

Tuesday, 14 December 2021

8:30-9:00 Opening Ceremony

9:00-9:55 Plenary Lecture: G. Fuller, Stanford University

The interfacial mechanics of ocular cell layers: friction, adhesion and delamination

9:55-10:05 Break

Time	Code	Hall A	Code	Hall B
Chair:		B. Kaffashi K. Razavi	Chair: M. Norouzi F. Sharif	
10:05-10:35	Keynote Lecture	Multi-Scale modeling of complex fluids: surfactants, colloids, and polymers, and their applications R.G. Larson	Keynote Lecture	Methane emissions and yield stress fluids I. Frigaard
10:35-11:05		Tuning colloidal gels by shear: New routes to manipulate mechanical properties G. Petekidis		Molecular dynamics and its application in molecular rheology and tribology A. Jabbarzadeh
11:05-11:35		The design and in-vivo validation of satiety controlling food-Controlling human fat digestion with help from rheology P. Fischer		On the use of "viscous micropump" for transporting non-newtonian fluids in microfluidic systems K. Sadeghy
Break				
Chair:		G.R. Pircheraghi M. Salehi	M. Razzaghi M. Mehranpour	
11:45-12:05	A-10-283-1	Colloid-polymer mixtures: Effects of polymer depletant topology P. Kiani Shojaie , E. Moghimi , D. Parisi , D. Vlassopoulos	A-10-333-1	Peristaltic Transport of Solid Particles Suspended in a Viscoelastic Fluid: a Numerical Study M. Pourjafar , B. Taghiloo , M. Ahmadi , A.R. Heidary , K. Sadeghy
12:05-12:25	A-10-270-2	Rheology and printability studies of crosslinked gelatin/tragacanth/lignin hydrogels H. Zehtab Minooei , B. Kaffashi	A-10-344-1	Investigating the Effect of Giesekus' Mobility Parameter on the Secondary Flows in Microfluidic Devices A. Kazemzadeh , M. Salami Hosseini , M. Mostafaiyan

12:25-12:55	A-10-304-1	Shear thickening behavior and hysteresis in non-brownian suspension M.R. Mahmoudian, F. Goharpey, Z. Daneshfar, M. Behzadnasab	A-10-346-1	CFD Analysis of Conical Bearing Hydrodynamic Lubrication Using Magnetorheological Fluids M. Norouzi, S.A.R. Vaziri, P. Akbarzadeh
Break				
13:00-13:40 Poster Session				
Chair: M.A. Razavi F. Abbasi			Chair: Farhang Abbasi N. Golshan Ebrahimi	
13:40-14:00	A-10-328-1	Effects of cellulose nanowhiskers on rheological properties of polycaprolactone/poly(lactic acid) cellulose nanowhisker composites G. Haghgoo, A. Babaei	A-10-251-1	Non-Einstein Rheological Behavior in Multiblock copolymer Nanocomposites H.R. Heydarnezhad, N. Mohammadi, A. Alegria
14:00-14:20	A-10-303-1	Effect of fat content, iodine value and solid fat content (SFC) on the rheological properties of margarine M. Fallahasgari, D. abolghasem, K. nayebzadeh	A-10-335-1	Rheology provides insight into distinguishing between unimodal and bimodal molecular weight distribution HDPE A. Malmir, H. Nazockdast, F. Goharpey
14:20-14:40	A-10-294-1	Non-linear rheological responses and tribological behaviors of model reduced-fat O/W emulsion using high pressure-treated corn starch as a novel fat replacer A. Heydari, S.M.A. Razavi	A-10-282-2	Experimental data and modeling of storage and loss moduli for SSBR/BR filled with hybrid filler M. Barghamadi, M. Karrabi, M.H.R. Ghoreishy, G. Naderi
Break				
Chair: A. Haghtalab N. Mohamadi			M. Rafizadeh S. Jamali	
15:00-15:30	Keynote Lecture	Interpenetrating and interconnected grafted nano cylinders from amphiphilic star block copolymers E. Moghimi	Keynote Lecture	Application of numerical method in studying the rheological properties of multiphase fluids M. Salami-Hosseini
15:30-16:00		Dynamics of self-assembled micellar Solutions in uniaxial extensional flows H. Mohammadi		Cellular fluid dynamics E. Nazockdast

16:00-16:30		Rheology of lyotropic liquid crystals from self-assembly of amphiphilic block copolymers, water and oil R. Foudazi		Non-Newtonian fluid mechanics S. Mohamad Taghavi
16:30-17:00		Gel Structure of PVC Plastisol Used as Automotive Underbody Coatings M. Pishvaei		From tribology to rheology: triborheology K. Shams
17:00-18:00 Poster Session				

Wednesday, 15 December 2021

9:00-9:55 Plenary Lecture: D. Vlassopoulos FORTH, University of Crete The unusual rheology of ring polymers and their blends with linear chains						
9:55-10:05 Break						
Time	Code	Hall A		Code	Hall B	
Chair:		H. Nazockdast	H. Garmabi	Chair:		K. Sadeghy A. Ramazani
10:05-10:35	Keynote Lecture	CNC suspension rheology S. Hatzikiriakos		Keynote Lecture	Designing complex fluid rheology - microstructure and measurements P. Spicer	
10:35-11:05		Evaluating the effectiveness of rice bran oil for rejuvenating rheological properties of aged asphalt binders in recycled asphalt pavements S.M. Zia Alavi			Effect of matrix molecular weight on the dispersion behavior of cellulose nanocrystal R. Nofar	
11:05-11:35		Application of rheology in controlling competitive reactions during reactive extrusion S. Ahmadi			Application of OD and FSI in patient-specific modeling of blood flow in children with congenital heart disease A.G. Kuchumov	
11:35-12:05		Polymer tribology and its correlation to polymer rheology M. Razzaghi Kashani			Stabilization of purely elastic instabilities in cross-slot geometries M. Davoodi	
Break						
Chair:		A. Yousefi	S. Mazinani	M. Kalaei	Chair: G. Hashemi Motlagh M. Salami	
12:15-12:35	A-10-254-1	Interplay between Microstructure and Nonlinear Viscoelastic Behavior of a Unique Thermo-responsive Hydrogel S. Tarashi , H. Nazockdast , S. Shafaghsorkh		A-10-302-1	On the use of MHD mechanism for pumping viscoplastic fluids in microfluidic systems: a numerical study S. Kosar , B. Jalali , M. Pourjafar , K. Sadeghy	
12:35-12:55	A-10-278-1	Interfacially Reaction Compatibilization of Polyisoprene/Polydimethylsiloxane Immiscible Blends J. Nasrollah Gavgani , F. Goharpey , S. Velankar		A-10-355-1	A Numerical study on the impact of a viscoelastic drop onto the same quiescent fluid film M.R. Rezaie , M. Norouzi , M.H. Kayhani , S.M. Taghavi	
Break						

13:00-13:40 Poster Session

Chair: M. Pishvaei J. Khademzadeh			Chair: M.H.R. Ghorashi A. A. Katbab		
13:40-14:00	A-10-260-1	The influence of cellulose nanoparticles on rheology and morphology PCL/TPU scaffold with cellular structure H. Kordbacheh , A.A. Katbab, N. haghhipour	A-10-284-1	Rheological properties and crystallization behavior of polyethylenes used in drip irrigation tapes S. Haghpourast , G.R. Pircheraghi	
14:00-14:20	A-10-301-1	Rheological study of injectable biomimetic hydrogel based on carboxymethyl chitosan- <i>g</i> -poly(<i>N</i> -isopropylacryamide) S. Ahmadi , S. Bagheri-Khoulenjani, S. Rajabi, S. Arne Sande, Bo Nyström	A-10-258-1	Simulation of Print Speed Effect on Flow ability and Stability of Printed Acrylonitrile Butadiene Styrene Strand in Fused Deposition Modeling Method N. Mosleh , S. Dariushi, M. Esfandeh	
14:20-14:40	A-10-249-1	Investigation of effective parameters on the rheological behaviors of UHMWPE/HDPE blends Z. Yagoobi , A. Jalali-Arani, A. Sepahi, R. Rashedi	A-10-330-1	A molecular dynamic simulation study of the rheological behavior jamming in densely packed and shear thickening shape nanoparticles in polyethylene glycol M. Zojaji , A. Hydarinasab, S.H. Hashemabadi, M. Mehranpour	

Break

Chair: Sh. Ahmadi R. Foudazi			Chair: M. Davoodi E. Nazockdast		
15:00-15:30	Keynote Lecture	Rheology in modern pharmaceuticals I. Haririan	Keynote Lecture	Mathematical modeling and experimental investigations of rheological behavior of drilling fluids containing synthetic polymers, bentonite, and salt A. Ramezani	
15:30-16:00		Capillarity and wetting in particulate suspensions S. Velankar		Relationship between microstructural relaxation and macroscopic properties of vitrimers F. Khabaz	
16:00-16:30		Dispersion done (much) better: Harnessing extensional flow in polymer blending and compounding J. Maia		Slurries of complex fluids S. Hormozi	

16:30-17:00		Rheology as a tool to control the jet ability of inkjet inks R. Moghadam		Colloidal Gels: rheology, thixotropy and microstructure S. Jamali
17:00-18:00 Closing Ceremony				