### Meeting Schedule

#### Monday, October 11, 2021

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<tr>
<th>Time</th>
<th>Room</th>
<th>Speaker/Session</th>
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<td>B5</td>
<td>M. J. Solomon (PL1) - B567</td>
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#### Wednesday, October 13, 2021

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<td>6:30</td>
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<td>Poster Session &amp; Reception</td>
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<td>Gallery of Rheology Contest</td>
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### Monday, October 11

#### Morning

**Ballroom 5: Polymers Solutions, Melts and Blends**

- **SM1. Pressure drop measurements of Newtonian and non-Newtonian fluids in a hyperbolic channel.** D. F. James, C. Roos and A. Tripathi

**Ballroom 7: Applied Rheology and Rheology Methods**

- **AR1. The dynamics of parallel-plate and cone-plate flows.** D. C. Venerus and A. U. Oza

**Meeting Room A-B: Active and Biological Materials**

- **AR2. Excess entropy scaling in active matter systems.** S. A. Ghaffarzadeh and G. J. Wang

**Meeting Room C-D: Suspensions, Colloids & Granular Materials**

- **SC1. Linear viscoelastic properties of adhesive soft particle gels.** A. Shabamashahmadi and R. T. Bonnecaze

**Ballroom 6: Arrested Systems: Gels and Glasses**


- **GG2. State behavior and kinetics of alkali-activated alumino-silicate gels.** J. N. Mills and N. J. Wagner

- **GG3. Gel and glassy states in macro- and nano-emulsions in the presence of micellar depletion attraction.** N. Sanatkar, M. Zhou and R. Foudazi


- **GG5. High shear capillary rheology and flow birefringence of rod-like viruses.** S. Kuei, P. Salipante, D. A. Gagnon, K. Shoele and S. S. Datta

#### Afternoon

**Ballroom 5: Polymers Solutions, Melts and Blends**

- **SM2. Rouse model with fluctuating internal friction.** R. Kailash, R. Chakrabarti and J. R. Prakash

**Ballroom 7: Applied Rheology and Rheology Methods**

- **AR2. Probing 3D molecular orientation and alignment of flowing fluids by small-angle scattering.** P. H. Gilbert, J. Rosks, P. Butler and Y. Liu

**Meeting Room A-B: Foams, Emulsions, Surfactants & Micelles**

- **FE6. Mixing dynamics of bilgewater emulsions in Taylor Couette flows.** Y. Panwar and C. Dutcher

**Meeting Room C-D: Active and Biological Materials**

- **AB6. The colloidal nature of complex fluids leads to enhanced motility of flagellated bacteria.** S. Kamdar, S. Shin, L. F. Francis, X. Xu and X. Cheng

**Ballroom 6: Arrested Systems: Gels and Glasses**

- **SC6. Effect of geometric frustration on the linear viscoelasticity of dense colloidal suspensions.** S. Pradeep, A. Wessel and C. Dessi

- **AB7. Opto-rheology of biologically derived active gels.** D. L. Blair, C. Desai and D. A. Gagnon

- **SG7. Bijels: 2D glasses or 3D gels?** H. Ching and A. Mohraz

**Ballroom 1: Virtual**

- **OP1. On-line discussion: Session 1.** A. M. Grillet and M. C. Heevey


FE8. Toward a biological toolkit: Systematic characterization of double emulsions for screening applications. S. G. Calhoun, K. K. Brower, G. Kim, V. Chandran Sujit, R. Radzynski, M. Khariton, P. M. Fordyce and G. G. Fuller

ABB. Effects of collagen on viscoelasticity of Pseudomonas aeruginosa biofilms grown in mouse wound beds. G. F. Christopher and M. Ur Rahman

SC8. Coupling between attractions and repulsions in flow of colloidal suspensions. S. Virk and P. T. Underhill

GG8. Relaxation processes in partially arrested soft matter. H. Winter


COFFEE BREAK


FE10. Drainage via stratification in foam films made with polymer-surfactant complexes. C. Xu, C. Martinez and V. Sharma

IN1. How much of the transient rheological behavior of geological shear zones can be explained using granular physics alone? R. Ferdowsi, B. M. Alessio and A. M. Rubin


SM11. Entanglement kinetics during interrupted orthogonal shear flow. P. D. Olmsted, M. G. Cubha and M. O. Robbins


FE11. The impact of viscous stress and Marangoni stress on the micro-scale droplet film drainage time. Y. Chen and C. Dutcher


FE12. Drainage kinetics of sodium caseinate foam films. I. Hassan, C. Xu, M. Boehm, S. B aier and V. Sharma


SC11. Shear induced geometry and jamming in sphere packings. V. Har and S. Saxty

SC12. Irreversible aggregation in sheared non-Brownian suspensions of clathrate hydrates. M. Gori and G. H. McKinley

SM13. Exploring the origins of the distinct relaxation times measured in shear and extensional rheometry for concentrated polymer solutions. J. Du, H. Ohtani, K. Ellwood and G. H. McKinley


SC13. Going with the flow: Multiscale dynamics of colloidal deposition, erosion, and interactions with immiscible fluids. J. Schneider, N. Bizmark, R. D. Priestley and S. S. Datta

SC14. Virtual mass of an oscillating sphere. N. Snow and V. Sharma

MC1. Let’s set the (error) bar high: Quantifying uncertainties in MD simulations of transport under nanoscale confinement. Y. Li and G. J. Wang


MC5. Growth and coalescence of nanoscopic mesas in stratifying, ultra thin freestanding films. C. Xu, S. Yilitsi, Y. Zhang and V. Sharma


Tuesday, October 12

Morning

Ballroom 5

Polymer Solutions, Melts and Blends

AR15. Rheology of aluminum copper alloys in the solidification region. L. Ravi Narayanan and R. J. Hebert

AR16. The kitchen pot thickens, drop by drop. K. Suresh, L. Hassan, C. Martinez Narvaez, M. Boehm, S. Baier and V. Sharma


AR18. Using hydrogel autofluorescence to determine elastic modulus in spatially nonuniform hydrogels. J. A. McGlynn and K. M. Schultz

AR19. Rheology empowered failure analysis of insulating glass unit performance enables a more accurate prediction of sustainability and resiliency to a changing climate. C. White, M. Dimitriou and H. Nejad

Ballroom 7

Applied Rheology and Rheology Methods

FE15. Factors governing rod formation and growth in polymer micelles. P. J. McCuey, S. Kumar and M. A. Calabrese

FE16. In situ rheoelectric investigation of alignment of lyotopic liquid crystal mesophases under large amplitude oscillatory shear. A. Bandegi and B. Foudazi

FE17. Magneto-rheology and field-induced ordering in polymer solutions via a mechanism alternate to phase alignment. K. Suresh, G. V. Krevge and M. A. Calabrese

FE18. Why can we measure interfacial rheology for some polymers at the A/W interface and not for others? D. Ashkenazi, S. Alexandris, D. Vlassopoulos and M. Gottlieb

Meeting Room A-B

Foams, Emulsions, Surfactants & Micelles


Meeting Room C-D

Active and Biological Materials


Ballroom 6

Suspensions, Colloids & Granular Materials


SC16. Scaling of the viscosity in discontinuously shear-thickening suspensions. B. Chakrabarty and J. F. Morris

SC17. A first-principles approach toward characterizing the rheology of starch granules during granule swelling. V. Narsimhan, G. P. Desam, J. Li, N. E. Dehghani and G. Narsimhan

SC18. Understanding granular clogging of porous media and continuum flow in rapid underground tunneling. B. A. Appleby and J. R. Samaniuk


Ballroom 1

Arrested Systems: Gels and Glasses


GG14. Tuning viscoelastic behavior of vitrimer through crosslinker and backbone control. L. E. Porath and C. M. Evans


LUNCH BREAK / SOCIETY BUSINESS MEETING (Ballroom 2-3, 12:00-1:30 pm)

Afternoon

Ballroom 5

Polymer Solutions, Melts and Blends

SM20. Polypolyethylene ionomers: Extensional strain-hardening and extensional flow-induced crystallization. C.-B. López-Barría and T.-P. Lin

Ballroom 7

Applied Rheology and Rheology Methods


Ballroom 6

Suspensions, Colloids & Granular Materials

SC20. Shear thickening: A transition from unconstrained to the constrained state. A. Singh, J. J. de Pablo and H. M. Jaeger

Ballroom 1

Arrested Systems: Gels and Glasses

OP2. Online discussion: Session 2. A. M. Grillet and M. C. Heesey

OP2 continues

OP2 continues

OP2 continues


AB16. A dilatational rheology perspective on acute respiratory distress syndrome. C. Cuturcu, S. Barman and J. Zasadzinski

SC21. Unifying disparate non-Newtonian regimes in suspensions: One model to unify them all. R. V. More and A. M. Ardekani


GG17. Bond forming dynamics of a model colloidal suspension with depletion interaction. Q. Li and E. M. Furst

2:20


AR22. A new rapid DSR separation method for polymer modified asphalt. Y. Cui

FE22. Tuning the thermoresponsive assembly and gelation of ABA/BAB triblock polymers for targeted antibiotic delivery to treat middle ear infections. J. M. White and M. A. Cafarelli

SC22. Shear-induced transition from disorder to coexisting ordered states in dense colloidal suspensions. A. Goyal, E. Del Gado, S. Jones and N. Marty

2:45


FE23. Constitutive modeling of dilute wormlike micelle solutions: Shear-induced structure, transient dynamics, and inhomogeneous flows. R. J. Hommel and M. D. Graham


3:10

COFFEE BREAK

Flow Induced Instabilities & Non-Newtonian Fluids

IN6. Transiently linked FENE dumbbells under shear flow. L. E. Quintero F., P. L. Cook and E. Zhou


MC7. Rheological analysis of complex fluids at the point-of-need via capillary filling dynamics. J. C. Contreras-Narangia and V. M. Uga


AR24. Rheology and texture of dairy and alternative cheeses using fractional calculus. F. De Vito, S. D. Dieng and J. B. Hirsch


IN8. The specific sequence of physical processes that causes the loss modulus overshoot in yield stress fluids. G. J. Donley, K. M. Kamani, P. K. Singh, A. Shetty and S. A. Rogers


SM26. Relating the entanglement of semiflexible polymer melts to their local inter- and intra-chain structure. R. S. Hoy, J. D. Dietz and M. Kröger

AR26. Liquid sheet breakup and droplet evaporation in agricultural sprays. L. Markownikova, E. Alonzi, F. Steven, C. Christine and C. Dutcher

FE26. Measuring the structure and rheology of wormlike micelles at high shear rates with capillary rheoSANS. K. Weigandt, R. Murphy, P. Salipante and S. Hudson

IN9. Reynolds “stress” realizability and Cauchy stress objectivity. C. A. Petty and A. Benard

MC9. Controlling alginate gelation dynamics in confined flows. B. T. Smith and S. M. Hashmi

Rheology and Mobility at Interfaces

R11. Shear and dilation rheology of complex fluid interfaces. Y. S. Tein, C. Muñoz, B. Maranville, J. Vermunt, B. Thompson and N. J. Wagner

SM27. Predicting the plateau modulus from molecular parameters of conjugated polymers. A. M. Fenton, E. D. Gomez and R. H. Colby

AR27. The effects of pH and ionic strength on the extensional relaxation time of agricultural sprays. M. Xu, A. Riseman and J. Frostad

FE27. Developing a scattering model for semiflexible chains in flow to assess flow-enhanced scission of wormlike micelles. J. Zhang, G. S. Smith, P. T. Corona, L. G. Leal and M. E. Helgeson

R12. Influence of interfacial viscosity on the stability of droplet shapes during sedimentation. N. Singh and V. Narsimhan

3:45


5:00

SM29. Predicting the plateau modulus from molecular parameters of conjugated polymers. A. M. Fenton, E. D. Gomez and R. H. Colby

AR27. The effects of pH and ionic strength on the extensional relaxation time of agricultural sprays. M. Xu, A. Riseman and J. Frostad

5:25

The Society of Rheology 92nd Annual Meeting, October 2021

END

AWARDS RECEPTION Ballroom Pre Function, Tent, until 7 pm

AWARDS BANQUET Ballroom 1-2-3

AM7. Suppression of filament defects in embedded 3D printing. L. M. Friedrich and J. E. Seppala

IN17. Axisymmetric numerical simulations of viscoelastic jets. K. Ziniello, T. Ibdabie, G. F. McKinley and O. K. Matar


AB26. Mechanical response of phantom tissues to compressive loading. B. Carroll, J. A. Price, and A. E. Patteson

AM8. Can the power law model predict behavior of colloidal dispersions for 3D printing applications? N. Hogue and G. F. Christopher


IN19. Secondary or adverse effects in the use of polymer additives for turbulent drag reduction. E. A. Davis and J. S. Park


AM10. 3D-printing of chiral ink within jammed microgels. M. Evangeli, K. George, N. Taheri-Qazvin and M. Sadat

IN20. Reverse transition routes from inertial to elasticity-dominated turbulence in viscoelastic Taylor-Couette flow. J. Song, N. Liu and B. Khumani

SC29. Shear-induced grain boundary dynamics in magnetically actuated colloidal crystals. D. Lohmeyer and S. L. Biswal


SC32. The dynamics in and rheology of dilute suspensions of semi-flexible, 2-D colloids. J. W. Swan and K. Silmore


IN21. Interfacial flows and instabilities of elastic fluids. F. Alboyley, V. Shrama, A. Kabakni, A. Rasmussen and D. Jelen


AM20. Reverse transition routes from inertial to elasticity-dominated turbulence in viscoelastic Taylor-Couette flow. J. Song, N. Liu and B. Khumani

IN23. Elastic turbulence generates anomalous flow resistance in porous media. C. A. Browne and S. S. Datta


IN24. Transient dynamics of viscoelastic turbulent flows subject to a sudden injection of polymer additives. A. Martinez-Ibarra and J. S. Park

SC33. Phase behavior and effective aspect ratio of polydisperse carbon nanotube solutions. J. R. Siqueira, M. Duran-Chaves and M. Pasquali
Thursday, October 14

Morning

MP1. Dynamics of physically and chemically reversible polymers. Q. Chen (Metzner Award Presentation) Ballroom 5-6-7
TRANSITION REMARKS Ballroom 5-6-7
COFFEE BREAK
GATHER.TOWN NETWORKING FOR IN-PERSON AND VIRTUAL ATTENDEES Virtual
END OF MEETING

Pre-Recorded Flash Presentations
Asynchronous Viewing through Meeting Web App

VP1. Re-entrant melting in interpenetrating and interconnected grafted nano cylinders from amphiphilic star block copolymers. E. Moghimi, I. Chubak, L. Cipelletti, K. Mortensen, C. Likos and D. Vlassopoulos
VP3. Mechanical degradation of polyacrylamide solutions in nanoparticle suspensions. A. Mora, J. Avendano, A. Hutin and M. S. Carvalho
VP4. Nonmonotonic variation of terminal relaxation in star-linear blends. S. Shanbhag
VP5. Can short, unentangled polymers be effective (self)compatibilizers in polymer blends? A. Bharati, R. Cardinaels and P. Moldenaers
VP6. Use of tailored blend morphologies to obtain electrically conductive composites. D. Strugova, E. David and N. Demarquette
VP10. Sculpting hydrogels using additive advective processing. A. V. Bayles, T. Pleij, M. Hofmann and J. Vermant
VP11. Extrudate instabilities in fused filament fabrication additive manufacturing. Z. Swain and M. E. Mackay
VP13. Reprocessable, soft, 3D printable elastomers. L. Cai
VP14. Probing in-cage particle dynamics in hard sphere glasses with high frequency rheometry. T. Athanasion, B. Mei, K. Schweizer and G. Petekidis
VP15. Thixotropy, non-monotonic stress relaxation, and the second law of thermodynamics. Y. M. Joshi
VP16. Cellulose nano-crystalline (CNC) hydrogels as yield stress fluids (YSFs): Effect of temperature, ultrasonication and concentration. B. Zakani and D. Grecov
VP17. Elastic storage during flow of yield stress materials. M. Marchand, M. Caggioni and V. Trappe
VP19. Simulation of rhamnolipids. J. Antory and E. Mani
VP20. Uses of large amplitude oscillatory shear in food products. H. S. Joyner
VP21. An application of lubrication theory for the flow of liquid crystals in a slider bearing. S. Li and G. Dana
VP22. The impact of multiple fluids on the purely-elastic instabilities that arise in a microfluidic flow focusing device. G. Houston and M. Oliveira
VP24. Molecular origin of rheological and mechanical properties of well-defined polystyrene POM-POM model systems. T. Hirschberg, M.-C. Röppert, L. Faust, K. Masood and M. Wilhelm
VP25. The role of hydrodynamics in flowing semifluid solutions of ring/linear polymer blends. C. E. Sing and C. D. Young
VP27. A two-species model for the rheology of associative polymer solutions from nonequilibrium thermodynamics. P. S. Stephanou, I. C. Tsimos and V. G. Mavrantzas
VP31. Unravelling the transient network topology of hydrophobically associating multiblock copolymers and their resulting elasticity and relaxation times. A. S. Havecom, W. Thielemans, R. Cardinaels and P. Moldenaers

VP32. Photopolymerization of methacrylate: From conversion via rheology to mechanical properties. R. Anastasio, W. Peerbooms, N. Steensma, R. Cardinaels and L. van Bremen


VP35. On simultaneous fitting of nonlinear and linear rheology data: Preventing a false sense of certainty. P. K. Singh and R. H. Ewoldt

VP36. Impact of various environmental chemical conditions on the rheological behaviour of a system of mixed clay gels using response surface methodology. C. Boulet, A. Brown, C. Formstone and D. Aarts


VP38. Extensional rheology and pinching dynamics of associative polysaccharide solutions. Y. Lu, C. Martine, J. Dincic, C. Wang, H. Sun, B. Rearick and V. Sharma


VP40. The rheology of methane and carbon dioxide hydrates at extreme high pressures. A. Guerra and A. D. Rey

VP41. Interplay of inertia and stress diffusion in shear flows of viscoelastic fluids. S. Sharma, Y. M. Joshi and V. Shankar

VP42. Effect of MW, concentration and anionicity on the linear and non-linear viscoelastic properties of high performance EOR polymers. M. S. Acaíd


VP44. Koopman with control for constitutive law identification. E. J. Southern and E. E. Keaveny


VP46. Advances in rheo-optical methods. J. Laeuger

VP47. Non-linear transient stretching and relaxation of highly deformed vesicles reveals a deformation-dependent binding modulus. C. M. Schroeder and D. Kumar

VP48. Saliva rheology and its effect on aerosol generation during sneezing. M. Rodriguez Hakim, L. Ráz and J. Vermant

VP49. Spinning a yarn of natural silk spinning: Sticky reptation in extensional flow. C. Schaefer and T. C. McLeish

VP50. Rheology and direct write printing of chitosan - graphene oxide nanocomposite hydrogels for differentiation of neuroblastoma cells. P. Thareja


VP54. Determining the yield stress of a biopolymer-bound soil composite for extrusion-based 3D printing applications. A. O. Biggersoff, G. G. Fuller, M. D. Lepech and D. J. Loftus

VP55. Physical aging in chocolate subsequent to mechanical rejuvenation. T. Bhattacharya and Y. M. Joshi


VP57. Application of high pressure shear rheology to assess CO2 gas bubble nucleating proficiency of native starch particles and dispersed proteins. J. J. Zink and E. J. Windhab


VP60. Colloidal gelation in foam: Probing the impact of elastic continuous phases on foam mechanics. A. Mikhailovskaya, V. Trappe and A. Salonen

VP61. Delayed elastic and ageing creep response of foams. F. A. Lavergne, P. Sollich and V. Trappe

VP62. An essential factor of perfluoroalkyl surfactant attracting to efficacy in firefighting foams. A. Banerjee and Y. Liu

VP63. Simulating foam and bubble suspensions using an extended Stokesian dynamics approach with bubble interaction. E. J. Rosenbaum, M. Massoudi and K. Dayal

VP64. Controlling the morphology of polymeric foams: An experimental and numerical investigation. D. Tammaro, M. M. Villone, G. D'Avino and P. L. Maffettone


VP66. Foam coarsening under steady shear: Interplay between bubble rearrangement and film thinning dynamics. A. Saint-Jalmes and C. Trêguet


VP68. Microstructure and interfacial rheology of ellipsoids at interfaces - Role of surface modification. H. Kumar and B. M. Gurappa


VP70. Effect of aromatic and non-aromatic solvents in the interfacial viscoelasticity of Brazilian asphaltene. I. F. Soares, E. Martin, J. Limberger and M. F. Naccache

VP71. Drag on a spherical particle at the air-liquid interface: Interplay between compressibility, Marangoni flow and surface viscosities. M. Pourali, M. Kröger, J. Vermant, P. D. Anderson and N. O. Jaensson

VP72. Super resolution microscopy to study rheological transitions during egg-white cooking. J. C. Bonilla and M. P. Claussen

VP73. Colloid-polymer mixtures revisited: Assessing the role of macromolecular depletant. E. Moghimi, K. Parvin, D. Parisi and D. Vlassopoulos

VP74. Evaporative shape transformations in polymeric sessile droplets. J. R. Belanger

VP75. Influence of surface roughness on the yielding of thermo-reversible colloidal gels. F. J. Müller and J. Vermant

VP76. Assessing rheological properties of highly-filled polymers for material extrusion additive manufacturing of metallic parts. S. Ancé, J. Souestlin, V. Demers and N. Demarquette

VP77. Active particles in external fields. V. A. Shaik and G. J. Elfring

VP78. On the inverse quenching technique applied to gelatin solutions. P. R. Avallone, R. Pasquino, S. Costanzo, A. Sarrica, M. Delmonte, F. Greco and N. Grizzuti


VP80. Determination of the molecular weight distribution of ultra-high molecular weight polyethylene from solution rheology. V. Ianniello, S. Costanzo, R. Pasquino, G. Ianniruberto, T. Tervoort and N. Grizzuti
VP01. Helical locomotion in yield stress fluids. F. Nazari and H. Mohammadigoushki

VP02. Can micro-pillared surfaces affect the viscoelasticity and attachment strength of Pseudomonas aeruginosa biofilms? B. Bhattarai and G. F. Christopher


VP04. Surface layer and bulk viscoelasticity of human airway mucus. S. Danielsen and M. Rubinstein

VP05. Biomass microbeads as sustainable rheological modifiers for personal care consumer products. B. P. Robertson and M. A. Calabrese

VP06. Using bi-disperse micro rheology to measure human mesenchymal stem cell remodeling of hydrogels on multiple length scales. J. A. McGlynn and K. M. Schultz


VP09. Tuning the extent of protein and biofilm deposition on surfaces with liquid layers. C. K. Fang, M. Andersen, A. Flores-Mireles and C. Howell


VP11. Fabrication of vaporized polymers with fugitive ink 3D printing. B. Dixon and C. Howell


VP13. Coalescence of passively trapped droplets in a microfluidic device with and without confinement. C. Panigrahi and C. Dutcher


VP15. The rheology of methane and carbon dioxide hydrates at extreme high pressures. G. Andre, A. D. Rey, M. Maric and P. Servio

VP16. Use of thermal analysis and rheometry to study the properties of crude oil. K. J. Whitcomb and Y. Adhiya

VP17. Exploring secondary flows while building high-fidelity tools for complex viscoelastic behavior in precision manufacturing. L. T. Holmes and R. B. Secor

VP18. Elastic instabilities in confined geometries. M. Kumar and A. M. Ardekani


VP20. Shear banding and wall slip in polymer wormlike micelles. P. J. McCarley, L. H. Pham, S. Kumar and M. A. Calabrese

VP21. Shear banding in poloxamer wormlike micelles (WLMs) with slow dynamics. C. Huang, P. J. McCarley and M. A. Calabrese


VP23. Introducing the role of brittleness to the soft materials. K. M. Kumanji and S. A. Rogers

VP24. Measurement and prediction of oozing in PSAs. S. Lalitha Sridhar, V. Pandey and Z. Zhao

VP25. Characterizing rheological behavior of dispersions and paints using Orthogonal Superposition. E. Akbari and S. Cotts

VP26. Characterizing yield using Orthogonal Superposition under controlled shear stress. S. Cotts

VP27. Temperature controlled droplet-based extensional rheometry for characterizing thermoresponsive materials. D. Y. Zhang and M. A. Calabrese


VP29. Tandem NIR/rheo cure monitoring of chemical conversion and rheology. S. V. Barancyk and M. J. DiTucci

VP30. High temperature dynamic mechanical analysis of glass and damascene steel in flexure mode up to 950 °C. M. Walluch, D. Ehgartner, A. Shetty, C. Giehl and D. Schuett

VP31. Shear cessation in the pre-yielding and post-yielding of dense soft solids. Y. H. A., D. Gavvin, V. Y. Vasish and E. Del Gado

VP32. On extrapolation of dynamic data to obtain the limiting steady-state compliance. M. T. Shaw and R. A. Weiss

VP33. Time-resolved microstructural changes and macroscopic sequence of physical processes in large amplitude oscillatory shear of model soft gels. G. J. Donley, M. Bantawa and E. Del Gado

VP34. Comparison of sequence of physical processes and Chebyshev decomposition methods to evaluate and interpret large amplitude oscillatory shear (LAOS) response of hard, soft and semolina flour dough. M. Vildiron and J. Kokini


VP38. A complete rheological formalism built on the concept of recovery. J. Shi and S. A. Rogers


PO42. Creeping flows of smooth and rough colloids. Y. C. Saravat and L. C. Hsiao


PO44. Probing plastic rearrangements in colloidal gels during creep. P. Lehericy, L. Stricker, L. Isa and J. Vermant


PO46. Characterization of powders from non-cohesive to cohesive through rheological means. J. P. Eckhoff


PO49. Impact of silica nanorod concentration on the nonlinear rheology of aqueous poly(acrylamide)-nanoparticle suspensions. C. A. Neal, V. Leon, M. C. Quan, N. Chibambo and M. A. Calabrese

PO50. Rheological characterization of high-solids, drilling fluids by flow loop. B. A. Appleby, J. Yu and J. R. Samaninuk


PO52. Study of the depletant concentration on the rheology of concentrated nanoemulsion. Z. Abbasian Chaleshtari, H. Salimi-kenari and R. Foudazi


PO54. Normal stresses at the yielding point. P. R. de Souza Mendes, T. N. Rochinha and P. R. Vargas

PO55. Poroelasticity of confined hydrogel films. G. D. Deegan and A. A. Pitenis

PO56. Exploration of slide-ring gelation kinetics using rheology. K. Dikshit and C. J. Bruns

PO57. Modulating the rheology of collagen-based hydrogels using morphology-controlled tannic acid particles. P. Sarker, O. J. Rejas and S. A. Khan

PO58. Tuning rheological and structural transitions in ABA/BAB poloxamer hydrogels. J. M. White and M. A. Calabrese

PO59. Rheological properties of phase transitions in polydisperse and monodisperse colloidal rod systems. S. He, D. R. Pascucci, M. Caggioni, S. Lindberg and K. M. Schultz

PO60. Magneto-rheological studies on the role of hydration in anomalous magnetically-induced block copolymer ordering. G. Y. Krenge and M. A. Calabrese


PO64. Relaxation dynamics of polyelectrolyte solutions. A. Han and R. H. Colby


PO67. Crosslinking poly(acrylamide-co-diallyldimethylammonium chloride) membrane with glutaraldehyde for fuel cell application. A. P. Udepurkar, S. Kuhn and C. Clasen

PO68. Emerging patterns in polymers. Reawakening. A. Alicke and J. Vermant

PO69. Nanofluidics: Tropical rainforest of Brazilian asphaltenes. T. Bello and P. T. Underhill

PO70. Extensional rheology, pinching dynamics, and processability of polymer solutions. C. Martinez and V. Sharma

Gallery of Rheology

**Preview:** Starts Monday 1:30 PM at Ballroom Pre Function and on [Meeting Web App](https://www.rheology.org/sorabst/)

**Contest:** Wednesday 6:30 PM – 8:30 PM (Online voting 10:00 AM – 8:00 PM ET) at Ballroom Pre Function

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GR1. Axisymmetric numerical simulations of viscoelastic jet thinning and breakup. K. Zinelis, T. Abadie, G. H. McKinley and O. K. Matar


GR3. Patterns of fluorescent quantum dots in polymerizing polymer beads passing through regular arrays of micro tubes under UV radiation. B. Iurii, A. P. Udepurkar, S. Kuhn and C. Clasen


GR5. Rolling around a spinning top. B. Keshavarz and M. Geri


GR8. Rheological petals. F. Albrectk, A. Kubinski and V. Sharma

GR9. Transition to turbulence in planar jets: Small amounts of polymer destabilize the flow. S. Yamandouozorkhabji, Y. Raj, G. H. McKinley and I. Bischofberger

GR10. Interfacial rheology and thin liquid films. A. Alcke and J. Vermant


### Social Program and Special Events

<table>
<thead>
<tr>
<th>Day</th>
<th>Event</th>
<th>Time</th>
<th>Location</th>
<th>Sponsor</th>
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<tbody>
<tr>
<td><strong>Sunday, October 10</strong></td>
<td><strong>Rheology Research Symposium</strong> (continued from Saturday, October 9)</td>
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<tr>
<td></td>
<td><strong>Welcoming Reception</strong></td>
<td>6:00 PM – 8:00 PM</td>
<td>Ballroom 2-3, Pre Function, Tent</td>
<td>Sponsored by TA Instruments</td>
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<tr>
<td><strong>Monday, October 11</strong></td>
<td><strong>Monday Boxed Lunch</strong></td>
<td>11:55 AM – 1:30 PM</td>
<td>Ballroom 2-3, Pre Function, Tent</td>
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<td></td>
<td><strong>Student-Industry Forum</strong></td>
<td>12:15 PM – 1:15 PM</td>
<td>Virtual</td>
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<td></td>
<td><strong>Gallery of Rheology Preview</strong></td>
<td>1:30 PM – Wed 4:00 PM</td>
<td>Ballroom Pre Function</td>
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<td></td>
<td><strong>Asynchronous Viewing</strong></td>
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<td>Meeting Web App</td>
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<td></td>
<td><strong>Student Trivia Night</strong></td>
<td>7:00 PM – 8:30 PM</td>
<td>Sea Dog Brewing Co.</td>
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<tr>
<td><strong>Tuesday, October 12</strong></td>
<td><strong>Society Business Meeting</strong></td>
<td>12:00 PM – 1:30 PM</td>
<td>Ballroom 2 and 3</td>
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<td></td>
<td><strong>Awards Reception</strong></td>
<td>6:00 PM – 7:00 PM</td>
<td>Ballroom Pre Function, Tent</td>
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<tr>
<td></td>
<td><strong>Awards Banquet</strong></td>
<td>7:00 PM</td>
<td>Ballroom 1, 2 and 3</td>
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<tr>
<td><strong>Wednesday, October 13</strong></td>
<td><strong>Poster Session and Reception</strong></td>
<td>6:30 PM – 8:30 PM</td>
<td>Ballroom 1-2-3-4, Pre Function, Tent</td>
<td>Reception sponsored by Anton-Paar USA</td>
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<tr>
<td></td>
<td><strong>Gallery of Rheology Contest</strong></td>
<td>6:30 PM – 8:30 PM</td>
<td>Ballroom Pre Function</td>
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<td></td>
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<td>Online voting 10 AM – 8 PM ET</td>
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*The Society of Rheology gratefully acknowledges the generous support of Anton-Paar USA, TA Instruments and Department of Chemical & Biomedical Engineering, University of Maine.*