

ICOR 2025 Program

Tuesday, December 16, 2025

8:00-9:00 Registration & Reception					
Hall A					
9:00-9:30 Opening Ceremony					
9:30-10:20 Plenary Lecture: Alan Jeffrey Giacomin, Queen´s University, Canada Unveiling liquid elasticity from polymer rotarance theory					
10:20-10:40 Break					
Hall A			Hall B		
Date	Keynote	Chair Persons: H. Nazockdast, F. Goharpey, M. Salami Hosseini	Date	Keynote	Chair Persons: I. Ghasemi, B. Kaffashi, H. Garmabi
10:40-11:15		Dimitris Vlassopoulos FORTH, University of Crete, Greece Normal stress measurements in polymer melts	10:40-11:10		Mohammad Zia Alavi University of Tehran, Iran Assessing rheological evolution in asphalt mixtures under asphalt binder oxidative aging
11:15-11:45		Reza Nofar Istanbul Technical University, Turkey Cellulose nanocrystals dispersibility in bioplastics	11:10-11:40		Mostafa Ahmadi Johannes Gutenberg University, Germany Modulation of network connectivity in PEG-peptide hydrogels via metal complexation
11:45-12:15		Karim Razavi Sahand University of Technology, Iran Rheology of polyurethane vitrimrs	11:40-12:10		Ahmad Ramezani Sharif University of Technology, Iran Rheological behavior of thermosensitive associative copolymers and their potential applications in drilling fluids and polymer flooding
12:15-12:45		Shervin Ahmadi Iran Polymer and Petrochemical Institute, Iran Effect of chain extenders on the rheological behavior of polyamide 6	12:10-12:30		A-10-703-1 Rheological properties of RPC-ABS blends in the presence of compatibilizer and chain extender R. Ghayednazeri, G. Pircheraghi, M. Dehghani
12:30-13:10 Exhibition & Poster Viewing					
13:00-14:00 Lunch Break					

Tuesday, December 16, 2025

14:00-14:50 Plenary Lecture: Michel Cloitre, ESPCI Paris, France Engineering yield stress materials from soft colloids					
Hall A			Hall B		
Date		Chair Persons: F. Goharpey, B. Kaffashi, M.K. Razavi	Date		Chair Persons: F. Sharif, H. Shirali, M. Salami Hosseini
14:50-15:20	Keynote	Hamid Garmabi Amirkabir University of Technology, Iran Investigating the effect of stereo complex crystallization and chain extender on the foamability of PVDF/PLLA/PDLA blends using elongational and shear rheology	14:50-15:20	Keynote	S. Mohammad Taghavi Laval University, Canada Dynamics of viscoplastic fluid flow in superhydrophobic grooved channels
15:20-15:50		Hadi Mohammadi Florida State University, USA Rheo-NMR of shear banding wormlike micelles	15:20-15:50		Safa Jamali Northeastern University, USA Robust machine-learning platforms for solution of viscoplastic flows
15:50-16:40 Plenary Lecture: Ronald G. Larson, University of Michigan, USA New simulation and modeling tools to understand rheology, processing, and crystallization of polyethylene melts					
16:40-17:00 Break					
Hall A			Hall B		
Date		Chair Persons: M. Mehranpour, S. Ahmadi, M.K. Razavi	Date		Chair Persons: H. Shirali, J. Khademzadeh, M. Salami Hosseini
17:00-17:30	Keynote	Esmael Moghimi Georgetown University, USA Flow-induced structures in attractive suspensions	17:00-17:30	Keynote	Parisa Mirbod University of Illinois, USA From sedimentation to suspension: Strain-driven transitions in dense particle flows
17:30-17:50		A-10-695-1 Unveiling nonlinear rheological signatures in PEG–silica suspensions: A comparative machine learning study K. Ghorbani, H. Shirali, F. Goharpey	17:30-17:50		A-10-618-1 Numerical simulation of droplet migration in microfluidic systems under pressure-driven flow A. Kazemzadeh Shahanagi, M. Salami Hosseini, M. Mostafaiyan
17:50-18:10		A-10-742-2 Machine-learning-based prediction of storage and loss moduli from sparse frequency data via gaussian process regression A. Nemat, M. Salami Hosseini	17:50-18:10		A-10-490-2 Rheology of the oldroyd 8-constant model: The step-by-step approach A. Sheikh

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Hall A			Hall B		
9:00-9:35	Keynote	Gerald G. Fuller Stanford University, USA Viscoelasticity of airway mucus by live-cell rheometry	9:00-9:30	Keynote	Elnaz Hajizadeh University of Melbourne, Australia An explainable XAI-driven multiscale simulation framework for deciphering the rheology of associative polymers bridging colloidal suspensions
9:35-10:25 Plenary Lecture: Evelyne van Ruymbeke, Université catholique de Louvain (UCL), Belgium Viscoelastic properties of associating polymers: When several dynamics are coming into play					
10:25-10:45 Break					
Hall A			Hall B		
Date		Chair Persons: I. Ghasemi, H. Garmabi, F. Sharif	Date		Chair Persons: N. Golshan Ebrahimi, S. Ahmadi, M. Salami Hosseini
10:45-11:15	Keynote	Peter Fischer ETH Zurich, Switzerland The flow of meat analogues study by rheo-SANS, scanning SAXS, and x-ray tomography	10:45-11:15	Keynote	Milad Mehranpour Islamic Azad University, Iran AI-assisted online rheometry for real-time melt rheology and quality control in polymer processing
11:15-11:45		Keyvan Sadeghi University of Tehran, Iran On the use of encapsulated gas bubble as contrast agent in medical sonography	11:15-11:45		Masood Khabazian Leibniz Institute of Polymer Research, Germany Measuring tensile stress growth coefficient $\eta_E^+(t)$ up to a Hencky strain of $\epsilon = 8.7$, introducing the 2D-UXF method
11:45-12:15		Mahmood Norouzi Shahrood University of Technology, Iran Velocity jumps in Newtonian droplets: New insights from viscoelastic environments	11:45-12:15		Azadeh Jafari University of Tehran, Iran Enzyme-powered microswimmers for targeted drug delivery in complex biological fluids
12:15-12:35	A-10-772-1 Rheology of polyurethane/polyamide (PU/PA) blend vitrimers <u>S. Mousapour Andarian</u> , M.K. Razavi Aghjeh		12:15-12:35	A-10-727-1 Core-shell polyaniline/carbon nanotube nanoparticles as modulators of microphase separation in TPU nanocomposites M. Saadat Tagharoodi, A. Seyedshalchi, A. Abbasi, S. Farokhtabar, M. Salehirad, P. Jamshidi, A. Zamani	
12:35-12:55	A-10-743-1 Preparation and characterization of PAAm/CMC/GO nanocomposite double network hydrogel strain sensors <u>M. Ranjbari</u> , H. Nazokdast, S. Tarashi, F. Goharpey		12:35-12:55	A-10-775-1 Rheological probing of network structure in covalently bonded CNT/graphene hybrids with tunable diamine junctions <u>M. Heydarnejad Moghadam</u> , F. Goharpey, M. Babaei	
12:55-13:15	A-10-776-1 Characterization of residence time distribution in co-rotating twin-screw extrusion: Experimental tracer study on polymer melt flow dynamics ARSAM Co.		12:55-13:15	A-10-774-1 Effect of particle dimensionality on the network structure of PVDF/graphitic nanoparticle composites: Insights from linear and nonlinear rheology <u>M. Babaei</u> , F. Goharpey, M. Heydarnejad Moghadam	

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13:00-14:00 Lunch Break			
Hall A		Hall B	
Date	Chair Persons: H. Nazokdast, I. Ghasemi, R. Khosrokhavar, M.K. Razavi, S. Ahmadi, M. Salami Hosseini	Date	Chair Persons: J. Khademzadeh, H. Shirali, F. Abbasi
14:00-14:50	Industry Panel	14:00-14:20	A-10-730-1 Experimental investigation of the melt flow index in blends of low-density and linear low-density polyethylene A. Zandi, M. Hamidi Arani, H. Davari Zarnaghi
14:50-15:20	Reza Foudazi Oklahoma State University Rheology of highly concentrated emulsions with adhesive and non-adhesive droplets	14:50-15:10	A-1-719-1 Payne effect in magnetorheological elastomers under thermal and magnetic fields M.H. Izadifard, M. Norouzi, M. Ghatee, A. Alimardan
		15:10-15:30	A-10-709-1 Role of graphene nanoplatelets on properties of HDPE/carbon black compound: Rheological assessments and creep flow M. Dehghani, G. Pircheraghi, S.H. Jafari
		15:30-15:50	A-10-763-1 On the rheological origins of viscoelasticity in rolling rubber: a computational study governed by the WLF equation S.H.R. Sabbaghi, S. Lotfi, M. Razzaghi-Kashani
15:20-15:50	Joao Maia Case Western University, USA Continuous catalyst cracking in twin-screw extrusion: A new approach to upcycling at scale of polyolefins		
15:50-16:10 Break			
16:10-17:00 Plenary Lecture: Simon Rogers, University of Illinois Urbana-Champaign, USA Recovery rheology			
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17:00-17:20	A-10- Quenching agent effects on internal associations and network structure of amine-functionalized polyolefins N. Moradinik, E. Mohammadi, B.M. Yavitt, L.L. Schafer, S.G. Hatzikiriakos	17:00-17:20	A-10-599-2 Advanced rheological modeling of dense suspensions: The role of surface roughness on normal stress differences S. Davarzani, R. Khoshrou Moeini, F. Goharpey
17:20-18:00 Closing Ceremony			