



The Society of Rheology 96th Annual Meeting

Santa Fe Community Convention Center, Santa Fe, NM

Meeting Schedule

Monday, October 20, 2025

	SBA	SBB	CD	PL	OM	SBC	SBD
8:30			A. Q. Shen (PL1) - <i>SBEF</i>				
9:20			Coffee Break				
9:50	CS1	GN1	SM1	AR1	IR1	BL1	FI1
10:10	CS2	GN2	SM2	AR2	IR2	BL2	FI2
10:30	CS3	GN3	SM3	AR3	IR3	BL3	FI3
10:50	CS4	GN4	SM4	AR4	IR4	BL4	FI4
11:10	CS5	GN5	SM5	AR5	IR5	BL5	FI5
11:30	CS6	GN6	SM6	AR6	IR6	BL6	FI6
11:50			Lunch Break				
1:30	CS7	GN7	SM7	AR7	IR7	BL7	FI7
1:50	CS8	GN8	SM8	AR8	IR8	BL8	FI8
2:10	CS9	GN9	SM9	AR9	IR9	BL9	FI9
2:30	CS10	GN10	SM10	AR10	IR10	BL10	FI10
2:50	CS11	GN11	SM11		IR11	BL11	FI11
3:10			Coffee Break				
3:45	CS12	GN12	SM12	RG1	IR12	BL12	FI12
4:05	CS13	GN13	SM13	RG1	IR13	BL13	FI13
4:25	CS14	GN14	SM14	RG2	IR14	BL14	FI14
4:45	CS15	GN15	SM15	RG2	IR15	BL15	FI15
5:05	CS16	GN16	SM16	RG3	IR16	BL16	FI16
5:25	CS17			RG3			
5:45				End			
7:00			Monday Reception				

Wednesday, October 22, 2025

	SBA	SBB	CD	PL	OM	SBC	SBD
8:30			L. Mahadevan (PL3) - <i>SBEF</i>				
9:20			Coffee Break				
9:50	CS33	GN34	SM28	AR20	AM12	ML1	TM7
10:10	CS34	GN35	SM29	AR21	AM13	ML2	TM8
10:30	CS35	GN36	SM30	AR22	AM14	ML3	TM9
10:50	CS36	GN37	SM31	AR23	AM15	ML4	TM10
11:10	CS37	GN38	SM32		AM16	ML5	TM11
11:30	CS38	GN39					TM12
11:50			Lunch Break				
1:30	CS39	GN40	SM33	AR24	AM17	ML7	TM13
1:50	CS40	GN41	SM34	AR25	AM18	ML8	TM14
2:10	CS41	GN42	SM35	AR26	AM19	ML9	TM15
2:30	CS42	GN43	SM36	AR27	AM20	ML10	TM16
2:50	CS43			AR28		ML11	TM17
3:10			Coffee Break				
3:45	CS44	SE1	SR1			ML12	TM18
4:05	CS45	SE2	SR2			ML13	TM19
4:25	CS46	SE3	SR3			ML14	TM20
4:45	CS47	SE4	SR4			ML15	TM21
5:05	CS48	SE5	SR5				TM22
5:25							TM23
5:45			End				
6:30			Poster Session & Reception				
6:30			Gallery of Rheology Sessions				

Tuesday, October 21, 2025

	SBA	SBB	CD	PL	OM	SBC	SBD
8:30			A. N. Beris (PL2) - SBEF				
9:20			Coffee Break				
9:50	CS18	GN18	SM17	RG4	IR18	BL17	FI17
10:10	CS19	GN19	SM18	RG4	IR19	BL18	FI18
10:30	CS20	GN20	SM19	RG5	IR20	BL19	FI19
10:50	CS21	GN21	SM20	RG5	IR21	BL20	FI20
11:10	CS22	GN22	SM21		IR22	BL21	FI21
11:30		GN23	SM22			BL22	
11:50			Lunch Break / Society Business Meeting				
1:30	CS23	GN24	SM23	AR11	AM1	BL23	FI22
1:50	CS24	GN25	SM24	AR12	AM2	BL24	FI23
2:10	CS25	GN26	SM25	AR13	AM3	BL25	FI24
2:30	CS26	GN27	SM26	AR14	AM4	BL26	FI25
2:50	CS27	GN28	SM27	AR15	AM5		
3:10			Coffee Break				
3:45	CS28	GN29	FR1	AR16	AM6	BL27	TM1
4:05	CS29	GN30	FR2	AR17	AM7	BL28	TM2
4:25	CS30	GN31	FR3	AR18	AM8	BL29	TM3
4:45	CS31	GN32	FR4	AR19	AM9	BL30	TM4
5:05	CS32	GN33	FR5		AM10		TM5
5:25			FR6		AM11		TM6
5:45				End			
6:30	Bus to Santa Fe Farmers' Market Pavilion						
8:00	Awards Banquet						

Thursday, October 23, 2025

	SBA	SBB	CD	SBC
8:00			S. Jamali (MP1) - <i>SBEF</i>	
8:40			Short Break	
8:45	CS49	SE6	SR6	ML16
9:05	CS50	SE7	SR7	ML17
9:25	CS51	SE8	SR8	ML18
9:45	CS52	SE9	SR9	ML19
10:05			Coffee Break	
10:35	CS53	SE10		
10:55	CS54	SE11		
11:15	CS55	SE12		
11:35	CS56	SE13		
11:55			End	

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 Speakers
GI = Gallery of Rheology - Images
GN = Self-assemblies, Gels and Networks
GV = Gallery of Rheology - Videos
IR = Interfacial Rheology, Surfactants, Foams and Emulsions

ML = AI and ML in Rheology
MP = Metzner Presentation
PL = Plenary Lectures
RG = Special Session: Rheology in Geoscience
SE = Rheology and Sustainability for Energy and Production
SM = Polymer Solutions, Melts and Blends
SR = Rheology for Soft Robotics and Use of Field-Responsive Materials
TM = Techniques and Methods: Rheometry, Tribometry, Spectroscopy and Microscopy

CD = Coronado + DeVargas
OM = O'Keefe + Milagro
PL = Peralta + Lamy
SBA = Sweeney Ballroom A
SBB = Sweeney Ballroom B
SBC = Sweeney Ballroom C
SBD = Sweeney Ballroom D
SBEF = Sweeney Ballroom E+F

Shaded = Keynote

Monday, October 20

Morning

8:30	PL1. Coupling rheology and microfluidics: Viscoelastic instabilities and emergent flow phenomena. <u>A. Q. Shen</u> and S. J. Haward						Sweeney Ballroom E+F
9:20	COFFEE BREAK						Santa Fe Community Convention Center Lobby
	Sweeney Ballroom A Colloidal Suspensions & Granular Matls	Sweeney Ballroom B Self-assemblies, Gels & Networks	Coronado + DeVargas Polymer Solutions, Melts & Blends	Peralta + Lamy Applied Rheology for Industrial Appl	O'Keeffe + Milagro Interfacial Rheo, Surf, Foams & Emul	Sweeney Ballroom C Biomaterials, Bio-fluid Dynm & Biorheo	Sweeney Ballroom D Flow-Induced Instb & Non-Newt Fluids
9:50	CS1. AI-powered Rheo-SAXS-XPCS analysis of cooperative rearrangement in dense colloidal suspensions. <u>H. He</u> , Y. Tian, H. Liang, M. Chu, Z. Jiang, J. de Pablo, M. Tirrell, S. Narayanan and W. Chen	GN1. Rheology in microgravity to elucidate fundamental transport phenomena. <u>P. Irace</u>	SM1. Slip-link and tube models make different predictions about entangled, star-shaped polymer relaxation. <u>J. D. Schieber</u> , A. Cordoba, M. Katzarova and D. Becerra	AR1. Advancements in extensional rheology of polymer melts on a rotational rheometer with dual motors. <u>J. P. Eickhoff Jr.</u> , J. Haeberle, J. A. Rodríguez Agudo, J. Laeuger and A. Shetty	IR1. Complex thermodynamics, structure and mechanics of mixed surfactant “frenemies” on highly curved interfaces. <u>M. E. Helgeson</u> , T. Sheth, A. Perez, N. Sinha, D. Zhao, G. Fredrickson and S. Shell	BL1. Biofilm infections can use material from the infected organism to strengthen and protect themselves. <u>V. Gordon</u>	FI1. GNFFTy model predictions of flow past a cylinder in the vortex-shedding regime. <u>R. J. Poole</u> and D. Geraghty
10:10	CS2. Structure & dynamics of dense colloidal suspensions under oscillatory shear. <u>P. E. Arratia</u>	GN2. Microstructure & rheology of thermoreversible colloidal gels by 4D-RheoSANS. <u>N. Wagner</u> , T. Egnaczyk, Q. Hartt, M. Kabra, K. Suman and C. Neal	SM2. Development of the Mead “Semi-Toy” polydispersity model for linear and/or star polymers in arbitrary flows. <u>D. W. Mead</u>	AR2. Boosting flow-induced crystallization of polypropylene via vitrimerization. <u>C. R. López-Barrón</u>	IR2. Controlled-release of additives to improve PFAS-free firefighting foam stability. <u>C. J. Martinez</u> , E. C. Malek and J. Youngblood	BL2. Using exogenous polymers to engineer biofilm viscoelasticity. <u>B. Bhattarai</u> and G. F. Christopher	FI2. Asymptotic flow states in turbulent viscoelastic Taylor-Couette flow: The relationship between asymptotic drag states and large and small scale interactions. <u>F. Lin</u> , N. Lin and <u>B. Khomami</u>
10:30	CS3. Stored elasticity, emerging plasticity, and recovery of rigidity in yield stress fluids. <u>L. Bayer</u> , H. A. Vinutha and E. Del Gado	GN3. Yielding of dense protein-adjuvanted colloidal gels. Y. C. Saraswat, R. Waheibi, C. Glover, D. Dixon, A. Langford and <u>L. Hsiao</u>	SM3. Shear banding in simulated entangled polymer melts depends on the effectiveness of flow-induced constraint release. <u>L. L. Nelson</u> , P. D. Olmsted and G. S. Grest	AR3. Impact of polymer melt viscoelasticity on hollow fiber formation in segmented arc melt spinning. <u>K. J. Ernst</u> , H. S. Perera, H. V. Tafreshi and S. Khan	IR3. Dynamics of bubble pinchoff using mixed surfactants. <u>S. L. Biswal</u>	BL3. Whole-cell models of E. coli: How colloidal physics regulate ribogenesis and protein synthesis. <u>R. N. Zia</u> , V. S. Sivasankar, J. L. Hofmann, T. S. Yang, A. J. Maheshwari, H. S. Sachar, J. G. Wang and D. Endy	FI3. Viscoelastic effects in the bulge instability of inflated tubes. <u>S. Velankar</u> , F. Rouhani, Q. Liu and B. Young
10:50	CS4. Memory in amorphous solids: From micro- to macro-rheology. <u>C. W. Lindeman</u> , S. R. Nagel, J. J. Griebler, P. G. Kovakas, S. A. Rogers, S. Narayanan, J. L. Harden and R. L. Leheny	GN4. Surface brush density as a structural and rheological tuning parameter in a colloidal gel. C. Zhuang, R. Campbell, P. Haghighi, S. Jamali and <u>A. Mohraz</u>	SM4. Modelling the nonlinear shear rheology of entangled polymer solutions and melts. <u>M. Dalne</u> and E. van Ruymbeke	AR4. Multiscale modeling, imaging, and rheology to understand crystallization pathways for resveratrol. <u>R. R. Rao</u> , C. C. Roberts, T. Janicki, H. Cleaves, T. R. Kennelly, T. Rodgers, M. Neal and Z. Nagy	IR4. Interfacial rheology and foam stability in pluronics and sodium dodecyl sulfate mixtures. <u>S. A. Onyemba</u> and R. Foudazi	BL4. On growth and form: Living gels formed by bacteria growing in complex fluids. S. Gonzalez La Corte, N. S. Wingreen and <u>S. S. Datta</u>	FI4. Structure and dynamics of elastoinertial turbulence in channel and pipe flow. M. Kumar and <u>M. D. Graham</u>
11:10	CS5. Flow irreversibility for translational and rotational motion in dense colloidal suspensions. <u>A. H. Walker</u> , E. Del Gado, J. Urbach and D. L. Blair	GN5. Simulating surface brush interactions in colloidal gel assembly using angular rigidity. <u>R. Campbell</u> , P. Haghighi, C. Zhuang, A. Mohraz and S. Jamali	SM5. Mechanically accelerated depolymerization of entangled linear polymer melts. <u>L. M. Walker</u> and J. Ahn	AR5. Path-independent flow characterization of model yielding pastes. <u>G. J. Donley</u> , K. Snyder, N. S. Martys and E. Del Gado	IR5. Stabilizing foams: Insights from thin film dynamics and interfacial rheology. <u>E. Chatziagiannakis</u>	BL5. Interpenetrated GelMA/PVA hydrogels with enhanced viscoelastic and structural properties for biomedical applications. <u>P. Sarkar</u> , A. G. Bernard and K. Mukhopadhyay	FI5. Statistical analysis of laminar-to-turbulent transition in viscoelastic channel flows. A. Martinez Ibarra and <u>J. S. Park</u>

11:30	CS6. Unified microscopic theory of nonequilibrium aging, structural and stress relaxation, and residual stress in colloidal glasses after flow cessation. <u>K. S. Schweizer</u> and A. Mutneja	GN6. Rheological behavior of colloidal silica (Ludox) dispersion: Irreversible aging and thixotropy. V. Kumar and <u>Y. M. Joshi</u>	SM6. Aging in natural gas activates the relaxations of polymer melts. <u>M. Hajirezaei</u> and R. Poling-Skutvik	AR6. Psychophysical and rheological investigation of toothpaste tube squeezability. <u>B. Teoman</u> and A. Potanin	IR6. Role of internal circulation in emulsion drops on microparticle morphology. S. Sundar, E. Hukkanen, R. Chiarella and <u>A. Ramachandran</u>	BL6. Measuring human mesenchymal stem cell migration and remodeling in hydrogels with a spatial change in elastic modulus. <u>Z. Imran</u> and K. Schultz	FI6. Constitutive relations for modelling the viscoelastic response of fluids that exhibit non-monotonic steady-state response. <u>K. K. Yanamundra</u> , S. P. Pillai, C. C. Benjamin and K. R. Rajagopal
11:50	LUNCH BREAK						
	Sweeney Ballroom A Colloidal Suspensions & Granular Matls	Sweeney Ballroom B Self-assemblies, Gels & Networks	Coronado + DeVargas Polymer Solutions, Melts & Blends	Peralta + Lamy Applied Rheology for Industrial Appl	O'Keeffe + Milagro Interfacial Rheo, Surf, Foams & Emul	Sweeney Ballroom C Biomaterials, Bio-fluid Dynm & Biorheo	Sweeney Ballroom D Flow-Induced Instb & Non-Newt Fluids
1:30	CS7. Particles to fields in viscoelastic fluids. S. Nagella, D. Y. Kim, S. Malik, E. S. Shaqfeh and <u>S. Takatori</u>	GN7. Role of non-central forces on the structure and mechanics of colloidal gels. <u>P. Haghighi</u> and S. Jamali	SM7. Impact of molecular weight and polydispersity on concentration-dependent relaxation time in dilute polymer solutions. <u>A. M. Aisling</u> , D. Ghasemi, N. J. Alvarez, H. W. Muller and L. Brandfellner	AR7. Recombinant fibrous protein gels and functionalized polysaccharides as rheological modifiers in personal care formulations. <u>H. A. Faizi</u>	IR7. Effect of interdroplet interaction on rheology of highly concentrated emulsions. M. Zhou, B. Valipour Goodarzi and <u>R. Foudazi</u>	BL7. Impact of integrin-ligand binding specificity on the dynamics of cell-material interactions: A rheological study of the cellular microenvironment. <u>F. Hamid</u> and K. Schultz	FI7. Elastic turbulence and shear banding in entangled polymers and wormlike micelles. T. Lewy, S. M. Fielding, <u>P. D. Olmsted</u> and R. R. Kerswell
1:50	CS8. Phase-change driven dynamics in confined colloidal suspensions. <u>A. Pahlavan</u>	GN8. Investigating rough particle contact mechanics using optical tweezers. <u>M. A. Pitell</u> , L. Woolley, J. Vermant and E. M. Furst	SM8. Viscoelastic properties of physical networks: From chain branching to sticky junctions. <u>E. van Ruymbeke</u>	AR8. Advanced tribological techniques for the personal care products. <u>J. P. Eickhoff Jr.</u> and K. S. Pondicherry	IR8. A rigorous microinertia model for dilute emulsions under flow. A. N. Beris and <u>B. J. Edwards</u>	BL8. Spatiotemporal mapping of dynamics and viscoelasticity in ligase-fueled DNA fluids. <u>A. D. McGovern</u> , E. Riggle, D. Protopapas, K. Chang, A. Razzaghi, R. J. McGorty and R. M. Robertson-Anderson	FI8. Rheo-NMR of shear banding wormlike micelles. A. Scigliani, <u>H. Mohammadigoushki</u> and S. C. Grant
2:10	CS9. Sedimentation of flocculating non-Brownian suspensions by high-order Stokesian dynamics. <u>A. Z. Zinchenko</u>	GN9. Structure and dynamics of frictional vs frictionless colloidal gels. <u>M. Tan</u> and S. Jamali	SM9. Flow effects on associative polymers: From linear to ring macromolecule. J. C. Bracewell, R. Sivaraj, D. Perahia, T. C. O'Connor and <u>G. S. Grest</u>	AR9. Influence of cationic surfactant-fatty alcohol on the properties of moisturizing creams. <u>S. Liu</u> , R. K. Sinha, C.-C. Chang, B. Lee and H. Bui	IR9. Formulation strategies for ZnO-containing emulsions with carbomer copolymers: Overcoming carbomer-electrolyte sensitivity. <u>B. S. Bodnar</u> , H. Bui, A. Poudel and A. Shah	BL9. Heterogeneity in red blood cell mechanics drives altered blood rheology in sickle cell disease. <u>H. M. Szafraniec</u> , F. Bull, J. Higgins, H. A. Stone, T. Krueger and D. K. Wood	FI9. Unraveling the dynamics of polymer scission in porous media. <u>R. C. Singiser</u> and S. S. Datta
2:30	CS10. Contactless inter-particle friction due to roughness and elasticity. <u>B. Rallabandi</u> , J. Minten and A. Kargar-Estahbanati	GN10. Shear-induced yielding and brittle-to-ductile transition in cellulose nanocrystal gels. L. Morlet-Decarnin, <u>T. Divoux</u> and S. Manneville	SM10. Effect of chain length on shear and extensional rheology of polyampholyte ionomers. <u>N. Sadeghi</u> and F. Khabaz	AR10. Multiscale rheo-physical characterization and processing of concentrated surfactant solutions. <u>P. U. Kelkar</u> , K. A. Erk, E. Tozzi and S. Lindberg	IR10. Reducing emulsion drop deformation with low surface coverage: High yield particle interfaces. <u>A. Abutalebi</u> and G. F. Christopher	BL10. Single cells are compactly and accurately described as Fractional Kelvin-Voigt Materials. M. Das, J. L. Waeterloos, C. Clasen and <u>G. McKinley</u>	FI10. Finite-time blow-up: The importance of (and approximations for) marginal chain stretching effects. <u>J. D. Peterson</u> , V. Chen and C. T. Drucker

2:50	CS11. Three simple Stokeslet trajectories. <u>B. J. Landrum</u>	GN11. Adding MXenes to aqueous cellulose nanocrystal dispersions: Effects on rheology and dispersion microstructure. <i>F. Mekunye, M. L. Woodmansee and V. A. Davis</i>	SM11. Linking multiscale rheology and SANS study to performance of hierarchically structured PEM fuel cell catalyst layer. <u>M. Lee</u> and M. Trifkovic	IR11. Simulation of amphiphilicity-dependent aggregation and microstructural evolution of Janus particles at fluid interfaces. <i>M. Pourasgharoshtebin, B. K C, R. Khare and G. F. Christopher</i>	BL11. How do crosslink dynamics alter the yielding transition and injectability of dynamic hydrogels? <u>N. Eckman</u> and E. Appel	FI11. Large amplitude oscillatory extension (LAOE) of complex fluids. <i>S. M. Recktenwald, T. P. John, R. J. Poole, A. Q. Shen, C. P. Fonte and S. J. Haward</i>	
3:10	COFFEE BREAK Santa Fe Community Convention Center Lobby						
	Rheology in Geoscience						
3:45	CS12. Dynamic response during solidification of dense suspensions. <u>M. Geri</u>	GN12. Explicit simulation of depletion effects in colloid-polymer mixtures. <u>A. Jha</u> and S. Jamali	SM12. Shear response of ionizable polymer melts from ionomers to polyelectrolytes. <i>S. Meedin, C. Kosgallana, G. S. Grest and D. Perahia</i>	RG1. A dynamical model for the rheology of polycrystalline glacial ice. <i>A. Vargas, R. Ran and J. C. Burton</i>	IR12. Characterizing yield stress mechanisms in particle laden interfaces. <u>K. Bhaskar</u> , S. A. Rogers and G. F. Christopher	BL12. Mechanical phase transitions in articular cartilage. <u>I. Cohen</u> , L. Bonassar, M. Das and J. Omonira	FI12. Recent advances in polymer viscoelasticity from general rigid bead-rod theory. <u>A. J. Giacomini</u>
4:05	CS13. Unified description of yielding in sheared soft particulate systems. <u>S. Pradeep</u> , A. Thery, P. E. Arratia and D. J. Jerolmack	GN13. Shear induced aging in polymer-silica composites. <u>D. D. Gray</u> , D. Adrian, D. Ahn, S. Chen, F. Kalyn, T. Heyl, M. Hodgson, J. L. Hor and S. A. Rogers	SM13. Microrheology of biosynthetic composites of DNA and NaPSS. <i>F. Safi Samghabadi, A. D. McGovern, R. M. Robertson-Anderson and J. C. Conrad</i>	RG1 continues	IR13. The rheology of Pickering emulsions - the effect of particle hydrophobicity. <i>N. Finish Hakshur and M. Gottlieb</i>	BL13. Non-equilibrium micromechanics of photo-responsive biopolymer composites. <u>R. M. Robertson-Anderson</u>	FI13. The influence of fluid elasticity on the flow-induced response of a flexibly-mounted square prism. <u>H. Gong</u> , U. N. Patel, J. P. Rothstein and Y. Modarres-Sadeghi
4:25	CS14. Delayed yielding in soft glasses and gels, and the role of critical strain. <u>C. E. Owens</u>	GN14. Polymer-nanoparticle composite gels to mimic muscle stiffness for cultured meat platforms. <u>S. D. Negash</u> , M. A. Snyder and K. Schultz	SM14. Pinching dynamics and extensional rheology of dilute and entangled polymer solutions. <i>C. Slykas, C. Martinez Narvaez, L. Edano and V. Sharma</i>	RG2. Discovering the complex rheology of polar ice using AI and satellite data. <u>C.-Y. Lai</u> and Y. Wang	IR14. Interfacial rheology of lung surfactants under relevant conditions. <u>J. Vermant</u> , M. C. Novaes Silva and M. Rodriguez Hakim	BL14. Emergent stress transmission in active cytoskeleton composites. <u>A. Razzaghi</u> , M. T. Valentine, R. J. McGorty and R. M. Robertson-Anderson	FI14. Is there a relationship between the EOR polymer solutions' mechanical degradation and rheological properties? <u>M. S. Azad</u> and D. Al Shehri
4:45	CS15. A nested effective medium model for the rheology of crosslinking thermoset composites. <u>A. P. Kotula</u> and S. Romberg	GN15. Rheology and structure of multi-component attractive colloidal gels. <u>A. I. Kaltashov</u> and S. Jamali	SM15. Stringiness, spinnability, and sprayability of polymer solutions. <u>L. Edano</u> , S. Sepahvand and V. Sharma	RG2 continues	IR15. Effects of molecular architecture at liquid interfaces: Interfacial rheology and neutron reflectometry of linear, ring, and dendritic polymers. <u>D. Renggli</u> , B. Thompson, J. Allgaier, M. Krutev, D. Richter, T.-C. Lin, K. Matyjaszewski, D. Vlassopoulos and N. Wagner	BL15. In situ rheological monitoring of diffusion-driven bioink crosslinking in embedded 3D bioprinting. <i>A. Shih, S. J. Chung, F. Christakopoulos, L. G. Brunel, N. Eckman, Y. Liu, J. Tao, S. C. Heilshorn and G. G. Fuller</i>	FI15. Holey sheet: Destabilizing fluids under extreme stress. <u>M. Driscoll</u> , C. Galvin, B. Blackwell and S. Nielsen
5:05	CS16. Benchmarking the rheology of nanocellulose dispersions from multiple sources. <u>P. T. Spicer</u> and M. Hosseini	GN16. Tailoring evaporative patterns by hetero-aggregation of oppositely charged species. <u>S. Hariharan</u> , S. P. Thampi and M. G. Basavaraj	SM16. Extensional rheology of dilute suspensions of spheres in polymeric liquids. <u>A. Sharma</u> and D. Koch	RG3. Freezing flow in porous ice. <u>X. Fu</u> , N. Jones, A. Eujayl, B. Zhao and A. Moure	IR16. The life and death of far-from-equilibrium droplets. <u>L. Zarzar</u>	BL16. Investigation of shear and extensional rheology of silk fibroin in applications of tissue engineering. <u>L. Brunmaier</u> and T. Walker	FI16. Pressure drop in a deformable channel distinguishes Newtonian from Boger fluids. <i>S. Chun, I. C. Christov and J. Feng</i>

5:25	CS17. From double yielding in step-rate shear to two-step re-equilibration dynamics in colloidal attractive glasses and gels. <u>A. Mutneja</u> and K. S. Schweizer	RG3 <i>continues</i>
5:45		END
7:00	MONDAY EVENING RECEPTION	New Mexico History Museum, until 9:00 pm

Tuesday, October 21

Morning

8:30	PL2. Rheology magic. <u>A. N. Beris</u> (Bingham Lecture) Sweeney Ballroom E+F						
9:20	COFFEE BREAK Santa Fe Community Convention Center Lobby						
	Sweeney Ballroom A Colloidal Suspensions & Granular Matls	Sweeney Ballroom B Self-assemblies, Gels & Networks	Coronado + DeVargas Polymer Solutions, Melts & Blends	Peralta + Lamy Rheology in Geoscience	O’Keeffe + Milagro Interfacial Rheo, Surf, Foams & Emul	Sweeney Ballroom C Biomaterials, Bio-fluid Dynm & Biorheo	Sweeney Ballroom D Flow-Induced Instb & Non-Newt Fluids
9:50	CS18. Non-simple flow geometries and granular rheology. <u>J. Clemmer</u> , <u>I. Srivastava</u> , <u>G. S. Grest</u> and <u>J. B. Lechman</u>	GN18. Linear and non-linear rheology of Pluronic F127 self-assemblies in ionic liquid and water mixtures. <u>S. M. Tabatabaei</u> and <u>R. Foudazi</u>	SM17. Time-temperature superposition breaks down in extensional flow of polymer solutions. <u>J. B. Joseph</u> and <u>J. P. Rothstein</u>	RG4. Flashing lights in speeding grains: Rheology of granular avalanches. <u>N. M. Vriend</u>	IR18. Shear-induced deformation of MXene-covered droplets: Effect of interfacial viscoelasticity. <u>B. Attaianese</u> and <u>R. Cardinaels</u>	BL17. Viscoelasticity of airway mucus by live-cell rheometry. <u>C. Moose</u> and <u>G. G. Fuller</u>	FI17. Evidence of an inertialess kapitza instability due to viscosity stratification. <u>S. Gundavarapu</u> , <u>D. J. Dhas</u> and <u>A. Roy</u>
10:10	CS19. Exploring effects of cohesive particles localization on $\mu(I)$ -rheology of highly polydisperse granular materials using GPU-accelerated DEM. <u>S. Yans</u> , <u>M. Henry</u> , <u>J. Lambrechts</u> and <u>V. Legat</u>	GN19. Thermodynamic origins of irreversible morphology transitions caused by flow-equilibration cycles in amphiphilic solutions. <u>S. Liu</u> and <u>R. Sureshkumar</u>	SM18. Modeling the molecular dynamics of entangled polymer melts under biaxial elongational flow. <u>N. Chongvimansin</u> and <u>T. C. O’Connor</u>	RG4 continues	IR19. Multiphysics modeling of long-term aging and deformation mechanisms in polyurethane foams. <u>K. N. Long</u> , <u>J. A. Brown</u> , <u>C. C. Roberts</u> , <u>B. H. Jones</u> and <u>R. R. Rao</u>	BL18. Thixo-viscoelastoplastic rheological characterisation of human mucus and sputum under healthy and ill conditions using a Bautista-Manero-Puig constitutive model within a multimode approach. <u>J. E. Lopez-Aguilar</u> , <u>M. Figueroa-Landeta</u> , <u>S. L. Esponda-Cervantes</u> , <u>M. F. Reyes-Tenorio</u> and <u>O. Manero</u>	FI18. Shear-driven sedimentation of a rigid particle in soft suspensions. <u>R. Alrashdan</u> and <u>F. Khabaz</u>
10:30	CS20. Shear reversal in dense frictional suspensions: A micromechanical description connecting microscopic physics with macroscopic physics via mesoscale frictional network. <u>R. Pappalardo</u> , <u>A. D’Amico</u> , <u>S. Sharma</u> , <u>S. Tu</u> , <u>M. Orsi</u> and <u>A. Singh</u>	GN20. Life-like condensate networks formed by liquid crystal filament coiling. <u>C. A. Browne</u> and <u>C. Osuji</u>	SM19. Measuring the properties of a viscoelastic fluid using a tethered swimming rheometer. <u>E. S. Shaqfeh</u> , <u>S. Chiu</u> , <u>L. Yan</u> , <u>A. Jussupov</u> and <u>M. Prakash</u>	RG5. Viewing lobate patterns on Earth and Mars as climate-modulated fluid-like instabilities. <u>R. C. Glade</u>	IR20. How does the airflow change the evaporation and deposition of droplets? <u>D. Jeon</u> , <u>G. Oh</u> , <u>S. Mun</u> , <u>J. S. Park</u> and <u>B. Weon</u>	BL19. Chemotactic response of bacteria to nutrient hotspots. <u>A. Pahlavan</u>	FI19. Mechanics of multiple bubbles in yield stress fluids: Effect of hydrodynamic interactions and coalescence. <u>M. Daneshi</u> , <u>E. Chaparian</u> and <u>I. Frigaard</u>
10:50	CS21. Characterization of granular rheology using LAOS in Couette chute flow. <u>D. Stumpf</u> , <u>K. Henry</u> , <u>C. R. Wassgren</u> and <u>P. R. Mort</u>	GN21. Structure and rheology of self-assembled poly(styrene)-poly(ethylene glycol) block copolymers. <u>K. M. Weigandt</u> and <u>K. Rehmann</u>	SM20. Interactive stress relaxation in polymers, fast and slow. <u>H. H. Winter</u>	RG5 continues	IR21. Dilatational response of soluble asphaltenes at the oil/water interface. <u>A. B. Marciel</u>	BL20. The stress relaxation response of the porcine descending aorta under combined normal and torsional loadings. <u>C. C. Benjamin</u> and <u>L. Nguyen</u>	FI20. The mechanism of incomplete stress relaxation in brittle yield stress fluids. <u>J. Lee</u> , <u>G. B. Thompson</u> , <u>B. A. Harley</u> and <u>S. A. Rogers</u>

11:10	CS22. Unifying granular intrusion dynamics for space exploration applications. <u>J. G. Ruck</u> , <u>S. Pradeep</u> , <u>J. Bush</u> , <u>E. D. Sigg</u> , <u>F. Qian</u> and <u>D. J. Jerolmack</u>	GN22. Modeling flow-driven disassembly of supramolecular telechelic polymers in elongational flows. <u>S. Liu</u> and <u>T. C. O'Connor</u>	SM21. A universal method to determine the molecular weight of polymers in semidilute unentangled solutions using SAXS, NMR diffusometry, and rheology. <u>B. Baniasadi</u> , <u>A. Han</u> , <u>M. M. H. Babu</u> , <u>V. S. Uppala</u> , <u>J. Aubry</u> , <u>L. A. Madsen</u> , <u>C. G. Lopez</u> and <u>R. H. Colby</u>	IR22. Flow assurance challenges through the lens of interfacial rheology. <u>T. A. Figueira</u> , <u>E. M. Castano</u> , <u>J. E. Leiva</u> , <u>A. Mora</u> , <u>M. C. Khalil de Oliveira</u> , <u>O. Karnitz</u> , <u>P. R. Varges</u> , <u>P. R. de Souza Mendes</u> and <u>M. F. Naccache</u>	BL21. A viscosity-based assay to screen blood diseases. <u>M. S. Tirumkudulu</u> and <u>M. A. Mir</u>	FI21. A universal relationship between linear and nonlinear responses in soft materials. <u>R. Poling-Skutvik</u> , <u>D. Keane</u> , <u>E. Nikoumanesh</u> and <u>S. A. Rogers</u>
11:30		GN23. Start-up response of wormlike micelles: Scission & banding. <u>I. Cusano</u> , <u>A. Azarpour</u> , <u>N. Grizzuti</u> , <u>G. Zanchetta</u> and <u>R. Pasquino</u>	SM22. Quantitative metrics to assess evidence of time-temperature superposition (tTS). <u>A. S. Modi</u> , <u>N. Ramlawi</u> , <u>A. T. Hedegaard</u> , <u>E. L. Breedlove</u> , <u>J. W. McAllister</u> , <u>H. Lee</u> , <u>B. Rajabifar</u> and <u>R. H. Ewoldt</u>		BL22. Complex coacervate microemulsions. <u>S. Srivastava</u>	
11:50	LUNCH BREAK / SOCIETY BUSINESS MEETING Sweeney Ballroom E+F, 12:00-1:30 pm					

Afternoon

	Sweeney Ballroom A Colloidal Suspensions & Granular Matls	Sweeney Ballroom B Self-assemblies, Gels & Networks	Coronado + DeVargas Polymer Solutions, Melts & Blends	Peralta + Lamy Applied Rheology for Industrial Appl	O'Keeffe + Milagro Additive and Advanced Manufacturing	Sweeney Ballroom C Biomaterials, Bio-fluid Dynam & Biorheo	Sweeney Ballroom D Flow-Induced Instb & Non-Newt Fluids
1:30	CS23. Microrheology in active suspensions. <u>B. Chen</u> and <u>J. F. Brady</u>	GN24. Effect of Microgel Elasticity on Tracer Dynamics in Microgels. <u>P. Edimeh</u> and <u>J. C. Conrad</u>	SM23. An elasto-viscoplastic approach to polymer rheology. <u>A. Winters</u> , <u>J. Vermant</u> and <u>T. A. Tervoort</u>	AR11. The evolution of parabolic focal conic defects in concentrated liquid crystalline detergent formulations. <u>M. Kaboolian</u> , <u>P. U. Kelkar</u> , <u>M. Caggioni</u> , <u>S. Lindberg</u> and <u>K. A. Erk</u>	AM1. Printability and rheology of colloidal inks under high-frequency pulsed strain histories. <u>L. Kroo</u> , <u>M. Rishabh</u> , <u>T. Tuladhar</u> and <u>G. McKinley</u>	BL23. Micro-confinement drives the separation of active and passive matter. <u>P. Lele</u> , <u>P. K. Subrahmanian</u> and <u>S. Mukhopadhyay</u>	FI22. Extensional deformation of a drop with an elastoviscoplastic interface. <u>P. D. Anderson</u> , <u>M. Hulsén</u> , <u>M. Hutter</u> , <u>M. Carrozza</u> and <u>L. Bremer</u>
1:50	CS24. Tuning the viscosity and shear-jamming point in active dense suspensions. <u>B. P. Bhowmik</u> and <u>C. Ness</u>	GN25. Granular hydrogels as brittle yield stress fluids. <u>J. Lee</u> , <u>G. B. Thompson</u> , <u>K. M. Kamani</u> , <u>N. Flores-Velasco</u> , <u>S. A. Rogers</u> and <u>B. A. Harley</u>	SM24. Inherent spatial heterogeneity in polystyrene/polyisoprene block copolymers. <u>B. W. Tantomio</u> and <u>G. B. McKenna</u>	AR12. Tribo-rheological evaluation of facial cleansers for post-wash frictional sensory on synthetic skin templates. <u>R. K. Sinha</u> and <u>H. Bui</u>	AM2. Printability criterion for highly-filled inks for direct-ink write additive manufacturing. <u>J. J. Grieblér</u> , <u>J. W. Kopatz</u> , <u>S. A. Rogers</u> , <u>A. S. Tappan</u> and <u>A. M. Grillet</u>	BL24. Multicomponent vesicles in simple shear flow. <u>Y. Li</u> , <u>A. Venkatesh</u> , <u>C. Schroeder</u> and <u>V. Narsimhan</u>	FI23. Fiber suspension flow with wall-slip in hyperbolic symmetric geometries. <u>K. D. Housiadas</u> , <u>A. N. Beris</u> and <u>S. G. Advani</u>
2:10	CS25. Viscoelasticity of nanocolloidal suspensions from probe rheology: probe size and statistics. <u>M. Pourasgharoshtebin</u> , <u>E. M. Furst</u> and <u>R. Khare</u>	GN26. Rheological effects on rupture of polymer networks. <u>Z. Fan</u> and <u>S.-Q. Wang</u>	SM25. PEO/PMMA blend dynamics revisited - a van Gorp-Palmen analysis. <u>B. W. Tantomio</u> , <u>T. T. Truong</u> , <u>L. M. Hoover</u> and <u>G. B. McKenna</u>	AR13. Microstructure-informed rheological models for effective formulation design. <u>J. Hipp</u> , <u>M. Caggioni</u> and <u>E. Martin</u>	AM3. Impact of polymer molar mass on stability of dense pastes during additive manufacturing. <u>B. Brettmann</u>	BL25. Up, up, and away: Microbes use biogenic bubbles to escape confinement in yield stress environments. <u>B. Vajdi Hokmabad</u> and <u>S. S. Datta</u>	FI24. Impact dynamics of non-Newtonian drops. <u>A. Mobaseri</u> , <u>S. Kumar</u> and <u>X. Cheng</u>
2:30	CS26. Probing the microstructure of a viscosity metamaterial. <u>A. R. Barth</u> , <u>N. Singh</u> , <u>I. Cohen</u> , <u>A. Shetty</u> , <u>E. R. Dufresne</u> and <u>B. Chakraborty</u>	GN27. The influence of network topology on the viscoelasticity of polyelectrolyte complex (PEC) hydrogels. <u>F. Albreiki</u> , <u>H. Senebandith</u> , <u>D. Li</u> and <u>S. Srivastava</u>	SM26. Immiscible polydimethylsiloxane and polybutadiene vitrimer blends. <u>N. Torres</u> , <u>D. C. Barzycki</u> and <u>R. G. Ricarte</u>	AR14. Linear and non-linear rheological behavior of ice cream. <u>A. Alvi</u> and <u>S. I. Martinez-Monteaquido</u>	AM4. Embedding cell-Like rheology into 3D printed scaffolding for active and adaptable materials applications. <u>T. E. Angelini</u>	BL26. Locomotion in viscoplastic yield stress fluids: Investigation of force balance and geometry effects. <u>F. Nazari</u> , <u>K. Shoele</u> and <u>H. Mohammadigoushki</u>	FI25. A causality-abiding constitutive relationship for a wide class of thixotropic materials. <u>S. P. Pillai</u> , <u>Z. Grasley</u> and <u>R. K R</u>

- 2:50 **CS27.** A discrete element framework for multibody collisions in wet granular systems. *R. Chattopadhyay and R. H. Davis*
- GN28.** Exploring chemistries for hydrogel-based reversible adhesives. *J. W. Kopatz, K. Ghosh, E. Larkin, R. Secor, R. R. Rao, M. Murphy, W. Dorman and C. C. Roberts*
- SM27.** Designing mercury-free photoelastic polyurethane particles. *K. Chaudhuri, H. Burke, B. Hayes and N. M. Vriend*
- AR15.** Small-volume protein solution rheology. *P. Salipante, V. Prabhu and S. Hudson*
- AM5.** Stabilizing liquid threads in embedded 3D printing. *M. T. Hossain, W. Eom, S. H. Tawfik and R. H. Ewoldt*

3:10 COFFEE BREAK Santa Fe Community Convention Center Lobby

Future of Rheology Speakers

- 3:45 **CS28.** Teaching thixotropy and elastoviscoplastic materials. *C. W. Macosko, R. H. Ewoldt and G. McKinley*
- GN29.** Time-resolved nonlinear rheology of interpenetrating biocomposite networks using the SPP framework: From experimental characterization to simulation models. *W. A. Fontaine-Seiler, D. L. Blair, E. Del Gado and G. J. Donley*
- 4:05 **CS29.** Discriminating between viscoelasticity and thixotropy via constrained recoil experiments. *P. R. de Souza Mendes, P. H. Silva Paiva, P. R. Varges, I. R. Siqueira and R. L. Thompson*
- GN30.** Molecular simulations of polymerization-induced phase separation and viscoelasticity in interpenetrating polymer networks. *G. Joe, W. T. Ferguson, M. J. Stevens and T. C. O'Connor*
- 4:25 **CS30.** Rheology of highly overpacked states of soft microgel particles. *R. Angelini, S. Franco, B. Ruzicka, V. Nigro and E. Buratti*
- GN31.** Polyelectrolyte complex-interpenetrating polymer network (PEC-IPN) hydrogels: Influence of covalent network molecular weight. *H. Senebandith, F. Albreiki, D. Li and S. Srivastava*
- 4:45 **CS31.** Rheology and microstructure of sticky yield stress fluids. *H. K. Yankah, R. Alrashdan, M. Cloitre and F. Khabaz*
- GN32.** How gel architecture controls ductility and dissipation in single and double network gels. *M. L. Mugnai, R. B. Tchuenkam and E. Del Gado*
- FR1.** Rigidity development in shear-thickened dense suspensions: Contact network and motion correlation analysis. *M. Orsi, R. Pandare, B. Chakraborty and J. F. Morris*
- FR2.** Measuring and modeling deformations of topologically-defined polymers using in situ capillary rheo-SANS. *A. Datta, S. Powers, X. T. Wang, R. P. Murphy, K. M. Weigandt, P. T. Underhill and M. E. Helgeson*
- FR3.** Nested traveling waves underlying elastoinertial turbulence. *M. Kumar*
- FR4.** Strain shift measured from stress-controlled oscillatory shear: Evidence for a continuous yielding transition and new techniques to determine recovery rheology measures. *J. J. Griebler, G. J. Donley, V. Wisniewski and S. A. Rogers*
- AR16.** Bio-based additives as rheology modifiers for Hevea and guayule rubber latexes. *M. Z. Ahmad Ebrahim, M. S. Apon, T. Pirzada and S. Khan*
- AR17.** Charge transport trade-offs in colloidal suspension electrodes under flow. *J. Krishna Udiyappan and M. V. Majji*
- AR18.** Towards the rheological fingerprint of protein-enriched yogurts. *A. G. Soler-Sanchez, J. I. Agbawodike, A. Alvi and S. I. Martinez-Monteagudo*
- AR19.** Oscillation thermorheometry as a tool to study the melting behavior of high protein ice creams. *N. Tweneboah, K. Pizarro, J. Olatunde and S. I. Martinez-Monteagudo*
- AM6.** Rapidly recoverable yield stresses in Direct-Ink-Write printing of weight-supporting structures using polymers containing fumed silica and polyethylene glycol. *C.-P. Chu, O. Roy and R. G. Larson*
- AM7.** Bridging microstructural information and swelling performance of emulsion-based edible films. *E. Pulatsu and C. Udenigwe*
- AM8.** Addressing process challenges in direct chip attachment process. *K. Tjiptowidjojo, T. Mitha, R. J. Fermin, J. Torres, B. T. Croslin and A. R. Mehrabi*
- AM9.** Additive manufacturing of bidisperse ceramic suspensions. *B. E. Dolata, S. H. Hales, A. J. Andrew, F. Zhang and R. A. Maier*
- BL27.** Hyaluronic acid/cellulose nanocrystal suspensions as a potential viscosupplement composition for osteoarthritis. *A. Bose, B. Zakani and D. Grecov*
- BL28.** The flow of meat analogues study by rheo-SANS, scanning SAXS, and x-ray tomography. *T. Guan, P. A. Rühls and P. Fischer*
- BL29.** Microfluidic cell-free layer and yield stress measurements of blood. *S. M. Farrington, N. Wagner and A. N. Beris*
- BL30.** Suspension balance modelling of microcirculatory blood flows capturing cell free layer. *H. A. Castillo Sanchez, W. Ortiz, R. R. Rao and L. Liu*

Techniques and Methods

- TM1.** Confocal and colloidal probe microscopy for characterizing adhesion, friction, and wetting of multi-phase elastomers. *J. T. Pham*
- TM2.** Mapping of the multiaxial failure envelope of model soft elastomers to develop a failure criterion. *M. N. Saadawi and C. W. Barney*
- TM3.** Rheo-impedance and Tribo-impedance spectroscopy of lubricating greases for electric vehicles. *P. Staudinger, J. Heinrich, K. S. Pondicherry and J. Laeuqer*
- TM4.** Tribological flow transitions in soft elastomers with colloid-laden lubricants. *O. Ojuade, H. Dong, A. Jagota and L. Hsiao*

5:05	CS32. Flow-induced lamellar ordering in attractive suspensions. <u>E. Moghimi</u>, H. A. Vinutha, A. H. Walker, E. Del Gado, D. L. Blair and J. Urbach	GN33. Strain softening-stiffening of composite hydrogels composed of biopolymer and colloidal microfibrillar networks. <u>C. Xu</u>, Y. C. Saraswat, M. A. Shaikh, N. Shakoury, P. H. Wink Reis and L. Hsiao	FR5. Rheology and dispensing of real and vegan mayo: The chickpea or egg problem. <u>N. Nikolova</u>, S. Sepahvand, S. K. Baier and V. Sharma	AM10. Formulation of ceramic clays and glazes with local materials of the Black Hills. <u>K. J. Donovan</u>, T. Walker and J. J. Kellar	TM5. Pressure driven flow of polymer melt in elliptical dies. <u>M. Zatloukal</u>, L. Szántó, J. Drabek and <u>P. Rolfe</u>
5:25			FR6. Size- and charge-dependent microrheology in live Escherichia coli: Impact of confinement and macromolecular interactions on particle dynamics and localization. <u>A. M. Sunol</u>, D. Valverde-Mendez, J. L. Hofmann, B. P. Bratton, M. Delarue, J. P. Sheehan, Z. Gitail, L. J. Holt, J. Shaevitz and R. N. Zia	AM11. Development of an experimental protocol for the evaluation of the buildability of fresh 3D printable concrete. <u>A. A. Youssef</u>	TM6. Determining viscoelastic properties of soft microscale rods by capillary aspiration. <u>B. T. Smith and S. M. Hashmi</u>
5:45				END	
6:30		BUS TO SANTA FE FARMERS' MARKET PAVILION		leaves from Grant St in front of Convention Center, until 8:00 PM	
8:00		AWARDS BANQUET		Santa Fe Farmers' Market Pavilion	

Wednesday, October 22

Morning

8:30	PL3. Shaping the future using folding (origami), cutting (kirigami) and printing (coiling). <u>L. Mahadevan</u>						Sweeney Ballroom E+F
9:20	COFFEE BREAK						Santa Fe Community Convention Center Lobby
	Sweeney Ballroom A Colloidal Suspensions & Granular Matls	Sweeney Ballroom B Self-assemblies, Gels & Networks	Coronado + DeVargas Polymer Solutions, Melts & Blends	Peralta + Lamy Applied Rheology for Industrial Appl	O'Keeffe + Milagro Additive and Advanced Manufacturing	Sweeney Ballroom C AI and ML in Rheology	Sweeney Ballroom D Techniques and Methods
9:50	CS33. Clogging of interlocking particles in a 2D microfluidic hopper. <u>A. Lindner</u> , <u>J. Tampier</u> , <u>L. Kool</u> and <u>P. Bourrianne</u>	GN34. Modelling the increased failure toughness of double network hydrogels. <u>S. B. Walker</u> and <u>S. M. Fielding</u>	SM28. Mechanical reprocessing of PA 11 and PA 11-LDPE blends followed via rheological methods. <u>D. Rodrigue</u> , <u>J. Morales</u> and <u>R. M. Michell</u>	AR20. Predicting spinnability of hydrocarbons from extensional rheology and thermal-flow simulations. <u>T. A. Lima</u> , <u>R. F. Torin</u> , <u>A. A. Yancheshme</u> and <u>N. J. Alvarez</u>	AM12. On the roles of die swell, boundary coalescence and crystallization kinetics in material extrusion-based additive manufacturing of thermoplastic polymers. <u>T. Domenech</u> , <u>P. Ovlaque</u> , <u>Y. Trolez</u> , <u>D. Olivier</u> , <u>B. Bujeau</u> , <u>S. Charlon</u> and <u>J. Soulestin</u>	ML1. Comprehensive data sets for machine-learned constitutive equations for temperature-dependent thixotropic waxy oils. <u>S. A. Ogunwale</u> , <u>K. Mateen</u> , <u>P. Thierry</u> , <u>A. Shetty</u> , <u>L. Mahir</u> , <u>A. Fidel-Dufour</u> and <u>R. G. Larson</u>	TM7. New advancements in techniques for investigating lava rheology. <u>M. A. Harris</u> , <u>S. Kolzenburg</u> and <u>M. O. Chevrel</u>
10:10	CS34. Shear-rheology of colloidal rods with hydrodynamic interactions in semi-dilute concentrations: Brownian Dynamics simulations. <u>L. H. P. Cunha</u> , <u>P. Salipante</u> and <u>S. Hudson</u>	GN35. Mean-field and critical scaling of polymer clusters near the gel point. <u>J. Qin</u>	SM29. Revisiting structure-property relations in PP/HDPE blends: From processing to performance with recycled polyolefins. <u>S. S. P. Looijmans</u> , <u>S. D. Namnidi</u> , <u>M. A. Spanjaards</u> , <u>L. A. van Breemen</u> and <u>P. D. Anderson</u>	AR21. Identifying efficient polymer processing aids. <u>X. Jia</u> , <u>A. Malmir</u> , <u>J. H. Piette</u> , <u>Z. Zhang</u> , <u>A. K. Doufas</u> , <u>G. Nicole</u> and <u>S. G. Hatzikiriakos</u>	AM13. Advanced manufacturing and deconstruction of polymer networks using stimuli-responsive microcapsules. <u>B. H. Jones</u> , <u>O. Davydovich</u> , <u>S. C. Leguizamon</u> , <u>C. Westover</u> and <u>F. M. C'de Baca</u>	ML2. Accelerating physics discovery with machine learning. <u>A. Howard</u>	TM8. Oscillatory rheometry procedures for highly loaded suspensions. <u>P. Stanton</u>
10:30	CS35. Two-step yielding in nematic glasses of rigid rods. <u>G. Petekidis</u> and <u>M. Das</u>	GN36. On gelation and form: Linear & nonlinear rheology of gelling networks during fluid-mediated shape formation. <u>B. Keshavarz</u>	SM30. Synergistic role of long chains and shear on the crystallization of poly(ethylene oxide) (PEO). <u>A. Bhadu</u> , <u>E. J. Mumau</u> , <u>N. C. Lee</u> , <u>K. A. Page</u> , <u>X. Zhang</u> , <u>A. M. Rhoades</u> and <u>R. H. Colby</u>	AR22. Rheological behavior of fresh ultra-high-performance concrete enhanced with cellulose nanofibers. <u>X. Xiong</u> and <u>C. Tao</u>	AM14. A rheological perspective into digital light projection printability of colloidal suspensions. <u>E. Hoque</u> , <u>S. Barber</u> , <u>A. Klear</u> and <u>B. M. Yavitt</u>	ML3. Rheo-Former: A generative platform for reliable rheological and non-Newtonian fluid mechanical modeling. <u>M. Saberi</u> and <u>S. Jamali</u>	TM9. Extensional rheology and stringiness of yield stress fluids. <u>S. Sepahvand</u> , <u>N. Nikolova</u> , <u>L. Edano</u> and <u>V. Sharma</u>
10:50	CS36. Average stress in a dilute suspension of rigid spheroids in a second-order fluid in a linear flow. <u>T. M. Apte</u> , <u>A. Ardekani</u> and <u>V. Narsimhan</u>	GN37. Protorheology à la critical gel. <u>M. C. Marsh</u> , <u>M. T. Hossain</u> and <u>R. H. Ewoldt</u>	SM31. Rheology during crystallization of poly(ethylene oxide) in gel polymer electrolytes. <u>F. Naderi Samani</u> and <u>R. Foudazi</u>	AR23. Impact of wellbore inclination and rheological properties on barite sedimentation: Using a new visualization technique. <u>R. S. Schimicoscki</u> , <u>E. M. Germer</u> and <u>A. T. Franco</u>	AM15. Effect of functional groups on acrylate photopolymerization kinetics and rheological properties during UV cure. <u>R. Crownover</u> and <u>E. Beckel</u>	ML4. Unveiling non-Newtonian flow dynamics and rheology: Data-driven constitutive modeling through differentiable simulations. <u>A. M. Sunol</u> , <u>M. G. Alhashim</u> , <u>W. Wang</u> , <u>J. V. Roggeveen</u> , <u>H. S. Bae</u> , <u>K. Hausknecht</u> , <u>D. A. Weitz</u> and <u>M. P. Brenner</u>	TM10. Boger yield stress fluids in gravity-driven filament stretching. <u>T. A. Livesay</u> , <u>M. T. Hossain</u> and <u>R. H. Ewoldt</u>

11:10	CS37. Shear flow of colloidal bent-core liquid crystals. <i>N. Hackney, J. Clemmer and G. S. Grest</i>	GN38. Enhancing the reprocessability of photo-recyclable polymer networks using molecular design and in situ photo-rheology. <i>E. L. Quirk, C. Pereira dos Santos, M. C. Burroughs, B. M. Wirtz, T. H. Schloemer, D. N. Congreve and D. J. Mai</i>	SM32. Role of the energy conversion factor in flow birefringence and polymer crystallization kinetics. <i>A. Bhadu, E. P. Moffett, S. Xu, A. M. Rhoades and R. H. Colby</i>	AM16. Pinch-off, impact, and spreading dynamics of fiber-suspension droplets. <i>A. Sauret, S. Rajesh, N. Vani and V. Thievenaz</i>	ML5. Inferring viscoelastic model parameters from complex flows using physics informed neural networks. <i>D. S. Bolintineanu, S. Sankaran, N. A. Trask, P. G. Perdikaris, R. R. Rao and W. Ortiz</i>	TM11. Rheology of Carbopol in a benchmark experiments: Flow around a rising bubble. <i>O. Hajieghrary, M. Daneshi and I. Frigaard</i>
11:30	CS38. Frictional contacts in rigid rod suspensions allow for large stress oscillations. <i>C. Quinones and P. D. Olmsted</i>	GN39. Rheological characterization of hydrogels with both adaptable and non-degradable cross-links. <i>G. Khare, K. Anseth and K. Schultz</i>				TM12. Marsh funnel protorheology for yield stress fluids - operational limits and design insights. <i>S. Gupta and R. H. Ewoldt</i>

11:50 LUNCH BREAK

	Sweeney Ballroom A Colloidal Suspensions & Granular Matls	Sweeney Ballroom B Self-assemblies, Gels & Networks	Coronado + DeVargas Polymer Solutions, Melts & Blends	Peralta + Lamy Applied Rheology for Industrial Appl	O’Keeffe + Milagro Additive and Advanced Manufacturing	Sweeney Ballroom C AI and ML in Rheology	Sweeney Ballroom D Techniques and Methods
1:30	CS39. Coherent x-rays reveal dynamics inhomogeneity in shear thickening colloids. <i>X.-M. Lin, J. P. Horwath, H. He, J. Lee, Z. Jiang, S. Chakraborty, Q. Zhang, E. M. Dufresne, M. Sutton, A. Sandy and S. Narayanan</i>	GN40. Viscoelasticity of model polyisoprene vitrimers. <i>R. Arcangela, B. Saibal, N. Konstantinos, H. Nikolaos, L. Benoit and D. Vlassopoulos</i>	SM33. Shear induced crystallization of concentrated, PEGylated nanoparticles. <i>K. Rehmann, K. M. Weigandt, S. Hudson and P. Salipante</i>	AR24. Fighting bad rheometry: Lessons from compliance limits and protorheology. <i>M. T. Hossain, R. Tiwari, C. W. Macosko, G. McKinley and R. H. Ewoldt</i>	AM17. Shear-induced nanoscale morphologies in 3D-printed structural color. <i>K. George and M. Sadati</i>	ML7. Non-local physics-informed neural networks for forward and inverse solutions of granular flows. <i>S. Zolfaghari and S. Jamali</i>	TM13. Statistical mechanics of aramid fiber structure and rheological properties subject to rheometric and high-rate impact deformations. <i>M. A. Ploch, M. R. Roenbeck, J. L. Pretko, C. W. Seay, K. E. Strawhecker and S. R. Lustig</i>
1:50	CS40. Scaling of structural and rheological properties in shear thickening suspensions. <i>R. Pandare, M. Orsi, B. Adu-Poku, B. Chakraborty and J. F. Morris</i>	GN41. Microstructural and rheological insights into polysaccharide-protein complex gels. <i>S. Mohammadkhah, S. Prottasha, A. Witherspoon and S. Khan</i>	SM34. Combined influence of pressure and shear flow on the crystallization of isotactic polypropylene. <i>B. Jacob, J. Laeuger, X. Zhang, M. Thiele, M. Nemeth, K. A. Page, A. M. Rhoades and R. H. Colby</i>	AR25. Making rheology developments interesting again and again. <i>D. J. Moonay</i>	AM18. The competition between nucleation agents and flow-induced crystallization in material extrusion additive manufacturing. <i>J. E. Seppala, K. A. Page, J. Crossno, P. Roberts and A. P. Kotula</i>	ML8. Augmenting machine learning of universal viscoelastic constitutive relationships through curriculum learning using first normal stress difference measurements in LAOS. <i>N. King, E. Pashkovski, R. Patterson, P. Rockwell and G. McKinley</i>	TM14. Chebyshev polynomial approach for first normal stress difference interpretation in LAOS. <i>A. T. Hedegaard</i>

2:10	CS41. Large intruders in a shear-thickening suspension. <u>A. Pelosse</u> and <u>H. Jaeger</u>	GN42. High-pressure rheology of a thermoreversible protein sol-gel. <u>E. M. Furst</u> , <u>S. Teixeira</u> , <u>B. Paul</u> , <u>N. Wagner</u> and <u>A. Lenhoff</u>	SM35. Extensional flow-induced crystallization in metallocene and Ziegler-Natta high-density polyethylenes. <u>K. Sundara Rajan</u> and <u>J. P. Rothstein</u>	AR26. Role of powder rheology in dry battery electrode processing. <u>A. Shetty</u> , <u>H. Weingrill</u> and <u>T. Ebner</u>	AM19. A multi-modal rheological characterization approach to determine the flow mechanisms during material-extrusion AM of polymer-composite type precursors. <u>A. Gozen</u> , <u>C. Grover</u> and <u>S. Beckman</u>	ML9. Deriving data-driven rheological constitutive models with a sparse identification algorithm. <u>T. Sato</u> , <u>S. Miyamoto</u> and <u>S. Kato</u>	TM15. Long windowed chirps to probe low frequencies. <u>K. J. Whitcomb</u> and <u>Y. Tian</u>
2:30	CS42. Shear thickening and time-dependent rheological behavior in graphite/CMC slurries. <u>H. Jung</u> , <u>C. Hyun</u> and <u>J. Nam</u>	GN43. Novel rheological transitions and ordering in hybrid emulsion-hydrogels for treating otitis media. <u>M. A. Calabrese</u> , <u>C. T. Knisely</u> and <u>G. Heinecke</u>	SM36. Flow-induced suppression of crystallization in polymer blends. <u>N. Deneke</u> and <u>K. B. Migler</u>	AR27. Powder rheological properties of pharmaceutical excipients: Lactose monohydrate and carboxymethyl cellulose. <u>B. Abedi</u>	AM20. Fabrication of functionally graded core-shell structures via material extrusion additive manufacturing. <u>A. Naqi</u> and <u>M. Mackay</u>	ML10. A general machine learning framework for accurate detection of cluster formation: A case study of polymer crystallization from molecular dynamics simulations with supervised and unsupervised approaches. <u>E. Tourani</u> , <u>B. J. Edwards</u> and <u>B. Khomami</u>	TM16. Nonlinear chirp rheology. <u>J. L. Waeterloos</u> and <u>C. Clasen</u>
2:50	CS43. Effects of non-adsorbing polymer molecular weight on the rheology and microstructure of dense, colloidal, ceramic suspensions. <u>A. N. Seshadri</u> , <u>M. Kaboolian</u> , <u>A. Ardekani</u> , <u>J. Youngblood</u> , <u>K. M. Weigandt</u> , <u>K. A. Erk</u> and <u>R. D. Corder</u>			AR28. Rheological insights into coffee powders: Unveiling the impact of grind size, roast degree, and origin. <u>B. Abedi</u>		ML11. Suspension-balance neural networks for modeling concentrated suspension rheology in confined flows. <u>M. Davis</u> , <u>H. A. Castillo Sanchez</u> , <u>R. R. Rao</u> and <u>L. Liu</u>	TM17. Application of improved optimally windowed-chirps (OWCh) to curing systems. <u>S. Cotts</u> and <u>K. J. Whitcomb</u>
3:10			COFFEE BREAK	Santa Fe Community Convention Center Lobby			
		Rheo & Sustainability for Energy & Prod	Rheo for Soft Robt & Field-Respn Matl				
3:45	CS44. Capillary rheology of high concentration CNT solutions. <u>O. S. Dewey</u> , <u>C. J. Ginestra</u> , <u>I. R. Siqueira</u> and <u>M. Pasquali</u>	SE1. Coating and extrusion models for viscoelastic fluids. <u>W. Ortiz</u> and <u>R. R. Rao</u>	SR1. From tunable shear thickening to viscosity metamaterials. <u>I. Cohen</u>			ML12. Geometric deep learning of disordered network rheology. <u>J. L. Shivers</u>	TM18. Dripping-on-Substrate (DoS) dos and don'ts. <u>L. N. Warwaruk</u> , <u>R. H. Ewoldt</u> , <u>M. Chris</u> and <u>G. McKinley</u>
4:05	CS45. Microscopic structure and dynamics of dense suspensions of a stimuli-responsive core-shell latex. <u>K. J. Patel</u> and <u>J. J. Richards</u>	SE2. Microstructure investigations of electrocatalyst inks towards manufacturing scaling-up of fuel cells and electrolyzers. <u>S. Khandavalli</u> , <u>J. H. Park</u> , <u>D. D. Soetrisno</u> , <u>M. Bassinger</u> , <u>H. H. Winter</u> , <u>D. J. Myers</u> , <u>M. Ulsh</u> and <u>S. A. Mauger</u>	SR2. Controlling the rheology and thixotropy of colloidal gels with an electric field. <u>S. M. Hosseini</u> and <u>J. S. Park</u>			ML13. Graph neural network for multitask prediction of rheological and microstructural behavior in suspensions. <u>J. Maia</u> , <u>A. Aminimajd</u> and <u>A. Singh</u>	TM19. A low-cost 3D-printed rotational viscometer for rheology and fluid mechanics education. <u>B. M. Yavitt</u> , <u>M. Knutson</u> , <u>S. P. Weerakoon</u> , <u>C. J. Ticknor</u> and <u>A. Priye</u>

4:25	CS46. From sedimentation to suspension: Critical strain as a predictor of particle resuspension under shear. <u>M. Mahmoudian</u> , S. A. Rogers and P. Mirbod	SE3. Edge profile control in battery electrode slot-coating. J. Yoon, K. Min, J. Song and <u>J. Nam</u>	SR3. Nonreciprocal rheology in living and robotic chiral active matter. <u>T. H. Tan</u>	ML14. Clustering and measurement methods for quantitative microstructural analysis using molecular dynamics data: A case study of polymer crystallization. E. Tourani, B. J. Edwards and <u>B. Khomami</u>	TM20. Fast, cheap, and predictably wrong: Quantitative limits of tilted vial protorheology. <u>R. Tiwari</u> , C. D. Armstrong, M. T. Hossain, M. Zakoworotny, I. Arretche, N. R. Sottos, P. Geubelle, S. H. Tawfik and R. H. Ewoldt
4:45	CS47. Fluid flow modulation via shape-evolving colloids. <u>J. A. Diaz A.</u> and L. Galeano Tirado	SE4. Effect of time-dependent thixotropic fluids on slot-die coater flow dynamics, viscosity recovery, and operating conditions. <u>T. R. Kennelly</u> , R. R. Rao, W. Ortiz, C. Parrish, K. Tjiptowidjojo and R. Schunk	SR4. Activity driven jamming. <u>N. Singh</u> , A. R. Barth, E. X. Ong, A. Shetty, B. Chakraborty, J. P. Sethna, E. R. Dufresne and I. Cohen	ML15. Isolating the MAOS regime via data-driven constitutive modeling. <u>S. Shanbhag</u> , V. Kumar and Y. M. Joshi	TM21. Errors matter when measuring Poisson's ratio of nearly incompressible elastomers. <u>C. W. Barney</u> , R. Nedoluha and M. N. Saadawi
5:05	CS48. Influence of particle morphology and fluid matrix on the rheological response and microstructure of non-colloidal suspensions. <u>L. H. Quitian-Ardila</u> , R. S. Schimicoski, D. V. Andrade and A. T. Franco	SE5. Effect of polymer additives to Nafion solutions on shear and extensional rheological behavior, coating deposition, and drying defects. <u>M. J. Gallegos</u> and N. S. Bell	SR5. Measuring thermophoretic and Brownian motion using multiple particle tracking microrheology in ground and microgravity conditions. <u>N. Hasanova</u> , M. C. Roffin, X. Cheng, K. Schultz and J. F. Gilchrist		TM22. Imaging intermittent flows in capillary channels using widefield spatiotemporal analysis of attractive nanoemulsions. <u>C. Weeks</u> , W. Tang and L. Hsiao
5:25					TM23. Characterization of length-scale dependent rheology using bi-disperse multiple particle tracking during cell-material interactions. J. A. McGlynn and <u>K. Schultz</u>
5:45	END				
6:30	POSTER SESSION & RECEPTION Sweeney Ballroom E+F, until 8:30 pm				
6:30	GALLERY OF RHEOLOGY SESSIONS Sweeney Ballroom E+F, until 8:30 pm				

Thursday, October 23

Morning

8:00	MP1. Rheoinformatics: Seamlessly integrating theory, computation, and experiment through data-driven rheology. <u>S. Jamali</u> (Metzner Award Presentation) Sweeney Ballroom E+F			
8:40	SHORT BREAK			
	Sweeney Ballroom A Colloidal Suspensions & Granular Matls	Sweeney Ballroom B Rheo & Sustainability for Energy & Prod	Coronado + DeVargas Rheo for Soft Robt & Field-Respn Matl	Sweeney Ballroom C AI and ML in Rheology
8:45	CS49. Rheology and crystallization behavior of natural basaltic melts at conditions relevant to lava flow emplacement. <u>S. Kolzenburg</u>	SE6. Examining the impact of polypropylene contamination on film blowing polyethylenes via extensional rheology. <u>G. Tillinghast</u> , <u>J. P. Rothstein</u> and <u>H. H. Winter</u>	SR6. Shear-induced structural transitions of cholesteric liquid crystals. <u>A. Shetty</u> and <u>C. Tang</u>	ML16. Obtaining rheological constitutive equations for geopolymer systems from scarce data. <u>D. Dabiri</u> , <u>T. Egnaczyk</u> , <u>N. Wagner</u> and <u>S. Jamali</u>
9:05	CS50. Acoustic forces in colloids: Microstreaming effects and particle-scale modeling. <u>S. Sudhaman</u> and <u>R. T. Bonnecaze</u>	SE7. Thermodynamic insights into shear flow-mediated crystallization. <u>L. C. Willis</u> , <u>R. R. Rao</u> and <u>L. Liu</u>	SR7. Reconfigurable paramagnetic colloidal clusters. <u>S. L. Biswal</u>	ML17. From microstructure to rheology: Discovering tunable design rules with neural latent spaces. <u>B. Valipour Goodarzi</u> and <u>R. Foudazi</u>
9:25	CS51. Rheology of dense fiber suspensions. <u>A. Ardekani</u>	SE8. Rheological characterization of CO ₂ hydrate suspensions. <u>R. A. Gomes</u> , <u>G. Muhlstedt</u> , <u>C. O. Negrão</u> and <u>D. V. Andrade</u>	SR8. Coordinated motion of magnetic Janus particle microroller swarms. <u>J. F. Gilchrist</u> , <u>J. Riffle</u> , <u>G. Powell</u> , <u>T. Richardson</u> , <u>O. Percaccio</u> , <u>N. Tobin</u> , <u>K. Weis</u> , <u>E. Kore</u> and <u>A. Donnelly</u>	ML18. Rheometric signal denoising using latent space modelling. <u>M. Das</u> , <u>D. Vaddilo</u> , <u>A. Perego</u> and <u>G. McKinley</u>
9:45	CS52. Cracking of films and buckling of shells in drying colloidal dispersions. <u>M. S. Tirumkudulu</u> and <u>O. P. Bamboriya</u>	SE9. Rheological and gelation study of silica-based nanofluid for flow control in enhanced geothermal systems. <u>N. Konate</u> , <u>R. Foudazi</u> , <u>S. Salehi</u> and <u>H. Karami</u>	SR9. Magnetically rotated Janus particles near solid boundaries. <u>A. Raghu</u> and <u>B. Bharti</u>	ML19. High-throughput viscometry via machine-learning using videos of inverted vials: The effects of process parameters on the inference accuracy. <u>I. Arretche</u> , <u>M. T. Hossain</u> , <u>R. Tiwari</u> , <u>M. G. Mills</u> , <u>A. J. Kim</u> , <u>C. D. Armstrong</u> , <u>J. J. Lessard</u> , <u>S. H. Tawfik</u> and <u>R. H. Ewoldt</u>
10:05	COFFEE BREAK Santa Fe Community Convention Center Lobby			
10:35	CS53. Superheating and melting kinetics in vibrated granular monolayers of cubic particles. <u>E.-A. Luis Fernando</u>	SE10. Understanding structure-property relationships of ionic liquids for biofuel production. <u>P. Dumnoenchanvanit</u> , <u>Y. J. Lee</u> and <u>Q. M. Qi</u>		
10:55	CS54. How does slip affect Thixotropy-Elasto-Visco-Plastic (TEVP) predictions in simple and oscillatory shear? <u>J. H. Piette</u> and <u>S. G. Hatzikiriakos</u>	SE11. Melt rheology of bio-based polymer composites: Effects of wood filler loadings, polymer blend ratio, and crosslinking. <u>A. Khatiwada</u> , <u>K. E. Slavny</u> , <u>A. M. Hubbard</u> and <u>R. D. Corder</u>		
11:15	CS55. Dominant agglomerate scales for cohesive grains a rotating drum. <u>R. S. Sharma</u> , <u>T. Yu</u> , <u>S. Rajesh</u> and <u>A. Sauret</u>	SE12. Rheological and morphological investigation corn stover undergoing enzymatic hydrolysis. <u>J. R. Samaniuk</u> , <u>J. Troxler</u> , <u>M. E. Himmel</u> , <u>L. Yudong</u> , <u>J. J. Stickel</u> and <u>L. Crain</u>		
11:35	CS56. Surface-modified microfibrillated cellulose to enable hydration and dehydration. <u>M. Afshang</u> , <u>M. Caggioni</u> , <u>S. Lindberg</u> and <u>K. Schultz</u>	SE13. Engineering clay-zwitterion membrane supercapacitors using rheology as a tool. <u>R. Islam</u> , <u>P. Sarkar</u> , <u>S. Ghimire</u> , <u>G. Rother</u> and <u>K. Mukhopadhyay</u>		
11:55	END			

Poster Session

Wednesday, October 22 6:30 PM – 8:30 PM Sweeney Ballroom E+F

- PO1.** Polymer gels for superior infrastructure materials: Internally cured cement and clay-based additive manufacturing. A. N. Seshadri, Y. Maierdan, S. Kawashima, J. A. Howarter and K. A. Erk
- PO2.** Rheology and printability of earth-based materials for sustainable construction. K. Shirzad, Y. Kuznetsov, B. Gyawali, V. Nasir, K. Alba and A. Shetty
- PO3.** 3D printing epoxy thermosets: Additive manufacturing of polymerization-induced phase separating materials. F. M. C'de Baca, K. E. Van Meter and B. H. Jones
- PO4.** Rheological characterization of cement pastes with alternative cementitious materials during early hydration. J. Sardin and M. Geri
- PO5.** Bubble-fiber interactions in multiphase flow: A pathway to sustainable paper manufacturing. A. McMaster, C. C. Roberts and B. Halls
- PO6.** Time-resolved mechanical properties of ordinary Portland cement during early-stage hydration. G. J. Donley, B. E. Johnsson and K. Snyder
- PO7.** Interfacial rheology of lanthanide binding peptide surfactants. S. A. Crane, F. Jimenez Angeles, M. Olvera de la Cruz, I. J. Dmochowski and K. J. Stebe
- PO8.** Heterogeneity in red blood cell mechanics drives altered blood rheology in sickle cell disease. H. M. Szafraniec, F. Bull, P. Pearce and D. K. Wood
- PO9.** Deposits from drying blood droplets - an alternative technique to differentiate healthy and unhealthy blood cells. L. K. Pandurangan
- PO10.** Natural additive based biopolymer film for medical applications. M. Z. Salih
- PO11.** More slippery than most: Rheological insights into fish skin mucus hydrodynamics. G. Garcia, M. Kaboolian, K. A. Erk, H. Larkins and D. K. Wainwright
- PO12.** Controlling slip-flow onset of hydrated soy protein melts as a basis for selecting cooling die temperature profiles in high-moisture extrusion. A. Kamboj, C. E. Wagner and G. M. Ganjyal
- PO13.** Training rheological properties of biological tissues under mechanical cues. S. Arzash and S. Banerjee
- PO14.** Viscosity modified resin for morphogenic growth 3D printing. M. T. Hossain, Y. S. Kim, S. H. Tawfik, R. H. Ewoldt, M. Zhu and P. Geubelle
- PO15.** Rheological characterization of fungal mycelium gels for use in soft electronics. R. Tippery, M. Kaboolian, Y. Tian, T. Li and K. A. Erk
- PO16.** Investigating injectability of high concentration mAb formulations with microfluidic viscometry. D. Fox, C. Ochoa, D. Young, J. Albertson, S. Shabaniverki and S.-G. Baek
- PO17.** Flow dynamics of active living entangled systems. P. Sarkar, S. Hariharan, I. Tiwari, P. K R, T. Marzin, S. P. Thampi, M. G. Basavaraj and S. Bhamla
- PO18.** From sedimentation to suspension: Critical strain as a predictor of particle resuspension thresholds. M. Mahmoudian, S. A. Rogers and P. Mirbod
- PO19.** Motion correlation for rigid particles in dense suspensions. R. Pandare, M. Orsi, M. D. Shattuck and J. F. Morris
- PO20.** A finite-element formulation of the suspension balance model applied to complex geometry flows. A. Rahmani and J. F. Morris
- PO21.** Microcapsule suspension rheology for geothermal short-circuiting prevention. A. K. Temple and W. M. Kibikas
- PO22.** Viscous heating limit lines for experimental prediction and qualification. A. K. Temple and R. H. Ewoldt
- PO23.** On the dynamics of yield stress fluids. R. Alrashdan, O. TayebbehKhabaz, M. Cloitre and F. Khabaz
- PO24.** Rheological behavior and shear stability of graphene-based nanofluids using Carbopol as base fluid. Y. H. Santos, C. Tanner, G. Palaoro and D. V. Andrade
- PO25.** Powder rheology of alternative grain free flour substitutes. K. R. Coasey
- PO26.** Designing mercury-free photoelastic polyurethane particles. K. Chaudhuri, H. Burke, B. Hayes and N. M. Vriend
- PO27.** Comparative rheological characterization of nanofluids containing fumed silica: Insights from mineral oil and Carbopol-based systems. G. Palaoro, D. V. Andrade, Y. H. Santos and F. Admilson

- PO28.** Study of silica-based nanofluids for flow control in enhanced geothermal systems: A rheological perspective. *N. Konate, R. Foudazi, S. Salehi and H. Karami*
- PO29.** The degeneracy of particles with purely area-dependent potential energy. *L. R. Debono*
- PO30.** Thermodynamically consistent rate-type constitutive relations for modelling shear banding in complex fluids. *K. K. Yanamundra, S. P. Pillai, C. C. Benjamin and K. R. Rajagopal*
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- PO50.** Bio-based additives as rheology modifiers for Hevea and guayule rubber latexes. *M. Z. Ahmad Ebrahim, S. Khan, M. S. Apon and T. Pirzada*
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- PO57.** Tuning supramolecular weight distributions and nonlinear rheology in blends of linear telechelic polymer. *S. Liu, M. Chen and T. C. O'Connor*

- PO58.** Simulation of particulate flows in viscoelastic fluid using immersed boundary Lattice Boltzmann Method. *G. Jeong, Y. K. Lee and J. Nam*
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- PO61.** Microstructured polymer electrolytes with high Li-ion conductivity by tuning structural uniformity. *L. Laugeni, F. Lorandi and R. Pasquino*
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- PO69.** Synthesis, hydrogelation, and adhesion of bioinspired block copolymers. *F. Albreiki and S. Srivastava*
- PO70.** How gel architecture controls ductility and dissipation in single and double network gels. *R. B. Tchuengkam*
- PO71.** Rheology of semiflexible filament gels with polymer-mediated attractive interactions. *R. Wattana and C. Osuji*
- PO72.** Viscoelasticity and extensional rheology of polystyrene vitrimers. *T. Guarino, A. Russo, A. Mavromanolakis, M. Conti, N. Van Zee, R. Nicolay, S. Coppola and D. Vlassopoulos*
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- PO74.** Investigating viscoelastic properties of vacuum distillation residue oils. *J. S. Weston, C. Pitti and P. Holmes*
- PO75.** Tuning the microstructure and particulate network in attractive colloidal gels through oscillatory shear flows. *M. Tan and S. Jamali*
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- PO80.** Coupling rheology and microstructure in real time: Advances in rheo-polarized imaging. *T. Sato and A. Shetty*
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- PO85.** Some useful methods for gathering and analyzing rheological data. *M. T. Shaw*
- PO86.** From chains to networks: Viscoelastic behavior of *Vibrio cholerae* polysaccharide (VPS). *A. P. Moreau, N. Fowler, R. Kandel, A. Hinbest, R. Woods, R. Olson and J. Yan*
- PO87.** Patterns of viscous intrusion in visco-elasto-plasto media. *B. Allen and N. W. Hayman*
- PO88.** Optical visualization of plastron stability and wetting transitions on superhydrophobic surfaces. *E. Solano-Calderón and S. Mohammadshahi*

Gallery of Rheology

Preview: Starts Monday 1:30 PM at Sweeney Ballroom E+F

Online Voting: Monday 1:30 PM – Wednesday 8:00 PM through [Meeting Web App](#)

Sessions: Wednesday 6:30 PM – 8:30 PM at Sweeney Ballroom E+F

Images

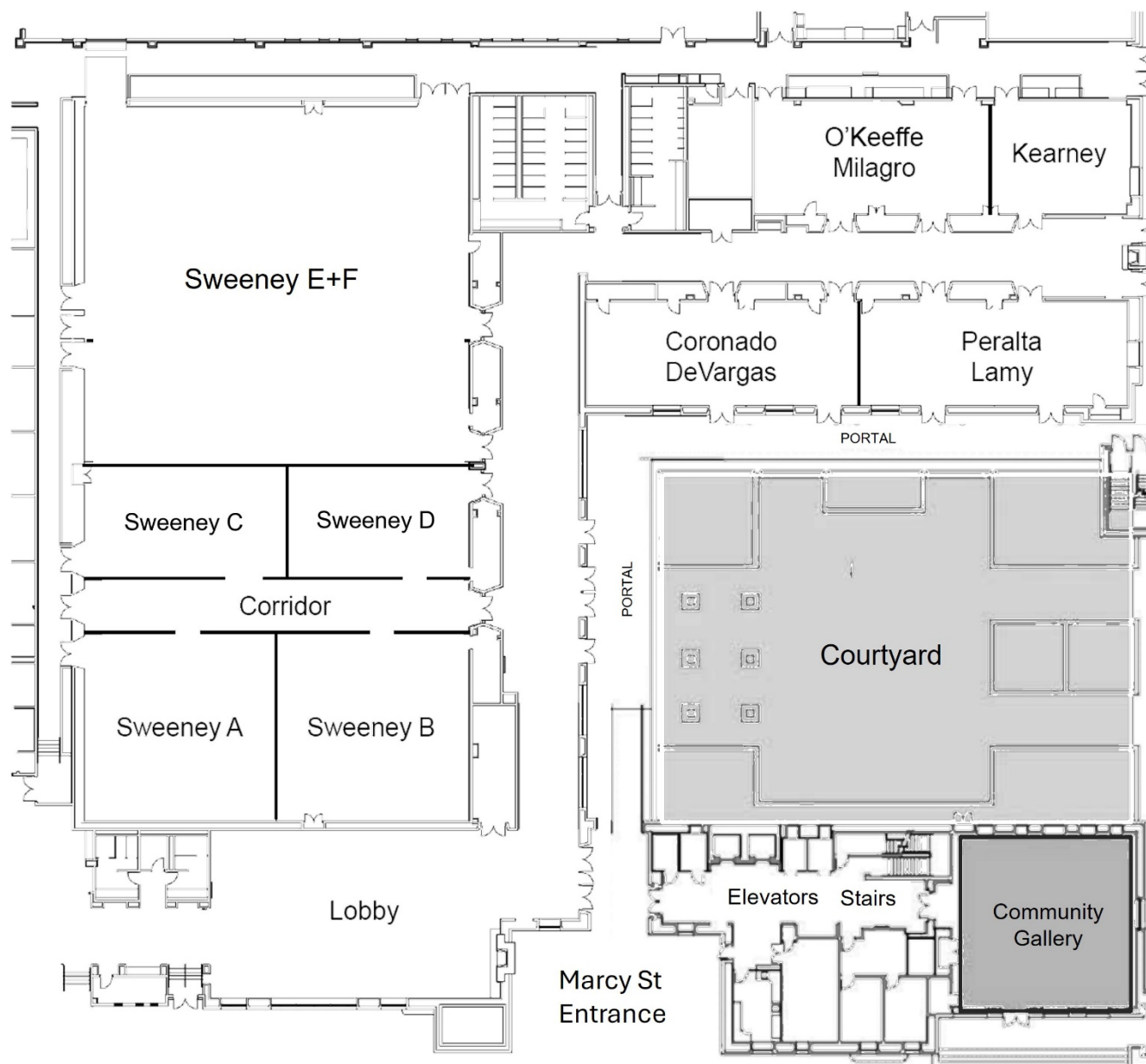
- GI1.** Cutting edge: Fracture of viscoelastic liquids. *M. C. Marsh and R. H. Ewoldt*
- GI2.** Resuspension tree: Shaped by flow and gravity. *M. Mahmoudian, S. A. Rogers and P. Mirbod*
- GI3.** Twist the rainbow. *A. Shetty and C. Tang*
- GI4.** Luminous webs. *M. T. Hossain and R. H. Ewoldt*
- GI5.** Helix of growth. *M. T. Hossain, Y. S. Kim, S. H. Tawfik and R. H. Ewoldt*
- GI6.** The art of flow in 3D. *M. T. Hossain and R. H. Ewoldt*
- GI7.** Unraveling hagfish skeins. *M. T. Hossain, D. S. Fudge and R. H. Ewoldt*
- GI8.** Predicting complex structure. *R. Campbell, C. Zhuang, P. Haghighi, A. Mohraz and S. Jamali*
- GI9.** The AI revelation: Using machine learning tools to accelerate micrograph analysis. *M. Kaboolian and K. A. Erk*
- GI10.** The treachery of modeling. *J. S. Weston and K. Weston*
- GI11.** Event-based capillarity-driven extensional rheometry. *L. N. Warwaruk and G. McKinley*
- GI12.** Mineralization. *A. N. Seshadri, J. A. Howarter and K. A. Erk*
- GI13.** Jellyfish: Oil drainage from porous hydrogels. *B. Valipour Goodarzi and R. Foudazi*
- GI14.** Frozen heart in gel. *H. Hossein, S. P. Mousavi and S. M. Taghavi*
- GI15.** Echoes of a vortex in soft-gel. *H. Hossein, T. Seyed Mohammad and M. Seyed Pedram*

Videos

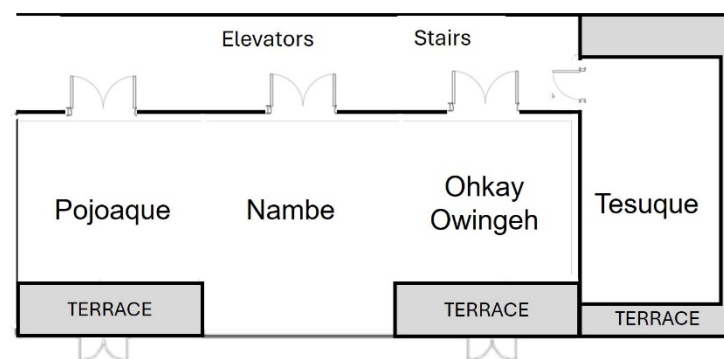
- GV1.** Pinching cytoskeleton composites. *A. Razzaghi, M. T. Valentine, R. J. McGorty and R. M. Robertson-Anderson*
- GV2.** Jamming in sickle blood flow. *H. M. Szafraniec, F. Bull, P. Pearce and D. K. Wood*
- GV3.** Photoelastic microparticles glow as they flow. *K. Chaudhuri, B. Hayes and N. M. Vriend*
- GV4.** When bubbles fall in love: A cavitation tale. *H. Hossein, S. P. Mousavi and S. M. Taghavi*
- GV5.** Brownian dynamics simulations of chains in shear and extensional flow. *I. M. Pincus*
- GV6.** Windmills of your polymer. *A. Bhadu, A. M. Rhoades and R. H. Colby*
- GV7.** Waves, spirals, and chaos in soft matter! *T. Sato and A. Shetty*
- GV8.** Milk splash! *L. Edano and V. Sharma*
- GV9.** Defects, defects everywhere. *M. Kaboolian and K. A. Erk*
- GV10.** Formulation dynamics and shear stability of graphene–Carbopol nanofluids: From preparation to rheological performance. *Y. H. Santos, C. Tanner, G. Palaoro, D. V. Andrade and A. T. Franco*
- GV11.** Fluid intrusion and fingering across the viscous to solid transition. *B. Allen and N. W. Hayman*

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Santa Fe Community Convention Center Meeting Space



1st FLOOR



2nd FLOOR

Social Program and Special Events

Sunday, October 19	Rheology Research Symposium (continued from Saturday Oct 18) Welcoming Reception 6:00 PM – 8:00 PM Santa Fe Convention Center Outdoor Plaza <i>Sponsored by Anton Paar USA</i>
Monday, October 20	Exhibits 8:30 AM – 4:00 PM Santa Fe Convention Center Lobby Geosciences Lunch, by invitation only 12:00 noon – 1:30 PM Pojoaque/Nambe/Ohkay Owingeh Gallery of Rheology Preview 1:30 PM – Wed 4:00 PM Sweeney Ballroom E+F Gallery of Rheology Online Voting 1:30 PM – Wed 8:00 PM Meeting Web App Monday Evening Reception 7:00 PM – 9:00 PM New Mexico History Museum <i>Sponsored by TA Instruments</i>
Tuesday, October 21	Exhibits 8:30 AM – 4:00 PM Santa Fe Convention Center Lobby Society Business Meeting 12:00 noon – 1:30 PM Sweeney Ballroom E+F Student Night 6:30 PM – 9:00 PM Tumbleroot Pottery Pub Awards Banquet 8:00 PM Santa Fe Farmers' Market Pavilion <i>Bus to Pavilion leaves 6:30 – 8:00 PM from Grant St in front of Convention Center.</i>
Wednesday, October 22	Exhibits 8:30 AM – 4:00 PM Santa Fe Convention Center Lobby Student-Industry Forum 12:00 noon – 1:30 PM Pojoaque/Nambe/Ohkay Owingeh <i>Sponsored by Dow and American Institute of Physics</i> Poster Session and Reception 6:30 PM – 8:30 PM Sweeney Ballroom E+F <i>Reception sponsored by Anton-Paar USA</i> Gallery of Rheology Sessions 6:30 PM – 8:30 PM Sweeney Ballroom E+F <i>Equipment sponsored by Los Alamos National Laboratory</i> Online voting ends at 8:00 PM.
Thursday, October 23	Exhibits 8:00 AM – 10:35 AM Santa Fe Convention Center Lobby

The Society of Rheology gratefully acknowledges the generous support of Anton-Paar USA, TA Instruments, Dow, American Institute of Physics, Sandia National Laboratories and Los Alamos National Laboratory.