



IO' International Congress on Rheology

ATHENS, GREECE

JULY 29 - AUGUST 4, 2023

Program



Athenaeum
Intercontinental Hotel
Athens, Greece

www.icr2023.com

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 Please stop by our poster presentations
Wednesday, August 2nd
9:00–12:00

thermo scientific

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Download the Official ICR2023 Mobile App

INSTALLATION INSTRUCTIONS

STEP 1

Use your device to scan the following QR CODE

STEP 2

Search for The Event App by EventsAIR on Play Store or App Store

When you are prompted for a code upon launching the App, insert: ICR2023

iOS DEVICES



ANDROID DEVICES



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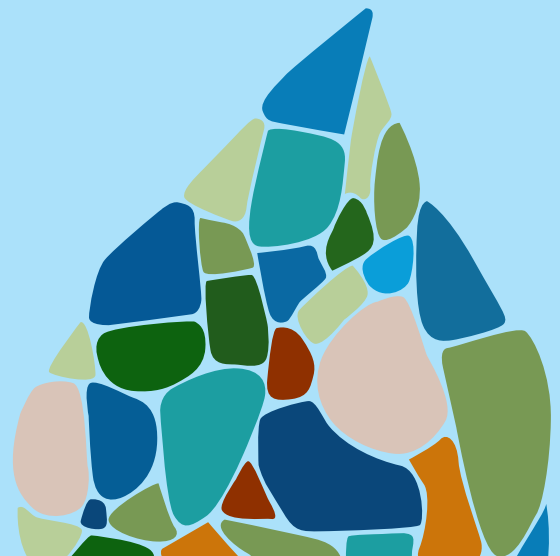
Technical Sessions
& Chairs

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& Exhibitors

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Invited
Speakers



Organization



Committees

Local arrangements

Dimitris Vlassopoulos (co-chair), *Heraklion, Greece*

Moshe Gottlieb (co-chair), *Beer Sheva, Israel*

Spiros H. Anastasiadis, *Heraklion, Greece*

Dganit Danino, *Haifa, Israel*

Maya Davidovich-Pinhas, *Haifa, Israel*

Yannis Dimakopoulos, *Patras, Greece*

George Floudas, *Ioannina, Greece*

Georgios Georgiou, *Nicosia, Cyprus*

Kostas Housiadas, *Samos, Greece*

Benoit Loppinet, *Heraklion, Greece*

Vlasis Mavrantzas, *Patras, Greece*

Guy Mechrez, *Rishon LeZion, Israel*

Evan Mitsoulis, *Athens, Greece*

Naum Naveh, *Ramat Gan, Israel*

Nikos Pelekasis, *Volos, Greece*

George Petekidis, *Heraklion, Greece*

Roii Sayag, *Beer Sheva, Israel*

John Tsamopoulos, *Patras, Greece*

Daphne Weihs, *Haifa, Israel*

Eyal Zussman, *Haifa, Israel*

Technical program

Jan Vermant (chair), *ETH, Zurich, Switzerland*

International advisory board

Patrick Anderson, *TU Eindhoven, The Netherlands*

Christian Clasen, *KU Leuven, Belgium*

Philippe Coussot, *Ecole des Ponts Paris Tech, France*

Juan de Vicente, *University of Granada, Spain*

Emanuela Del Gado, *Georgetown University, USA*

Suzanne Fielding, *Durham University, UK*

Gerald G. Fuller, *Stanford University, USA*

Steve Granick, *Institute for Basic Science, Korea*

Savvas G. Hatzikiriakos, *University of British Columbia, Canada*

Yogesh M. Joshi, *IIT Kanpur, India*

Gareth H. McKinley, *MIT, USA*

Amy Shen, *Okinawa Institute of Science and Technology, Japan*

Patrick Spicer, *University of New South Wales, Australia*

Norman J. Wagner, *University of Delaware, USA*

Hiroshi Watanabe, *Kyoto University, Japan*

General Information

Congress Venue

Athenaeum Intercontinental Hotel

A. 89-93 Andrea Syngrou Ave., 115 21 Athens, Greece
T. +30 210 9206000, W. www.athenaeum.intercontinental.com

Congress Organizing Bureau



ERASMUS CONFERENCES & EVENTS S.A.

52B Vouliagmenis Av., 167 77, Ellinikon, Greece
Call Center: +30 210 7414700, Fax: +30 210 7257532
E-mail: info@erasmus.gr, Website: www.erasmus.gr

Registration Desk

The Short Course Registration Desk is located at the Ground Floor Level (0) of the Athenaeum Intercontinental Hotel and will be in operation during the following dates and hours:

Saturday, July 29 th , 2023	08:00-17:30
Sunday, July 30 th , 2023	08:00-15:00

The Congress Registration Desk is located at the Level (-1) of the Athenaeum Intercontinental Hotel and will be in operation during the following dates and hours:

Sunday, July 30 th , 2023	16:00-20:00
Monday, July 31 st , 2023	07:00-17:30
Tuesday, August 1 st , 2023	07:30-18:00
Wednesday, August 2 nd , 2023	08:00-13:00
Thursday, August 3 rd , 2023	07:30-17:30
Friday, August 4 th , 2023	08:00-16:00

Badges

The name badge issued to delegates upon their check-in at the Registration Desk serves as an admission pass to all scientific sessions and the exhibition. Delegates are kindly requested to wear their name badge at all times.

Exhibition

The exhibition hall is located in Ballroom Foyer (Level -2).

Congress Halls

Level 0 (Ground Floor)

Aphrodite II
Aphrodite III & IV
Aphrodite V
Arcade I & II
Athenaeum Conf. Centre

Level -1

Ypsilon II & III
Ypsilon IV & V
Omikron I
Omikron II
Epsilon-Zeta (Speakers' Preview Room)

Level -2

Ballroom
Omega
VIP
Lambda
Theta/Sigma/Delta

Internet Facilities

Wi-Fi internet connection will be available in the venue via the **ICR2023 network**, password: **Rheology2023**.

Coffee-Tea Breaks

Coffee/tea will be served at the Levels -1, -2 of Athenaeum Intercontinental Hotel.

Lunch / Dinner

Please visit the Congress Website for suggestions.

Cash Machine

The nearest ATM machine is located inside the Athenaeum Intercontinental Hotel, in the main entrance of the building.

Credit Cards

Commonly accepted credit cards in hotels, restaurants and stores are Visa, MasterCard & Maestro.

Smoking

Smoking is prohibited in the Hotel.

Lost Property

Enquiries regarding items lost or found can be made at the Registration Desk.

Insurance

The Organizing Committee and the Congress Organizing Bureau do not have any liability for damages and/or losses of any kind which may be incurred by the Congress participants or by any persons accompanying them, during the Congress period (including scientific and social events). Participation in all tours and events is at one's own risk. Participants are advised to take out insurance against loss, accidents or damage that could be incurred during the Congress period. Verbal agreements will not be binding unless they are confirmed in writing. Sole place of jurisdiction is Athens. Greek law is applicable.

Presentation Instructions

Instructions for Session Chairs, Chairpersons, Speakers and Poster Presenters

- Chairpersons and Speakers are requested to be in the session room 10 minutes before their session starts.
- Speakers/Presenters may check their presentation in the Speakers' Preview Room well in advance of their session and contact the technical support personnel or student helpers for assistance.
- Speakers/Presenters scheduled to present in the following Halls, which will be live-streamed and recorded via ZOOM, are required to upload their presentation in the Speakers' Preview room, two hours before their session. The AV staff will be available to assist them as needed.

Halls: **BALLROOM, YPSILON II & III, YPSILON IV & V, APHRODITE II, APHRODITE III & IV, ATHENAEUM CONF. CENTRE**

- Speakers are asked to respect the allocated presentation time as follows:

– **Plenary Presentations:** 45 minutes followed by 10 minutes discussion

– **Keynote Presentations:** 35 minutes followed by 5 minutes discussion

– **Oral Presentations:** 17 minutes followed by 3 minutes discussion

Session Chairs must ensure that Chairpersons are in their place.

Chairpersons should enforce the time to ensure that parallel sessions are synchronized. A countdown timer will be appearing on the podium screen to assist in observing the allotted time.

- Poster board dimensions are 120 cm (height) x 80 cm (width). The posters will be mounted on **Wednesday, August 2**, at the **BALLROOM HALL** (Level -2), before the session starts (08.00-09.00). The congress staff and student helpers shall provide double-sided tape and assist as needed. The Poster Number is indicated at the TOP of the board. It is strictly the presenter's responsibility to remove their poster at the end of the session (not later than 14.00). The congress staff bears no responsibility for lost posters.

Speakers' Preview Room

The Speakers' Preview facilities are located in the **EPSILON-ZETA** Hall at the Congress Venue (Level -1) and can be used for seating, rehearsing, previewing. Speakers may report there at their earliest convenience and before their presentation time. The Speakers' Preview facilities will be operating according to the schedule of the Congress Registration Secretariat.

Certificate of Attendance

An official Certificate of Attendance will be sent via email to all registered participants after the end of the Congress.



Social Events

Welcome Reception

 Sunday, July 30th

 19:30 – 21:00


 Casual

The Welcome Reception will take place at the Congress Venue, Athenaeum Intercontinental Hotel.
(Address: 89-93 Andrea Syngrou Avenue, Athens).



Acropolis Museum Guided Tour & Evening Reception

 Monday, July 31st

 18:00 – 22:30

 Casual, comfortable shoes

- The guided tour will begin in groups from the **Acropolis Museum** (Address: 15 Dionysiou Areopagitou Str., Athens) from 18:00h. The museum tour will last 90 minutes. After the end of the tour, a short guided walk (650 meters) to the Evening Reception venue, passing by the Temple of Olympian Zeus, will follow.
- The Evening Reception will take place at the **Athens Lawn Tennis Club** (Address: 2 Vasilissis Olgas Avenue, Athens) (<http://www.oaa.gr/home-in-english.htm>).
- Bus transportation will be provided *only* from the Congress Venue to the Acropolis Museum. Buses will depart from the main entrance of the Congress Venue Athenaeum Intercontinental Hotel at the time mentioned on the coupon received upon registration (please check).
- Return to hotels: please use tram line T6 (direction Pikrodafni, step in at Zappeion Stop outside Athens Lawn Tennis Club, step out at Kasomouli Stop at Athenaeum Intercontinental Hotel) or taxi/uber. The actual distance is 2.2 km.
- To enter the Acropolis Museum tour and/or the Evening Reception, participants must present their congress name badge at the entrance.
- Free for all registered participants and registered accompanying persons.



Banquet

 Thursday, August 3rd

 19:30 – 23:30

 Casual

- The Banquet will take place at Ble Azure Seaside Restaurant (Address: 74 Poseidonos Avenue, Alimos, Athens). Ble Azure Restaurant is located on a green peninsula, where everything seems magical. An idyllic setting with a spectacular sea and sunset view. The natural scenery combined with the attentive and romantic lighting, gives a unique feeling that will stay for a long time in your memory.
- Bus transportation will be provided from/to the Congress Venue. Buses will depart from the main entrance of Athenaeum Intercontinental Hotel, at 19:00 hrs.
- To return independently (actual distance is 6.5 km), please use tram line T7 direction Aghia Triada (step in at Zefyros stop outside restaurant) and connect at Pikrodafni stop with line T6 (change tram) direction Syntagma, or take taxi/uber.
- Participants need to present their congress name badge upon embarkation to the buses or at the entrance of the dinner venue.
- Free for all registered participants and registered accompanying persons.





Technical Sessions & Chairs

Advances in rheometrical and rheophysical methods

Chairs: Simon Rogers (University of Illinois Urbana-Champaign, USA)
Takahashi Tsutomu (Nagaoka University of Technology, Japan)
Paula Moldenaers (KU Leuven, Belgium)

Microfluidics, nanofluidics, thin films and confined flows

Chairs: Francisco Galindo Rosales (University of Porto, Portugal)
Simon Haward (Okinawa Institute of Science and Technology Graduate University, Japan)
Cari Dutcher (University of Minnesota, USA)

Non-Newtonian Fluid Mechanics

Chairs: Ian Frigaard (University of British Columbia, Canada)
Paulo R. de Souza Mendes (Pontifical Catholic University of Rio de Janeiro, Brazil),
Rob Poole (University of Liverpool, UK)

Polymeric materials (melts, solutions, copolymers, blends, composites)

Chairs: Giovanni Ianniruberto (University of Naples Federico II, Italy)
Yuichi Masubuchi (Nagoya University, Japan)
Ravi Jagadeeshan (Monash University, Australia)

Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks

Chairs: Quan Chen (Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China)
Marie-Claude Heuzey (Polytechnique Montréal, Canada)

Suspensions, frictional and granular systems

Chairs: Michel Cloitre (ESPCI, France)
Erin Koos (KU Leuven, Belgium)
Ryohei Seto (Wenzhou Institute, Chinese Academy of Sciences, China)

Arrested matter: gels, glasses and jammed systems

Chairs: Hajime Tanaka (University of Tokyo, Japan)
Luca Cipelletti (Université de Montpellier, France)
Roseanna Zia (Stanford University, USA)

Interfacial rheology, bubbles and foams, droplets and emulsions

Chairs: Anniina Salonen (Université Paris-Sud, France)
Nick Jaensson (TU Eindhoven, The Netherlands)
Natalie Germann (University of Stuttgart, Germany)

Biorheology and rheology in the biomedical field

Chairs: Antony Beris (University of Delaware, USA)
Pier-Luca Maffettone (University of Naples Federico II, Italy)
Manlio Tassieri (University of Glasgow, UK)

Rheology of living and active systems

Chairs: Sujit S. Datta (Princeton University, USA)
Arezo Ardekani (Purdue University, USA)

Rheology and design of Foods, pharmaceutical formulations and consumer products

Chairs: Marco Ramaoli (INRAE, France)
Ruth Cardinaels (KU Leuven, Belgium)
Peter Fischer (ETH, Switzerland)

Additive Manufacturing, Composites and Polymer Processing

Chairs: Peter Olmsted (Georgetown University, USA)
Carlos R. López-Barrón (ExxonMobil, USA)
Antonios Doufas (Sabic, Saudi Arabia)

Rheology and sustainability (constructions, recycling, cellulose, biodegradable)

Chairs: Nicolas Roussel (IFSSTAR, France)
Joe Samaniuk (Colorado School of Mines, USA)

Machine learning and AI in rheology

Chairs: Safa Jamali (Northeastern University, USA)
Ellie Hajizadeh (University of Melbourne, Australia)

Rheology for soft robotics and use of field-responsive materials

Chairs: Randy H. Ewoldt (University of Illinois at Urbana-Champaign, USA)
Ryan L. Truby (Northwestern University, USA)

Invited Speakers

Plenaries

Salvatore Coppola (*Eni Versalis, Italy*)
Eric M. Furst (*University of Delaware, USA*)
Peter Fischer (*ETH Zurich, Switzerland*)
Elisabeth Guazzelli (*Université Paris Cité, France*)
Ronald G. Larson (*University of Michigan, Ann Arbor, USA*)

Pier Luca Maffettone (*University of Napoli Federico II, Italy*)
Jeffrey F. Morris (*The City College of New York, USA*)
Kelly Schultz (*Lehigh University, USA*)
Kenji Urayama (*Kyoto University, Japan*)

Keynotes

Luca Biancofiore (*Bilkent University, Turkey*)
Emmanouil Chatzigiannakis (*Eindhoven University of Technology, The Netherlands*)
Sujit S. Datta (*Princeton University, USA*)
Maya Davidovich-Pinhas (*Technion - Israel Institute of Technology, Israel*)
Emanuela Del Gado (*Georgetown University, USA*)
Suzanne Fielding (*Durham University, UK*)
Michela Geri (*MIT, USA*)
Savvas G. Hatzikiriakos (*University of British Columbia, Canada*)
Duncan Hewitt (*University College London, UK*)
Roland Kádár (*Chalmers University, Sweden*)
Anthony Kotula (*NIST, USA*)
Kurt Kremer (*Max Planck Institute for Polymer Research, Germany*)
Romain Mari (*University Grenoble-Alpes, France*)
Kalman Migler (*NIST, USA*)
Sepideh Razavi (*University of Oklahoma, USA*)
Rae Robertson-Anderson (*University of San Diego, USA*)
Eric Shaqfeh (*Stanford University, USA*)
Sehyun Shin (*Korea University, Korea*)
Shinji Tamano (*Nagoya Institute of Technology, Japan*)
Mahesh Tirumkudulu (*IIT Bombay, India*)
Evelyne Van Ruymbeke (*UC Louvain, Belgium*)
Stylianos Varchanis (*OIST, Japan*)



Tom McLeish Memorial Session

Ralph H. Colby (*Pennsylvania State University, USA*)
Ole Hassager (*DTU, Denmark*)
Giovanni Ianniruberto (*University of Napoli Federico II, Italy*)
Peter D. Olmsted (*Georgetown University, USA*)

Daniel J. Read (*University of Leeds, UK*)
Michael Rubinstein (*Duke University, USA*)
Hiroshi Watanabe (*Kyoto University, Japan*)

CONGRESS PROGRAM

Sunday, July 30th, 16:00 - 22:00

LEVEL -1

16:00-20:00

CONGRESS ORGANIZING SECRETARIAT, INTERCONTINENTAL
Registration

LEVELS -1, -2




19:30-21:00




INTERCONTINENTAL
Welcome Reception



	BALLROOM (Level -2)	THETA/SIGMA/DELTA (Level -2)	VIP (Level -2)	OMEGA (Level -2)	YPSILON II & III (Level -1)	YPSILON IV & V (Level -1)
08:00-08:30	BALLROOM (Level -2)					
08:30-09:30	OPENING CEREMONY					
	Chair: Hiroshi Watanabe					
	From molecules to processing flows: multi-scale rheological modeling • Ronald G. Larson					
09:30-10:00	COFFEE - TEA BREAK					
10:00-12:20	Polymeric materials (melts, solutions, copolymers, blends, composites) 1 , Tom McLeish memorial session Chairs : Yuichi Masubuchi, Moshe Gottlieb, Dimitris Vlassopoulos	Additive manufacturing, composites and polymer processing 1 Chairs : Marianna Kontopoulou, Antonios Doufas	Rheology and design of foods, pharmaceutical formulations and consumer products 1 Chairs : Maya Davidovich-Pinhas, Peter Fischer	Advances in rheometrical and rheophysical methods 1 Chairs : Christian Clasen, Paula Moldenaers	Non-Newtonian fluid mechanics 1 Chairs : Agathe Robisson, Priscilla Varges	Rheology and sustainability (constructions, recycling, cellulose, biodegradable) 1 Chairs : Joseph Samaniuk, Kelly Schultz
10:00-10:20	Chemical features of Convected Constraint Release in polymer melts Peter Olmsted , Benjamin E Dolata, Marco Galvani Cunha	Patterns of 3D printed filaments of yield stress fluids Anatole Geffrault , Hela Bessaies-Bey, Nicolas Roussel, Philippe Coussot	Extrusion of plant-based meat analogues - rheology, simulation and microstructure Mats Stading , Erik Kaunisto, Sophia Wassén, Johan Wiklund	Elongational rheometry for yield stress fluids Philippe Coussot , Anatole Geffrault	Viscoplastic container filling Manuela Barnoin , Elie Hachem, Rudy Valette, Anselmo Pereira	Rheology of Chemically Modified Celluloses in Aqueous Solution Toshiyuki Shikata , Erika Saiki, Misato Yoshida
10:20-10:40	Rouse analysis of nonlinear rheology of unentangled polymer melts under fast shear: viscoelastic response to superposed oscillatory strain Hiroshi Watanabe , Yumi Matsumiya, Takeshi Sato, Quan Chen	Modeling of Extrusion in 3D-Concrete-Printing John Vlachopoulos , Nickolas Polychronopoulos	Effect of fibre orientation on the shear stress and normal stress responses of meat (analogue) Gerard Giménez-Ribes , Mats Oostendorp, Atze Jan van der Goot, Erik van der Linden, Mehdi Habibi	Relation between flight behavior and extensional characteristics of dilute polymer solution using inkjet mechanism Ryosuke Sugiura , Takeshi Matsuda, Masakazu Muto, Shinji Tamano	Wall-Slip Control in Micro-Flows of Microgels and Emulsions by Surface Roughness Using Doppler-OCT Kasra Amini , Magdalena Przeradzka, Michel Cloitre, Veronique Schmitt, Valerie Ravaine, Outi Tammisola, Fredrik Lundell	Rheological measurement and characterization of pretreated biomass slurries Jessie Troxler , Joseph Samaniuk, Jonathan Stickel, Yudong Li, Brennan Pecha
10:40-11:00	Spatial radical distribution in fractured polymer glasses & melts visualized using a pro-fluorescent nitroxide probe Qian Huang , Ole Hassager , Jeppe Madsen	Accurate Rheological Characterization of Highly-Filled Direct-Ink Write Pastes Jessica Kopatz , Adolfo Cazares, Jonathan Leonard, Alexander Tappan, Anne Grillet	Towards Printability Predictions of Complex Food Inks: Formulation and Rheology Yagmur Bugday , Aaditya Venkatachalam, Shiyao Wang, Ruud van der Sman, Patrick Anderson	High frequency and extensional rheology of low viscosity inkjet fluids Tri Tuladhar	Shear induced particle migration in a cement slurry under pipe flow Agathe Robisson , Teresa Liberto, Valmir Kabashi	Rheology of biopolymer/ionic liquid solutions Daniele Parisi , Ralph H. Colby
11:00-11:20	Nonlinear shear rheology of unentangled H-polymers Giovanni Ianniruberto , Giuseppe Marrucci, Salvatore Costanzo, Guilhem Baeza	In-situ Process Monitoring of Direct-Ink Write Additive Manufacturing Jessica Kopatz , Derek Reinholtz, Jonathan Leonard, Alexander S. Tappan, Adam W. Cook, Anne Grillet	Universality in food rheology? Ruud Van Der Sman	Measuring Transient Extensional Properties in Complex Microstructured Fluids using a Composite Harmonic Exponential Waveform (CHEW) Laurel Kroo , Patrick T. Underhill, Marissa F. Rizzi, Reed A. Nicholson, Gareth H. McKinley	Unraveling the Complex Dynamics of Buoyant Miscible Jets: From Newtonian to Viscoplastic Fluids Hossein Hassanzadeh , Seyed Mohammad Taghavi	Mechanical & Rheological characterization of agar gels in Glycerol/Water co-solvent Perrine Pipart , Y. Tran, D. Hourdet
11:20-11:40	Determination of molecular weights using a polydisperse Rouse model for semidilute unentangled polyelectrolyte and neutral polymer solutions Ralph Colby , Aijie Han	Control of the extruded layer geometry in 3D printing process of construction materials using squeeze test measurements Benamara Abdeslam , Alexandre Pierre, Kaci Abdelhak, Mélinge Yannick	Emulgels structured with dietary fiber: a rheological model Elisabetta Bruno , Francesca Romana Lupi , Domenico Mammolenti, Olga Miletì, Noemi Baldino, Domenico Gabriele	Role of substrate spreading on the breakup behavior of low-viscosity fluids in Dripping-onto-Substrate (DoS) extensional rheology measurements Kathleen Lauser , Amy Rueter, Michelle Calabrese	Density unstable injection of a viscoplastic fluid in a channel filled with a lower density Newtonian fluid Ida Karimfazi , Abdallah Ghazal	Morphological and Rheological Evaluation of Polyhydroxyalkanoates (PHAs) through Constitutive Equation Modelling Ehsan Behzadfar , Hadis Torabi , Hadis Zarrin
11:40-12:00	Reaching for the stars with a Renaissance scientist Michael Rubinstein	How the rheology of powder affects its spreadability? Aurélien Neveu , Filip Francqui, Geoffroy Lumay	The influence of extrinsic factors on rheological properties of citrus fiber suspensions Domenico Mammolenti , Elisabetta Bruno, Francesca R. Lupi, Noemi Baldino, Danilo Gaudio, Viviana Cupone, Domenico Gabriele	Extensional Rheometry: an Operational Review Chris Macosko , Randy Ewoldt, Gareth McKinley	Flow displacement of yield stress fluids through irregular annular tubes Priscilla Ribeiro Varges , Bruno Da Silva Fonseca, Lorena Moraes, Monica Naccache, Paulo Roberto de Souza Mendes, Carlos Pessanha Costa Carvalho, André Leibsohn Martins	Water retention mechanism of Cellulose ether in low carbon construction materials Yasmine Kaci , Mohend Chaouche, Roberta Alfani
12:00-12:20	From model materials to polydisperse industrial complexity Daniel Read , Chinmay Das	Rheological investigation and modeling of healing properties in Innovative fused deposition of medical composites based on poly(lactic-acid)/hydroxyapatite fillers Khalid Lamnawar , Abderrahim Maazouz , Xavier Lacambra, Xavier P. Morelle, Jean-Marc Chenal	Tribological characterization of horizontal ball mill ground cocoa mass with different particle size distributions and rheological properties Florian Rummel , Martina Tietz, Shona Venk	Tuning fork rheometer to measure fluid rheological properties for industrial measurement applications Mary Joens , Joshua David John Rathinaraj, Kyle Lennon, Miguel Gonzalez, Ashok Santra, Gareth McKinley	60 Years of the K-BKZ Constitutive Relation for Polymers Evan Mitsoulis	Connecting rheological and compressive strength evolution for lunar regolith simulant geopolymers William Hartt V , Norman Wagner
12:20-14:00	LUNCH BREAK					

OMIKRON I (Level -1)	OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
BALLROOM (Level -2)		OPENING CEREMONY			
BALLROOM (Level -2)		Chair: Hiroshi Watanabe			
		From molecules to processing flows: multi-scale rheological modeling • Ronald G. Larson			
COFFEE - TEA BREAK					
Biorheology and rheology in the biomedical field 1 Chairs: Antony N. Beris, Scott Danielsen	Microfluidics, nanofluidics, thin films and confined flows 1 Chairs: Vivek Narsimhan, Simon Haward	Suspensions, frictional and granular systems 1 Chairs: Nadia El Kissi, Roberto Cerbino	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 1 Chairs: Marie Claude Heuzey, Quan Chen	Arrested matter: gels, glasses and jammed systems 1 Chairs: Kenneth Schweizer	Interfacial rheology, bubbles and foams, droplets and emulsions 1 Chairs: Ruth Cardinaels, Sepideh Razavi
A noble microfluidic-thromboelastograph (micro-TEG) analysis of whole blood coagulation and fibrinolysis Sehyun Shin , J. Wang	Dynamics of flexible filaments in oscillatory shear flows Francesco Bonacci , Brato Chakrabarti, David Saintillan, Anke Lindner, Olivia du Roure	Yield Stress and Shear-thinning Behavior in a non Brownian Bitumen Suspensions Benoit Dussault, Arnaud Leclerc, Charles Brissot, Jean-Baptiste Champenois, Arnaud Poulesquen	Improving extensibility of telechelic poly(tert-butyl acrylate) carboxylate ionomers through tuning sticker distance of counterions Shuang Liu , Qian Huang	Moving cracks in drying colloidal sheets Atiya Badar, Mahesh S Tirumkudulu	Essential conditions for suppression of non-Newtonian drop bouncing on superhydrophobic surfaces Khusro Kamaluddin , Gopal Chandra Pal, Purbarun Dhar, Chander Shekhar Sharma, Devranjan Samanta
	Macromolecular Microfluidic Concentrators Steady Coombs, Khemapat Tontiwattanakul, Alan Jeffrey Giacomini	Physical mechanism of erythrocytes sedimentation rate Alexis Darras , Thomas John, Lars Kaestner, Christian Wagner	Polyelectrolyte Complexation in Non-Ideal Environments Samanvaya Srivastava, Divya Iyer , Vaqar Syed, Holly Senebandith, Peter Goh, Vanessa Huaco, Lucas Willey		Oscillatory motion of viscoelastic drops on slippery lubricated surfaces Paolo Sartori, Davide Ferraro, Marco Dassie, Alessio Meggiolaro, Daniele Filippi, Annamaria Zaltron, Giampaolo Mistura, Matteo Pierno
A microfluidic model of micro-haemorheology in complex porous media Qi Chen , Naval Singh, Igor Chernyavsky, Anne Juel	Inertial effects and fluctuation-dissipation relations for microparticle dynamics in a viscoelastic fluid Massimiliano Giona , Giuseppe Procopio, Antonio Brasiello, Rainer Klages	Effect of Carbopol and Triethanolamine concentrations on rheological properties of aqueous solutions and comparison with the SoFA model Roney Thompson, Daiane Iceri, Charlie van der Geest, Thierry Palermo, Marcelo de Castro	Conformational rheology of wormlike polyelectrolyte chain in confined spaces of narrow channels Myung-Suk Chun , Min Sun Yeom	What recovery teaches us about yielding and double yielding James Griebler, Gavin Donley, Victoria Wisniewski, Simon Rogers	Partial coalescence phenomenon under dynamic conditions in rising/falling droplets against bulk oil/water interfaces Preetika Rastogi , Gavin S. McCabe, Jan Zawala, Gerald G. Fuller
Vascular networks of optimal solute perfusion Georgios Gounaris , Miguel Ruiz Garcia, Eleni Katifori	On the Faxén operators and the dualism with the disturbance fields of an arbitrary body in Stokes flows Giuseppe Procopio , M. Giona	Effects of a non-ionic surfactant admixture on the rheology of dense silica suspensions Antoine Aubel , Xavier Chateau, Julie Goyon, Anaël Lemaître	Coacervates at solid and fluid interfaces: rheology, capillary effects and lubrication Philipp Erni	A model for thixotropy of soft particle glasses from the thermodynamics of its stress distributions Minaspi Bantawa, Roger T. Bonnecaze	A reduced model for droplet dynamics in shear flows at finite capillary numbers Diego Taglienti , Fabio Guglietta, Mauro Sbragaglia
The Viscosity of the Cytosol of Red Blood Cells Christian Wagner , Thomas John	Magnetically actuated particles in viscoelastic fluids in proximity to a wall Parajal Rai , Ye Wang, Patrick Anderson, Nick Jaensson	Homogenization Estimates for the Macroscopic Rheology and Local Field Statistics in Yield Stress Suspensions Pedro Ponte Castañeda , Christoph Kammer, Paulo E. Arratia	Electrorheological effect in Polyelectrolytes under Strong Electric Field Arkadii Arinstein , Patrik Martin, Gleb Vasilyev, Eyal Zussman	Nonlinear Rheological Investigations of a Bimodal Mixture of PS-PNIPAm Core-Shell Particles around the Glass Transition Lea Fischer , Mahadevan Sutharsan, Matthias Fuchs, Manfred Wilhelm	The Deformation of a Droplet in a Shearing Viscoplastic Fluid Thomas Appleford , Vatsal Sanjay, Mazi Jalaal
Thixotropy of Human Blood and the Role of Rouleaux Formation Sean Farrington , Antony Beris, Norman Wagner	Fluid structure interaction (FSI) between linearly elastic sheets and complex fluids in microfluidic devices at low Reynolds numbers and intermediate Weissenberg numbers Vivek Narsimhan , Anirudh Venkatesh, Vishal Anand	Lubrication effect of nanoparticles in capillary suspensions Lingyue Liu , Jens Allard, Erin Koos	Start-up shear of natural near-critical gels made of gluten proteins Ameur Louhichi, Marie-Hélène Morel, Laurence Ramos, Amélie Banc	Continuum modelling of shear start-up in soft glassy materials Roberto Benzi, Thibaut Divoux , Catherine Barentin, Sébastien Manneville, Mauro Sbragaglia, Federico Toschi	Atomistic modeling provides direct observation of Rayleigh jets in charged droplets Stella Consta
Rheological properties of PNIPAM based hydrogels in swollen and shrunk states Xu Yinghao , Marie-Claude Heuzey, Abdellah Ajji	Intermittent dynamics of crosslinking polymers in microfluidic flows Barrett Smith , Sara Hashmi	Suspensions of viscoelastic spherical capsules: effect of membrane viscosity on transient dynamics Fabio Guglietta , Francesca Pelusi, Othmane Aouane, Marcello Segal, Jens Harting	Side-chain length dependence of viscoelastic properties in poly(ionic liquid)s Tiago Outerelo Corvo , Jorge Peixinho, Guillaume Miquelard-Garnier, Eric Drockenmuller, Frédéric Restagno, Alexis Chennévière	Non-monotonic stress relaxation in a “simple” yield stress fluid Crystal Owens , Suzanne Fielding, Gareth McKinley	Hydrodynamics Coalescence of Emulsion Droplets Marion Grzelka , Manon L'Estimé, Antoine Deblais, Daniel Bonn
LUNCH BREAK					











	BALLROOM (Level -2) 	THETA/SIGMA/DELTA (Level -2)	OMEGA (Level -2)	YPSILON II & III (Level -1) 	YPSILON IV & V (Level -1) 	OMIKRON I (Level -1)
14:00-15:00	Chair: Erin Koos BALLROOM (Level -2) Interactions, elasticity, aging and yielding of colloidal gels • Eric M. Furst					
15:00-15:30	COFFEE - TEA BREAK					
15:30-17:10	Polymeric materials (melts, solutions, copolymers, blends, composites) 2 Chairs: Takashi Taniguchi, Salvatore Costanzo	Additive manufacturing, composites and polymer processing 2 Chairs: Peter Olmsted, Benjamin Yavitt	Advances in rheometrical and rheophysical methods 2 Chairs: Simon Rogers, Tsutomu Takahashi	Non-Newtonian fluid mechanics 2 Chairs: Rich Kerswell, Paulo De Souza Mendes	Rheology and sustainability (constructions, recycling, cellulose, biodegradable) 2 Chairs: Daniele Parisi, Joseph Samaniuk	Rheology of living and active systems 1 Chairs: Sujit S. Datta, Saad Bhamla
15:30-15:50	Structural Reorganization of Magnetic Nanoparticles upon Stimulus-Healing of Responsive Thermoplastic Elastomers Angelo Pommella , Pablo Griffiths, Gildas Coativy, Florent Dalmas, Françoise Méchin, Julien Bernard, Thomas Zinn, Theyencheri Narayanan, Sylvain Meille, Guilhem Baeza	Mapping residual stress and orientation from material extrusion processes Anthony Kotula , Benjamin Dolata, Yoon Tae Kim, Jonathan Seppala	Listen to the lubricants - probing viscoelastic slipperiness with a tuning fork apparatus Julie Jagielka , Joshua A. Dijkman, Daniel Bonn	Connecting dynamics of penetration to rheometry of yield stress fluids Michela Geri	Influence of shear history and hydration process on the mechanisms of thixotropy in cement pastes Julian Link , Bastian Strybny, Max Coenen, Marcus Zuber, Michael Haist	Emergent micro-mechanics of active bio-synthetic composites Rae Robertson-Anderson , Maya Hendija, Qiaopeng Chen, Daisy Achiriloaie, Janet Sheung, Mehrzad Sasanpour, Mehdi Aporvari, Jennifer Ross, Michael Rust, Moumita Das, Ryan McGorty, Megan Valentine
15:50-16:10	Fragmentation of a curing elastomer in secondary flows Bavand Keshavarz		Double-gap bicone magnetorheology Guillermo Camacho , José Rafael Morillas, Juan de Vicente		Heterogeneous flows in sheared cement suspensions Subhransu Dhar , Teresa Liberto, Agathe Robisson	
16:10-16:30	Rheological & tribological properties of chemically cross-linked low density polyethylenes Franziska Schneek , Philana O. Kruse, Daniel Hesse-Hornich, Nelson Felipe Lopes Dias, Wolfgang Tillmann, Frank Katzenberg, Joerg C. Tiller, Ulrich A. Handge	Anisotropy and rate-dependent visco-elastic behavior of MatEx additively manufactured PLA and ABS Wilco M.H. Verbeeten , Miriam Lorenzo-Bañuelos	Measurement of the Rheology of Polymer-Polymer Melt Interfaces via Sandwiched Multilayer Structure Huagui Zhang , Huawei Qiao, Botuo Zheng, Ruth Cardinaels, Paula Moldenaers, Khalid Lamnawar	Flow and instability induced by bubbles rising in a two-layer fluid system Marjan Zare , Ian Frigaard, Greg Lawrence	Rheology control of limestone calcined clay cement pastes Yu Chen , Erik Schlangen, Oğuzhan Çopuroğlu	The adaptative mechanical properties of branched actin networks Mehdi Bouzid , Cesar Valencia Gallardo, Julien Heuvingh, Olivia Du Roure, Martin Lenz
16:30-16:50	Isothermal cavitation of rubber toughened polymers: a valuable tool to assess the kinetics of void formation in the rubber phase Dino Ferri , I. Marino, L. Castellani, F. Doghieri, L. Martinelli	Development of an in-line microrheometer coupled to a microscale counter-rotating twin-screw extruder designed for the production of 3D printing filaments Loic Hilliou , João Duarte Alves de Sousa, José A. Covas	A novel tool to measure the second normal stress difference of dilute and semi-dilute polymer solutions Luca Passaro , Eugene Pashkovski, Christian Clasen	Two-phase yield stress flow in Pore Network Model Federico Lanza , Alex Hansen, Laurent Talon, Alberto Rosso, Santanu Sinha	Connecting the rheology and kinetics of sustainable geopolymer cements from metakaolin for additive manufacturing applications Thaddeus Egnaczyk , Norman Wagner	Particle activity affects the viscoelasticity of permanent and dynamic hydrogels Laura Porath , Jan Vermant
16:50-17:10	The difficult flow and slip behaviour of rubbers and their compounds and the impact on processing Patrick Heyer , Christine Wurm, Harald Ehrentraut	Print-and-grow within a novel granular support material for 3D bioprinting Nouy Hen , Majd Machour, Idit Goldfracht, Dina Safina, Maya Davidovich-Pinhas, Shulamit Levenberg, Havazelet Bianco-Peled		Viscoelastic fingering during the sedimentation of a sphere Stylianos Varchanis , Simon J. Haward, Amy Q. Shen	Rheology and Methane Emissions Ian Frigaard	The Dilatational Modulus of Lung Surfactant During Inflammation and Acute Respiratory Distress Joseph Zasadzinski , Steven Iasella, Clara Ciutara, Zachary McAllister, Cain Valtierrez-Gaytan
18:00-22:30	ACROPOLIS MUSEUM VISIT AND RECEPTION					

OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	APHRODITE V (Level 0)	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
BALLROOM (Level -2) Chair: Erin Koos Interactions, elasticity, aging and yielding of colloidal gels • Eric M. Furst					
COFFEE - TEA BREAK					
Microfluidics, nanofluidics, thin films and confined flows 2 Chairs: Amanda Pessoa , Ricardo Lopez	Suspensions, frictional and granular systems 2 Chairs: Jeffrey F. Morris , Stefano Aime	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 2 Chairs: Quan Chen , Marie Claude Heuzey	Suspensions, frictional and granular systems 3 Chairs: Elisabeth Guazzelli , Paolo Edera	Arrested matter: gels, glasses and jammed systems 2 Chairs: Mahesh S. Tirumkudulu	Interfacial rheology, bubbles and foams, droplets & emulsions 2 Chairs: Corneliu Balan , Mariana Rodriguez Hakim
Extensional rheometry in numerically-optimized stagnation point microfluidic devices Simon Haward , Francisco Pimenta , Stylianios Varchanis , Daniel Carlson , Kazumi Toda-Peters , Gareth McKinley , Manuel Alves , Amy Shen	Rheology of a particle-laden soap film Antoine Seguin , J. Lallieu , G. Gauthier	Hardening phenomenon in concentrated and diluted wormlike micelles Rossana Pasquino , Ilaria Cusano , Nino Grizzuti	Squeeze flow of a dense suspension Zidi Koceila , Darbois-Textier Baptiste , Seguin Antoine , Gauthier Georges	Mechanical Spectroscopy of the Sol-Gel Transition in Suspensions of Cellulose Nanocrystals Lise Morlet-Decamin , Thibaut Divoux , Sébastien Manneville	Chiral-style directional surface roughness affecting flow and rheology of emulsions in confined microchannels: from numerical simulations to experiments Francesca Pelusi , Mauro Sbragaglia , Daniele Filippi , Matteo Pierno
An experimental investigation of pulsatile viscoelastic flow past a confined cylinder Tomás Rodrigues , Francisco José Galindo-Rosales , Laura Campo-Deaño	Universality in Buckling Behavior of Drying Suspension Drops Om Prakash Bambariya , Mahesh S Tirumkudulu	Mesoscopic simulations of the shear rheology of dilute and semidilute unentangled wormlike micellar solutions Avishek Kumar , P Sunthar , Rico Tabor , Ravi Jagadeeshan	Effects of confinement-induced non-Newtonian lubrication forces on the rheology of a dense suspension Esteban Lopez-Aguilar , Alan Rosales-Romero , Adolfo Vazquez-Quesada , Sagaya S. Prasanna Kumar , Marco Ellero	Correlating interparticle properties to macroscopic rheology in rough particle gels Florence J. Müller , Madhu V. Majji , Lukas A. Woolley , Shivaprakash N. Ramakrishna , Lucio Isa , Jan Vermant	3D printing of Pickering emulsions Madivala G. Basavaraj , Nithin Madhavan , Manas Mukherjee
Successive deposition of poly(styrene) particles in cross-flow through T-shaped microchannel Dae Yeon Kim , Young Jin Lee , Seon Yeop Jung , Kyung Hyun Ahn	Effect of the rain infiltration process on soil organic carbon content and mud rheology Mario Minale , Simona Moliterno , Pasquale Marino , Elio Coppola , Roberto Greco , Claudia Carotenuto	Rheological Models for Wormlike Micelles: Advances, Limitations, and Promising Future Directions Joseph Peterson , Weizhong Zou	Role of flow-induced dynamical heterogeneities in macroscopic rheology of soft particle glasses Hrishikesh Pable , Michel Cloitre , Fardin Khabaz	Ultrasound Flow Imaging coupled to Classical Rheology for characterization of a Yield Stress Sludge Sébastien Castel , Sébastien Manneville , Arnaud Poulesquen	Cellulose acetate stabilized Pickering emulsions with internal hydrophobic moieties Mariam Sohail , Dick Guenther , Tahira Pirzada , Eduardo Barbieri , Charles Opperman , Saad Khan
PDMS-based porous media microdevices for real-time monitoring of pore-blocking phenomena during emulsion flow Clarice de Amorim , Amanda C.S.N. Pessoa , Ranena V.P. Flores , Marcio S. Carvalho	High-speed synchrotron x-ray analysis of non-contact jetting process Gustaf Mårtensson , Jesper Sallander , Daniel Brevemark , Johan Göhl , Andreas Mark , Fredrik Lundell	Brownian Dynamics simulation of the viscoelasticity of wormlike micellar solutions Loukas Peristeras , Katerina Karadima , Dimitris Tsalikis , Ian Scott , Vlasios Mavrantzas	Hopper discharge of jammed soft particle suspensions Lars Kool , Anke Lindner	Structuring Colloidal Gels via Micro-Bubble Oscillations Kim William Torre , Joost de Graaf	On the stability of bubbles in a yield stress fluid: Role of interactions Masoud Daneshi , Ian Frigaard
Clogging and particle accumulation during the flow of suspensions of solid particles in model 2D porous media Hugues Bodiguel , Youness Soumane , Antoine Naillon	Numerical and experimental investigation of the rheological behavior of oil-based capillary suspensions Ahmed Jarray , Elke Scholten	Simultaneous Capillary Rheology and Neutron Scattering on Rod-Like Particles and Wormlike Micelles Katie Weigandt , Ryan Murphy , Steven Hudson , Paul Salipante , Steve Kuei	Rheology of Brownian suspensions of star colloids Florencio Balboa Usabiaga , Marco Ellero	Effect of Solid Filling on Colloidal Gel Rheology Yujie Jiang , Ryohei Seto	Hydrodynamic Interaction of Unequal Coaxially Rising Bubbles in elasto-viscoplastic Materials Athanasios Kordalis , Yannis Dimakopoulos , John Tsamopoulos

ACROPOLIS MUSEUM VISIT AND RECEPTION



	BALLROOM (Level -2)	THETA/SIGMA/DELTA (Level -2)	VIP (Level -2)	OMEGA (Level -2)	YPSILON II & III (Level -1)	YPSILON IV & V (Level -1)
08:30-09:30	<div>BALLROOM (Level -2)</div> <div>Chair: Roger T. Bonnecaze</div> <div>Rheology of dense granular suspensions: from viscous to inertial regimes, from rigid and rough to soft and smooth particles • Elisabeth Guazzelli</div>					
09:30-10:00	COFFEE - TEA BREAK					
10:00-12:20	<div>Polymeric materials (melts, solutions, copolymers, blends, composites) 3</div> <div>Chairs: Hiroshi Watanabe, Evelyne Van Ruymbeke</div>	<div>Additive manufacturing, composites and polymer processing 3</div> <div>Chairs: Anthony Kotula, Antonios Doufas</div>	<div>Rheology and design of foods, pharmaceutical formulations and consumer products 2</div> <div>Chairs: Mats Stading, Marco Ramaioli</div>	<div>Advances in rheometrical and rheophysical methods 3</div> <div>Chairs: Paula Moldenaers, Tsutomu Takahashi</div>	<div>Non-Newtonian fluid mechanics 3</div> <div>Chairs: Marjan Zare, Edson Soares</div>	<div>Biorheology and rheology in the biomedical field 2</div> <div>Chairs: Manlio Tassieri, Yannis Dimakopoulos</div>
10:00-10:20	<div>Matrix effect on the nonlinear shear rheology of unentangled solutions</div> <div>Salvatore Costanzo, Vincenzo Ianniello, Valerian Hirschberg, Nino Grizzuti</div>	<div>The Non-Newtonian fluid mechanics of iCLIP: A new VAT polymerization process</div> <div>Eric Shaqfeh, G. Lipkowitz, N. Krishna, J. DeSimone</div>	<div>Mesoscopic characterization of yielding in whipped cream under oscillatory shear</div> <div>Shuji Fujii</div>	<div>A new double-hyphenated technique for the study of optically-active suspensions: rheo-PLI-SAXS</div> <div>Reza Ghanbari, Ann Terry, Sylvia Wojno, Amit Kumar Sonker, Kim Nygård, Roland Kádár</div>	<div>Disorder induced non-linearity in the growth of viscous fingers</div> <div>Santanu Sinha, Hursanay Fyhn, Subhadeep Roy, Yves Méheust, A. Hansen</div>	<div>Thixo-elastoviscoplastic Modelling of Human Blood</div> <div>Alexandros Spyridakis, Pantelis Moschopoulos, Stylianios Varchanis, Yannis Dimakopoulos, John Tsamopoulos</div>
10:20-10:40	<div>Unentangled polymer melts and solutions under fast shear and elongational flow: a simulation study</div> <div>Jun-Ichi Takimoto, Sathish Sukumaran</div>				<div>Effects of different anti-freezing agents on ice crystal size and physical properties of ice cream</div> <div>Qi Wang, Sala Guido, Elke Scholten</div>	<div>Invasion of a viscoplastic fluid in Hele-Shaw geometry</div> <div>Mahdi Izadi, Ian Frigaard, Emad Chaparian</div>
10:40-11:00	<div>Variation of spring stiffness, monomeric friction and Brownian intensity in the simulation system of unentangled melt under steady flow</div> <div>Nuofei Jiang, Evelyne van Ruymbeke</div>	<div>Curing Kinetics and Liquid Additive Manufacturing of Polyurethane Elastomers with Gradient Properties</div> <div>Peng Wang, Henning Winter, Manfred Wagner, Dietmar Auhl</div>	<div>Rheology of acid cheese during its drainage</div> <div>Marie Hélène Famelart, Islem Mtibaa, Florence Rousseau, Romain Richoux, Lydie Frogerais</div>	<div>Advanced combined rheometer setups: Rheo-NMR, Rheo-dielectric, Rheo-IR and Rheo-SAXS</div> <div>Manfred Wilhelm, K. Ratzsch, C. Iacob, N. Radebe, T. Meins</div>	<div>A modeling framework for viscoplastic flows in superhydrophobic channels</div> <div>Hossein Rahmani, Seyed Mohammad Taghavi</div>	<div>Cell-free layer dynamics of red blood cells in a constricted microchannel under time-dependent flow</div> <div>Steffen M. Recktenwald, Yazdan Rashidi, Thomas John, Christian Wagner</div>
11:00-11:20	<div>Rheo-dielectric Behavior of Unentangled Poly(butylene oxide) under Steady Shear: Non-equilibrium Parameters at the Onset of Nonlinearity</div> <div>Yumi Matsumiya, Takeshi Sato, Quan Chen, Hiroshi Watanabe</div>	<div>Which rheological tests best predict 3D printability?</div> <div>Omkar Roy, Ying Liu, Matthew Hildner, William A. Van den Bogert, James Lorenz, Maude Desroches, Kurt A. Koppi, Albert Shih, Ronald G. Larson</div>	<div>Yogurt: improved rheological characterization of a thixotropic yield stress fluid and its structural kinetic modelling</div> <div>Ases Akas Mishra, Viney Ghai, Dragana Arlov, Fredrik Innings, Roland Kádár</div>	<div>Fingerprinting nanostructure evolution during complex flows using scattering in a fluidic four-roll mill</div> <div>Patrick Corona, Barbara Berke, Manuel Guizar-Sicarios, Gary Leal, Marianne Liebi, Matthew Helgeson</div>	<div>Effect of volume shrinkage on the flow start-up of gelled waxy crude oils</div> <div>Nezia Rosso, Angel Jimenez, Roque Martins Jr., Cezar Otaviano Ribeiro Negrão</div>	<div>Controlling blood film thickness on a smear device</div> <div>Mahrukh A. Mir, M.S. Tirumkululu</div>
11:20-11:40	<div>Understanding Rheo-Dielectric Behavior of Unentangled Non-Associative and Associative Polymers Under Fast Shear Flows via Nonequilibrium Computer Simulations</div> <div>Zuowei Wang</div>	<div>On non-Newtonian Fluid Mechanics of 3D Printing Soft Materials</div> <div>Jesse van der Klof, Daniel Tieman, Hugo Franca, Mazi Jalaal</div>	<div>Temperature, shear, and time-dependent rheology of chocolate spray compounds</div> <div>Felix Oppong, Andrew R. Cox, William J. Frith, Robert S. Farr</div>	<div>Structure and Dynamics of entangled polymers under shear flow studied by Neutron Scattering</div> <div>Philipp Gutfreund, Max Wolff</div>	<div>A theory for the flow of chemically responsive polymer solutions: Equilibrium and shear-induced phase separation</div> <div>Marco De Corato, Marino Arroyo</div>	<div>Viscoelastic and plastic deformation of cancer spheroids in constricted microfluidic channels</div> <div>Margherita Tavano, Valeria Garbin, Pouyan E. Boukany</div>
11:40-12:00	<div>Modelling the nonlinear shear rheology of unentangled linear polymer melts</div> <div>Maxime Dalne, Evelyne van Ruymbeke, Katerina Peponaki, Dimitris Vlassopoulos, Salvatore Costanzo</div>	<div>Understanding Experimental Jettability Diagrams Autonomously Constructed by Machine Learning</div> <div>Ethan Chadwick, Mingyang Tan, Everett Grethel, Alexander Chandy, Maryam Pardakti, Shing-Yun Chang, Qian Yang, Anson Ma</div>	<div>Harnessing molecular architecture to design novel and nutritional food products</div> <div>Maya Davidovich-Pinhas</div>	<div>Combining high-shear capillary rheometry and small-angle scattering</div> <div>Ryan Murphy, Paul Salipante, Peter Beaucage, Tyler Martin, Elizabeth Kelley, Katie Weigandt, Steven Hudson</div>	<div>To slip or not to slip? A quantitative analysis of non-affine effects on polymer models</div> <div>David Nieto Simavilla, Pep Español, Marco Ellero</div>	<div>Mechanical stimuli in bio soft matter to study cancer viscoelasticity</div> <div>Rosalia Ferraro, Stefano Guido, Sergio Caserta</div>
12:00-12:20	<div>Modification of the Rouse model in terms of Brownian force variation preserving the volume of unentangled chains during flow</div> <div>Youngdon Kwon</div>	<div>Rheological approach to formulate bituminous sealants for road repairing</div> <div>Ines Antunes, Rita Cimicata, Fabio Curto, Gilberto Del Zoppo, Laura Pellicano</div>		<div>Bayesian Uncertainty Quantification for the Squeeze Flow of Soft Matter</div> <div>Aricia Rinkens, Clemens Verhoosel, Nick Jaensson</div>	<div>Investigation of Polymer Film Stretching Rheology Using Modified Leonov Model</div> <div>Ruixue Ma, Wei Cao, Changyu Shen</div>	<div>Single-cell deformability and viscosity measurement by in-flow viscoelastic forces</div> <div>Maria Isabella Maremonti, David Dannhauser, Valeria Panzetta, Paolo Antonio Netti, Filippo Causa</div>
12:20-14:00	LUNCH BREAK					

OMIKRON I (Level -1)	OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	APHRODITE V (Level 0)	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
BALLROOM (Level -2) Rheology of dense granular suspensions: from viscous to inertial regimes, from rigid and rough to soft and smooth particles • Elisabeth Guazzelli						
<i>COFFEE - TEA BREAK</i>						
Rheology of living and active systems 2  Chairs: Nazim Ali, Laura Porath	Microfluidics, nanofluidics, thin films and confined flows 3  Chairs: Francisco Galindo, Stylianos Varchanis	Suspensions, frictional and granular systems 4  Chairs: Safa Jamali, Fardin Khabaz	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 3  Chairs: Marie Claude Heuzey, Quan Chen	Rheology and sustainability (constructions, recycling, cellulose, biodegradable) 3  Chairs: Chen-Yang Liu, Michelle Calabrese	Arrested matter: gels, glasses and jammed systems 3  Chairs: Suzanne Fielding	Interfacial rheology, bubbles and foams, droplets and emulsions 3  Chairs: Natalie Germann, Florian Stadler
On the absence of collective motion in a bulk suspension of spontaneously rotating dielectric particles Debasish Das , David Saintillan	Understanding viscoelastic effects in thin-film lubrication Humayun Ahmed , Luca Biancofiore	Viscous Dissipation and microstructure in Unsaturated Wet Granular Materials Ahmad Awdi , C. Chateau, F. Chevoir, J.N. Roux, A. Fal	Rheology and self-healing of amine-based polyolefins and related blends Savvas G. Hatzikiriakos , B.M. Yavitt, Z. Zhang, N. Moradinik, N. Kuanr, D.J. Gilmour, E. van Ruymbeke, L.L. Schafer	Shear and Extensional Rheology of Mechanically and Chemically Recycled Plastics Guinevere Tillinghast , Horst Henning Winter, Jonathan Rothstein	Theory of Kinetic Arrest, Shear Elasticity and Yielding of Dense Biphasic Colloidal Mixtures Kenneth Schweizer , Subhasish Chaki	Two-dimensional glass transition of Janus particle-laden interface Sepideh Razavi , Elton Correia, Henning Winter
Modeling micropipette aspiration for use in material characterization of biological condensates James Roggeveen , Huan Wang, Zheng Shi, Howard Stone		From surface friction to non-monotonic flow curves: the missing link in granular flows Olfa D'angelo , Thomas Voigtman, Thorsten Pöschel		Impact of acceleration in shear flow on polymer chain scission Junghyun Ahn , Jon Bingaman, Bharath Venkatesh, Rachel Segalman, Susannah Scott, Lynn Walker	Dynamic arrest and yielding of diblock star-polyelectrolyte micelles Roshan Akdar Mohamed Yunus , Utku Gürel, Aleksander Guzik, M.C.A. Stuart, Patrizio Raffa, Andrea Guintoli, Daniele Parisi	
Viscoelasticity of metabolically intact isolated nuclei Paul Janmey , Fitzroy Byfield, Alison Patteson	Slot Coating Process of Thixotropic Liquids Carlos Sanchez-Perez , Danmer Maza, Marcio Carvalho	Microscopic description of slow granular flow Ravi Gautam , Prabhu R. Nott	Rheology of Hydrogen Bonding Polymer Blends Osamu Urakawa , Ryota Kashoji, Tadashi Inoue	Rheology challenges in plastics recycling Sylvie Vervoort	Brownian dynamics simulation on the superposition rheology of a colloidal gel Young Jin Lee , Kyung Hyun Ahn	Bulk and Interfacial Rheological Study of Oil/water Emulsion Stabilized with Magnetic Janus Particles Samin Habibi , Jacob John, Giovannantonio Natale
Defining cell mechanical capacitance to improve hydrodynamic bioprocesses Mehdi Maleki , Imen Halima, Emma Petiot, Edwin-Joffrey Courtial	Assessment of 2-phase solvers for low capillary number flows in lung airways Pantelis Koullapis , Fotos Stylianou, Stavros Kassinos, Alexandros Syrakos , Metin Muradoglou, Zhidian Yang, Francesco Romano, James Grotberg	Directional shear jamming of elongated particles Martin Trulsson	Rheology and fabrication of vinylous urethane based materials Laura Ballester-Bayarri , Nicholas Ballard, Robert Aguirresarobe	A Novel Approach to the Recycling of PET/PE Blends and Laminates: Rheology Driven Continuous In-Melt Separation Joao Maia , Steven Vecchi, Ezra Kone, Lauren Hampton, Hossein Ghassemi, David Schiraldi	Memory of shear in soft jammed materials Vinutha H A , Manon Marchand, Marco Caggioni, Vishwas V Vasisht, Emanuela Del Gado, Veronique Trappe	Associative Liquid-in-Liquid 3D Printing Guided by Self-Assembly of Surfactants Houman Honaryar , Saba Amirfattahi, Zahra Niroobakhsh
Actin cytoskeletal networks soften but do not break in the presence of cofilin, a disassembling factor Magdalena Kopec , Julien Heuvingh, Olivia Du Roure	The influence of complex rheology on the spreading of drops Peyman Rostami , Valentine Comoy, Reza Azimlayeri, Günter K. Auernhammer	Quantitative understanding of the onset of dense granular flows Kasra Farain , Daniel Bonn	Rheology Control of a Polyolefin/Polyester Vitrimer Naum Naveh , Karin Rosenfeld, Natanel Jarach, Hanna Dodiuk, Shmuel Kenig	Protein-based foams by conventional plastic foaming processes and their impact on the network microstructure Mercedes Bettelli , Emmanuelle Traissac, Mercedes Jimenez-Rosado, Antonio Guerrero, Mikael Hedenqvist, Antonio Capezza	The molecular weight dependence of the glass transition temperature in polymer melts Johan Mattsson , Peter Olmsted, Daniel Baker, Matthew Reynolds, Robin Masurel	Influence of interfacial viscoelastic properties on foam stability Laura Melissa Torres Almeida , Emmanouil Chatzigiannakis, Jan Vermant, Christine Dalmazzone, Isabelle Henaut
Understanding Enhanced Rotational Dynamics of Active Probes in Rod Suspensions Joost De Graaf , Meike Bos, Narinder Narinder, Clara Abaurrea-Velasco, Clemens Bechinger	Using confinement for non-contact microrheology Haim Diamant , Chen Bar-Haim	The effect of anisotropy on the rheology of granular flows Devang Khakhar , Ashish Bhateja, Gargi Agrahari	Branched Supramolecular Copolymers Ishay Columbus , Noga Eren, Renana Elitsur, Maya Davidovich-Pinhas, Roy Shenhar	Effect of mechanical recycling on the rheological and mechanical properties of HDPE Jian Zhang , Valerian Hirschberg, Manfred Wilhelm, Denis Rodrigue	Wall slip of dense suspensions of polymer microgels Frédéric Caetano , Justin Péméja, Catherine Barentin, Le Merrer Marie	Shear and dilatational interfacial properties of polymers at the air water interface measured by a new interfacial rheometer-the "Quadrotrough" Daniel Ashkenazi , Norman Wagner, Summer Tien, Kiet Pham, Jan Vermant, Moshe Gottlieb
Brownian dynamics and spontaneous rotation of a Janus particle in a polymer solution Paula Martínez-Lera , Noemi D'Auria, Marco De Corato	Slip and friction of polymers on a solid surface Suzanne Lafon , Liliane Léger, Alexis Chennivière, Frédéric Restagno	Rheology and shear banding behavior of soft hydrogel suspensions in the quasistatic flow regime Zohreh Farmani , Nazanin Ghods, Harkirat Singh, Jing Wang, Stefan Radl, David Henann, Ralf Stannarius, Joshua Albert Dijkstra	Morphology and Rheology of Block Copolymer Assemblies in Solution: A Molecular Dynamics Study Radhakrishna Sureshkumar , Senyuan Liu	Controlled degradation of polycarbonate by alkali-promoted hydrolysis during melt processing Young Soo Choi , Hyungsu Kim	Yield and Residual Stresses in Amorphous Systems: Microscopic Time Scales and Macroscopic Tensorial Aspects Thomas Voigtman , Sebastian Steinhäuser, Stephan Domann, Timm Treskatis, Stefan Turek	A macroscopic interfacial rheology approach to measure lipid membrane fluidity Damian Renggli , Maria Clara Novaes Silva, Laura Stricker, Jan Vermant

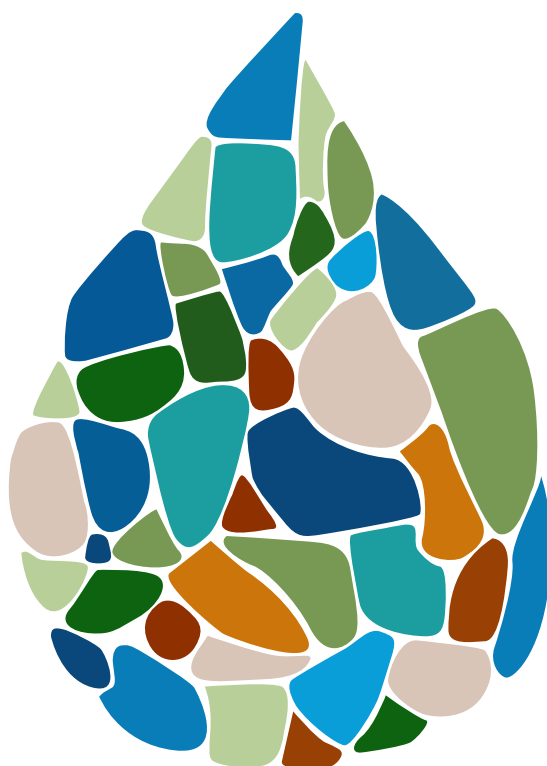
LUNCH BREAK



	BALLROOM (Level -2)	THETA/SIGMA/DELTA (Level -2)	OMEGA (Level -2)	YPSILON II & III (Level -1)	YPSILON IV & V (Level -1)
14:00-15:00	Chair: Ralph H. Colby BALLROOM (Level -2) Crack-tip analysis of fast-moving and stationary cracks in elastomers • Kenji Urayama				
15:00-15:30	COFFEE - TEA BREAK				
15:30-17:50	Polymeric materials (melts, solutions, copolymers, blends, composites) 4 Chairs: Valerian Hirschberg, Qian Huang	Additive manufacturing, composites and polymer processing 4 Chairs: Evan Mitsoulis, Peter Olmsted	Advances in rheometrical and rheophysical methods 4 Chairs: Simon Rogers, Tsutomu Takahashi	Non-Newtonian fluid mechanics 4 Chairs: Ruri Hidema, Rich Kerswell	Biorheology and rheology in the biomedical field 3 Chairs: Manlio Tassieri, Antony N. Beris
15:30-15:50	Rouse Dynamics in Viscoelastic Media Tadashi Inoue, Osamu Urakawa	Rheology of PA6/PDE blends containing graphene Milad Hadaeghnia, Shervin Ahmadi, Ismaeil Ghasemi, Paula Wood-Adams	Distinguishing thixotropy, anti-thixotropy, and viscoelasticity Yilin Wang, Randy H. Ewoldt	Linear instability leading to elastic turbulence in plane Couette flow Rich Kerswell, M.Beneitez, J.Page	Hydrodynamics of spike proteins dictate a transport-affinity competition for SARS-CoV-2 and other enveloped viruses Daniela Moreno, Nicolas Moreno, Florencio Balboa, Marco Ellero
15:50-16:10	Phase separation dynamics of unentangled polymer blend with dynamic asymmetry: An experimental test Takeshi Sato, Yumi Matsumiya, Hiroshi Watanabe	Orientation of graphene nanoplatelets in the extrusion flow of polyethylene: effect of polymer topology and molecular weight on rheological and antibacterial properties Alexandra Aulova, Shadi Rahimi, Santosh Pandit, Martin Lovmar, Viney Ghai, Ivan Mijakovic, Roland Kádár	Quantifying the errors due to overfilling in rotational rheometry: From Newtonian to shear thinning and viscoelastic fluids Michelle M.A. Spanjaards, Naveen K. Reddy, Martien A. Hulsen, Christian Clasen, Patrick D. Anderson, Ruth Cardinaels	Revisiting elastic turbulence in von Karman swirling flow of polymer solutions Darius Marin, Xiaoxiao Yang, Anke Lindner, Charlotte Py, Sandra Lerouge	Cell trains in pressure-driven flows of Newtonian and viscoelastic media: a numerical study Giancarlo Esposito, Gaetano D'Avino, Massimiliano Maria Villone
16:10-16:30	Investigation of Local Viscoelastic Properties of Polymer Melts in Bulk and at Interfaces via Equilibrium Atomistic Molecular Dynamics Simulations Petra Bacova, Alireza F. Behbahani, Patrycja Polinska, Craig Burkhart, Manolis Doxastakis, Vagelis Harmandaris	Effect of microstructure of graphene nanoplatelets produced through top-down exfoliation of graphite on the rheological properties of their composites with poly(ethylene oxide) Haritha Haridas, Kent Mardlin, Marianna Kontopoulou	Correction of the Effective Gap Extension in Structured Coaxial Measuring Systems Steffen Jesinghausen, Sebastian Josch, Hans-Joachim Schmid	Polymer-doped two-dimensional flow to study elastic turbulence Ruri Hidema, Haruki Kishi, Robert J. Poole, Hiroshi Suzuki	Impact of bioinks micro-heterogeneity on bulk rheology, 3D printing of complex constructs and cell viability Bruna Regina Maciel, Alisa Grimm, Claude Delschlaeger, Ute Schepers, Norbert Willenbacher
16:30-16:50	Playing with entanglements to structure polymer materials Hsiao-Ping Hsu, Manjesh Singh, George Fytas, Kurt Kremer	Compatibilized poly(lactide)/polyamide 11 (PLA/PA11) blends containing multiwall carbon nanotubes: morphology, rheology, electrical and mechanical properties Zeinab Mousavi, Marie-Claude Heuzey, Pierre Carreau	Optimally Windowed Chirp Rheometry (OWCh) using Stress Controlled Rheometers Rebecca Hudson, Joshua Rathinaraj, Gareth McKinley, Daniel Curtis	Mixing in viscoelastic fluids using elastic turbulence Reinier van Buel, Holger Stark	Characterization of length-scale dependent rheology using bi-disperse multiple particle tracking during cell-material interactions John McGlynn, Kelly Schultz
16:50-17:10		In-situ microfibrillated PP/PET composites by 3D printing: a rheological study Itxaso Calafel, Paul Capellán, Mercedes Fernández, Robert Aguirresarobe, Nora Aramburu, Itziar Otaegi, Gonzalo Guerrica-Echevarria, Alejandro J. Müller	Distinguishing Thixotropy from Viscoelasticity in Complex Fluids using Gaborrheometry and Parallel Superposition Rheometry Marc Grädel, Joshua Rathinaraj, Rishabh More, Gabriele Pagani, Jan Vermant, Gareth McKinley	Flow of an Oldroyd-B fluid in a slowly varying contraction: theoretical results for arbitrary values of Deborah number in the ultra-dilute limit Evgeniy Boyko, John Hinch, Howard Stone	The effects of breaking down EPS polysaccharides using Glycoside Hydrolases on Pseudomonas Aeruginosa biofilm viscoelasticity Bikash Bhattari, Gordon Christopher
17:10-17:30	Study of Scaling of Entangled Polymers in Good Solvents by Coarse-Grained Molecular Dynamics Simulations Jiaqi Wang, Ping Gao	Composition-Process-Property Relationships for Direct-Ink-Writing of Polymer Nanocomposites Ruchira Tandel, Arda Gozen	Self-similarity in the non-linear viscoelastic regime in crosslinked polymeric systems at the vicinity of the gel point David Kogan, Moshe Gottlieb	Fast flow of an Oldroyd-B fluid through a slowly varying contraction, expansion or constriction in a channel John Hinch, Evgeniy Boyko, Howard Stone	Magnetic Stress Rheometer for Biological Fluid Characterization Audrey Shih, Stella Chung, Alexander Vezieridis, Gerald Fuller
17:30-17:50	Multi-chain slip-spring simulations for entangled polymer dynamics Yuichi Masubuchi, Takashi Uneyama	4D printing of self-forming Shape Memory Polymers - From rheological characterization to 4D Finite Element modeling Dominik Fauser, Holger Steeb	Rheological evaluation of materials for Li-ion batteries electrodes in powder form Marco Coletti, Sarah Cotts	Fully Lagrangian Heterogeneous Multiscale Modelling of Non-Newtonian fluids Nicolas Moreno, Marco Ellero	Shear-Driven Solidification in Biological Tissues Junxiang Huang, James O. Cochran, Dapeng Bi, M. Cristina Marchetti, Suzanne Fielding

OMIKRON I (Level -1)	OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
Chair: Ralph H. Colby Crack-tip analysis of fast-moving and stationary cracks in elastomers • Kenji Urayama					
COFFEE - TEA BREAK					
Rheology of living and active systems 3 Chairs: Sujit S. Datta , Martyna Goral	Microfluidics, nanofluidics, thin films and confined flows 4 Chairs: Sarah Hashmi , Luca Biancofiore	Suspensions, frictional and granular systems 5 Chairs: Michel Cloitre , Christos Likos	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 4 Chair: Savvas G. Hatzikiriakos , Joseph Peterson	Arrested matter: gels, glasses and jammed systems 4 Chairs: Stefano Aime	Interfacial rheology, bubbles and foams, droplets and emulsions 4 Chairs: Reza Foudazi , David Venerus
Discontinuous Shear Thickening and Jamming in Biological Tissues Michael Hertaeg , Suzanne Fielding , Dapeng Bi	The effect of viscoelasticity in channel and tubes with variable geometry using high-order lubrication theory Kostas Housiadas , Antony Beris	Dense suspensions under shear rotation Frédéric Blanc , François Peters , Jurriaan J. J. Gillissen , Michael E. Cates , Sandra Bosio , Camille Benarroche , Romain Mari	Rheological and mechanical behaviour of polyethylene-based vitrimers Tianqi Huang , Julie Alves , Romain Castellani , Yannick Tillier , Jean-Luc Bouvard	Delayed yielding of amorphous materials Suzanne Fielding	Surface stress decomposition in large amplitude oscillatory interfacial dilatation of complex interfaces Anteun de Groot , Jack Yang , Leonard Sagis
A versatile toolbox to characterize bacterial biofilms in situ: Bulk, interfacial and active micro rheology Steffen Geisel , Samuel Charlton , Javier Tajuelo Rodriguez , Eleonora Secchi , Jan Vermant	Microscopic investigation of fouling mechanisms in dairy protein mixes under shear Margot Grostete , Zanele Msibi , Françoise Boissel , Loic Joanny , Francis Gouttefangeas , Maude Jimenez , Romain Jeantet , Jeehyun Lee , Luca Lanotte		Beyond Time-Temperature Superposition, Solid-State Rheology of High Tg Vitrimers Paolo Edera , Selene Chappuis , Francois Tournilhac , Michel Cloitre		A Novel and Non-invasive Approach to Study the Shear Rheology of Complex Fluid Interfaces David Venerus
Growing microbial colonies are unstable 'active' fluids Alejandro Martínez-Calvo , Tapomoy Bhattacharjee , Kónane Bay , Hao Nghi Luu , Anna Hancock , Carolina Trenado Yuste , Ned Wingreen , Sujit Datta	Rheological study of micro-droplet formation in flow focusing capillary device Farnoosh Hormozinezhad , Salvatore Cito , Alexandre Fabregat Tomàs , ÁN. Catalán Fariás	Flow reversibility of a concentrated suspension of colloidal spheres Pascal Hébraud , Dmytro Kushnir , Nicolas Beyer	"Catfish effect" in vitrimers with dynamic covalent networks incorporating exchangeable linear chains Bo Lu , Jie Wang , Yaming Wang , Chuntai Liu , Changyu Shen	Visualization and extent of plastic events during the yielding of depletion gels Pierre Lehéricey , Vincent Niggel , Lucio Isa , Jan Vermant	The influence of guanidine hydrochloride and ionic surfactants on the dynamic surface properties of myoglobin aqueous solutions Michał Krucki , Boris Noskov
Biofilm Adaptation and Stiffness Matching on Soft Substrates Alison Patteson	Capillary Flow of Wormlike Micellar Gels: Plugs and Shear-layers Ronak Gupta , Masoud Daneshi , Ian Frigaard , Gwynn Elfring	A new frequency dependent irreversibility threshold in non-Brownian suspensions Simona Moliterno , Claudia Carotenuto , Mario Minale	Brittle/ductile properties of associative polymers under extension Quan Chen , S. Wu , H. Yang , S. Liu	The Rheology of Impact-Absorbing Gels: Can a Thin Gel Coating Protect Fragile Objects from Breaking? Sairam Ganesh , Mahima Srivastava , Sai Subraveti , Srinivasa R. Raghavan	Sighs and metastability of pulmonary surfactant: a rheological study Maria Clara Novaes-Silva , Mariana Rodriguez-Hakim , Jan Vermant
Un-jammed to jammed transition in bacterial biofilms: structure and rheology Saikat Jana , Samuel G.V. Charlton , Thomas P. Curtis , Jinju Chen	Molecular Rheology of Nanoconfined Polymer Melts Ahmet Burak Yıldırım , Aykut Erbaş , Luca Biancofiore	Dense suspensions transform from a viscous fluid to a plastic solid with increasing strain Prabhu Nott , Tabish Khan	Gelation dynamics and reversibility of photocrosslinkable polymer nanocomposite hydrogels Michael Burroughs , Tracy Schloemer , Daniel Congreve , Danielle Mai	The different schools of thought on Thixotropic Elasto-Visco-Plasticity and the shift towards complex time-evolving phenomena Flavio H. Marchesini	Linking interfacial shear & dilatational rheology to long term stability of therapeutic protein formulations Kiet Pham , Benjamin Thompson , Ken Qian , Tingting Wang , Yun Liu , Norman Wagner
Utilizing microfluidic structures and interfacial shear rheology for probing mycelial growth in viscoelastic host material Ciatta Wobill , Samuel Steffen , Peter Fischer	Thin gap rheology of polysaccharide gels Puchalapalli Saveri , Abhijit P. Deshpande , Susy Varughese	The rheology of non-Brownian suspensions under inhomogeneous flow Christopher Ness	Associative structures and gels of cellulose nanofibrils with nanochitins Emily Facchine , Orlando Rojas , Saad Khan	Microscopic yielding of glassy materials under oscillatory shear Stefano Aime , Domenico Truzzolillo	Dilatational Rheology of Spread and Adsorbed Layers of Protein Aggregates Boris Noskov , A.V. Akentiev , A.G. Bykov , O.Y. Milyaeva
Rheological properties of human semen and its correlation with sperm motility Giovanna Tomaiuolo , Fiammetta Fellico , Valentina Preziosi , Stefano Guido	Experimental investigation of polymer solution flow in converging-diverging channel geometry with axial symmetry Aidar Kadjirov , Rinat Zaripov , Danila Makarushkin	Continuum modeling of dense suspensions with evolving relaxed states Giulio Giuseppe Giusteri , Luca Santelli , Ryohei Seto		Evidence for Chaotic Behaviour During the Yielding of Soft Jammed Matter Francesco Accetta , Otar Machabeli , Daniela Bushiri , Seyed Mahmoud Arzideh , David Venerus	Bubble Dissolution in a Simple Yield-Stress Fluid Brice Saint-Michel

	BALLROOM (Level -2)
09:00-12:00	Chair: George Georgiou , Guy Mechrez , Naum Naveh , George Petekidis POSTER PRESENTATIONS (see pages 32-39)
13:00	CONGRESS EXCURSIONS



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	BALLROOM (Level -2)	THETA/SIGMA/DELTA (Level -2)	VIP (Level -2)	OMEGA (Level -2)	YPSILON II & III (Level -1)
08:30-09:30	Chair: Nino Grizzuti BALLROOM (Level -2) Microfluidics of noncolloidal rigid particles in viscoelastic fluids • Pier Luca Maffettone				
09:30-10:00	COFFEE - TEA BREAK				
10:00-12:20	Polymeric materials (melts, solutions, copolymers, blends, composites) 5 Chairs: Ralph H. Colby, Yumi Matsumiya	Additive manufacturing, composites and polymer processing 5 Chairs: Anne Grillet, Eric Shaqfeh	Rheology and design of foods, pharmaceutical formulations and consumer products 3 Chairs: Marco Ramaoli, Maya Davidovich-Pinhas	Advances in rheometrical and rheophysical methods 5 Chairs: Christian Clasen, Tsutomu Takahashi	Non-Newtonian fluid mechanics 5 Chairs: Edson Soares, Ian Frigaard
10:00-10:20	Atomistic simulation of flow-induced configuration phase or microphase separation and crystallization of entangled polyethylene solutions and melts in elongational flow Bamin Khomami, Brian Edwards, Mohammad Hadi Nafar Sefiddashti	Solid-state extrusion of ultra-high molecular weight polyethylene Fotis Christakopoulos, Stephan Busato, Enrico Troisi, Nic. Friederichs, Theo Tervoort	Describing the shear and elongational rheology of wheat flour dough by the fractional Maxwell-KBKZ model Paula Moldenaers, Yannick Meeus, Mathieu Meerts, Gareth McKinley, Ruth Cardinaels	Fun with rheometers: Unconventional applications beyond standard shear rheology Joerg Laeuger, Julius Heinrich	Role of large-scale flow structures on drag reduction in turbulent boundary layer flow due to surfactant injection Shinji Tamano, Toma Yoshikawa, Masakazu Muto
10:20-10:40	Atomistic simulations of the effects of entanglement on polymer crystal nucleation and growth Wenlin Zhang, Lingyi Zou	Slip-link model for polydisperse melts in industrial processes Marat Andreev, Jonathan Moore, Gregory C. Rutledge	Competition for water and space: rheology and freeze-thaw stability of starch composite gels with highly branched xylans from Plantago ovata (psyllium) Lucija Strkalj, Galina Pavlovskaya, James Cowley, Rachel Burton, Gleb Yakubov	SAOS using only 2 mg of sample Gengxin Liu	
10:40-11:00	Computational Fluid Dynamics of Polymer Flow Induced Crystallisation using the polySTRAND model William Grant, Oliver Harlen, Daniel Read	Dependency of morphological and mechanical performance of PLA/PBAT blends and their reactively compatibilized counterparts on melt viscoelastic properties of the blending components M. Reza Nofar, Aylin Altinbay Bekem, Ceren Özsaltık, Yavuz Akdevelioğlu, Burcu Özdemir	Rheological characterization and modelling of starch-based mixtures aiming at the optimization of the extrusion foam process Claudio Esposito, Daniele Tammara, Gaetano D'Avino, Gerald Schennink, Alvarado Chacon, Pier Luca Maffettone	Flow-SAS: deciphering the in situ 3D structure of fluids under flow Viviane Lütz Bueno, Markus Strobl, Christian Schlepütz, Marco Stampanoni	Polymer drag reduction regeneration Jordan Cussuol, Edson Soares, Renato Siqueira
11:00-11:20	The role of functionality on the branch point motion in star polymers Michaela Zamponi, Stefan Holler, Angel J. Moreno, Petra Bačová, Hermis Iatrou, Lutz Willner, Peter Falus, Dieter Richter	Rheology and Morphology of a Reactively Compatibilised Ternary Polymer Blend Sathish K. Sukumaran, Naoki Abe, Eiichi Nishi, Masataka Sugimoto	Effect of cracker dough rheology on sheeting Najat Albarakati, Sushant Agarwal, Mahesh Padmanabhan, Rakesh Gupta	New combined measurement of first normal stress difference and shear rate dependant viscosity at high shear rates via capillary rheometry Masood Khabazian Esfahani, Christos Georgantopoulos, Ingo Naue, Joachim Sunder, Manfred Wilhelm	Effect of polymer additives on dynamics of water level in an open channel Manish Kumar, Michael D. Graham
11:20-11:40	Stretched Polymer Physics and Rheology: Stringiness & Spinnability Vivek Sharma, C. Slykas, C. D.V. Martinez Narvaez, J. Dinic, L. Edano, M. Jabr	Creating Polymer Coatings using the Cold Spray Additive Manufacturing Technique Kashyap Sundara Rajan, Jonathan Rothstein	Tackling the gluten network structure to anticipate dough mechanical behavior in baking industry Maude Dufour, Loïc Foucat, Laurent Chaunier, Denis Lourdin, Anne-Laure Reguerre, Florence Hugon, Aurore Dugué, Kamal Kansou, Luc Saulnier, Guy Della Valle	Viscoelastic Poisson's ratio: A comparison of direct and indirect methods Rodriguez Agudo, Michael Möller-Pabel, Christopher Giehl, Dominik Fauser, Jan Haeberle, Holger Steeb	Large Scale Direct Numerical Simulation of Isotropic Viscoelastic Turbulence: from Turbulent Drag Reduction to Elastic Turbulence Xue-Feng Yuan
11:40-12:00		Fiber orientation kinetics in uniaxial elongational flows via in-situ SALS characterization Thijs R. N. Egelmeers, Nick O. Jaensson, Patrick D. Anderson, Ruth M. Cardinaels	Rheological properties and swelling capacity of porcine plasma protein-based superabsorbent matrices Antonio Guerrero, Estefanía Álvarez-Castillo, Antonio Capezza, Richard T. Olsson, Carlos Bengoechea	Stress controlled, time-dependent rheology at the microscopic scale using Capillary Micromechanics Kalpit Bakal, Hans M Wyss	Lubricated gravity currents of power-law fluids Roij Sayag, Ayala Gyllenberg, Pramoda Kumar, Shahar Zuri, David Kogan, Moshe Gottlieb
12:00-12:20		Advances in the spatial & temporal characterization of structure development during extrusion 3D printing Benjamin Yavitt	Fractal scaling of Dairy gels: A rheology and neutron scattering study Koduvayur Ananthanarayanan Ramya, Liliana de Campo, Markus Strobl, François Boué, Christopher J. Garvey	Protorheology: the first thing to do Mohammad Tanver Hossain, Randy Ewoldt	
12:20-14:00	LUNCH BREAK				

OMIKRON I (Level -1)	OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
BALLROOM (Level -2) Chair: Nino Grizzuti Microfluidics of noncolloidal rigid particles in viscoelastic fluids • Pier Luca Maffettone					
COFFEE - TEA BREAK					
Rheology of living and active systems 4 Chairs: Saad Bhamla, Olivia Du Roure	Machine learning and AI in rheology 1 Chairs: Ellie Hajizadeh, Kyle Lennon	Suspensions, frictional and granular systems 6 Chairs: Ryohei Seto, Michel Cloitre	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 5 Chair: Kathleen Weigandt, Claudia Carotenuto	Arrested matter: gels, glasses and jammed systems 5 Chairs: Thomas Voigtmann	Interfacial rheology, bubbles and foams, droplets and emulsions 5 Chairs: Anniina Salonen, Sergio Ribeiro
Correlation between nonlinear rheological response of fungal biofilms and its extracellular matrix composition Aiswarya N M , Shamas Tabraiz, Himani Taneja, Asma Ahmed, A Narayanan R	Constitutive model construction from data: Let the material decide Mohammadamin Mahmoudabad, Kruthart Kamani, Simon Rogers, Safa Jamali	Flow induced rigidity percolation in shear thickening suspensions Abhay Goyal , Emanuela Del Gado , Nicos S. Martyts	Rheology of amino-functionalized graphene oxide suspensions on hydrogel at different pHs Lorena Moraes , Monica Naccache , Ricardo Andrade, Helio Ribeiro	The interplay between dynamical arrest, phase separation, and particle interactions on the structure and shear rheology of a thermoreversible colloidal suspension by Rheo-SANS Norman Wagner , Khushboo Suman	The storage modulus of high internal phase emulsions: effect of the droplet size and distribution Tao Li , Z. Wei
Influence of substrate composition on mycelium growth in wood fungi Natalie Nussbaum , Tabea von Wyl, Peter Fischer	Data-driven constitutive modeling in fluidic four-roll mill flows via small-angle X-ray scattering Charles Young , Patrick Corona, Anukta Datta, Matthew Helgeson, Michael Graham		The shape tunability of gelatin/carbon nanotube wet-gels for complex three-dimensional cellular structures with high elasticity Hyekyeong Jang , Minju Jeong, Byeongho Park, Youngseok Oh	A mechanism for irreversible dynamics in cyclicly sheared amorphous solids Asaf Szulc , Ido Regev	Curvature dynamics of viscous and viscoelastic fluid surfaces during formation and retraction of filaments Corneliu Balan , Ana-Maria Bratu, Istvan Magos
Non-linear Rheological Characteristics of Turbatrix Aceti nematodes Nazim Ali , Sada Nand, Manoranjan Mishra, Vishwajeet Mehandi	Bayesian Machine Learning for Multi-Scale Simulations of Polymer Flows Souta Miyamoto , Yoshiaki Ueno, Takashi Taniguchi, John Molina	Network analysis of particle populations and stress response in shear thickening dense suspensions Jeffrey F. Morris , Omer Sedes, Herman A. Makse, Morton M. Denn	On the empirical correlation between rheological response of alginate solutions and the derived hydrogels Fatma Nalan Cetin , Lorenzo Sardelli, Paola Petrini, Francesco Briatico Vangosa	Stress build-up under constant strain conditions in Soft Glassy Materials Vivek Kumar , Gareth H McKinley, Yogesh Joshi	Influence of the type of Pickering emulsifier on bulk shear rheology Florian Stadler , Shu-Ming Cui, Ling Li, Ya-Hao Liu, Mehdihasan Shekh, Guang-Ming Zhu
Rheology of Entangled Active Polymer-Like T. Tubifex Worms Antoine Deblais , S. Woutersen, D. Bonn	Modeling thixo-elastic-visco-plastic (TEVP) fluids using a Neural Network-Isotropic Kinematic Hardening (NN-IKH) model Joshua David John Rathinaraj , Kyle Lennon, Miguel Gonzalez, Ashok Santra, James Swan, Gareth McKinley	Contact network and cluster dynamics in shear thickening suspensions Mohammad Nabizadeh , Abhinendra Singh, Safa Jamali	Mucosal rheology in fresh and salt waters Caroline E. Giacomini , Dimitra Founta, Dimitris Vlassopoulos, Peter Fischer	Internal stress, mechanical memory, and aging in Soft Particle Glasses Paolo Edera , Minaspi Bantawa, Stefano Aime, Roger T. Bonnecaze, Michel Cloitre	A green formulation for superhydrophobic coatings based on Pickering emulsion templating for anti-biofilm applications Raz Cohen
Worm blobs: Topologically tangled active polymers Saad Bhamla	Frame invariant constitutive model based on recurrent neural network Howon Jin , Soohyung Lee, Kyung Hyun Ahn	Simulations of rough polydisperse particles using tribological variable-friction coefficient models Jose Antonio Ruiz-Lopez , Sagaya Prasanna Kumar, Adolfo Vazquez-Quesada, Juan de Vicente, Marco Ellero	Thermo-rheological behaviour of basil seed mucilage polysaccharides Krithika Bhaskaran , Susy Varughese	Colloidal gelation induced by ring polymers Christos Likos , Esmaeel Moghimi, Iurii Chubak, Parvin Kainy, Sergei Egorov, Dimitris Vlassopoulos	Rheology of interfaces formed by Pickering Crystallisation Narayani Kelkar , Jyoti Seth
Odd viscosity and rheology of chiral suspensions Zhiyuan Zhao , Boyi Wang, Mingcheng Yang, Shigeyuki Komura, Fangfu Ye, Ryohei Seto	Machine learning opens a doorway for microrheology with optical tweezers in living systems Matthew Smith , Jack Radford, Eky Febrianto, Jorge Ramirez, Helen O'Mahony, Andrew Matheson, Graham Gibson, Daniele Faccio, Manlio Tassieri	Frictional behavior of soft permeable particles Lily Blaisett , Nicolas Sanson, Bruno Bresson, Bloen Metzger, Yoël Forterre, Matthieu Roché, Elisabeth Guazzelli	The next generation of macroscopic hierarchically assembled scaffolds for cell culture Gal Yosefi , Hanna Rapaport, Ronit Bitton	Three length scales colloidal gels: the clusters of clusters versus the interpenetrating clusters approach Louis-Vincent Bouthier , Thomas Gibaud, Romain Castellani	Dynamics and rheology of 2D colloidal crystals with active anisotropic impurities Jacob John , Giovanniantonio Natale
Rheological behavior of active fibers Vishwajeet Mehandia , Nazim Ali, Sada Nand, Manoranjan Mishra	Machine Learning enables accurate droplet size and generation rate predictions in flow focusing microfluidic devices Claire Barnes , Eva Sonnenschein, Francesco Del Giudice	Rheology of dense bidisperse frictional suspensions Abhinendra Singh , Christopher Ness, Abhishek K. Sharma, Juan J. de Pablo, Heinrich M. Jaeger	Magnetorheology using triaxial magnetic fields and 3D particle scaffold self-assembly in hydrogels for regenerative medicine Matthew Terkel , Jesus García, Guillermo Camacho, Oscar Martinez-Cano, José Rafael Morillas, Stefania Nardecchia, Juan de Vicente	Rheo-DLS investigation of the non-affine and heterogeneous dynamics of jammed microgel suspensions Chiara Marraffa , M. Cloitre, S. Aime	Yielding dynamics in capillary suspensions: the importance of local and semi-local structures Jens Allard , Sebastian Bindgen, Erin Koos
LUNCH BREAK					






	BALLROOM (Level -2)	THETA/SIGMA/DELTA (Level -2)	VIP (Level -2)	OMEGA (Level -2)	YPSILON II & III (Level -1)	YPSILON IV & V (Level -1)
14:00-15:00	Chair: Morton M. Denn Dilatancy and the pressures of dense suspension flows • Jeffrey F. Morris					
15:00-15:30	COFFEE - TEA BREAK					
15:30-17:10	Polymeric materials (melts, solutions, copolymers, blends, composites) 6 Chairs: Bavand Keshavarz, Ravi Jagadeeshan	Polymeric materials (melts, solutions, copolymers, blends, composites) 7 Chairs: Julie Kornfield, Ulrich A. Handge	Biorheology and rheology in the biomedical field 4 Chairs: Antony N. Beris, Natalie Germann	Advances in rheometrical and rheophysical methods 6 Chairs: Simon Rogers, Paula Moldenaers	Non-Newtonian fluid mechanics 6 Chairs: Ida Karimfazli, Jonathan Rothstein	Awards Session Chairs: Anne Grillet, Mario Minale
15:30-15:50	Solution Rheology as a tool to evaluate the MWD of UHMW Polyolefins <u>Vincenzo Ianniello, Salvatore Costanzo, Rossana Pasquino, Giovanni Ianniruberto, Theo Tervoort, Nino Grizzuti</u>	«Linear-nonlinear dichotomy» in the rheological sense <u>Xiaorong Wang</u>	Hydrogels for oftalmic applications. Adhesion and nonlinear rheology <u>Mercedes Fernandez, Itziar Insua, Itxaso Calafel, Robert Aguirresarobe, Marcelo Calderon, David Esporin-Ubieto</u>	Quantitative rheo-microscopy of soft matter <u>Stefano Villa, Paolo Edera, Matteo Brizioli, George Petekidis, Veronique Trappe, Fabio Giavazzi, Roberto Cerbino</u>	Vortex-Induced Vibrations of a Cylinder in the Crossflow of a Non-Newtonian Fluid <u>Pieter Boersma, Umang Patel, Yahya Modarres-Sadeghi, Jonathan Rothstein</u>	Locomotion through a viscoplastic material: from Oldroyd to swimming worms <u>Duncan Hewitt, N. Balmforth</u>
15:50-16:10	Scaling analysis and transient rheological investigation of ultra-high molecular weight polyethylene oxide aqueous solution <u>Xun Chen, Shishun Bai, Peng Chen</u>	Linear and non-linear rheology of polymer nanocomposites <u>Wei Yu, Hao Zhang, Benke Li, Yiming Wang, Wei You</u>	Hydrogels as modern wound dressings - advanced rheometry under controlled environmental conditions <u>Juan Pablo Segovia-Gutiérrez, José Alberto Rodríguez Agudo, Jürgen Utz, Natalie Germann</u>	Microscopic rheological characterization of concentrated dispersion fluids using Nano-Indentation tests with a spherical indenter <u>Tsutomu Takahashi, Yunosuke Kimoto, Yasunori Sato, Machi Horiai, Satoshi Nagase, Akira Uno</u>	Flow of polymer and surfactant solutions through a periodically constricted tube <u>Lucas Warwaruk, Sina Ghaemi</u>	
16:10-16:30	Stochastic kinetic theory applied to nonequilibrium polymer simulations <u>Shangren Zhu, Patrick Underhill</u>	A combined theoretical-simulation approach to microstructure and dynamics of unentangled poly(ethylene glycol) - silica nanocomposite melts <u>Emmanuel Skountzos, Dimitrios Tsalikis, Pavlos Stephanou, Vlasios Mavrantzas</u>	Crossing the scales between the propagation of respiratory droplets and the assessment of viral transmission risks in crowds <u>Alexandre Nicolas, Simon Mendez</u>	Rheo-optical measurements of uniaxially extended wormlike micelles <u>Masakazu Muto, Tatsuya Yoshino, Shinji Tamano</u>	Instabilities of dilute wormlike micelle solutions in 2D and 3D circular Couette flows <u>Richard Hommel, Michael Graham</u>	
16:30-16:50	Two-fluid model based on Onsager principle <u>Jiajia Zhou, Masao Doi</u>	Nanoparticles assembly governs the conformation and dynamics in polymer grafted nanocomposites <u>Aakash Sharma, Margarita Kruteva, Sascha Ehlert, Martin Dulle, Stephan Foerster, Dieter Richter</u>	Multi-scale fluid dynamics simulation of sneezing through a liquid film breakup analogy <u>Massimiliano Di Martino, Marco Trofa, Pier Luca Maffettone</u>	Puff rheometer: Fast and contactless measurements of viscosity and surface tension <u>Coen Van Der Gracht, Nick Jaensson, Ruth Cardinaels</u>	Origin of steady state stress fluctuations in a shear-thinning wormlike micellar solution <u>Abhishek Ghadai, Pradip Kumar Bera, Sayantan Majumdar</u>	Chaos in confinement: How to make shear-thinning fluids flow thicken <u>Sujit S. Datta</u>
16:50-17:10	Influence of macromolecular hydrodynamic interactions on the capillary-thinning of liquid bridges <u>Joseph Connell, Murray Rudman, Ranganathan Prabhakar</u>	Effect of nanoparticles on the viscous and elastic properties of mechanically degraded polymers used in EOR <u>Andrea Mora, Anthony Hutin, Jorge Antonio Avendano Benavides, Marcio Carvalho</u>	Surface Layer Adsorption and Bulk Association of Mucins in Human Airway Mucus <u>Scott Daniels, Qishun Tang, Ralph Colby, Dimitris Vlassopoulos, Brian Button, David Hill, Richard Boucher, Michael Rubinstein</u>	Flow Birefringence Measurement around a Bubble under Pressure-Oscillating Field <u>Shuichi Iwata, Kaito Yurikusa, Sachika Hayashi, Mayu Yamadera, Takafumi Togawa, Tsutomu Takahashi</u>	Flow heterogeneity and flow reversal in poloxamer wormlike micelle gels <u>Patrick McCauley, Satish Kumar, Michelle Calabrese</u>	
19:30-23:30	BANQUET					



OMIKRON I (Level -1)	OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	APHRODITE V (Level 0)	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
BALLROOM (Level -2)		Chair: Morton M. Denn Dilatancy and the pressures of dense suspension flows • Jeffrey F. Morris				
COFFEE - TEA BREAK						
Rheology of living and active systems 5 Chairs: Antoine Deblais, Sujit S. Datta	Microfluidics, nanofluidics, thin films and confined flows 5 Chairs: Anke Lindner, Vincenzo Calabrese	Suspensions, frictional and granular systems 7 Chairs: Erin Koos, Reza Foudazi	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 6 Chairs: Rossana Pasquino, Giovannantonio Natale	Suspensions, frictional and granular systems 8 Chairs: Jun Dong Park, Michel Cloitre	Arrested matter: gels, glasses and jammed systems 6 Chairs: Norman Wagner, Daniel Bonn	Interfacial rheology, bubbles and foams, droplets and emulsions 6 Chairs: Marion Grzelka, Nick Jaensson
Hyperfluidity in extensional flows of active sperm suspensions Mathew Lui, Joseph Connell, Amgad R. Rezk, Leslie Y. Yeo, Ranganathan Prabhakar	Asymmetric bistability of chiral particle orientation in viscous shear flows Andreas Zöttl, Francesca Tesser, Justine Laurent, Daiki Matsunaga, Olivia du Roure, Anke Lindner	Imaging the motion of colloids in dense suspensions under shear Vincent Niggel , Josué Lehericey, Jan Vermant, Lucio Isa	Targeted Micro-Phase Separation – a Generic Design Concept to Control the Elasticity of Extrudable Hydrogels Bruna Regina Maciel, Ke Wang, Marc Müller, Claude Oelschlaeger , Norbert Willenbacher	Nonlinear magnetorheology- A new method to describe induced structural arrangements of complex magnetic suspensions Maria Daniela Contreras-Mateus , Francisco Sánchez, Nashaat Nassar, Arlex Chaves Guerrero	Stress-stress Correlations Reveal Force Chains in Gels Vinutha H.A. , Fabiola Diaz Ruiz, Xiaoming Mao, Bulbul Chakraborty, Emanuela Del Gado	Particle stabilization in non-aqueous foams Suzanne Calhoun , Gerald Fuller
Healthy sperm cells selection in microfluidics Luigi Fausto Canonico , Maria Isabella Maremonti, David Dannhauser, Paolo Antonio Netti, Filippo Causa	Dynamics of sol-gel transition in confinement using molecular rotors Elham Mirzahosseini , R. Le Dizès Castell, M. Grzelka , D. Bonn, S. Jabbari Farouji, N. Shahidzadeh	Rheological behavior of nanostructured complex fluids with two-dimensional (2D) materials Ricardo Andrade , Josué Cremonuzzi, Dante Yokoyama, Elyff Cargnin, Helio Ribeiro, Monica Naccache, Lorena Moraes, Yago Soares	Multiwave tests to study thermoreversible gelation of aqueous solutions of Hydroxy-PropylMethylcellulose with different chemical structures Claudia Carotenuto , Saray Perez Robles, Mario Minale	Investigating connection between LAOS response and printability of yield stress fluids for 3D printing applications Rishav Agrawal , Esther García-Tuñón	The network hardening of drying beads of colloidal gel Matteo Milani , Khaled Ahmad, Emanuele Cavalletti, Ty Phou, Christian Ligoure, Luca Cipelletti, Laurence Ramos	Dilatational Interfacial Rheology of Perfluoroalkyl Acids (PFAA) Muchu Zhou , Reza Foudazi
Active colloids: slender, looped, and knotty Panayiota Katsamba , Matthew Butler, Lyndon Koens, Sebastien Michelin, Thomas Montenegro-Johnson	Intrinsic structure and dynamics of monolayer linear and ring polymer melts via atomistic and coarse-grained molecular dynamics simulations Junmo Kim	Migration and diffusion in pressure-driven flow of dense suspensions Ryohei Seto , Zhiyuan Zhao, Jeffrey Morris, Masao Doi	Tuning the rheology of thermoresponsive microgel suspensions via polyelectrolyte adsorption Rajam Elancheliyan , Edouard Chauveau, Domenico Truzzolillo	Modelling Extensional rheology of polyolefins based suspensions Jean-Charles Majeste , Nanjunda Velu	Micro-mechanical insights into the stress transmission in strongly aggregating colloidal gel Yezaz Ahmed Gadi Man , Divas Singh Dagur, Saikat Roy	Interfacial Rheology and dynamics towards Unveiling the Effects of In Situ Layer–Layer Interfacial Reaction in Multilayer Polymer Films via Multilayered Assembly: From Microlayers to Nanolayers Khalid Lamnawar , Abderrahim Maazouz, B. Lu, A. Bondon, H. Zhang
Active matter in inhomogeneous environments Vaseem Shaik, Jiahao Gong, Charu Datt, Gwynn Elfring	Effects of two-dimensional volume fraction distribution during drying on cracking of colloidal dispersion film Kota Hatakeyama , Shiro Wakaki, Tsutomu Takahashi	Rheology and scaling of frictionless non-Brownian suspensions across jamming Rohan Vernekar , B. Chareyre, R. Mari, H. Bodiguel	Supramolecular Organogels that Exhibit Thermal Thickening, Humidity-Induced Thinning, and Pressure-Induced Thinning Emmanouil Vereroudakis, Nikolaos Burger, Laurent Bouteiller, Benoit Loppinet, Dimitris Vlassopoulos, E. W. Meijer, Nathan Van Zee	Rheology of conductive High Reactivity Carbonaceous Material (HRCM)-based ink suspensions: Dependence on concentration and temperature Claudia Dessi , Nicola Melis, Francesco Desogus, Luca Pilia, Roberto Ricci, Massimiliano Grosso	The hidden hierarchical nature of soft particulate gels Minaspi Bantawa, Bavand Keshavarz Keshavarz, Michela Geri, Mehdi Bouzid, Thibaut Divoux, Gareth McKinley, Emanuela Del Gado	Dilatational response of an asphaltene-model molecule stabilizing the oil-water interface near the onset point of precipitation Nataira Pagan Pagan , Thao Vy Nguyen, Sibani Lisa Biswal, Amanda B. Marciel
Reversal motion of E-coli bacteria in nematic liquid crystals Martyna Goral , Eric Clement, Researcher Teresa Lopez-Leon, Anke Lindner	Meniscus stability and fingering phenomena for oil-water systems with surface-active particles and surfactants Dimitrios Papavassiliou , Thao Nguyen, Sepideh Razavi	Relationships among structure, memory, and rheology in cyclically sheared disordered materials Paulo Arratia , Douglas Jerolmack, Arjun Yodh	Ion Conductivity-Shear Modulus Relationship of Single-ion Electrolytes Composed of Polyanionic Particles Emmanouil Glynos , Georgia Nikolakakou, Christos Pantazidis, Georgios Sakellariou	Investigation of the Mechanism of Electrorheological Behaviours of Waxy Crude Oil Hongying Li , Yiwei Xie, Qian Huang, Chaohui Chen, Yang Su, Chaoyue Zhang, Jinjun Zhang	Emergence of Increase in Rod Diffusivity in Markovian Systems Nakai Fumiaki , Martin Kröger, Takato Ishida, Takashi Uneyama, Yuya Doi, Yuichi Masubuchi	Landau-Levich transition in capillary bridges during liquid transfer from a bath to a surface Lea Cailly-Brandstater , Lorenzo Betti, Rudy Valette, Céline Cohen
BANQUET						

	BALLROOM (Level -2) 	THETA/SIGMA/DELTA (Level -2)	VIP (Level -2)	YPSILON II & III (Level -1) 	OMIKRON I (Level -1)
09:00-10:20	Polymeric materials (melts, solutions, copolymers, blends, composites) 8 <u>Chairs:</u> Pavlos Stephanou, Tadashi Inoue	Polymeric materials (melts, solutions, copolymers, blends, composites) 9 <u>Chairs:</u> Salvatore Coppola, Takato Ishida	Rheology and design of foods, pharmaceutical formulations and consumer products 4 <u>Chairs:</u> Ruth Cardinaels, Loic Hilliou	Non-Newtonian fluid mechanics 7 <u>Chairs:</u> Anselmo Pereira, Gaetano D'Avino	Rheology of living and active systems 6 <u>Chairs:</u> Saad Bhamla, Sujit S. Datta
09:00-09:20	Rheology of polymer chains having end-groups associating with impurities under uniaxial elongational flows Shoma Fujii, Yuto Ike, Mayank Dixit, <u>Takashi Taniguchi</u>	Advanced characterization of polymeric materials by combining rotational and linear drives in one rheometer device <u>José Alberto Rodríguez Agudo,</u> Jan Haerberle, Francisco Lossada, Josefine Meurer, Christopher Giehl, Joerg Laeuger	Relating Shear-Rheology and Dielectric Properties of Glass-Forming Pharmaceutical Liquids Lara Röwekamp, <u>Kevin Moch,</u> Catalin Gainaru, Roland Böhmer	Viscoelastic fluid flow in a helical static mixer: A comparison between the sPTT and FENE-P constitutive models <u>Thomas John,</u> Jake Stewart, Robert Poole, Adam Kowalski, Claudio Fonte	A swimming rheometer Eric Shaqfeh, J. Binaglia, L. Kroo, <u>Neo Boon Siong,</u> N. Eckman, M. Prakash
09:20-09:40	Mesoscopic Coarse-Grained Modeling of Polymeric Materials with Transient Potentials <u>Takashi Uneyama</u>	Exploiting Structure-Process Property Relationships of Branched Polycarbonates for Industrial Applications <u>Manojkumar Chellamuthu</u>	Order-Disorder Transition Effects on Processing of Lamellar Structured Concentrated Surfactant Solutions Parth Kelkar, Matthew Kaboolian, Akul Seshadri, Ria Corder, Seth Lindberg, Kendra Erk	Influence of geometric ordering on viscoelastic flow instabilities in 3D porous media <u>Emily Chen,</u> Christopher Browne, Simon Haward, Daniel Carlson, Amy Shen, Sujit Datta	Rheology of active colloids: motility-induced shear thickening <u>Ayten Gülce Bayram,</u> Fabian Jan Schwarzendah, Hartmut Löwen, Luca Biancofiore
09:40-10:00	Adhesion-modified polypropylene: a sticky situation <u>Stan Looijmans,</u> Patrick Anderson, Lambert van Breemen	Composition-Rheology Relationships of Graphene Polyethylene Oxide Inks <u>Caitlin Grover,</u> Cindy Bernal, Irmak Sargin, Scott Beckman, Arda Gozen	Investigating the effect of the rheological properties of texture modified beverages on the gravity-driven flow in a syringe to understand the IDDSI characterisation Rémi Lecanu, Guy Della Valle, Cassandre Leverrier, <u>Marco Ramaioli</u>	Viscoelasticity induced onset of slip at the wall for polymer fluids Marion Grzelka, Alexis Chennevière, Liliane Léger, <u>Frédéric Restagno</u>	Complete and partial wetting in active liquids <u>Francesco Turci,</u> Nigel Wilding
10:00-10:20	Nonlinear Extensional Rheology of Entangled Poly (n alkyl methacrylate) Melts with Fixed Number of Entanglements and Kuhn Segments per Chain <u>Shilong Wu,</u> H. Yang, Q. Chen	Quantitative Correlation between Hierarchical Nanofiller Structure and Rheology of Polymer/Fumed Silica Nanocomposites <u>Wei You,</u> Yiming Wang, Wei Yu	The Rheology of Magic <u>Arif Z. Nelson</u>	Impact of non-spherical viscoplastic drops on a liquid <u>Rudy Valette,</u> Kindness Isukwem, Romain Castellani, Anselmo Pereira	Collective dynamics of interacting autophoretic disks R Kailasham, <u>Aditya Khair</u>
10:20-10:50	COFFEE - TEA BREAK				




OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	APHRODITE V (Level 0)	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
Machine learning and AI in rheology 2 <u>Chairs:</u> Safa Jamali, Ellie Hajizadeh	Suspensions, frictional and granular systems 9 <u>Chairs:</u> Yogesh Joshi, Vincenzo Calabrese	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 7 <u>Chairs:</u> Evelynne Van Ruymbeke, Scott Danielsen	Suspensions, frictional and granular systems 10 <u>Chairs:</u> Heon Sang Lee, Ryohei Seto	Arrested matter: gels, glasses and jammed systems 7 <u>Chairs:</u> Peter Olmsted, Pavlik Lettinga	Interfacial rheology, bubbles and foams, droplets and emulsions 7 <u>Chairs:</u> Joseph Samaniuk, Francesca Pelusi
Heterogeneity control – how to make it? Howon Jin, Seunghoon Kang, Kyung Hyun Ahn	Flow-induced alignment of colloidal rod suspensions under planar shear and extensional flows <u>Byoungjin Chun</u> , Hyun Wook Jung	SLE3S – water phase diagram: from microstructure to rheology and back <u>Rosalia Ferraro</u> , Gerardino D'Errico, Stefano Guido, Sergio Caserta	Shear-induced structural changes of cathode slurry during storage <u>JH Park</u> , KH Ahn	Capturing strain-dependent microstructure evolution of ABA triblock copolymer gels using RheoSAXS <u>Santanu Kundu</u> , Rosa Maria Badani Prado, Satish Mishra, Humayun Ahmad, Wesley Burghardt	Effects of changing the nature of the stress boundary condition on the thinning of thin Newtonian liquid films <u>Emmanouil Chatzigiannakis</u> , Jan Vermant
Scientific Machine Learning for Modeling Complex Fluids <u>Kyle Lennon</u> , Gareth McKinley, James Swan	Orientational arrest in dense suspensions of elliptical particles under oscillatory shear flows <u>Zakiyeh Yousefian</u> , Martin Trulsson	Using CO ₂ to modulate self-assembly and rheology: Viscosity increase or decrease in surfactant fluids induced by CO ₂ <u>Mahima Srivastava</u> , S. Raghavan	Role of carboxymethyl cellulose in dense water-based anode slurries for lithium-ion batteries <u>Soichiro Makino</u> , Masahiko Ishii, Yusuke Akimoto, Hiroshi Nakamura	Plasticity and strain-hardening of glassy polymers: a microscopic theory Thomas Merlette, Jérôme Hem, Caroline Crauste-Thibierge, Sergio Ciliberto, Florence Clement, Paul Sotta, <u>Didier Long</u>	
Efficient Tuning of Coarse Grained Polymer Models Using Bayesian Inference Dominic Robe, Hansani Weeratunge, Kate Smith-Miles, Ellie Hajizadeh	Numerical simulation of clogging of rods in a microchannel with planar contraction <u>Marco Trofa</u> , Gaetano D'Avino, Pier Luca Maffettone	Improvement of the Rheological Behavior of an Anionic Surfactant Formulation used for Enhanced Oil Recovery upon Interactions with Hydrotropic Salts <u>Ronald Mercado</u> , Jheriany Ruiz, Angie Suarez	Carbomer – Zinc interaction: rheological detection of polymer adsorption onto metallic microparticles Diego Milian, Yahya Rharbi, <u>Nadia El Kissi</u>	Dual origin of viscoelasticity in polymer-carbon black hydrogels: a rheometry and electrical spectroscopy study <u>Gauthier Legrand</u> , Sébastien Manneville, Gareth H. McKinley, Thibaut Divoux	The influence of saliva's interfacial rheological properties on aerosol evaporation <u>Mariana Rodriguez Hakim</u> , Maria Clara Novaes Silva, Jan Vermant
Physiology-Based Parameterization of Human Blood Shear Rheology via Machine Learning <u>Sean Farrington</u> , Soham Jariwala, Matthew Armstrong, Ethan Nigro, Norman Wagner, Antony Beris	On the dynamics of Brownian rods with anisotropic translational diffusion Hamza Issa, Julien Férec, Gilles Ausias, <u>Giovanniantonio Natale</u>	Morphology transition in dilute surfactant solutions: from micelles to vesicles by using a pharmaceutical salt <u>Rossana Pasquino</u> , Ilaria Cusano, Ionita Inbal, Pedro Rodriguez Gonzales, Dganit Danino, Nino Grizzuti	Identification of the two-step yielding behavior of concentrated lithium-ion battery anode slurry with large amplitude oscillatory shear Yeseul Kim, Jeong Hoon Park, Kyung Hyun Ahn, <u>Jun Dong Park</u>	Residual trapped stresses in 'simple' yield stress fluids influence their rheology Roos Scheermeijer, Kasra Farin, <u>Daniel Bonn</u>	Characterisation of the destabilisation of saliva filaments during phonation by a model experiment Tristan Xabada, Manouk Abkarian, <u>Christian Ligoure</u>

COFFEE - TEA BREAK





	BALLROOM (Level -2)	THETA/SIGMA/DELTA (Level -2)	VIP (Level -2)	OMEGA (Level -2)	YPSILON II & III (Level -1)	YPSILON IV & V (Level -1)
10:50–12:30	Polymeric materials (melts, solutions, copolymers, blends, composites) 10 <u>Chairs:</u> Yuichi Masubuchi, Giovanni Ianniruberto	Polymeric materials (melts, solutions, copolymers, blends, composites) 11 <u>Chairs:</u> Ravi Jagadeeshan, Yuya Doi	Rheology and design of foods, pharmaceutical formulations and consumer products 5 <u>Chairs:</u> Peter Fischer, Ruth Cardinaels	Rheology for soft robotics and use of field-responsive materials 1 <u>Chairs:</u> Ryan Truby, Panagiotis Voudouris	Non-Newtonian fluid mechanics 8 <u>Chairs:</u> Shinji Tamano, Michela Geri	Non-Newtonian fluid mechanics 9 <u>Chairs:</u> Gaetano D'Avino, Anselmo Pereira
10:50–11:10	Stretching-Induced Concentration Gradient in Entangled Polymer Solutions Visualized by an AIE-Based Fluorescent Probe Shuang Liu, Li Peng, Xianbo Huang, Qian Huang	Study of heterogeneous oxidative aging of polymers by coarse-grained molecular dynamics <u>Takato Ishida,</u> Yuya Doi, Takashi Uneyama, Yuichi Masubuchi	Kinetics of acid hydrolysis of k-Carrageenan by in situ rheological follow-up <u>Simona Russo Spena,</u> Nino Grizzuti, Rossana Pasquino, Andrea Sarrica, Marco Delmonte, Helen Yang	One-step manufacturing of soft actuators by viscoplastic advective assembly Matthew Murdock, Minh Tran, <u>Alexandra Bayles</u>	Incipient contact dynamics of non-Newtonian droplets and the determination of the critical overlap concentration Ziwen He, Huy Tran, <u>Min Pack</u>	Evaluation of constitutive models for shear-banding wormlike micellar solutions in simple and complex flows <u>Stylianios Varchanis,</u> Simon J. Haward, Cameron C. Hopkins, John Tsamopoulos, Amy Q. Shen
11:10–11:30	Investigating the effects of n-n stacking and friction reduction on rheological behaviour of polymer melts in extensional flow <u>Yiming Zhong,</u> Shuang Liu, Qian Huang	Can linear viscoelastic properties be used to validate the purity of very large polymer rings? <u>Julie Kornfield,</u> Dongjie Chen, Kristof Molnar, Hojin Kim, Judit Puskas, Greg McKenna	Structuring Gelatin Methacrylate - Dextran Hydrogels Under Shear: a Plethora of Microstructures Ghazi Ben Messaoud, <u>Evdokia Stefanopoulou,</u> Mattis Wachendoerfer, Sanja Aveic, Horst Fischer, Walter Richtering	Soft triborheology of elastomers with colloid-laden lubricants <u>Lilian Hsiao,</u> Yug Saraswat, Catherine Hill, Chris Serfass	Breakdown of universality in viscoelastic pinch-off <u>Antoine Gaillard,</u> Miguel Angel Herrada Gutierrez, Antoine Deblais, Jens Eggers, Daniel Bonn	
11:30–11:50	Measurement and Modeling of Uniaxial and Planar Extensional Viscosities for Linear and Branched Polyolefin Melts in Very Fast Flows <u>Martin Zatloukal,</u> Jiri Drabek	Melt rheology of ring polybutadienes with high purity <u>Atsushi Takano,</u> Y. Tsuduki, Y. Takahashi, Y. Matsushita	Thermo-responsive nanocellulose hydrogels as a universal drug release platform <u>Qiyao Sun,</u> Garam Han, Luca Müller, Giovanni Bovone, Siyuan Tao, Pascal Bertsch, Mark Tibbitt, Qun Ren, Gilberto Siqueira, Peter Fischer	Self-healing dynamics at sliding polymer interfaces: From Scamach waves to bio-inspired locomotion? <u>Koushik Viswanathan,</u> Mohd Aaquib Ansari	Breakup of a polymeric droplet in high-speed airflow Navin Kumar <u>Chandra,</u> Shubham Sharma, Saptarshi Basu, Aloke Kumar	Numerical simulations on the settling dynamics of ellipsoidal particles in a viscoelastic fluid <u>Gaetano D'Avino</u>
11:50–12:10	Modeling the elongational viscoelastic response of bidisperse linear polymer blends: from well to barely entangled matrix <u>Celine Hannecart,</u> Christian Clasen, Evelyne van Ruymbeke	Microscopic dynamics of long polymer ring melts from atomistic simulations and comparison with neutron spic echo measurements <u>Dimitrios Tsalikis,</u> Vlasios G. Mavrantzas	Thermo-rheological behavior of k-carrageenan hydrogels modified with xanthan gum <u>Pietro Renato Avallone,</u> Simona Russo Spena, Andrea Sarrica, Marco Delmonte, Rossana Pasquino, Nino Grizzuti	Rheology of photopolymer compositions with dispersed carbon nanoparticles for vat photopolymerization of ionic soft actuators <u>Sergey Nechausov,</u> Aslan Miriyev	The fluid dynamics of a viscoelastic fluid dripping onto a substrate <u>Konstantinos Zinelis,</u> Abadie Thomas, Gareth McKinley, Jesse Capecehatro, Omar Matar	Particle redistribution in a horizontal Couette <u>Mahdi Davoodi,</u> Andrew Clarke
12:10–12:30	A general view at shear thinning based on clusters, demonstrated for polymer solutions <u>Bernhard Wolf</u>	Unexpected slow relaxation dynamics of pure ring polymers <u>Charles Schroeder,</u> Hung Nguyen, Michael Tu	Three-component injectable hydrogels based on inter-polyelectrolyte interactions <u>Gleb Vasiluyev,</u> Christine Warwar Damouny, Patrick Martin, Rita Vilensky, Eyal Zussman	Rheo-electrical behaviour of low concentrated Multiwall Carbon Nanotubes suspensions <u>Sergio Lago-Garrido,</u> D. S. Schmidt, S. Arora, María José Martín Alonso, Lola González-García	The Yoga of Droplets <u>Aloke Kumar,</u> Sarath Varma, Abhineet Rajput	Local flow dynamics visualisation in cornstarch suspensions using rheoLSI Akankshya Majhi, Jesse Buijs, <u>Joshua A. Dijkman,</u> Jasper van der Gucht
12:30–13:30	LUNCH BREAK					




OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	APHRODITE V (Level 0)	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
Machine learning and AI in rheology 3 <u>Chairs:</u> Ellie Hajizadeh, Safa Jamali	Suspensions, frictional and granular systems 11 <u>Chairs:</u> Romain Mari, Ryohei Seto	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 8 <u>Chairs:</u> Osamu Urakawa, Quan Chen	Suspensions, frictional and granular systems 12 <u>Chairs:</u> Prabhu Nott, Michel Cloitre	Arrested matter: gels, glasses and jammed systems 8 <u>Chairs:</u> Emanuela Del Gado, Domenico Truzzolillo	Interfacial rheology, bubbles and foams, droplets and emulsions 8 <u>Chairs:</u> Emmanouil Chatzigiannakis, Alexandra Aliche
Petascale Brownian dynamics simulations of highly resolved polymer chains with hydrodynamic interactions using modern GPUs <u>Venkata Siva Krishna Sanagavarapu,</u> Praphul Kumar, Bharatkumar Sharma, Indranil Saha Dalal	Morphological transitions of self-interacting sheets in shear flow <u>William Funkenbusch,</u> Kevin Silmore, James Swan, Patrick Doyle	Viscoelastic properties of metallo-supramolecular networks: How to relate stickers dynamics to terminal flow, based on the building blocks architecture? Yanzhao Li, Jean-Francois Gohy, Charles-Andre Fustin, Evelyne van Ruymbeke	The colloidal glass transition rules the onset of shape instability in drying colloidal drops <u>Matteo Milani,</u> Ty Phou, Christian Ligoure, Luca Cipelletti, Laurence Ramos	Betweenness Centrality as a Yielding Prediction in Colloidal Gels <u>Deepak Mangal,</u> Mohammad Nabizadeh, Safa Jamali	Dimple and wimple morphology in thin film drainage Pasquale Calabrese, Lorenzo Lombardi, <u>Daniele Tammaro,</u> Pier Luca Maffettone
Deep-learning-based instability detection of formulated liquids <u>Maurizio De Micco,</u> Vincenzo Guida, Luisa Verdoliva, Massimiliano Maria Villone	Link between rheology, dynamics and microstructure in dense suspensions <u>Naveen Agrawal,</u> Zhouyang Ge, Martin Trulsson, Outi Tammisola, Luca Brandt		Active and passive microrheology in hard colloids with varying tracer size Francisco Orts, Manuel Maier, Matthias Fuchs, Gloria Ortega, Ester M. Garzón, Antonio M. Puertas	Internal tension determines the rheology of fractal colloidal gels <u>Stefano Aime,</u> Elisa Julien, Naveen Agrawal, Matteo Milani, David Weitz	Breakup of thin liquid films with viscous interfaces Vitor Heitor Cunha, <u>Sergio Ribeiro,</u> Marcio Carvalho
Structure, Dynamics and Viscoelasticity of Polymer Melts Confined Between Alumina via Machine-Learnt Atomistic Simulations <u>Nikolaos Patsalidis,</u> Georgios Papamokos, George Floudas, Vangelis Harmandaris	Steady shear rheology of magnetorheological fluids under a balanced triaxial field <u>Jose R. Morillas,</u> Juan de Vicente, Jeffrey F. Morris	Rheology of giant micelles: Rheological response through Rheo-SALS structure factor measurements of cetyltrimethylammonium tosylate (CTAT) solutions in the presence of sodium bromide (NaBr) <u>Octavio Manero,</u> Moises Romero-Ureña, Luis Medina-Torres, Esteban Lopez-Aguilar	Rheology of dilute and concentrated non-Brownian suspensions made of irregular porous particles in a Newtonian solvent <u>Johanna Vargas,</u> Claudia Carotenuto, Farid B. Cortés, Mario Minale	Tuning the strength of colloidal gels by oscillatory shear <u>Shreyas Sudhaman,</u> Roger Bonnecaze	Lipid-Coated Microbubbles for Ultrasound Imaging and Tissue Engineering: Interfacial Rheological models for Jets and Microstreaming <u>Kausik Sarkar,</u> Nimany Mobadersa
Computer Vision based reverse analysis of open channel flow behaviour as method for inline determination of rheological properties of fresh concrete <u>Michael Haist,</u> C. Vogel, M. Coenen, T. Schack	A Mesoscopic Theory on the Rheology of Liquid Crystalline Carbon Nanotubes <u>Heon Sang Lee,</u> Gyeong Min Choi	Self-organisation and dynamics of two-dimensional DNA-kinetoplast networks <u>Terpsichori Alexiou,</u> C.N. Likos	Rheology of pedestrian crowds <u>Dariel Hernández-Delfin,</u> Ander García, Dae-Jin Lee, Marco Ellero	The role of hydrodynamic interactions on yield in colloidal gels under the start-up shear flow <u>Jae Hwan Jeong,</u> Roseanna Zia	Highly tunable Pickering emulsion/polymer systems: from colloids to functional soft materials <u>Guy Mechrez</u>
Investigation of the classification and regression of the extensional behavior of complex fluids through DoS-CaBER and machine learning <u>Minhyuk Im,</u> Junhyeong Jang, Jaewook Nam	A unified framework to describe shear- and extension-induced alignment of macromolecules of various flexibility <u>Vincenzo Calabrese,</u> Tatiana Porto Santos, Carlos G. Lopez, Minne Paul Lettinga, Simon J. Haward, Amy Q. Shen	Aqueous solutions of Pluronic F68 and Diclofenac: phase transitions studied by Rheology and SAXS <u>Nicola Antonio Di Spirito,</u> Nino Grizzuti, Rossana Pasquino	Rediscovering tempera grassa: rheological properties of emulsion-based paints <u>Côme Thillaye du Boullay,</u> Laurence De Viguerie, M. Jaber	Multiscale Structural Evolution of Thixotropic Depletion Gels <u>Rishabh More,</u> Gareth H. McKinley	Suppression of Coffee-Ring by Manipulating Colloidal Interactions <u>Sankar Hariharan,</u> Sumesh P. Thampi, Madivala G. Basavaraj

LUNCH BREAK



	BALLROOM (Level -2)	THETA/SIGMA/DELTA (Level -2)	VIP (Level -2)	YPSILON II & III (Level -1)	YPSILON IV & V (Level -1)	OMIKRON I (Level -1)
13:30-14:30	Polymeric materials (melts, solutions, copolymers, blends, composites) 12 <u>Chairs:</u> Guilhem Baeza, Daniel Read	Polymeric materials (melts, solutions, copolymers, blends, composites) 13 <u>Chairs:</u> Takashi Uneyama, Wei You	Biorheology and rheology in the biomedical field 5 <u>Chairs:</u> Sergio Caserta, Manlio Tassieri	Non-Newtonian fluid mechanics 10 <u>Chairs:</u> Davide Picchi, Mahdi Davoodi	Non-Newtonian fluid mechanics 11 <u>Chairs:</u> Priscilla Vargas, Agathe Robisson	Rheology and sustainability (constructions, recycling, cellulose, biodegradable) 4 <u>Chairs:</u> Gordon Christopher, Joseph Samaniuk
13:30-13:50	New Insights into Elongational Rheology of Polystyrene Pom-poms <u>Max G. Schußmann</u> , Manfred Wilhelm, Valerian Hirschberg	Glass Transition Temperatures of Copolymers: Molecular Origins of Deviation from the Linear Relation Cong-Cong Huang, <u>Chen-Yang Liu</u>	Rheology of airway mucus in situ <u>Margaret Braunreuther</u> , Maude Liegeois, John V. Fahy, Gerald G. Fuller	Capillary imbibition of shear-thinning fluids: from Lucas-Washburn to oscillatory regimes <u>Davide Picchi</u> , Camille Steinik, Gianluca Lavalle, Pietro Poesio	A variational formalism of irreversible thermodynamics for constitutive equations <u>Kwang Soo Cho</u>	Rheology during cascading crystallization in mixed polyolefins: implications for mechanical recycling Derek Huang, McKenzie Coughlin, Chad Snyder, Anthony Kotula, <u>Kalman Migler</u>
13:50-14:10	Continuing the pom-pom story: shear and elongational rheology of polystyrene pom-poms and comparison with combs <u>Valerian Hirschberg</u> , Max G. Schußmann, Manfred Wagner, Manfred Wilhelm	Magneto-rheology and field-induced ordering in block copolymer (BCP) micelles via a mechanism alternative to phase alignment Grace Kresge, Arit Das, Christopher Neal, Chelsea Mikal, <u>Michelle Calabrese</u>	Bio-based synthetic mucus gel mimicking the rheological behavior of human airways mucus <u>Diego Milian</u> , Jérémy Patarin, Matthieu Robert de Saint Vincent, Hugues Bodiguel	Displacement flows of shear thinning fluids in a vertical annulus <u>Ruizi Zhang</u> , <u>Ian Frigaard</u>	Displacement of elastoviscoplastic materials by air in straight or corrugated tubes <u>Pantelis Moschopoulos</u> , Yannis Dimakopoulos, John Tsamopoulos	
14:10-14:30	Rheology of Conjugated Polymers with Long and Branched Side Chains <u>Zhi-Chao Yan</u> , Gui-Sheng Jiao, Yanan Li, Chengjun Pan	Size-dependent interparticle interaction and its role in coarsening dynamics of co-continuous polymer blends <u>Milana Trifkovic</u> , Rajas Shah, S. Bryant	First use of rheological properties of airway mucus in an interventional clinical trial for muco-obstructive lung diseases: what are the determinants and how it can impact patient life <u>Jeremy Patarin</u> , Matthieu Robert de Saint Vincent	Flow classification in the 4-roll mill from the perspective of microelements dispersed in the continuous phase João Cunha, <u>Paulo De Souza Mendes</u> , Roney Thompson, Elias Rodrigues, Erick Quintella	The role of viscoplastic drop shape in impact <u>Kindness Isukwem</u> , Romain Castellani, J. Godefroid, C. Monteux, D. Bouttes, Rudy Valette, Anselmo Pereira	
14:45-15:45	<div><div><div>BALLROOM (Level -2)</div><div></div></div><div><div>Rheology quo vadis</div><div>Chair: <u>Jan Vermant</u></div><div>From polymers to tyres: rheological challenges in rubber industry • <u>Salvatore Coppola</u></div><div>Opportunities for rheology to address biological questions • <u>Kelly Schultz</u></div><div>Once upon a time food was simple • <u>Peter Fischer</u></div></div></div>					
15:45-16:00	CLOSING CEREMONY					



OMIKRON II (Level -1)	APHRODITE II (Level 0) 	APHRODITE III & IV (Level 0) 	APHRODITE V (Level 0)	ATHENAEUM CONF. CENTRE (Level 0) 	ARCADE I & II (Level 0)
Arrested matter: gels, glasses and jammed systems 9 <u>Chairs:</u> Michel Cloitre, Lilian Hsiao	Suspensions, frictional and granular systems 13 <u>Chairs:</u> Emanuela Del Gado, Ryohei Seto	Supramolecular and self-assembling systems, associating polymers, polyelectrolytes, synthetic and biological networks 9 <u>Chairs:</u> Quan Chen, Osamu Urakawa	Suspensions, frictional and granular systems 14 <u>Chair:</u> Abhinendra Singh, Domenico Truzzolillo	Arrested matter: gels, glasses and jammed systems 10 <u>Chairs:</u> Stefano Aime	Interfacial rheology, bubbles and foams, droplets and emulsions 9 <u>Chairs:</u> Damian Renggli, Daniele Tammaro
Mechanical fingerprints of single polymer chain in stretched macroscopic polymer network <u>Tsutomu Indei,</u> Takahiro Matsuda, Tasuku Nakajima, Yukiko Takahashi, Tatiana B. Kouznetsova, Michael Rubinstein, Stephen L. Craig, Jian Ping Gong	Detecting early-stage cohesion due to calcium silicate hydration with rheology and surface forces apparatus <u>Teresa Liberto,</u> Joanna Dziadkowicz, Markus Valtiner, Agathe Robisson	Molecular understanding of viscoelastic relaxation using transient networks with well-controlled structures <u>Takuya Katashima,</u> Mitsuru Naito, Satoru Nagatoishi, Kanjiro Miyata, Kouhei Tsumoto, Ung-il Chung, Takamasa Sakai	Rheology and structure of nanocrystalline cellulose suspensions <u>Yuan Xu,</u> Jason R. Stokes	Negative Electrorheology of Networked Suspensions <u>Ankita Jain,</u> Vinay A. Juvekar, Jyoti R. Seth	Simultaneous micro- and macroscopic description of foam shear in a plate-plate rheometer with X-ray microscopic tomography <u>Florian Schott,</u> Stefan Johann Gstöhl, Christian Matthias Schlepütz, Benjamin Dollet, Christophe Raufaste, Stéphane Santucci, Cyrille Claudet, Rajmund Mosko
The dynamics of molecular or colloidal caging in 1, 2, and 3 dimensions <u>Horst H Winter,</u> Elton Correia, Sepideh Razavil	Cement paste: comparison with a model system and analysed by rheo-spectroscopy <u>Christopher O. Klein,</u> Nonkululeko W. Radebe, Roxana Figuli, Manfred Wilhelm, Himanshu P. Patel, Günter K. Auernhammer	Percolation and phase behavior in cellulose nanocrystal suspensions via rheo-PLI and nonlinear rheological analysis <u>Sylwia Wojno,</u> Gunnar Westman, Roland Kádár	Rheological Properties of Hyaluronic Acid/ Cellulose Nanocrystals Suspensions <u>Akshai Bose,</u> Behzad Zakani, Dana Grecov	Viscoelastic coarsening of quasi-2D foam <u>Chiara Guidolin,</u> Alice Requier, Emmanuelle Rio, Jonathan MacIntyre, Antti Puisto, Nicolo Galvani, Sylvie Cohen-Addad, Olivier Pitois, Anniina Salonen	Preparation, characterization and dilute solution rheology of two-dimensional sheet-shaped poly(methyl methacrylate) <u>Yuuya Doi</u>
Inducing irreversible strain hardening and alignment during collagen gelation <u>Lens Dedroog,</u> Erin Koos, Yovan de Coene, Olivier Deschaume, Wim Thielemans, Carmen Bartic, <u>Pavlik Lettinga</u>	Shear induced particle migration in viscous suspensions with continuous size distribution <u>Avinoam Nir,</u> O.M. Lavrenteva, I. Smagin	Binary mixture of hard and soft colloids with tuneable interactions <u>Fabien Dutertre,</u> Ashley Mungroo, Jean-Charles Majesté	Effects of non-adsorbing polymers on discontinuous shear thickening of 3D printable colloidal ceramic suspensions <u>Ria Corder,</u> Y.-J. Chen, Arezo Ardekani, <u>Kendra Erk</u>	Power Law Rheology of Engineered Muscle-Inspired Protein Hydrogels <u>Anders Aufderhorst-Roberts,</u> Sophie Elizabeth Cussons, David J Brockwell, Lorna Dougan	Solid - liquid work of adhesion <u>Rafael Tadmor</u>

BALLROOM (Level -2)



Rheology quo vadis

Chair: Jan VermantFrom polymers to tyres: rheological challenges in rubber industry • Salvatore CoppolaOpportunities for rheology to address biological questions • Kelly SchultzOnce upon a time food was simple • Peter Fischer

CLOSING CEREMONY



Polymeric materials (melts, solutions, copolymers, blends, composites)

- PP001** **Effect of chain shape on the diffusion of star polymers in solution**
Prabeen Kumar Pattanayak, Alope Kumar, Gaurav Tomar
- PP002** **Dielectric relaxation and glassy dynamics in poly(diisopropyl fumarate) and its copolymers**
Koji Fukao, Kari Miyata, Jun Yoshioka, Yasuhito Suzuki, Akikazu Matsumoto
- PP003** **Viscoelastic Simulations of the Effect of Strain Hardening on Interfacial Roughness during Two-layer Coextrusion**
Keiko Takeda, Sathish Kumar Sukumaran, Masataka Sugimoto
- PP004** **Instabilities of polymer melt suspensions under uniaxial extension**
Moritz Neukötter, Steffen Jesinghausen, Hans-Joachim Schmid
- PP005** **Shear rheology of methyl cellulose based solutions for cell mechanical measurements at high shear rates**
Beyza Büyükgüngör, Santanu Basu, Markus Neuner, Jochen Guck, Andreas Wierschem, Felix Reichel
- PP006** **Hybrid synthesis of bottlebrush DNA polymers for single-molecule rheology**
Michael Burroughs, Lisa Nieman, Louis Wang, Danielle Mai
- PP007** **L-P model: a rheological molecular model for blends of linear and pom-pom architectures**
Benoît Blottiere, McLeish Tom C.B.
- PP008** **The effect of sterilization on the rheological performance of alginate/gelatin hydrogels**
Teresa Carranza, Pedro Guerrero, Koro De La Caba
- PP009** **The effect of temperature on the rheological behaviour of chitin/gelatin hydrogels for 3D printing**
Teresa Carranza, Jone Uranga, Koro de la Caba, Pedro Guerrero
- PP010** **Mapping surface defects in highly-filled wood fiber polymer composite extrusion from inline spectral analysis**
Sajjad Pashazadeh, Arvin Seshadri Suresh, Tobias Moberg, Anders Brolin, Roland Kádár
- PP011** **Uncertainty quantification in data-driven coarse-grained models of complex macromolecular systems: A Bayesian approach for ultra coarse-graining of polymer star melts**
Panayiota Katsamba, Antonis Chazirakis, Eirini Gkolfi, Petra Bacova, Evangelia Kalligianaki, Vagelis Harmandaris

- PP012** **Anticipating edge fracture and drawing experimental limit lines**
Maxwell Marsh, Ryan Gergley, Randy Ewoldt
- PP013** **Local mechanism governs global reinforcement of filler-hydrogel composites**
Jppolyti Dellatolas, Minaspi Bantawa, Thibaut Divoux, Emanuela Del Gado, Irmgard Bischofberger
- PP014** **Rheological and mechanical properties of epoxy resins during cross-linking at various temperatures**
David Zupančič Valant, Alen Oseli, Lidija Slemenik Perše
- PP015** **Chemically specific multiscale modelling of viscoelastic dielectric liquids**
Bharath Ravikumar, Ioannis K Karathanassis, Timothy Smith, Manolis Gavaises
- PP016** **On unified approaches of soft matter physics – example in polymer rheology**
Yuanze Xu
- PP017** **Rheological behaviour of PEEK during isothermal crystallisation and impact on interface healing**
Morgane Le Bot, Lise Trouillet-Fonti, Hubert Lecocq, Paul Sotta
- PP018** **Flow-induced Crystallization of High Density Polyethylene**
Arshiya Bhadu, Benson Jacob, Alicyn Rhoades, Ralph Colby
- PP019** **Elastomers for wave energy harvesting**
Salvatore Coppola, Francesco Della Penna, Giovanni Regattieri
- PP020** **Unveiling the evulsion of CNTs aggregation and alignment in linear and long chain branched polymer matrices under shear and elongational flows**
Jixiang Li, Aberderrahim. Maazouz, Khalid. Lamnawar
- PP021** **Viscoelastic response of a dynamic covalent network diluted in different polymer matrices**
Pierrot De Wergifosse, Céline Hannecart, Rowanne Lyons, Larissa Hammer, Charles-André Fustin, Renaud Nicolay, Evelyne van Ruymbeke
- PP022** **Microrheological monitoring of polymerization reactions**
Caidric Gupit, Pedro Salas-Ambrosio, Juan Manuel Uruña, Yimin Luo, Jeanne Hankett, Rohini Gupta, Megan Valentine, Heather Maynard, Matthew Helgeson
- PP023** **Particle-based discrete element modelling of dilute linear polymer solutions in pure shear and kinematically-mixed extensional-dominated flows**
Luke Debono, Helen J. Wilson, Luke K. Davis

- PP024** **Predicting Rheological Properties of Biodegradable Copolymers using Non-equilibrium Molecular Dynamics Simulations**
Sharanya Alluri, Tarak Kumar Patra
- PP025** **Dynamics of reversible polymer networks and self-healing properties**
Hao Wang, Evelyne van Ruymbeke
- PP026** **The Effect of Carbon Nanotubes (CNTs) dispersity in Ag/Polydimethylsiloxan (PDMS) composite conductors**
Eun Hui Jeong, Jun Dong Park, Byoung Soo Kim
- PP027** **Rheological Characterization of Covalent Adaptable Network (CAN) Polymers Comprising β -Amino Esters Using Oscillatory Shear Tests**
Hyeonjong Song, Gyuri Lee, Suk-kyun Ahn, Kyu Hyun
- PP028** **Influence of Entanglement State on Molecular Mixing of Intractable Polyolefins and Its Implications on Rheological Response and Mechanical Properties**
Fahad Alsalem, Sanjay Rastogi
- PP029** **The Relationship between Rheological Properties and Morphology with Different Inorganic Filler in Poly(lactic acid)/Low-density Polyethylene Blends**
Min Chan Kim, Sumkun Lee, Seunghyeon Jin, Kyu Hyun
- PP030** **WITHDRAWN**
- PP031** **Rheological and Mechanical Properties of Poly(lactic acid) / Poly(ethylene oxide)/Cellulose Nanocrystal (CNC) Nanocomposites**
Daehan Oh, Sumkun Lee, Seunghyeon Jin, Kyu Hyun
- PP032** **Polyethylene grafted sheet-like silsesquioxane nanocomposites with unprecedented adhesion to polar substrates**
Vivek Sharma, Uday Paulbudhe, Nirmalya Bachhar, Samir Chikkali, Guruswamy Kumaraswamy
- PP033** **Metalloccenic Polybutene-1 with improved processability in slot-die extrusion coating process**
Alberto Bugana, Italo Corzani, Francesco Briatico Vangosa
- PP034** **Molecular weight dependence of Soret coefficient of Rouse chains**
Tatsuma Oishi, Takato Ishida, Yuya Doi, Takashi Uneyama, Yuichi Masubuchi
- PP035** **Improving the viscoelastic and mechanical properties of recycled polymers based on vitrimers**
Alexandru Boborodea, Evelyne van Ruymbeke, Ibrahim Göde, Renaud Nicolay, Amandine Guérinot

PP036	A highly transparent, colorless optical film with outstanding mechanical strength and folding reliability using mismatched charge-transfer complex intensification <u>Sung Woo Hong</u>
PP037	Shear Rheology of Unentangled Polystyrene Melts of Various Architectures <u>Aikaterini - Zoi Peponaki, Nikolaos Patelis, Georgios Sakellariou, Parvin Kiany, Dimitris Vlassopoulos</u>
PP038	Rheological Properties of Poly(ethylene oxide)/Silica Nanocomposites <u>Thaleia-Michaela Chatzaki, Sokratis Kogchylakis, Kiriaki Chrissopoulou, Dimitris Vlassopoulos, Spiros Anastasiadis</u>
PP039	Crack-growth Criterion in elastomers under biaxial deformation with different geometries <u>Thanh Tam Mai, Katsuhiko Tsunoda, Kenji Urayama</u>
PP040	Rheology-induced filler flocculation monitored by SAXS in rubber nanocomposites <u>Numera Shafqat, Caroline Anne-Genix, Clement Robin, Thomas Bizien, Julian Oberdisse</u>
PP041	Micro and nano-structured multicomponent composites for ultra-high absorbance of Electro-Magnetic Radiation <u>Emna Masghouni, Abderrahim Maazouz, Khalid Lamnawar</u>
PP042	Rheology of acylhydrazide end-functionalized polyisoprene and its nanocomposites <u>Menghuan Zha, Xiaorong Wang</u>
PP043	Sulfonated carbon foam with high conductivity and specific surface area prepared by high internal phase emulsion <u>Seong Jae Lee, Ho Seong Choi, Seon Gyeom Kim, Song Hee Lee, Hyo Yeol Na</u>
PP044	Tuning the Mechanical Properties in Architecturally Engineered All-polymer Nanostructured Materials <u>Georgia Nikolakakou, Alkmini Nega, George Sakellariou, Dimitrios Vlassopoulos, Emmanouil Glynos</u>
PP045	On the effect of long chain branching distribution in linear and non-linear rheological properties of polyolefins <u>Juan F. Vega, Andrés Cardil, Sandeep Garrepally, Olivier L'host</u>
PP045	On the effect of long chain branching distribution in linear and non-linear rheological properties of polyolefins <u>Juan F. Vega, Andrés Cardil, Sandeep Garrepally, Olivier L'host</u>
PP046	Catalytic poisoning induced interfacial viscoelasticity in the composite for a strong reversible adhesion <u>Kuldeep Kuhar, Animangsu Ghatak</u>
PP047	Brownian Dynamics Simulations of Silica/SBR Nanocomposites <u>Christos Psevdos, Giovanni Ianniruberto, Giuseppe Marrucci, Guilhem Baeza, Salvatore Coppola</u>
PP048	Summary of useful tools for gathering and analyzing rheological data <u>Montgomery Shaw</u>
PP049	Revealing the Shear Effect on the Interfacial Layer in Polymer Nanocomposites through Nanofiber Reorientation <u>Benke Li, Wei You, Li Peng, Xianbo Huang, Wei Yu</u>
PP050	Extensional viscosity of immiscible polymer multilayer films: signature of the interphase <u>Anna Dmochowska, Guillaume Miquelard-Garnier, Jorge Peixinho</u>
Interfacial rheology, bubbles and foams, droplets and emulsions	
PP051	Dewetting dynamics of sheared thin polymer films: an experimental investigation <u>Anna Dmochowska, Guillaume Miquelard-Garnier, Jorge Peixinho</u>
PP052	Genes control polymer dynamics and rheological properties that modulate fluxes of matter and energy in the ocean <u>Ian R. Jenkinson, Elisa Berdalet</u>
PP053	A pair of in-line bubbles rising in Carreau liquid with interfacial passive scalar transport <u>Koorosh Kazemi, Anton Vernet, Francesc Xavier Grau, Salvatore Cito, Alexandre Fabregat</u>
PP054	Drying Dispersion Drops Residing on Inclined Solid Substrates <u>Sankar Hariharan, Sumesh P Thampi, Madivala G Basavaraj</u>
PP055	Effect of volatile solvents on bubble and bulk foam stability in nonaqueous systems <u>Lorenzo Lombardi, Soledad Roig-Sanchez, Amar Bapat, John M. Frostad</u>
PP056	Friction between a liquid foam and a network of microscopic pillars <u>Alexis Commereuc, Emmanuelle Rio, François Boulogne</u>
PP057	Rheological interfacial properties of defatted cricket flour <u>Noemi Baldino, Simona Aprile, Olga Mileti, Francesca Romana Lupi, Domenico Gabriele</u>
PP058	Interfacial rheology of organo-silica particles with matching convex and concave asperities <u>Lukas Woolley, Florence Müller, Damian Renggli, Lucio Isa, Jan Vermant</u>
PP059	Spreading of elastoviscoplastic droplets <u>Hugo França, Maziya Jalaal, Cassio Oishi</u>
PP060	Cruciferin versus napin – air-water interface and foam stabilizing properties of rapeseed storage proteins <u>Penghui Shen, Jack Yang, Constantinos V. Nikiforidis, Helene C.M. Mocking-Bode, Leonard M.C. Sagis</u>
PP061	Thin liquid film rupture: Interplay between Marangoni flows and film break up <u>Lucas Bidoire, Jan Vermant</u>
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Rheology of living and active systems

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Rheology and sustainability (constructions, recycling, cellulose, biodegradable)

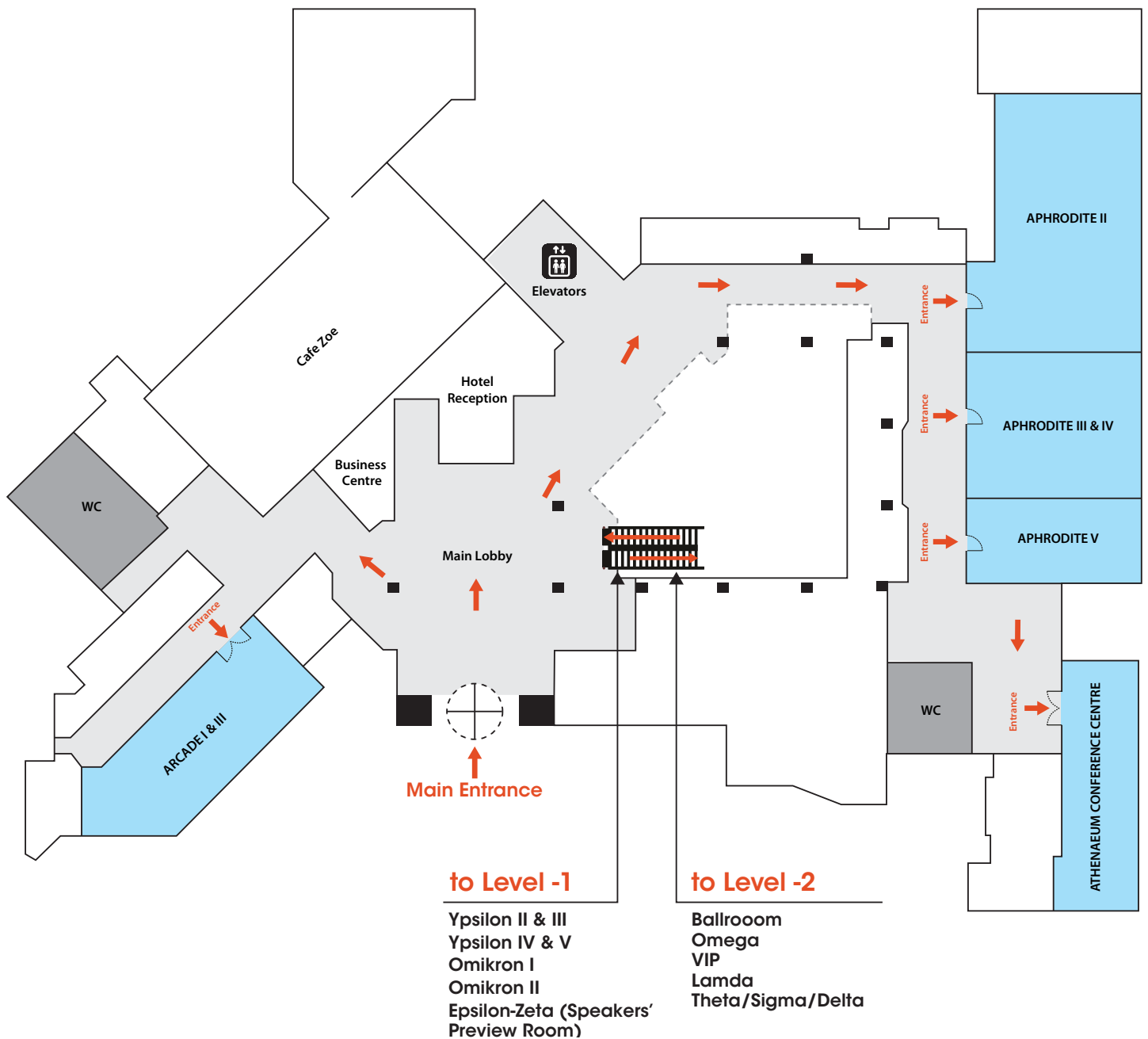
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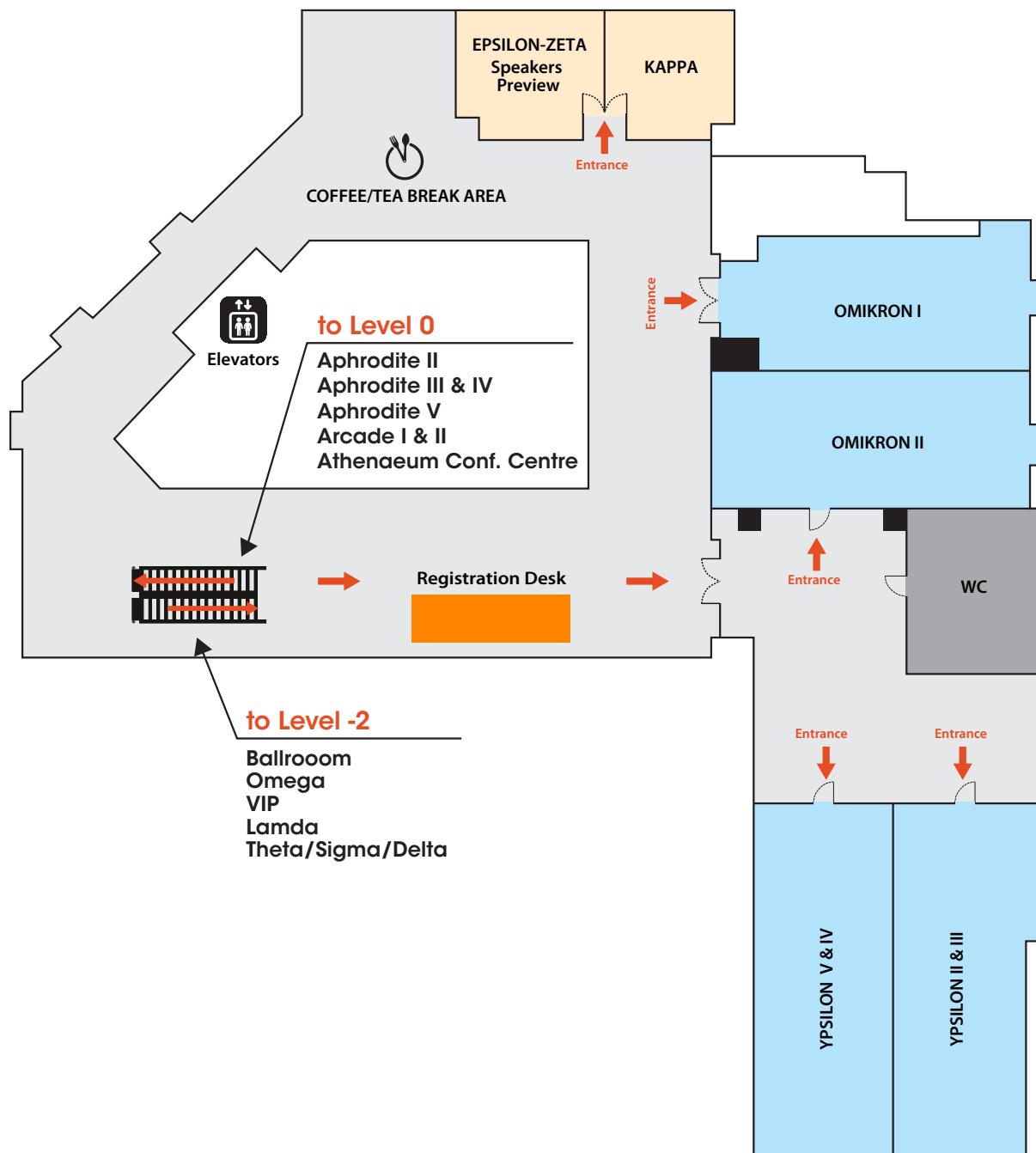
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LEVEL 0



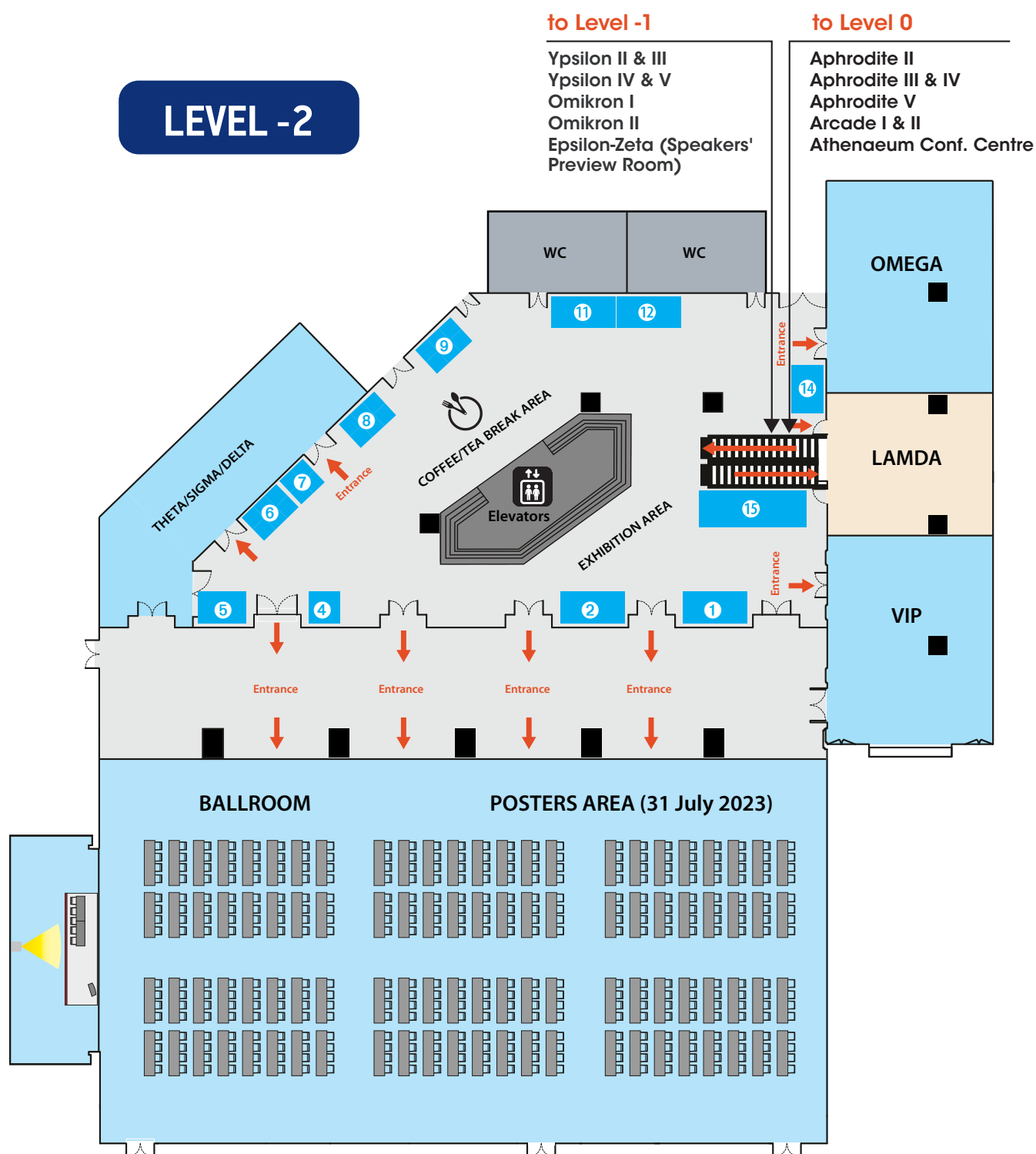
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Congress Venue Floor Plan

LEVEL -2



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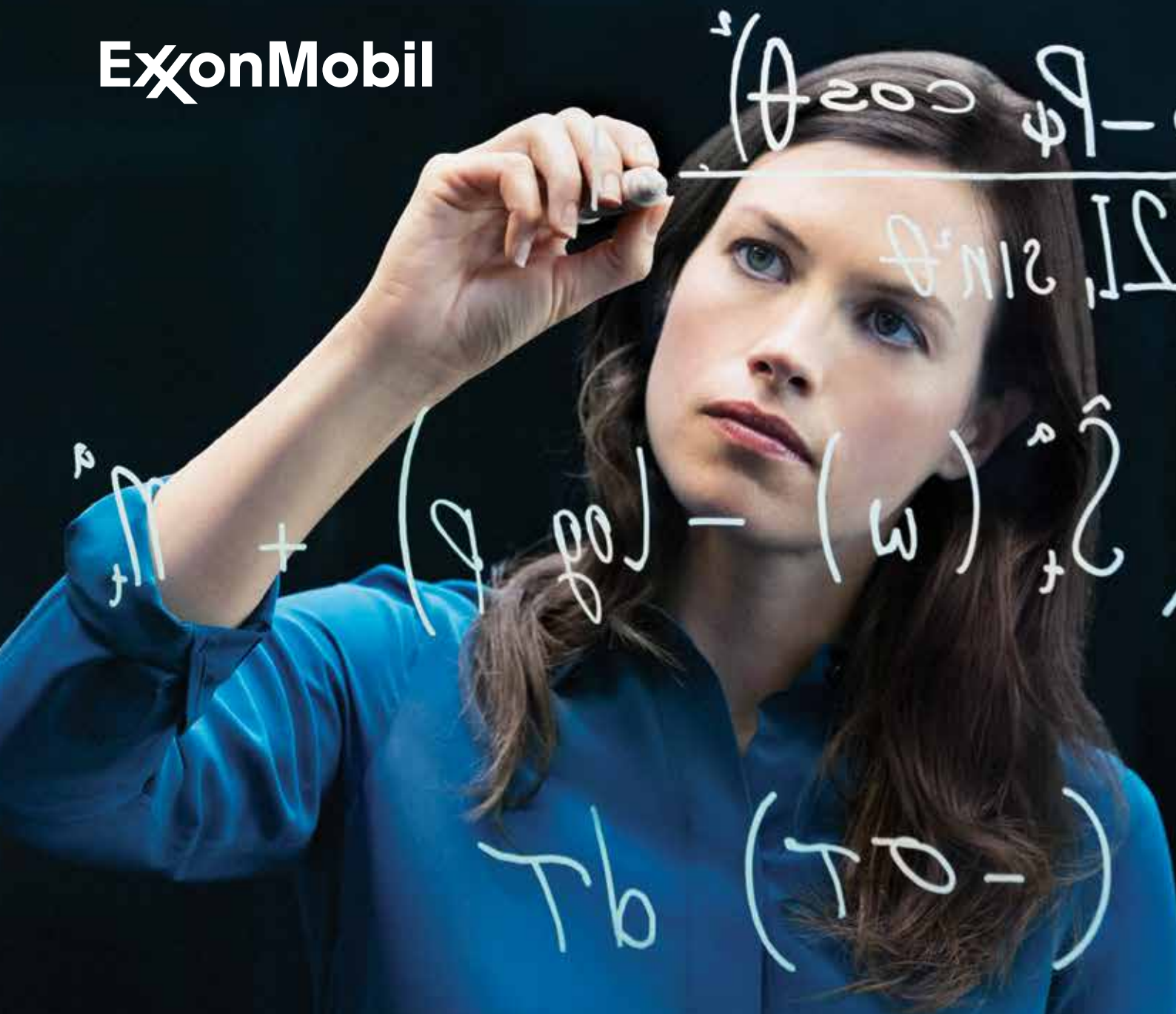
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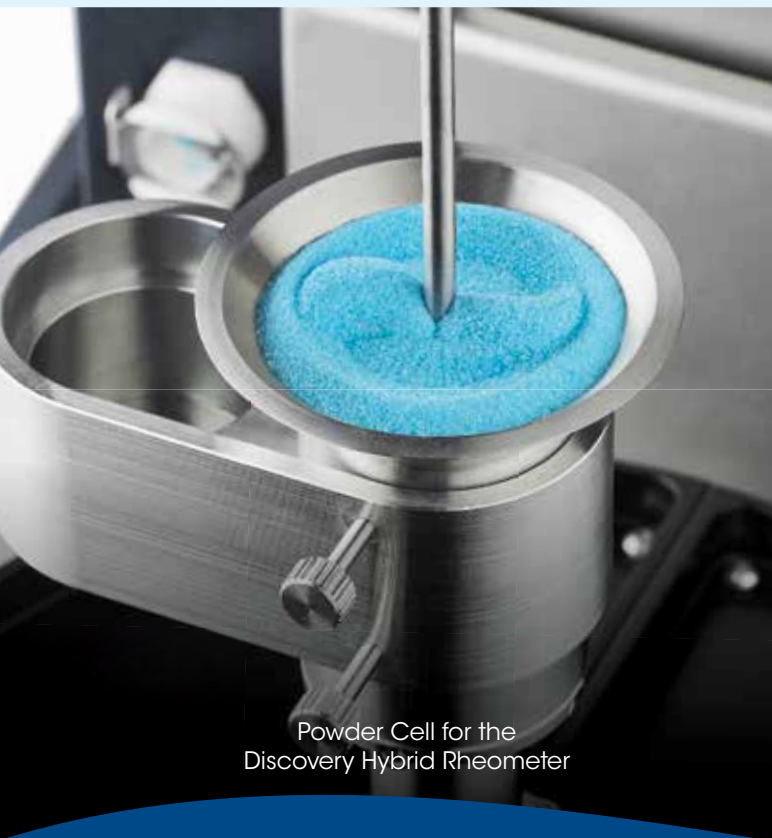
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