analysis. <i>E. A. Martin and M. Caggioni</i>	FI24. Coating of shear-thinning and shear-thickening liquids on rotating cylinders. <i>P. Gupta, J. Chamlongrath and S. Kumar</i>	SM7. A multiscale model of flow and crystallization of linear low-density polyethylene in extrusion-based 3D printing. <i>N. Kolezakis, G. Rutledge, G. Mitchell, J. Matias, P. Martinho and P. Pascoal-Faria</i>	BL17. Shape-dependent transport and implantation of elongated particles in biolistic ocular delivery. <i>F. Müller, D. Ko, S. Verma and J. Kornfield</i>	AR7. Role of polyvinylpyrrolidone in high-solid-content LiMnxFe1-xPO4 electrode slurries. <i>C. Hyun, S. Lee, W. Jo and J. Nam</i>
1:50	CS24. Controlling physical aging in suspensions using liquid crystal elastomer microparticles. <i>C. Martinez Narvaez, C. Chen, S. Rowan and J. de Pablo</i>	GN25. A poroviscoelastic framework with evolving network structure to predict creep and delayed collapse of colloidal gels under gravity. <i>A. Ojoawo and R. Bonnecaze</i>	ML23. Pretrained transformers for complex flow modeling. <i>M. Saberi and S. Jamali</i>	FI25. Coupling of elastic and viscoelastic relaxation in oscillatory flows of viscoelastic fluids in deformable channels. <i>S. Pande and J. C. Christov</i>	SM8. Extensional strain-hardening induced by π-π interactions and ionic bonds in Poly(4-vinylbiphenyl) ionomers. <i>C. Piñón-Balderrama and C. R. López-Barrón</i>	BL18. Predicting the storage modulus of starch suspensions during swelling. <i>Y. Zhao, V. Narsimhan and G. Narsimhan</i>	AR8. Rheological signatures of CMC-mediated interactions in graphite anode slurries. <i>R. Seto, S. Makino, Y. Yamawaki, H. Nakano and H. Nakamura</i>
2:10	CS25. Rheological reinforcement by rigid subnetworks in soft particle glasses. <i>R. Alrashdan, M. Cloitre and F. Khabaz</i>	GN26. Particle dynamics simulations predict gel network damage under sonication. <i>S. Sudhaman and R. Bonnecaze</i>	ML24. Multi-marginal flow matching for sparse-snapshot reconstruction of rheological flow dynamics. <i>S. Zolfaghari and S. Jamali</i>	FI26. 2D flow instabilities in large amplitude oscillatory shear flows. <i>J. D. Peterson, C. V. Marmolejo, O. Alessandro and C. Drucker</i>	SM9. When flow creates order: Role of the energy conversion factor in flow birefringence, Raman spectroscopy and crystallization kinetics of HDPE. <i>A. Bhadu, E. Moffett, S. Xu, A. Rhoades and R. Colby</i>	BL19. Active glassy rheology in plant cells. <i>M. Jalaal</i>	AR9. Path-independent flow characterization of model yielding pastes. <i>G. Donley, N. Martys, E. Del Gado and K. A. Snyder</i>
2:30	CS26. Cage dynamics and larger-scale heterogeneities in yielding soft glasses. <i>S. Aime, C. Marraffa, E. Cavalletti, M. Gunny, P. Edera and M. Cloitre</i>	GN27. Evaporation-driven arrested network self-assembly in liquid-liquid-phase-separating polymeric fluids. <i>Z. Peng, P. Cole and L. Kroo</i>	ML25. Reduced-order framework of viscoelastic flows: An intrusive modeling for Oldroyd-B fluids. <i>H. Tran, W. Zou and P. N. Nguyen</i>	FI27. Confinement-induced departures from classical hole-pressure predictions in viscoelastic flows. <i>H. Thakkar, N. Hu, D. Fraggedakis, E. Davidson and H. Stone</i>	SM10. Thermo-rheological behavior in biopolymer blends: From phase evolution to structure-property relationships. <i>S. A. Nadkarni and S. Khan</i>	BL20. Rheology of ribogenesis: Coupled diffusion, folding, and complexation in crowded intracellular environment. <i>H. S. Sachar, V. Sivasankar, J. Wang and R. Zia</i>	AR10. Rheological evaluation and manufacturing pathway development for indigenous mineral-based construction materials. <i>K. Donovan</i>
2:50	CS27. Strain-induced discontinuous shear thickening and jamming in dense particulate suspensions. <i>A. Jain and P. Nott</i>		ML26. Event-aligned simulation analysis of temperature-dependent pre-nucleation dynamics in polymer melts. <i>E. Tourani, B. Edwards and B. Khomami</i>	FI28. Instabilities in the transition to clogging in gelling microflows. <i>T. O. Obidara and S. M. Hashmi</i>	SM11. Beyond flow-induced crystallization: Suppression mechanisms in immiscible polymer blends. <i>N. Deneke and K. Migler</i>	BL21. Cytoplasmic crowding and nucleoid structure set RNA polymerase allocation in Escherichia coli. <i>V. S. Sivasankar, G. Roure and R. Zia</i>	AR11. How tribology testing can help to solve rheology problems. <i>R. Jones</i>
3:10	COFFEE BREAK						

	Statler Rheology & Sustainability for Energy & Production (SE)	Studio 1 Interfacial Rheology, Surfactants, Foams & Emulsions (IR-I)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-VI)	The Loft Polymer Solutions, Melts & Blends (SM-III)	Park/Scolay Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-V)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-III)
3:45	SE1. Electrocatalyst ink design challenges in manufacturing scaling-up of fuel cells and electrolyzers. <u>S. Khandavalli</u> , J. Park, D. Soetrisno, M. Bassinger, S. Berlinger, H. Winter, D. Myers, M. Ulsh and S. Mauger	IR1. Overcoming microfluidic device fouling for scalable lipid nanoparticle manufacturing. G. Kim, Y.-H. Hwang, D. Issadore and <u>D. Lee</u>	FI29. Transient sedimentation of two coaxial charged spheres in viscoelastic electrolyte solutions: Coupled electrokinetic and hydrodynamic interactions. E. Kouni, P. Zakeri, Y. Dimakopoulos, P. Moschopoulos and <u>J. Tsamopoulos</u>	SM12. Combining strategies to measure atmosphere sensitive polymer melts with rheology. <u>K. J. Whitcomb</u> and M. Coletti	BL22. Lipid membrane viscosities from molecular simulations via time-correlation formulas. <u>Z.-X. Xu</u> and A. Sahu	AR12. Rheological analysis of purge materials for polymer processing. <u>A. R. Colon</u>
4:05	SE2. Rheology of silicon-carbon nanotube-based slurries for lithium-ion battery composite anodes. <u>K. Wu</u> , R. Gupta, Y. Lu, M. Pasquali and S. Biswal	IR2. Interfacial microrheology and mass transfer coupling in microgel-laden fluid-fluid interfaces. <u>G. Natale</u> , S. Sadeghi, P. Lettinga and A. Scotti	FI30. Wake flow instabilities in liquid crystals. <u>L. Molefe</u> , D. Jia and I. Bischofberger	SM13. Implications of self-similarity for polymer melts and solutions. <u>H. H. Winter</u>	BL23. Dynamics of multicomponent vesicles in shear flow. <u>V. Narsimhan</u> , A. Venkatesh, E. Li and C. Schroeder	AR13. Thermal memory and microstructural evolution in model waxy oils: Unveiling the role of dissolution temperature on the gel strength. <u>D. E. V. Andrade</u> , M. Cunha and E. Soares
4:25	SE3. Impact of polymer binder on the flow behavior of cathode slurry formulations. <u>F. Gandhi</u> , L. Chen, B. Cromer, L. Hough, S. Reynaud and J. Richards	IR3. Structure-coupled interfacial rheology of DPPC on curved interfaces. <u>Z. He</u> , S. Iasella and J. Zasadzinski	FI31. Enhanced resistance of viscoelastic flow through microfluidic post arrays. <u>S. J. Haward</u> and A. Shen	SM14. Non-linear effects in (polymer) rheology: A recoverable-strain perspective. <u>T. Tervoort</u> , A. Winters and J. Vermant	BL24. Bioinspired surfactant wake interaction dynamics of multiple active Marangoni surfers. <u>J. B. Joseph</u> and J. Rothstein	AR14. Characterization of steady-state and transient rheology of SBMs under extreme conditions for deepwater applications. <u>S. Yanik</u> , I. Gucuyener and E. Özbayoglu
4:45	SE4. Rheology-guided design of adaptive nanonetworks for silicon anodes. <u>A. Q. Shen</u> , Y. Ju, M. Abdelgawad and D. Lee	IR4. Retraction dynamics of viscous liquid sheets in the presence of surface rheological effects. <u>A. H. Kumar</u> , N. Dhanwani, H. Wee and O. Basaran	FI32. Flow driven polymer scission in porous media. <u>C. Singiser</u> and S. Datta	SM15. Direct observation of dynamic heterogeneity and tumbling of entangled polymers in shear flow. <u>C. M. Schroeder</u> , H. Nguyen, J. Shi and S. Rogers	BL25. Studying complex biofluids: The viscoelastic behaviour of the human tear film. <u>A. Cardil</u> , M. Fernandez, I. Calafel, A. P. Sarriegui, A. Acera and J. F. Vega	AR15. Buoyancy-driven displacement flows of viscoplastic and Newtonian fluids during well abandonment. <u>P. R. Varges</u> , V. Picoli, D. Fonseca, M. Campos, J. P. Nagoya, M. Naccache, P. de Souza Mendes, S. H. Moura, G. Teixeira, H. Althoff and D. dos Santos
5:05	SE5. Rheology as an enabler of upcycling polyolefins in twin-screw extrusion. <u>J. Maia</u> , S. Vecchi, M. Lu, S. Tu, V. Desyatkin, E. Kone, V. Rodionov and S. Ray	IR5. Modeling lipid nanoparticle transport in extracellular matrix: Effects of particle size and rigidity. <u>P. Nakate</u> and A. Ardekani	FI33. Rheology-controlled burst instabilities in compression-driven gas-liquid displacement. <u>M. S. Abdelgawad</u> and S. Datta	SM16. Development of the Mead “Semi-Toy” polydispersity model for linear and/or star polymer blends in arbitrary flows. <u>D. Mead</u>	BL26. Spore formation alters the physical maturation trajectory of <i>Bacillus subtilis</i> biofilms. <u>N. Ducharme</u>	AR16. Rheological modeling of thixotropy in noble metal enriched nuclear glass. <u>D. Beslay</u> , E. Sauvage, S. Castel and S. Schuller
5:25	SE6. Melt rheology of PLA/PHB/wood flour composites and reactive interfacial compatibilizer effects. A. Khatiwada, K. Slavy, A. Hubbard and <u>R. D. Corder</u>	IR6. Interfacial dilatational rheology of Pluronic F68-sodium dodecyl sulfate mixtures in the presence of micelles. <u>R. Foudazi</u> and S. Onyemba			BL27. Biofilms as materials: A continuum framework for growth, mechanics, and ordering in biofilm composites. <u>S. Rahbar</u> , T. Dethé, S. Yang, A. Košmrlj and R. Robertson-Anderson	AR17. Rheology-guided processing of chitosan-gelatin/deep eutectic solvent iontronic soft materials. <u>P. Singh</u> and A. Miriyev
5:45	END					
6:30	AWARDS RECEPTION					
7:30	AWARDS BANQUET					

Wednesday, October 28

8:30

PL3. From Brownian Suspensions to Living Cells: A Next Frontier in Rheology in Biotechnology. R. Zia (Grand Ballroom A)

9:20

COFFEE BREAK

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-VI)	Statler Self-Assemblies, Gels & Networks (GN-VI)	Studio 1 Interfacial Rheology, Surfactants, Foams & Emulsions (IR-II)	Studio 2 Future of Rheology Speakers (FR)	The Loft Polymer Solutions, Melts & Blends (SM-IV)	Park/Scollay Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-VI)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-IV)
9:50	CS28. The thixotropy myth? <i>P. G. Kovakas and S. A. Rogers</i>	GN28. Glass-gel duality of jammed colloids with dynamic associations. <i>M. Mattiello, P. Edera, J.-M. Suau and M. Cloitre</i>	IR7. Steady-state rheological material functions in non-viscometric-non-extensional flows: Application in dilute emulsion systems. <i>G. Crepaldi, A. Guilherme, I. Siqueira, T. Oliveira and R. Leon Thompson</i>	FR1. Reversible dehydration of microfibrillated cellulose for sustainable formulation design. <i>M. Afshang, S. Lindberg, M. Caggioni and K. Schultz</i>	SM17. From birth to death: The effect of 'megasupramolecules' on the fate of hydrocarbon droplets in Rayleigh jets. <i>S. Verma and J. Kornfield</i>	BL28. Physical properties of bulk mucus and mucus-air interface: Mechanistic implications for mucociliary clearance. <i>A. Han, B. Chan, F. Fazelpour, S. Danielsen, D. Hill and M. Rubinstein</i>	AR18. Rheology and human perception of personal care products. <i>A. Potanin and B. Teoman</i>
10:10	CS29. Microscopic theory of step-rate start-up shear rheology: Insights into the overshoot, shear-thinning, and structural relaxation time using recovery rheology. <i>A. Mutneja and K. S. Schweizer</i>	GN29. Non-monotonic elasticity in shear-trained colloidal gels. <i>J. López, G. Baeza, C. Tougne and T. Divoux</i>	IR8. Rheology and structure of polymer-laden air/water interface: What occurs at large compressions? <i>K. Pham, B. Thompson, D. Ashkenazi, D. Renggli, M. Gottlieb and N. Wagner</i>	FR2. Automated, data-driven mapping of non-linear interactions of Hofmeister salts on hydrogel mechanics. <i>K. Bakal, N. Verhagen, P. Kourwer and M. Mabesoone</i>	SM18. Modulating polymer solution extensibility and processability using dimethylformamide. <i>M. A. Calabrese, D. Zhang and H. Zhao</i>	BL29. Human mesenchymal stem cell migration in hydrogels with a radial step change in elastic modulus. <i>Z. E. Imran and K. Schultz</i>	AR19. Rheology of luxury skincare products: Relating multi-axial flow behavior to texture and sensory. <i>S. Sepahvand, H. Bui and V. Sharma</i>
10:30	CS30. Microscopic theory of large amplitude oscillatory shear rheology. <i>A. Mutneja and K. Schweizer</i>	GN30. Rolling constraints in depletion-induced colloidal gels. <i>H. Xu, R. More, G.H. McKinley, W. Poon and J. Royer</i>	IR9. Interpreting the two-dimensional Poisson's ratio of surfactants and microgels at the air-water interface. <i>D. Hill, D. Renggli, B. Thompson, R. Anderson, C. Kloxin and N. Wagner</i>	FR3. Scale up processing of structured complex fluids: Optimizing concentrated surfactant flow with in-line/on-line technology. <i>P. Kelkar, E. Williams, K. Erk, E. Tozzi and S. Lindberg</i>	SM19. Time-temperature superposition of the transient extensional relaxation time measured using CaBER. <i>J. B. Joseph, J. Rothstein and J. Book</i>	BL30. How matrix-secreting cells sense scaffold viscoelasticity. <i>J. Song, S. Loveland, F. Yang, N. Bhutani, M. Levenston and O. Chaudhuri</i>	AR20. Correlating bulk rheology and tribological behavior in concentrated aqueous dispersions of mineral UV filters. <i>B. Bodnar, H. Bui and L. Wilson</i>
10:50	CS31. Orientation dynamics of spheroids in weakly viscoelastic fluids with inertia. <i>T. M. Apte, A. Ardekani and V. Narsimhan</i>	GN31. Rheology and network topology of colloidal depletion gels with particle size disparity. <i>Z. Zhuang, R. Campbell, S. Jamali and A. Mohraz</i>	IR10. Rheology and dispensing of real and vegan mayo: The chickpea or egg problem. <i>N. Nikolova, S. Baier and V. Sharma</i>	FR4. Dripping-onto-substrate (DoS) dos and don'ts. <i>L. Warwaruk, K. Zinelis, R.H. Ewoldt, C. Macosko and G.H. McKinley</i>	SM20. Consequences of skin formation for volatile polymer solutions. <i>A. Bhadu, L. Khalko and R. H. Colby</i>	BL31. Rheological characterization of cytokine-dependent cell-mediated remodeling in synthetic hydrogels. <i>P. Ariyaphuttarat and K. Schultz</i>	AR21. Impact of lipophilic solvents on the viscoelasticity of hectorite gels for cosmetic formulations. <i>P. Ramos, B. Pease and H. Bui</i>
11:10	CS32. Confined dynamics of complex-shaped magnetic swimmers. <i>G. Roure</i>	GN32. Interplay between hydrodynamic and non-central interactions determine structure and dynamics of colloidal gel. <i>P. Haghighi and S. Jamali</i>	IR11. Self-assembled interfacial gels for stabilization and fabrication of structured materials. <i>H. Honaryar, S. Amirfatahi, M. S. Habib and Z. Niroobakhsh</i>	FR5. Aging, residual stress, and directional memory in suspensions of soft and rigid particles. <i>R. Alrashdan, M. Cloitre and F. Khabaz</i>	SM21. Extensional rheology of telechelic polymer solutions and model dense paints. <i>A. Amer, G. Deeter, R. Gupta, N. Foley, M. Krayner and V. Sharma</i>	AR22. Sunscreen sensory attribute prediction via textural, rheological, and tribological tests. <i>G. Nabiveva, B. Teoman, A. Potanin and G. Gor</i>	
11:30	CS33. Dissipation and microstructure in sheared active suspensions of squirmers. <i>Z. Ge and G. Elfring</i>	GN33. Reconfigurable colloidal networks driven by non-identical interactions and self-propulsion. <i>M. Kandula and P. Dutta</i>	IR12. Surfactant and drop size effects on coalescence-induced wetting via pre-wetting surface island drops in water-in-oil emulsions. <i>S. H. Rad, A. Ramachandran and E. Acosta</i>	FR6. Oscillation dynamics of viscoelastic drops. <i>P. Rostami, A. Kaltashov, S. Jamali, A. Castrejón-Pita and G. Auernhammer</i>	SM22. Stringiness, spinnability, sprayability and extensional rheology of polymer solutions. <i>L. Edano, D. Oester, F. M. H. Choi, R. Gupta, P. Varanasi and V. Sharma</i>	AR23. Investigative efforts into the rheological behavior of Hanford site nuclear waste slurries for vitrification. <i>N. C. Bohrmann, J. Rigby, J. Marcial, P. Ghatge, C. Grover, W. Eaton, M. Hall and A. Kruger</i>	

11:50

LUNCH BREAK / FUTURE FLOWS UNDERGRADUATE LUNCH WITH EXPERTS, 11:50 am-1:00 pm (Statler)

	Grand Ballroom A Field-Responsive Materials & Soft Robotics (SR-I)	Statler Self-Assemblies, Gels & Networks (GN-VII)	Studio 1 Interfacial Rheology, Surfactants, Foams & Emulsions (IR-III)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-VII)	The Loft Polymer Solutions, Melts & Blends (SM-V)	Park/Scollay Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-VII)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-V)
1:30	SR1. Undulatory transport in Newtonian and non-Newtonian fluids: Gait optimization of linkage swimmers beyond velocity-maximization. <u>Y.-J. Choi</u> and L. Kroo	GN34. Visualizing plastic events in colloidal gels. <u>J. Vermant</u> , <u>S. Goven</u> , <u>P. Lehericey</u> and <u>P. Derlet</u>	IR13. Spatiotemporal viscosity gradients shape relaxation dynamics in particle-filled drops. <u>J. Vaswani</u> , <u>A. Gopinath</u> , <u>V. Ayyaswamy</u> and <u>S. Velankar</u>	FI34. Active viscoelastic instabilities drive spontaneous intracellular aster motion. <u>S. Varchanis</u> , <u>M. Shelley</u> and <u>D. Stein</u>	SM23. Design of dilute polymer solutions with prescribed rheological properties. <u>J. Hwang</u> and <u>H. Stone</u>	BL32. Anomalous conformations and dynamics of an active polymer melt. <u>B. Chan</u> and <u>M. Rubinstein</u>	AR24. Ruby chocolate: Linking rheology, tribology, impedance spectroscopy to sensory function. <u>B. Abedi</u>
1:50	SR2. Electrical response and dynamics of conductive anisotropic particles. <u>K. Ghezzi</u> and <u>J. Richards</u>	GN35. Revealing particle-scale yielding mechanisms by direct imaging of sheared colloidal gels. <u>P. Schall</u>	IR14. Using interfacial yield stress to reduce Pickering drop deformation and coalescence. <u>A. F. Abutalebi</u> and <u>G. Christopher</u>	FI35. Emergence of purely elasto-plastic turbulence in shear flows. <u>B. Thomases</u> , <u>P. Arratia</u> , <u>M. Abdullah</u> , <u>S. Pradeep</u> and <u>D. Jerolmack</u>	SM24. Quantifying dilute polymer conformations in shear flow using multidimensional Gram-Charlier analysis. <u>V. A. Maske</u> , <u>X. Wang</u> , <u>S. Powers</u> , <u>A. Datta</u> , <u>C.-H. Tung</u> , <u>M. Helgeson</u> and <u>P. Underhill</u>	BL33. Bunching, burrowing, slurping, and shrouding: Weird motion in 3D bioprinted cell populations. <u>T. Angelini</u> , <u>T. Monjure</u> , <u>V. Subramaniam</u> and <u>A. Shetty</u>	AR25. Building an analytical texture framework for high-protein yogurt systems. <u>F. De Vito</u> , <u>D. Keane</u> and <u>S. Baier</u>
2:10	SR3. Swarm formation and dynamics of coordinated magnetically-responsive microrollers. <u>J. F. Gilchrist</u> , <u>F. Akhtar</u> , <u>G. Powell</u> , <u>J. Riffle</u> , <u>N. Tobin</u> , <u>G.H. McKinley</u> and <u>T. Richardson</u>	GN36. A dual dissipative trap model for soft glassy materials. <u>A. S. Puri</u> and <u>S. Rogers</u>	IR15. 'Stealth impact': Cavity suppression by dense suspension droplets impacting immiscible pools. <u>X. Tang</u> and <u>B. Yan</u>	FI36. Discovery of a discontinuous transition between elasto-inertial and elastic turbulence in channel flows. <u>B. Khomami</u> , <u>N.-S. Liu</u> and <u>F. Lin</u>	SM25. Reduced-order constitutive reconstruction of HPAM rheology across thermal and mechanical regimes. <u>E. Pérez</u> , <u>V. Alvarado</u> , <u>E. Manrique</u> , <u>M. Carmona</u> and <u>G. Artana</u>	BL34. Robust mechanically active 3D printed biocomposite materials driven by cell-generated forces. <u>V. Subramaniam</u> , <u>A. Noy</u> , <u>T. Monjure</u> , <u>C.-Y. Wang</u> and <u>T. Angelini</u>	AR26. Tailoring the rheology of xanthan gum fluids via graphene oxide lateral size distribution for industrial applications. <u>G. de Oliveira</u> and <u>R. E. Andrade</u>
2:30	SR4. When rheological properties control the temperature (as much as the opposite). <u>G. P. Baeza</u> , <u>L. Ea</u> , <u>B. Robbani</u> and <u>G. Coativy</u>	GN37. Exploring colloidal gelation. <u>M. L. Mugnai</u> and <u>E. Del Gado</u>	IR16. Contour dynamics of dense emulsion droplets in extensional flows. <u>C. Drucker</u> , <u>J. Peterson</u> and <u>S. Srivastava</u>	FI37. Effect of temperature on elastic turbulent transition of shear-banding micelle solutions. <u>X. Yang</u> , <u>S. Manneville</u> and <u>T. Divoux</u>	SM26. Probing structural and dynamic heterogeneity of semiflexible polymer solutions. <u>M. Pourasgharoshitebin</u> , <u>G. Christopher</u> and <u>R. Khare</u>	BL35. Thixotropy in sparse bacterial cellulose dispersions. <u>P. T. Spicer</u> , <u>A. O' Connor</u> and <u>M. Hosseini</u>	AR27. The influence of rheology and processing conditions on melt blown fiber diameter and filtration efficiency examined by experiments and modeling. <u>O. Roy</u> , <u>Z. Zhang</u> , <u>C. Song</u> , <u>B. Love</u> , <u>I. Ragai</u> , <u>A. Shih</u> and <u>R. Larson</u>
2:50	SR5. Multi-scale modeling of charged polymers: Uncovering dual relaxation timescales and the upper-convected electric field response. <u>Z. Wolfgram</u> , <u>M. Grasinger</u> and <u>J. Ethier</u>	GN38. Sliding friction enhances elasticity and induces particle reorganizations in attractive colloidal gels. <u>M. Tan</u> and <u>S. Jamali</u>	IR17. Effects of matrix viscoelasticity on shear-induced diffusivity of drops in an emulsion. <u>K. Sarkar</u> , <u>A. Tarafder</u> and <u>A. Rezaeepazhand</u>		SM27. Mechanics and dynamics of DNA minicircles in extensional flow. <u>R. Huang</u> and <u>P. Doyle</u>	BL36. <i>In situ</i> rheological monitoring of diffusion-controlled hydrogel crosslinking for embedded 3D bioprinting. <u>F. Christakopoulos</u> , <u>A. Shih</u> , <u>S. Chung</u> , <u>C. Huerta-López</u> , <u>L. Brunel</u> , <u>N. D. P. Narciso</u> , <u>D. Myung</u> , <u>S. Heilshorn</u> and <u>G. Fuller</u>	
3:10				COFFEE BREAK			

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-VII)	Statler Self-Assemblies, Gels & Networks (GN-VIII)	Studio 1 Interfacial Rheology, Surfactants, Foams & Emulsions (IR-IV)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-VIII)	The Loft Polymer Solutions, Melts & Blends (SM-VI)	Park/Scolloy Techniques and Methods (TM-III)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-VI)
3:45	CS34. Pushing polymer-linked emulsions to the nanoscale: Impact of droplet size on polymer bridging and transport. <i>S. K. Priyo, T. Kolozsvary, B. McDonald and R. Poling-Skutvik</i>	GN39. Contrasting aging dynamics and generalized superposition in conductive versus insulating carbon black-carboxymethylcellulose hydrogels. <i>G. Legrand, G. Baeza, W. Chèvremont, S. Manneville and T. Divoux</i>	IR18. Shear-induced gelation of human insulin at the air-liquid interface. <i>J. Adam, P. McMackin, C. Picu, P. Underhill and A. Hirs</i>	FI38. On bounds of conformation tensor space in planar flows of the Oldroyd B model. <i>R. Poole</i>	SM28. Recovery rheology of nonlinear constitutive models for polymers. <i>S. Shanbhag and Y. Joshi</i>	TM12. Utilization of fast frequency chirps for the characterization of adhesives and thermal/structural equilibration of hydrogels. <i>K. Coasey</i>	AR28. Revealing the role of structure in tribo-particle lubricants to achieve superlubricity. <i>P. Schall, A. Gupta, P.-M. Aborde and M.-I. de Barros Bouchet</i>
4:05	CS35. Rheological fingerprinting of Hevea and alternative natural rubber latices: Flow and viscoelastic characterization. <i>S. Jin and G. McKenna</i>	GN40. Bimodal colloids highlight the mesoscale mirror of rigidity percolation and yielding. <i>R. Campbell, Z. Zhuang, A. Mohraz and S. Jamali</i>	IR19. Flows and instabilities in stratifying micellar foam films. <i>V. Sharma and C. Xu</i>	FI39. How inverse Langevin approximations shape polymer dynamics — and a path to precision. <i>M. Cromer, P. Vasquez, M. Kostrna, N. Barlow and S. Weinstein</i>	SM29. Understanding the role of chemistry on dilute polymer rheology using high-shear capillary rheo-SANS. <i>S. Powers, A. Datta, C.-H. Tung, V. Maske, X. Wang, P. Underhill and M. Helgeson</i>	TM13. Stringimeter: An open source, cost-effective and versatile device for probing complex fluids in uniaxial extensional flow. <i>V. Calabrese</i>	AR29. PFAS-free polymeric lubricants: Overcoming tribochemical degradation. <i>C. C. Roberts, J. Curry, J. Hall, R. Williams, K. Ringler, P. Sawyer and K. Ghosh</i>
4:25	CS36. Rheo-kinetics and microstructural evolution of aluminosilicate gels & geopolymers. <i>N. J. Wagner, T. Egnaczyk and R. Murphy</i>	GN41. Effect of hydrodynamic interactions in high volume fraction colloidal gels. <i>A. Machas, S. Chattaraj and G. Petekidis</i>	IR20. Antifoaming in aqueous micellar foams and foam films. <i>K. Ngo, Q. Huynh, Y. Zheng, H. Zhang, R. Gupta, P. Varanasi and V. Sharma</i>	FI40. Lagrangian approach to determining polymeric stress in viscoelastic flows. <i>M. Majidi, L. Thorens, M. Teimouri, J. Guasto and A. Ardekani</i>	SM30. Onset of coil-stretch in disperse polymer solutions. <i>C. Middleton, Z. Peng, T. Emrick and L. Kroo</i>	TM14. Know your Nahme: Operational limits for viscous heating. <i>R. H. Ewoldt and A. Temple</i>	AR30. Molecular simulations of interfacial systems to enhance industrial applications. <i>A. Striolo</i>
4:45	CS37. Squeeze flow analysis of concentrated cementitious suspensions through different theoretical models. <i>F. Grandes, F. A. Cardoso and R. Pileggi</i>	GN42. Particle contacts and architectures of colloidal gels. <i>L. Bayer, E. Del Gado, H. A. Vinutha and A. Bathina</i>	IR21. The role of dilational rheology in predicting foamability. <i>J. Frostad and B. Chen</i>	FI41. Lagrangian polymer dynamics reveals anisotropic relaxation and limitations of viscoelastic constitutive models. <i>L. Thorens, G. Juarez, P. Arratia and J. Guasto</i>	SM31. Flow-induced alignment in semiflexible poly(ether sulfone) solutions. <i>S. Darvoush, E. Gomez and R. Colby</i>	TM15. Transient extensional rheology of yield-stress fluids for droplet breakup and deposition. <i>M. T. Hossain, S. Sen and R.H. Ewoldt</i>	AR31. Methyl-branched fatty acid film formation and lubrication. <i>M. Ruths</i>
5:05	CS38. Time-resolved rheological characterization of aggregated suspensions: Application to geopolymers. <i>A. Poulesquen and B. Keshavarz</i>	GN43. Towards a unifying thermorheological framework of wax crystal networks. <i>G. D'Orta, P. Doyle, M. Sommer and G.H. McKinley</i>	IR22. Linking composition and assembly to the rheology of particle-laden interfaces. <i>O. Korkut, P. Anderson and A. Aliche</i>	FI42. The universal law behind long-lived interfaces in fully miscible fluids. <i>H. S. Lee, G. M. Choi and A. Hussain</i>	SM32. The role of emulsification of polymer solutions in drag-reducing flows: A strategy to reduce polymer breakage under extensional flows and facilitate its injection. <i>E. J. Soares, G. Melhorim and C. Dalmazio</i>	TM16. Squeeze flows in soft deformable substrates. <i>M. Milani, G. S. Lunego, V. Waltz, O. Aubrun, R. Santoprete and A. Lindner</i>	AR32. Negative thermal expansion drives defect formation and mechanical evolution in lamellar-structured concentrated surfactants. <i>M. Kaboolian, E. Williams, M. Caggioni, S. Lindberg and K. Erk</i>
5:25		GN44. Experimental investigation and emergent yielding model predictions of startup, delayed yielding, hysteresis, and LAOS in Carbopol, bentonite, and waxy crude oil. <i>G. Pattila, K. Kamawat and L. Kumar</i>	IR23. Scaling dynamics of particles confined at fluid-fluid interface. <i>E. Barros de Oliveira, S. Razavi and H. H. Winter</i>	FI43. Flat elastic disc suspensions are indistinguishable from solutions of long flexible polymers within planar incompressible flows. <i>F. Hillebrand, R. Hill, M. Davoodi, S. Haward, A. Shen, R. Poole and S. Varchanis</i>	SM33. A second opinion on the Weissenberg effect: The role of the second normal-stress difference in rod-climbing effect. <i>R. V. More</i>	TM17. Shear and extensional rheology of polypropylene melt using elliptical dies. <i>L. Drga, M. Zatloukal, L. Szántó and P. Rolfe</i>	AR33. Temperature dependence of kinetic friction. <i>J. Thomas, C. Snyder and K. B. Migler</i>
5:45	END						
6:30	POSTER SESSION & RECEPTION (Georgian/Arlington/Berkeley/Clarendon, until 8:30 pm)						

Thursday, October 29

8:00

MP1. Microscopic Origin of Electron Transport in Suspensions of Conducting Particles. J. Richards (Metzner Award Presentation) (Grand Ballroom A)

	Grand Ballroom A Field-Responsive Materials & Soft Robotics (SR-II)	Statler Self-Assemblies, Gels & Networks (GN-IX)	Studio 1 Interfacial Rheology, Surfactants, Foams & Emulsions (IR-V)	Studio 2 Flow-Induced Instabilities & Non-Newtonian Fluids (FI-IX)	The Loft Polymer Solutions, Melts & Blends (SM-VII)	Park/Scolley Techniques and Methods (TM-IV)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-VII)
8:40	SR6. Microrheology of thermoresponsive linear poly-(N-isopropylacrylamide) solutions undergoing phase transition in ground and microgravity conditions. <u>N. Hasanova</u> , <u>M. C. Roffin</u> , <u>X. Cheng</u> , <u>K. Schultz</u> and <u>J. Gilchrist</u>	GN45. Elasticity driven assemblies of colloidal plates in a curved 2D fluid. <u>M. Santore</u> and <u>A. Prempeh</u>	IR24. Simultaneous interfacial rheology and neutron reflectometry of linear and cyclic polymers. <u>D. Renggli</u> , <u>K. Pham</u> , <u>B. Thompson</u> , <u>J. Allgaier</u> , <u>M. Kruteva</u> , <u>D. Richter</u> , <u>T.-C. Lin</u> , <u>K. Matyjaszewski</u> , <u>D. Vlassopoulos</u> and <u>N. Wagner</u>	F144. How material behavior affects the bulge instability of inflated tubes. <u>F. Rouhani</u> , <u>P. Pazin</u> , <u>B. Young</u> , <u>Q. Liu</u> , <u>A. Ganesh</u> and <u>S. Velankar</u>	SM34. From molecular-scale damage and viscoelasticity to polymer melt fracture: Insights from mechanochemistry. <u>G. Sanoja</u> and <u>D. Rosmarin</u>	TM18. Measuring Poisson's ratio of nearly incompressible gels and elastomers. <u>C. Barney</u>	AR34. Effect of processing on the rheological properties of epoxy resin. <u>Y.-M. Wang</u> , <u>T. Khmiadashvili</u> , <u>S. Kim</u> and <u>D. Krogstad</u>
9:00	SR7. Negative electrorheology in networked suspensions. <u>A. Jain</u> , <u>J. R. Seth</u> and <u>V. Juvekar</u>	GN46. Direct observation of shear banding and heterogeneous recovery dynamics in thixotropic colloidal gels via x-ray photon correlation spectroscopy. <u>E. Nikoumanesh</u> , <u>S. K. Priyo</u> and <u>R. Poling-Skutvik</u>	IR25. Identifying the influence of bulk and interfacial rheology on the tactile experience of writing with fountain pen ink. <u>J. R. Samaniuk</u> , <u>L. Crain</u> and <u>N. Sharp</u>	F145. Flow-induced vibrations of a flexible cantilevered beam in a FENE-P fluid flow. <u>H. Gong</u> , <u>J. Rothstein</u> and <u>Y. Modarres-Sadeghi</u>	SM35. Polymer shear banding and the normal stress ratio. <u>L. L. Nelson</u> , <u>G. Grest</u> and <u>P. Olmsted</u>	TM19. Impact of conductive particle doping on the rheology, tribology, and electrical behavior of greases. <u>J. P. Eickhoff</u> , <u>K. Pondicherry</u> and <u>P. Staudinger</u>	AR35. Cure kinetics analysis of an epoxy resin. <u>C. Strasser</u> and <u>E. Moukhina</u>
9:20	SR8. Field-induced control of the breakup of ferrofluid droplets in simple shear flow. <u>I. R. Siqueira</u> , <u>A. Guilherme</u> , <u>R. Abdo</u> , <u>L. Cunha</u> , <u>R. Thompson</u> and <u>T. Oliveira</u>	GN47. QL-LAOS stress exceeds steady-state stress at equivalent structuring levels in thixotropic materials. <u>P. R. de Souza Mendes</u> and <u>R. Thompson</u>	IR26. From stability to release: Interfacial mechanics of plant lipid droplets. <u>K. A. Ganar</u> , <u>M. Lobé</u> , <u>I. Morris</u> , <u>O. Trommelen</u> , <u>J. C. Bonilla</u> , <u>C. V. Nikiforidis</u> , and <u>E. Chatzigiannakis</u>	F146. Rheological and collective effects on fluid-structure interaction of cantilevers. <u>A. Yokokoji</u> , <u>S. Haward</u> and <u>A. Shen</u>	SM36. Insights into the molar mass dependence of the thermorheological complexity of well-defined Poly(2-ethylhexyl methacrylate). <u>A. T. Boborodea</u> , <u>I. Göde</u> , <u>A. Q. Sedano</u> , <u>A. G. Boborodea</u> and <u>E. Van Ruymbeke</u>	TM20. Wettability-driven friction modulation in hydrophilic PDMS elastomers. <u>O. Ojuade</u> , <u>A. Verma</u> and <u>L. Hsiao</u>	AR36. Process rheology and applications for multi-base propellants. <u>D. H. Sebastian</u> , <u>Z. Ophir</u> , <u>R. Crownover</u> , <u>J. Schaefer</u> , <u>J. Mullen</u> , <u>C. Gogos</u> and <u>F. Sullivan</u>
9:40	SR9. Mermaid cereal: Interactions and pattern formation in a macroscopic magnetocapillary SALR system. <u>D. Harris</u>	GN48. Connecting molecular modeling and recovery rheology to describe the rheology of gelation. <u>B. Chiu</u> , <u>A. Abilova</u> , <u>J. Shi</u> , <u>C. Sing</u> , <u>A. Kuenstler</u> and <u>S. Rogers</u>	IR27. Arginine-mediated modulation of interfacial self-association in a fusion protein, monoclonal antibody, and globular protein. <u>P. Dastyar</u> , <u>H. Mitra</u> , <u>C. V. Wood</u> , <u>T. A. Everett</u> , <u>Y.-J. Lin</u> , <u>Y. Tian</u> and <u>A. M. Ardekani</u>	F147. Vibration dynamics of a flexible square prism in an elasto-inertial cross flow. <u>C. Park</u> , <u>J. Rothstein</u> and <u>Y. Modarres-Sadeghi</u>	SM37. Rheology of commercially available linear / pom-pom polystyrene blends for enhanced foam quality in foam extrusion. <u>A. Bornemann</u> , <u>T. Schwedhelm</u> , <u>U. Handge</u> and <u>V. Hirschberg</u>	TM21. Enhancing tribo-rheological relevance with consumer sensory insight using a synthetic skin template: A comparison to conventional metal only geometries. <u>R. K. Sinha</u> , <u>S. Ehlert</u> , <u>K. Belli</u> , <u>S. Liu</u> and <u>H. Bui</u>	AR37. Rheology of plant milks: With and without gums. <u>E. Bayraktar</u> , <u>E. Patel</u> , <u>K. Al Zahabi</u> , <u>L. Hassan</u> , <u>N. Nikolova</u> and <u>V. Sharma</u>

10:00

COFFEE BREAK

	Grand Ballroom A Colloidal Suspensions & Granular Materials (CS-VIII)	Statler Self-Assemblies, Gels & Networks (GN-X)	Studio 1 Interfacial Rheology, Surfactants, Foams & Emulsions (IR-VI)	Studio 2 Biomaterials, Bio-fluid Dynamics, & Biorheology (BL-VIII)	The Loft Polymer Solutions, Melts & Blends (SM-VIII)	Park/Scolay Techniques and Methods (TM-V)	Copley/Kenmore Applied Rheology for Industrial Applications (AR-VIII)
10:25	CS39. Mechanical spectroscopy during early hydration of a model cement suspension. <u>J. Sardin</u> and <u>M. Geri</u>	GN49. Rheological characterization of the pericellular region in hydrogels with integrin-specific ligands. <u>E. Hamid</u> and <u>K. Schultz</u>	IR28. Examining the impact of salt/surfactant on the yielding of particle-laden interfaces using strain decomposition. <u>K.C. Bhaskar</u> and <u>G. Christopher</u>	BL37. Viscoelastic properties of juvenile porcine brain tissue characterized with a generalized Maxwell solid model. <u>G. Williams</u> , <u>R. Ramos</u> , <u>B. Wu</u> , <u>H. Matthew</u> , <u>C. Manke</u> and <u>C. Harris</u>	SM38. Tunable rheology of blends involving ring polymers. <u>K. Peponaki</u> , <u>D. Parisi</u> , <u>M. Rubinstein</u> and <u>D. Vlassopoulos</u>	TM22. Opportunities for high-throughput rheology in the development of polymer-based formulations. <u>D. V. Krogstad</u> and <u>Y.-M. Wang</u>	AR38. A new rheological gradient concept to improve polymer flood performance. <u>D. Al-Shehri</u> , <u>M. Azad</u> , <u>A. Barri</u> and <u>J. Alhamad</u>
10:45	CS40. Collective shear-induced sedimentation of rigid particles in soft suspensions. <u>R. Alrashdan</u> and <u>F. Khabaz</u>	GN50. Strain softening-stiffening of composite hydrogels with colloidal fibrillar networks. <u>C. Xu</u> , <u>Y. Saraswat</u> , <u>M. Shaikh</u> , <u>N. Shakoury</u> , <u>P. H. W. Reis</u> and <u>L. Hsiao</u>	IR29. Rheology and droplet dynamics of dilute charged Pickering emulsions. <u>S. P. Miller</u> and <u>M. Geri</u>	BL38. Linking rheology and spinnability of alginate solutions enriched with probiotics. <u>C. Cersosimo</u> , <u>R. Rovelli</u> , <u>G. Degen</u> , <u>S. Danti</u> , <u>G.H. McKinley</u> and <u>M. Milazzo</u>	SM39. All-at-once fitting of time-temperature measurements for uncertainty quantification. <u>A. S. Modi</u> , <u>A. Hedegaard</u> , <u>J. McAllister</u> , <u>H. Lee</u> , <u>E. Breedlove</u> and <u>R.H. Ewoldt</u>	TM23. A viscosity measurement technique for ultra low sample volumes. <u>M. S. Tirumkudulu</u> and <u>M. Mir</u>	AR39. Shear thickening during viscoelastic polymer flooding: Does it have practical significance? <u>M. S. Azad</u>
11:05	CS41. Distinct activation mechanisms for flow, elasticity, and recovery in carbon black gels. <u>E. Saint-Sever</u> , <u>G. Baeza</u> and <u>T. Divoux</u>	GN51. Rheology and microstructure of biopolymeric aqueous matrices reinforced with graphene oxide. <u>M. F. Naccache</u> , <u>L. Moraes</u> , <u>M. Xavier</u> , <u>N. Moraes</u> , <u>P. Varges</u> , <u>H. Ribeiro</u> and <u>R. Andrade</u>	IR30. Shear memory and recovery mechanisms in emulsions and Pickering emulsions: Linear and nonlinear rheology approaches. <u>K. Damayanti</u> , <u>F. J. Stadler</u> , <u>R. Yun</u> and <u>S. Cui</u>	BL39. Rheology of Brownian particle suspensions in solutions of flexible and rod-like polymers. <u>S. Malik</u> , <u>S. Takatori</u> and <u>E. S. Shaqfeh</u>	SM40. Effect of multiple extrusion on the rheological and mechanical properties of PE-PP blends. <u>D. Rodrigue</u> , <u>A. Goecke</u> , <u>V. Hirschberg</u> and <u>M. Wilhelm</u>	TM24. Revealing actual viscoelastic relaxation times in capillary breakup. <u>N. Hu</u> , <u>J. Hwang</u> , <u>T. Ruangkriengsin</u> and <u>H. Stone</u>	AR40. Interplay between rheology and inclination on sedimentation dynamics in complex suspensions. <u>R. S. Schimicoscki</u> , <u>L. Quitian-Ardila</u> and <u>A. Franco</u>
11:25		GN52. Rheological characterization of polymer-nanoparticle composite hydrogels. <u>S. D. Negash</u> , <u>M. Snyder</u> and <u>K. Schultz</u>	IR31. Yielding behavior and microstructural evolution in nanodiamond-stabilized Pickering emulsions. <u>K. J. Ernst</u> , <u>A. Shah</u> , <u>J. Griebler</u> , <u>C. Xu</u> , <u>L. Hsiao</u> and <u>S. Khan</u>	BL40. Dynamic in-situ rheometry of micro-volume hydrogel samples. <u>C. Moose</u> , <u>J. Arenhoevel</u> , <u>R. Haag</u> and <u>G. Fuller</u>	SM41. Interfacial P2VP-silica interactions driving structure and dynamics in block copolymer nanocomposites. <u>S. Fritz</u> , <u>G. Baeza</u> , <u>J. Bernard</u> , <u>F. Dalmás</u> , <u>D. Albertini</u> , <u>A. Bagur</u> and <u>O. Sandre</u>	TM25. Macro- and micro-structural yielding of composite covalent adaptable networks with varying viscoelasticity. <u>G. V. Khare</u> , <u>K. Anseth</u> and <u>K. Schultz</u>	AR41. Investigating the mechanism for nanoparticle release from automotive tire tread. <u>B. M. Yavitt</u> , <u>E. Hoque</u> and <u>H.-S. Eom</u>
11:45				BL41. Dynamic flow-path formation in biofilms due to cell-to-cell signaling in a biofilm modelled as a spatially-variable yield-stress fluid. <u>I. Pincus</u> , <u>P. de Anna</u> and <u>N. Harmsen</u>	SM42. Tracking molecular architecture evolution in reprocessed LLDPE using rheology and SSA-DSC. <u>N. R. Demarquette</u> , <u>J. Zaessinger</u> , <u>D. Strugova</u> , <u>A. Michelet</u> and <u>C. Bellehumeur</u>	TM26. Salvaged serrations, SAOS slip suppression, and yield stress, oh my! <u>D. Moonay</u>	AR42. Pinching dynamics of liquid bridges stretched on withdrawal of dip-coated probes. <u>D. Bhakta</u> , <u>S. Sepahvand</u> , <u>N. Nikolova</u> , <u>S. Mahammad</u> and <u>V. Sharma</u>
12:05							

END

Poster Session

Wednesday, October 28, 6:30 PM – 8:30 PM — Georgian/Arlington/Berkeley/Clarendon (Mezzanine Level)

- PO1.** Sedimentation of a rigid particle in sheared sticky soft suspensions. *R. Alrashdan and F. Khabaz*
- PO2.** Direct ink write extrusion modeling of particle-laden inks. *E. Joly, L. Raymond, C. Zubeldia, J. Monti, R. Rao, J. Kopatz, D. Bolintineanu, H. Fowler and H. Root*
- PO3.** Local topological characterization of rigid cluster formation. *C. N. Lahu, K. Gadgil, B. Adu-Poku, R. Pandare, M. Orsi, J. Morris, J. Jaquette, L. Cummings and L. Kondic*
- PO4. WITHDRAWN**
- PO5.** Rheology of dense colloidal suspensions with non-adsorbing polymer. *M. Saedi*
- PO6.** A viscous-to-cohesive stress ratio controls flow curves and hysteresis in dense suspensions: From clays to debris-flow source soils. *A. S. Lima and H. Matinpour*
- PO7.** Rheological behavior of graphene oxide lyotropic liquid crystals: Correlating microstructure, viscoelasticity, and processability. *R. Shukla and P. Singh*
- PO8.** Incorporating non-adsorbing polymer contributions in suspension maximum packing models. *N. Smith and R. Corder*
- PO9.** Time-resolved rheo-USAXS reveals anisotropic microstructural evolution during discontinuous shear thickening of fumed silica suspensions. *A. Wang, T. Gibaud and Y. Chushkin*
- PO10.** Competing activity and non-identical interactions driven self-assembly in active-passive colloidal mixtures. *P. Dutta and M. Kandula*
- PO11.** Salt and shape effects on the linear rheology of colloidal gels prepared in the diffusion-limited cluster aggregation regime: Implications for the bond spring constant. *H. Kareem, S. M. Khairi and M. Solomon*
- PO12.** Stimuli-responsive soft materials for haptics applications. *J. Lies and L. Walker*
- PO13.** Connecting microscopic dynamics and macroscopic rheology of highly crosslinked associative networks. *A. Mamat, R. Alrashdan, M. Cloitre and F. Khabaz*
- PO14.** Microscopic elasticity of colloidal gels of spheres and discoids measured by confocal microscopy. *S. M. Khairi, H. Kareem and M. Solomon*
- PO15.** Towards a three-dimensional, two-fluid model of viscoelastic phase separation in alginate hydrogel microstructures. *B. S. Neo, J. Quek, C. Tang and M. Jhon*
- PO16.** Elucidating the physics of the yield transition. *E. Nikoumanesh and R. Poling-Skutvik*
- PO17.** Jamming-induced protein gelation. *G. Vu, O. Campanella, B. L. Valente and J. Ilavsky*
- PO18.** Shear-induced nematic alignment in polysulfone melts. *S. Daryoush, T. O. Corvo, E. Gomez and R. Colby*
- PO19.** Stringiness, spinnability and sprayability of polymer solutions. *L. Edano, C. Slykas, D. Oester, F. Choi, R. Gupta, P. Varanasi and V. Sharma*
- PO20.** Melt rheology of Joncryl-compatible PLA/PHB/wood flour composites. *A. Khatiwada, A. Hubbard and R. Corder*
- PO21.** Anisotropic thermal conductivity of uniaxially elongated poly(lactic acid). *O. S. Pinosa and D. Venerus*
- PO22.** Dry-brush entropic attraction in block-copolymer stabilized drops significantly reduces the drainage time in flow-induced coalescence. *C. Vannozzi*
- PO23.** Shear and extensional rheology of plant milks: With or without gum. *E. Bayraktar, E. Patel, S. Sepahvand and V. Sharma*
- PO24.** Drainage via stratification of mixed surfactant micellar foam films. *K. Ngo, L. Alsurakhi, T. Dang and V. Sharma*
- PO25.** Tuning viscoelasticity of dynamic covalent hydrogels for human tissue modeling. *F. Christakopoulos, N. D. P. Narciso, M. Huang, N. Baugh, C. Huerta-López, A. Spakowitz and S. Heilshorn*
- PO26.** Testing the "cytoplasm as a glass" hypothesis: A comparative Angell fragility analysis of desiccation-tolerant systems. *A.-T. Mehra*
- PO27.** Coral bleaching weakens the surface mucus layer. *M. Rios Maciel, K. Toda-Peters and A. Shen*
- PO28.** Evolution of fluid microstructure in elastic turbulence. *D. Amirsadri, R. Larson and C. Browne*
- PO29.** Thixotropic behavior of 3D-printable ultra-high-performance concrete: Experiments and modeling. *A. Ahmed, R. M. Rosa, B. Ayhan and G. Cusatis*
- PO30.** Multi-wavelength cure and rheological analysis of multi-component systems with Waters TA Instruments™ multi-LED photocure accessory. *E. Baburoglu, A. Jackson, R. Colburn and C. Lewis*
- PO31.** From rheology to voxels: Discrete 3D printing of acoustic metamaterials. *A. Gasmí, N. Aguerbi, C. Barentin, G. Ovarlez and J. Leng*
- PO32.** Rheological criteria for active mixing during direct ink writing (DIW) of polyimide nanocomposite inks. *L. Hilger, B. Brettmann and D. Beck*
- PO33.** The competition between nucleation agents and flow-induced crystallization in material extrusion additive manufacturing. *J. Seppala, K. Page, J. Crossno, P. Roberts and A. Kotula*
- PO34.** Reduced-order modeling of Oldroyd-B fluid in a CC27 rheometer under steady shear. *P. N. Nguyen, H. Tran and W. Zou*
- PO35.** Utilizing factor analysis to connect rheology and sensory measurements for sunscreen formulations. *B. Bodnar, H. Bui, A. Jain, N. Poccia and M. Kindschuh*
- PO36.** VROC technology obtains full viscosity fingerprint for high concentration biopharmaceutical formulation development. *S. Marnoto, S. Shabaniverki and C. Ochoa*
- PO37.** Rheological characterization and thermal dependency of Brazilian marine clays. *D. V. Andrade, A. Albuquerque, G. H. Fiorot, C. Bresolin, A. C. Adami, N. Alves and R. Garske*
- PO38.** Understanding droplet based extraction of resin out of guayule bark. *F. Müller, S. Premnath, Z. Readi-Brown and J. Kornfield*
- PO39.** The rheometer sees wax late: Multi-method reconciliation of the wax appearance temperature and the onset of wall deposition across cooling rates. *G. Palaoro, F. J. P. Coronel, C. Kakitani, A. Machado, M. M. Neto, A. Sum and R. E. Morales*

- PO40.** Rheology of silicon–carbon nanotube-based slurries for lithium-ion battery composite anodes. K. Wu, R. Gupta, Y. Lu, M. Pasquali and S. Biswal
- PO41.** Spatiotemporal tuning of material properties of active biopolymer composites via microparticles and micropatterned scaffolds. A. M. Hernandez, A. Razzaghi, T. Chiu, S. Yang and R. Robertson-Anderson
- PO42.** Modulating the thermal gelation dynamics of pea protein isolate through limited proteolysis and guar gum reinforcement. S. R. Alam, M. Z. A. Ebrahim and S. Khan
- PO43.** Effect of halide tracers on CT imaging contrast and rheology of HPAM polymer solutions. M. Algharaib, A. Alajmi and O. Al-Omair
- PO44.** Stretching the limits: From thin-film extensional rheology to capillary breakup. D. Anderson, A. Shetty, J. Haeberle and J. Laeuger
- PO45.** Data-driven discovery of viscoelastic constitutive equations from Brownian dynamics simulations using symbolic regression. C. Anyanwu, H.-Y. Wang and R. Larson
- PO46.** Simultaneous measurement of local flow and rheology in injectable complex fluids. P. Ariyaphuttarat, A. Carnevale and K. Schultz
- PO47.** Delay in edge fracture for polymer melts via flow-induced nematic alignment and crystal precursor network formation. A. Bhadu, E. Moffett, D. Noronha, H. Vadivel, B. Li, D. Vlassopoulos, A. Rhoades and R. Colby
- PO48.** Microscopic origins of reverse flow in shear-banding entangled polymeric liquids. M. Boudaghi, B. Khomami and B. Edwards
- PO49.** Spatiotemporal control of elastic instabilities using responsive fluids. J. Carter
- PO50.** Rheo-electric characterization of soft semiconducting materials. L. Chen, K. Ghezzi, M. Brucks and J. Richards
- PO51.** A model hard-particle system for understanding shear and extensional effects in cementitious 3D printing. A. Z. Chowdhury, T. Hossain and R. H. Ewoldt
- PO52.** Shear and extensional rheology of polyelectrolyte solutions: Experiments and a Donnan-modified FENE-P model. N. Cielica, N. Hu, P. de Souza and H. Stone
- PO53.** Influence of formulation on the structure of Rayleigh-Taylor instabilities in evaporating polymer solutions. P. Cole, Z. Peng and L. Kroo
- PO54.** Yield-stress-controlled filament formation in hydrogel extrusion: A VOF–Herschel–Bulkley regime map. N. de Rosso, A. Ogundele and C. Negro
- PO55.** Leveraging simultaneous correlated and transient data streams to characterize nonlinear oscillatory behavior and edge fracture in PDMS. K. Dennis
- PO56.** Rheological and structural insights into light-free crosslinking of GelMA/xanthan gum hydrogels for 3D bioprinting. I. Disigant and R. Andrade
- PO57.** Brownian dynamics of telechelic polymers in suspensions of variably sized particles. J. Fudala and R. Larson
- PO58.** Cyanobacteria cells serve as microrheological probes and material modifiers of networks of dynamic actin filaments. A. Galvan, C. Gupta, M. Rust, M. Valentine and R. Robertson-Anderson
- PO59.** Time-dependent microscale viscoelasticity of aged epoxy during the curing process. R. Gayoso, K. Howard, T. Toy, P. Diaz-Montiel and R. Robertson-Anderson
- PO60.** Quantifying phase separation and local transport in thermoresponsive PNIPAm solutions using multiple particle tracking microrheology. N. Hasanova, M. C. Roffin, X. Cheng, K. Schultz and J. Gilchrist
- PO61.** Colloidal rod dynamics under large amplitude oscillatory extensional flow. S. Haward, A. Shen, S. Recktenwald, V. Calabrese and G. Natale
- PO62.** Effects of flow obstructions on viscoelastic expansion and contraction flows. F. Hillebrand and A. Shen
- PO63.** Effect of particle hydrophobicity on suspension dynamics and rheology. S. M. Hosseini, R. Haggerty, Y. Li and J. S. Park
- PO64.** Mechanics and dynamics of DNA nanostructures in extensional flow. R. Huang and P. Doyle
- PO65.** Data-driven printability modeling of hydrogels for precise direct ink writing based on rheological properties. E. Jeong and J. D. Park
- PO66.** Structure-based modeling of tRNA accommodation for AI-guided multiscale ribosome engineering. X. Jiang, H. Sachar, V. Sivasankar, S. Narayanan and R. Zia
- PO67.** Probing molecular interactions in wheat protein networks using large-amplitude oscillatory shear and selective chemical disruption. A. Kamboj, J. Zhao and G. Ganjyal
- PO68.** Chirps testing on polymer melts with native mode strain control and stress control rotational rheometers. G. Kamykowski
- PO69.** A methodology to predict long-term failure of pressure-sensitive adhesives using short-timescale measurement. S. Kannapadi, R. Behling, J. Shi, D. Vadillo, A. Kuenstler and S. Rogers
- PO70.** Slip-link theory predicts architecture-dependent relaxation and universal nonlinear response of symmetric star-branched polymer melts. M. Katarova, A. Córdoba, D. Becerra and J. Schieber
- PO71.** Sliding drop method to characterize extensional rheological properties of aqueous polyethylene oxide solutions. J.-H. Kim and J. Lee
- PO72.** Tracking memory formation and erasure via recovery rheology. P. G. Kovakas and S. Rogers
- PO73.** Engineering the bite: Linking extrusion processing to the mechanical properties of plant-based high-moisture meat analog extrudates. Y. Kuznetsov, K. Shirzad, A. Shetty, A. Kamboj, S. Nain and G. Ganjyal
- PO74.** Hysteretic contact formation and rupture in shear-history-dependent graphite/CMC slurries. H. Lee, H. Jung and J. Nam
- PO75.** The large-deformation limits of amplitude sweeps. J. Lee and S. Rogers
- PO76.** Dispersant blending strategy for concentrated LiMnFe1-xPO4 electrode slurries. S. Lee, C. Hyun, W. Jo and J. Nam
- PO77.** From rheology to lithium-ion battery cathode manufacturing: Using a model aqueous slurry. Y. Leng, P. Anderson and A. Aliche
- PO78.** Comprehensive rheological characterization of liquid silicone rubber for healthcare applications using rotational and capillary rheometry. H. Li, J. Howe, N. Moka-Vidyanag and C. Dinninger
- PO79.** Ultra-soft mechanochromic pigments based on bottlebrush block copolymers. R. Li

- PO80.** YouTube goes to the rheology lab: Measurements to enhance visual demos. *N. Taylor, M. Kaufman, S. Rodriguez, C. Wilson and M. Liberatore*
- PO81.** Rotational frustration drives shear jamming in dense suspensions. *A. Maia, A. Singh and R. More*
- PO82.** Tuning the material properties of active microtubule networks via filament stabilization. *K. Matic, J. Ross, M. Valentine and R. Robertson-Anderson*
- PO83.** A rheological analysis of pharmaceutical filling needle clogging. *C. Amato, J. McGlynn, M. Flamm, M. Ngene and D. Owen*
- PO84.** Role of microstructure and rheology in the resuspension of colloidal aluminum adjuvants. *N. Nawar, Y. Saraswat, R. Waheibi, C. Glover, D. Dixon, A. Langford and L. Hsiao*
- PO85.** Suspension rheology and particle confinement as design parameters for tuning soft contact tribology. *O. Ojuade, H. Dong, Y. Saraswat, A. Jagota and L. Hsiao*
- PO86.** Shear reversal reveals how persistent contacts drive shear thickening behavior. *R. Pappalardo, R. Duggal, A. d'Amico, S. Sharma, M. Orsi, M. Ramaswamy and A. Singh*
- PO87.** PocketCaBER and PocketDoS: Low-cost open-source tools for teaching and learning advanced topics in fluid mechanics. *Z. Peng, L. Warwaruk, T. Livesay, B. Yavitt, R.H. Ewoldt, G.H. McKinley and L. Kroo*
- PO88.** Rheological engineering of sustainable drilling fluids: Effects of biopolymers, brines, and particle interactions in complex suspensions. *L. Qitian A., O. P. Calabokis, M. Theisen, W. C. Junior, A. M. Vianna, E. A. de Souza and A. Franco*
- PO89.** Advanced rheo-Raman-UV setup for simultaneous mechanical and chemical analysis of curing processes. *J. Raia, A. Braun, L. Voelker-Pop, L. Reinders, M. Biermann and J. Laeuger*
- PO90.** Dueling enzymatic modulation of entanglements and microscale viscoelasticity of concentrated DNA solutions. *G. R. Velazquez, J. Li, A. McGovern and R. Robertson-Anderson*
- PO91.** Expanding direct ink write formulation printability predictions through synergistic LAMMPS and SAOS efforts. *L. Raymond, C. Zubeldia, E. Joly, J. Monti, J. Kopatz, R. Rao, D. Bolinteanu, H. Fowler and H. Root*
- PO92.** Effect of irradiation conditions on gelation and network development in UV-curable acrylate adhesives. *M. Ross, D. Curtis and S. Marsh*
- PO93.** Viscoelastic response of multi-extruded fiber-grade polypropylene for fiber spinning. *A. Sati, L. Hsiao and R. Farer*
- PO94.** Onset of nonlinearity of asphalt binders with isocyanate-based asphalt modifiers. *K. Saud, B. Orr and B. Malonson*
- PO95.** Shear and extensional rheology of yield-stress fluids and their stringiness. *S. Sepahvand, V. Sharma and I. Villagomez*
- PO96.** Elastic turbulence in fractured porous media. *J. Somma and C. Browne*
- PO97.** Normal stress difference in large amplitude oscillatory shear flow of yield stress fluids. *A. Tahmasebi and D. Venerus*
- PO98.** Linking cure kinetics, chemistry and rheology in a liquid encapsulant for semiconductor packaging. *R. Tao, A. Kotula, J. Tu, Y. J. Lee and G. Holmes*
- PO99.** Training graph neural network models for fast simulation of macromolecular self-assembly in bacteria. *S. V. Narayanan, J. Wang and R. Zia*
- PO100.** Salivary mucins for turbulent drag reduction. *L. Warwaruk, G. Degen, C. Cersosimo and G.H. McKinley*
- PO101.** Impact of hydrostatic pressure on microstructure and bulk rheology of dispersed materials. *S. Watson and L. Kroo*
- PO102.** Persistent homology of shear-history-dependent recovery in colloidal gels. *C. Weeks, R. Waheibi and L. Hsiao*
- PO103.** Mechanical and spatial insights into brittle thermoreversible gel fracture using recovery rheology and PIV. *E. Williams, Z. Roeder, M. Kaboolian and K. Erk*
- PO104.** Rheology–microstructure–performance relationships in dry electrode dough. *J. Woo, B. Park, J.-K. Yoo and J. D. Park*
- PO105.** Influence of surfactants, polymers and proteins on foam film drainage. *C. Xu, K. Ngo and V. Sharma*
- PO106.** Shear banding instabilities in complex fluids. *K. K. Yanamundra and L. Fusi*
- PO107.** Flow fingerprint: A protorheological measure of concrete pumpability using confined pipe rheometry. *A. Youssef, C. Donnelly, X. Shi, P. Gujar and Z. Grasley*
- PO108.** Extensional rheology of CNT/redox-active polymer inks for critical element recovery. *H. Zhao, J. Cleveland and M. Calabrese*
- PO109.** Rheological characterization and yielding behavior of an embolization material for endovascular aneurysm treatment. *H. Zong, S. Offermans, T. Homsma, P. Anderson and A. Alicke*

Gallery of Rheology

Grand Ballroom B & Pre-Function (Mezzanine Level)

Online Voting



Images

- GI1.** Fractured flows: Bursting bubbles in dense suspensions. X. Zhang, J. Elkhoury, I. Peters and I. Bischofberger
- GI2.** Effect of surfactants on flow-induced coalescence and relaxation. C. Vannozzi
- GI3.** High speed image of hybrid fan tip application of a plastisol sealer. N. Huff, C. Rader, R. McCall and K. Kmetz
- GI4.** Seeing the memory of shear in carbon black gels by tomo-rheoscopy. J. Bauland, S. Roux, S. Gstöhl, C. Schlepütz, M. Haist and T. Divoux
- GI5.** Setting boundaries: Mapping particle dynamics across a thermally induced phase interface in PNIPAm solutions. N. Hasanova, M. C. Roffin, X. Cheng, K. Schultz and J. Gilchrist
- GI6.** Tuning the material properties of active microtubule networks via filament stabilization. K. Matic, J. Ross, M. Valentine and R. Robertson-Anderson
- GI7.** Tripper's delight: Flow-induced patterns during crystallization of an immiscible polymer blend. K. Migler
- GI8.** The shape of roughness. N. Windbacher and L. Isa
- GI9.** Same Apparent Viscosity, Different Dynamics: Visualizing Newtonian and Non-Newtonian Fluid Injection. R. S. Schimicoscki, J. P. de Cristo, L. H. Quitian-Ardila, A. T. Franco, E. M. Germer
- GI10.** Microfluidic assessment of how adding polyethylene oxide changes the elongational behavior of low-concentration Carbopol solutions. F. Gallo, A. I. Cirillo, J. Claussen, S. Guido and G. Tomaiuolo

Videos

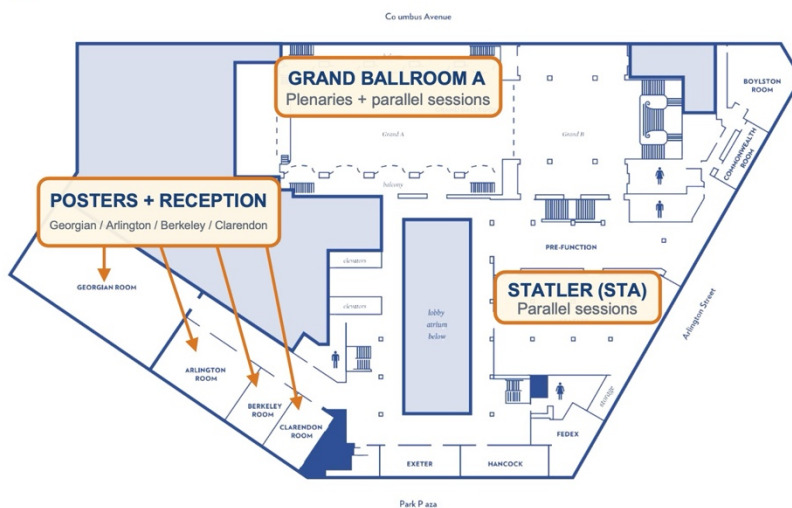
- GV1.** Solar system in a suspension. L. Chen, K. Ghezzi and J. Richards
- GV2.** Shooting the sheet: High-speed imaging of instabilities in expanding Carbopol sheets as a novel method of probing material mesostructure. C. Galvin, S. Nielsen, B. Blackwell and M. Driscoll
- GV3.** Formation of secondary structures in graphene under flow. K. Ghezzi, X. Wan, K. Ngo and J. Richards
- GV4.** Impact, yield, recover. M. T. Hossain and R. H. Ewoldt
- GV5.** Tumbling liquid crystals get it together. D. Jia and I. Bischofberger
- GV6.** Vibrant flowing flames. L. Molefe and I. Bischofberger
- GV7.** Various gel states in attractive suspensions of polarizable particles in electric field. S. M. Hosseini and J. S. Park
- GV8.** Rheology in action: Measuring and printing ceramics at NIST. R. Tao, R. Maier, S. Hales and W. Osborn
- GV9.** Visualization and flow-induced birefringence of myxosperry. G. D'Oria, G. H. McKinley
- GV10.** Non-Newtonian fluid injection: A visual journey through concentration dynamics. R. S. Schimicoscki, J. P. de Cristo, L. H. Q. Ardila and A. T. Franco

Meeting Schedule Overview

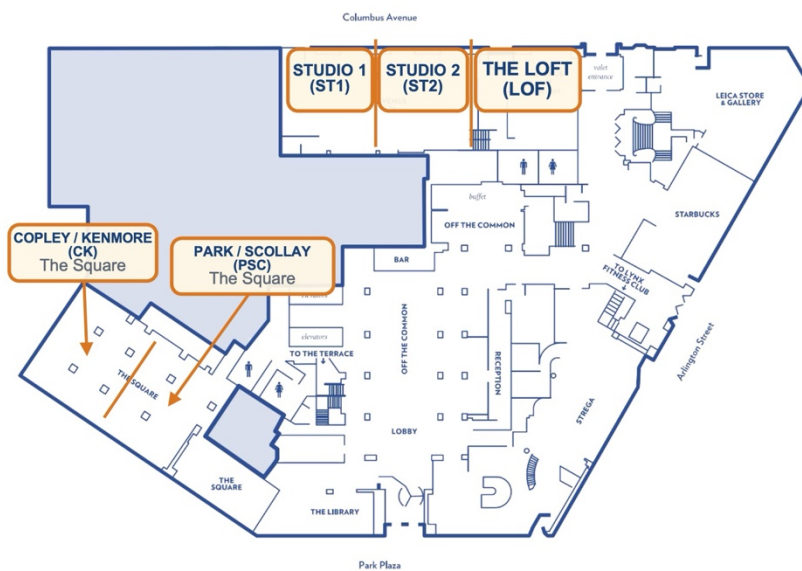
Date	Morning	Afternoon / Evening
Sat, Oct 24	8 am - 5 pm: Rheology Research Symposium / Short Course	
Sun, Oct 25	8 am – 1 pm: Rheology Research Symposium. 8 am – 4pm: Short Course	3 pm – 6 pm: Registration 6 pm – 8 pm: Welcome Reception
Sun, Oct 25	8 am - 5 pm: Rheology Research Symposium / Short Course	3 pm - 6 pm: Registration 6 pm - 8 pm: Welcome Reception
Mon, Oct 26	8:30 am: Plenary I (H. Stone) 9:50 am: Morning Sessions 12:00-1:15 pm: Student-Industry Forum	1:30 pm: Afternoon Sessions I 3:45 pm: Afternoon Sessions II 5:45 pm: ASTM-SOR Joint Session 7-9 pm: Student Trivia Night (Ghost Light Tavern)
Tue, Oct 27	8:30 am: Bingham Lecture (R. Bonnecaze) 9:50 am: Morning Sessions	1:30 pm: Afternoon Sessions I 3:45 pm: Afternoon Sessions II 6:30 pm: Awards Reception 7:30 pm: Awards Banquet
Wed, Oct 28	8:30 am: Plenary II (R. Zia) 9:15 am – 8:00 pm: Future Flows Undergraduate Day 9:50 am: Morning Sessions	1:30 pm: Afternoon Sessions I 3:45 pm: Afternoon Sessions II 6:30 pm: Poster Session & Reception 8:00 pm: Poster / Gallery Awards
Thu, Oct 29	8:00 am: Metzner Award Presentation (J. Richards) 8:40 am: Morning Sessions I 10:25 am: Morning Sessions II	

Hilton Boston Park Plaza

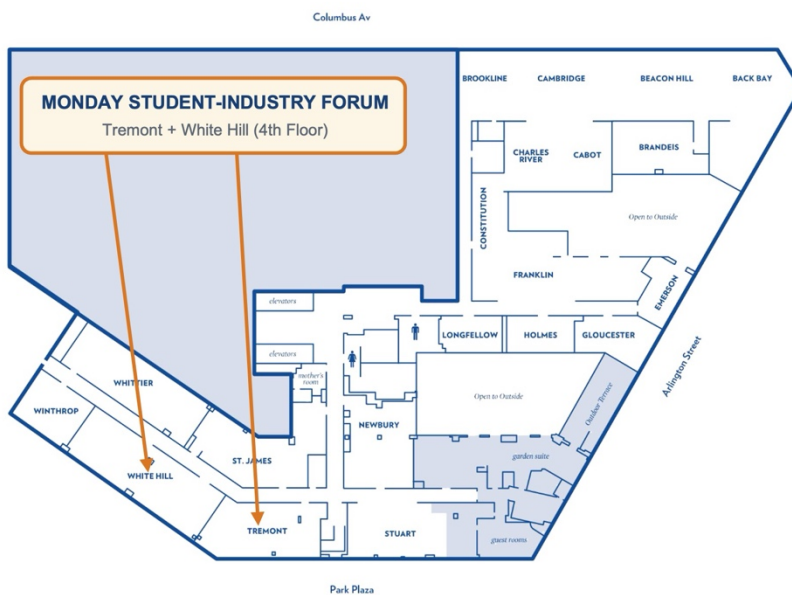
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