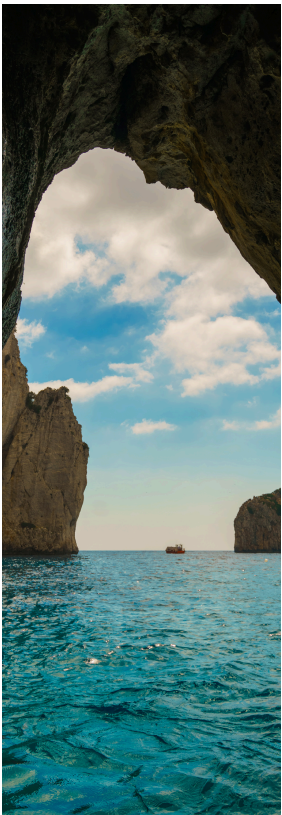
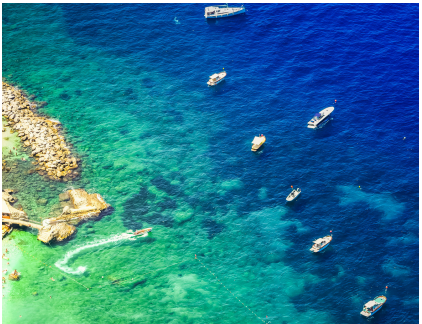
XVIII

ITALIAN SOCIETY OF RHEOLOGY CONFERENCE

Capri, 12 - 14 Sept 2024





PROGRAM

Thursday, September 12

08:20	Registration	
08:40	Opening Ceremony	
09:00	**Keynote**: Interfacial rheology of microgels at liquid-liquid interfaces	**E. Zaccarelli**

ADVANCED MATERIALS (GELS)

M. Minale, E. Zaccarelli

09:40	Soft and responsive: rheological insights into PNIPAM based microgels	**R. Angelini**
10:00	Rheological behaviour of thermoreversible hydroxypropyl(methyl)cellulose hydrogels doped with particles	**S. Perez Robles**
10:20	Nuclear magnetic resonance and advanced microscopy to study complex fluid microstructure	**C. D'Agostino**
10:40	Coffee Break	

BIOWORLD (BIOLOGICAL FLUIDS)

L. Lanotte, V. Preziosi

11.10	Effect of true 3D vascular structures on the flow of aggregating red blood cells	**P. Lettinga**
11:30	Thrombus morphology and growth: exploring the impact of hematocrit and wall shear rate using microfluidics	**E. Pero**
11:50	Rheological characterization of menstrual fluid	**J. Claussen & C. Neu**
12:10	Effect of reducing agent on the viscoelastic properties of porcine gastric mucus	**G. Franzino**
12:30	Lunch	

NEW FRONTIERS

G. Ianniruberto, P. Lettinga

14:00	On the effect of multiphase system rheology on some chemical technology processes	**O. Oikonomidou**
14:20	Most recent developments of rheology – Impendance measurements for conductive slurries	**M. Coletti**
14:40	Innovative mechanochromic photonic crystals for visual strain sensing	**M. Martusciello**
15:00	Machine-learning-based measurement of relaxation time via particle ordering	**M. De Micco**
15:20	Coffee Break & Poster Session	

INDUSTRIAL PRODUCTION (FOOD)

G. Baeza, F. R. Lupi

16:20	Stabilization of cricket protein emulsions by low-methoxyl pectin: an interfacial rheology study	**S. Aprile**
16:40	New insights on fouling mechanisms explored by rheo-fluidics at the microscale	**L. Lanotte**
17:00	Rheology of microfluidized emulgels structured with citrus fiber	**D. Mammolenti**
17:20	From food rheology and tribology to consistency and texture perception	**M. Ramaioli**
17:40	The role of powder rheology in the design and development of novel oral solid dosage food supplements	**G. Tafuro**

PROGRAM

Friday, September 13

08:20	Sessions Opening	

BIOWORLD (BIOTECHNOLOGIES)

D. Gabriele, S. Migliozzi

08:30	An investigation of liver viscoelasticity through dynamic mechanical analysis	**F. Briatico Vangosa**
08:50	A cost-effective rheo-optical compression assay for the mechanical characterization of cell spheroids	**R. Ferraro**
09:10	Magnetic hyperthermia in non-Newtonian and phase-transition fluids	**G. Baeza**
09:30	Microscopic origin of the increase in viscosity in concentrated solutions of monoclonal antibodies	**F. Camerin**
09:50	The sedimentation role on bacteria asymmetrical distribution in confined environments	**D. Marra**
10:10	Coffee Break	

ADVANCED MATERIALS (MULTIPHASE FLUIDS)

R. Angelini, D. Tammaro

10:40	Numerical simulations of the sedimentation of soft particles in confined Newtonian liquids	**M. Villone**
11:00	Microfluidic pressure-driven flow of a pair of particles in elastoviscoplastic materials	**G. Esposito**
11:20	Stability and rheological behaviour of High Internal Phase Emulsions (HIPEs) with potential application for 3D printed functionally graded porous materials	**V. Rosciardi**
11:40	Temperature driven self-assembly of Pluronic F68 with different salts	**R. Pasquino**
12:00	The central role of colloids to explain the crystallization dynamics of halide perovskites: a rheological study	**D. Amoroso**
12:20	Family Photo	
12:30	Lunch	

INDUSTRIAL PRODUCTION (NON-NEWTONIAN FLUIDS)

N. Baldino, R. Pasquino

13:50	Influence of Carreau number on relaminarization of turbulent shear thickening channel flow	**E. Milocco**
14:10	SPH simulations of integral fractional viscoelastic models for LAOS and other complex flows	**L. Santelli**
14:30	Linear and nonlinear shear rheology of unentangled pom-pom polymers	**G. Iannirubertо**

ENVIRONMENT

N. Baldino, R. Pasquino

14:50	Rheology and foaming of linear and branched polyolefin melts	**S. Costanzo**
15:10	Kinetic model and viscometry of plastic degradation in the sea from macro to micro and nanoplastics	**V. Villani**
15:30	Coffee Break	

CHATTING *a*ROUND RHEOLOGY

16:00	Rheology: Back to the Future	**N. Grizzuti**
16:20 – **17:30**	Round Table 	**D. Ferri, M. Minale, S. Guido**
19:00	Shuttle Transfers	
19:30	Social Dinner	

PROGRAM

Saturday, September 14

08:20	Sessions Opening	
8:30	**Keynote**: The role of viscoelasticity in thin lubricated contacts	**L. Biancofiore**

INDUSTRIAL PRODUCTION (INTERFACES)

L. Biancofiore, S. Costanzo

09:10	Bubble-driven creation of stable thin film structures: experimental insights and mechanistic understanding	**L. Lombardi**
09:30	Pickering emulsions for stimuli-responsive transdermal drug delivery: effect of rheology and microstructure on performance	**S. Migliozzi**
09:50	Bubbles growth in additive manufacturing at high Graetz number	**D. Tammaro**
10:10	Tuneable conductive foamed structures through additive manufacturing	**L. Gala**
10:30	Coffee Break	

INDUSTRIAL PRODUCTION (POLYMERS)

G. Filippone, M. Villone

11:00	Measuring the second normal stress difference via interfacial deformation	**L. Passaro**
11:20	Kinetics of void formation in the rubber phase of rubber toughened polymers inferred by isothermal cavitation experiments	**D. Ferri**
11:40	Efficient devulcanization strategies for enhanced tire rubber recycling: a comparative Study of BR and NR with devulcanization promoters	**S. Molitierno**
12:00	Rheological characterization of block copolymers in organic solvents	**I. Perna**
12:20	Influence of polyethylene oxide addition on the elongational properties of low concentration Carbopol solutions	**F. Gallo**
12:40	Closing Ceremony & Brunch	

Posters

1	Dynamics of particle migration in Poiseuille flow of elasto-viscoplastic fluid	**A. Abbasi Yazdi**
2	Rheological study of high-protein Canapa fresh pasta	**N. Baldino**
3	Shape instabilities control in slit dies design for foaming extrusion process	**C. Esposito**
4	Correlation between cross-linking of the rubbery phase and aesthetic properties in ABS copolymers	**D. Ferri**
5	CFD simulation of spray drying for non-Newtonian fluid solutions: understanding rheological impacts on nozzle behavior and droplet formation	**I. Foglia**
6	Computational fluid dynamics of complex multiphase systems through electrohydrodynamic effect (EHD) for microfluidic applications	**G. Fontanarosa**
7	Rheological properties of dietary fiber suspensions as a function of water solutes	**D. Gabriele**
8	Modelling and simulation of incompatible polymer blending in twin-screw extruders	**M. Giglio**
9	Carbon nanoparticles at liquid interface: a preliminary investigation with pendant drop techniques	**R. Griffo**
10	Miniaturization of the fouling of whey proteins by microfluidics	**M. Grostete**
11	Numerical modeling of the rheology of industrially relevant colloidal depletion gels	**N. Kolezakis**
12	Industrial bread enriched with citrus fiber: rheological properties of doughs	**F. R. Lupi**
13	Suspensions of porous silica particles in PEG: a preliminary investigation	**H. Nassiri**
14	Numerical simulation of platelet aggregation in microfluidics	**M. Nouman**
15	Interfacial shear rheology as a tool to investigate the intermolecular structure of binary surfactant mixtures at the surface of flotation solutions	**O. Oikonomidou**
16	Agarose low-gelling temperature: correlation between rheological proprieties and spinnability	**S. Pettineo**
17	Morphogenerators in bacterial immobilization for advanced probiotics	**S. Rehmat**
18	Numerical simulations of non-Newtonian fluids in spray drying process: particles analysis and characterization	**F. Vallefuoco**
19	Comparative analysis of the rheology of biofuels and their mixtures with fossil fuels for maritime applications	**M. Zabatta**