

IWEAYR18

Program Overview

	24	25		26		27
8:20		Registration		Poster preparation		Free discussion
9:00		Opening		Poster Presentation 8:50 – 11:20		
		Long Oral Presentation A L01 - L06 9:10-10:22				
10:00		Break				
		Long Oral Presentation B L07 - L12 10:40-11:52				
11:00				Faculty Activity Student Activity		
12:00		Lunch				
13:00		Short Oral Presentation A S01 - S16 13:00-14:04				
14:00		Break				
15:00		Short Oral Presentation B S17 - S36 14:24-15:44				
16:00		Student Check-in (Regular) & Registration (All Students)	Faculty Check-in	Student Check-in (A-PRCR attendees)	<div>Group presentation</div> Banquet 16:00-18:30	
17:00						
18:00	Student Activity	Faculty Activity	Student Activity	Bus 18:30-19:15		
19:00				Fire works 19:45-20:30		
20:00				Move to hotels		
21:00						

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Committee

✧ Chair

Prof. Hiroshi Suzuki (Kobe University)

✧ Members

Prof. Tadashi Inoue (Osaka University)

Prof. Osamu Urakawa (Osaka University)

Prof. Yuichi Masubuchi (Nagoya University)

Prof. Takashi Taniguchi (Kyoto University)

Prof. Junichi Horinaka (Kyoto University)

Prof. Yumi Matsumiya (Osaka University/Kyoto University)

Prof. Kohei Ohie (Nagoya University)

✧ Secretary

Prof. Yoshiyuki Komoda (Kobe University)

Prof. Ruri Hidema (Nagoya University)

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Chair persons

Long Oral Presentation A

9:10 – 10:22	L01 ~ L06	Prof. Sijun Liu Shanghai Jiao Tong University	Prof. Tongsai Jamnongkan Kasetsart University
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Long Oral Presentation B

10:40 – 11:52	L07 ~ L12	Prof. Quan Chen Chinese Academy of Sciences	Prof. Takeshi Sato Kanazawa University
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Short Oral Presentation A

13:00 – 14:04	S01 ~ S16	Prof. Park Jun Dong Sookmyung Women's University	Prof. Jaewook Nam Seoul National University
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Short Oral Presentation B

14:30 – 15:50	S17 ~ S36	Prof. Lee Doojin Chonnam National University	Prof. Atsushi Matsumoto University of Fukui
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Long Oral Presentations

	Time	Title	Speaker (Affiliation)
L01	9:10	SAOS using only 2 mg of sample and filament stretching to the next level	Prof. Gengxin Liu (Donghua University, China)
L02	9:22	Rheological characterization of thermodynamically miscible fluids by Wet Capillary Thinning (WCT)	Ashhar Hussain (Dong-A University, Korea)
L03	9:34	Extensional rheology on wet-spinning of tempo-oxidized cellulose nanofiber	Gyeong Min Choi (Dong-A University, Korea)
L04	9:46	Assessing Dispersion in Electrode Slurries Based on Sequence of Physical Processes (SPP) Analysis	Hyo-Jeong Lee (Seoul National University, Korea)
L05	9:58	Nonlinear rheology of stress-controlled rheometers: Large Amplitude Oscillatory Shear	Jehyeok Choi (Kungpook National University, Korea)
L06	10:10	Microchannel network flow optimization method using electric circuit analogy	Jeongwook Lim (Seoul National University, Korea)
	10:22	break (18min)	
L07	10:40	Pusatile shear-thinning flow with PINNs	Junwon Son (Seoul National University, Korea)
L08	10:52	Structure and rheology of mechanical interlocked polymer networks	Lin Cheng (Shanghai Jiao Tong University, China)
L09	11:04	Dynamic Rheological Behavior of Diels-Alder Crosslinked Cellulose Nanofiber/Polyurethane Composites: Molecular Engineering for Wide-Temperature Adaptive Materials	Qingyu Liao (Shanghai Jiao Tong University, China)
L10	11:16	Optimizing soft glassy rheology model with machine learning: From measurement to SPH simulation analysis	Soo Hyung Lee (Seoul National University, Korea)
L11	11:28	Construction of Viscous/Elastic Stress Space Based on Fourier Coefficients and its Application in Machine Learning Modeling	Zhou Ziyu (Shanghai Jiao Tong University, China)
L12	11:40	Brill Transition and Crystallization Morphology Evolution of Polyamide 1012 and Its copolymers.	Prof. Xia Dong (Chinese Academy of Sciences, China)

Short Oral Presentations

	Time	Title	Speaker (Affiliation)
S01	13:00	Swellability of polymer gels in mixed solvents characterized by rheological techniques	Prof. Jian Tang (Chinese Academy of Sciences, China)
S02	13:04	Improved hardness of the scalpel blade for elephant operations, coated with TiN using the sputtering technique	Prof. P. Pungboon Pansila (Kasetsart University, Thailand)
S03	13:08	Antibacterial nanofiber mats based on biopolymers for wound dressing applications	Prof. Tongchai Jamnongkan (Kasetsart University, Thailand)
S04	13:12	Optimization of Continuous Binder Solution Mixing Process	Chae-hee Kim (Gyeongsang National University, Korea)
S05	13:16	Stress decomposition of Alginate hydrogels under Large Amplitude Oscillatory Shear	Changyao Liu (Shanghai Jiao Tong University, China)
S06	13:20	Investigate the Microstructure of Battery Slurry under Extensional Flow	Dohye Park (Seoul National University, Korea)
S07	13:24	Multilength dynamics of polymerized ionic liquids with various cations/anions	Gang Liu (Chinese Academy of Sciences, China)
S08	13:28	Dielectric Relaxation in Styrene-Isoprene-Styrene Triblock Elastomer with Associative Groups on the Isoprene block	Hongbing Chen (Chinese Academy of Sciences, China)
S09	13:32	Mesh Filtration Effects on the Rheology and Dispersion of Battery Anode Slurries in a Closed-Loop System	Sanghyeok Seo (Seoul National University, Korea)
S10	13:36	Mechanisms of Discontinuous Shear Thickening in Nanoparticle/Polymer Composites	Shuo Qi (Shanghai Jiao Tong University, China)
S11	13:40	Polyethylene-based Elastomer for Photovoltaic Encapsulation	Wang Shi-Rong (Chinese Academy of Sciences, China)
S12	13:44	Early detection of pore clogging in microfluidic systems with 3D convolutional neural network	Woobin Yi (Seoul National University, Korea)
S13	13:48	The Reinforcement Mechanism of Polymer Nanocomposites in Molten and Rubbery States: The Interaction Difference.	Yadong Lu (Shanghai Jiao Tong University, China)
S14	13:52	Rheological study of topology-transformable macromolecular [2]rotaxanes	Yu Zhu (Shanghai Jiao Tong University, China)
S15	13:56	Nonlinear Rheological Properties of Hydrophobically Modified Ethoxylated Urethane Aqueous Solutions	Yuxuan Pei (Chinese Academy of Sciences, China)
S16	14:00	The Molecular Mechanism of β Transition: Local Rotational Motion under Confined Conditions	Zhu Wen-Rui (Chinese Academy of Sciences, China)

Short Oral & Poster Presentations

	Time	Title	Speaker (Affiliation)
S17	14:30	Mechanical properties of double network with interpenetrating polystyrene networks	Atsuya Kashiwagi (Nagoya Institute of Technology, Japan)
S18	14:34	Evaluation of Dual-Curing Initiators Using Real-Time FT-IR	Ayase Yokota (Kanazawa University, Japan)
S19	14:38	A novel sunscreen design with dynamic homogenization of UV filters	Chaeyeon Yoo (Sookmyung Women's University, Korea)
S20	14:42	Mechanical properties of polyurethane elastomers with various hard segment contents	Hiroaki Murase (Nagoya Institute of Technology, Japan)
S21	14:46	Rheologically guided preparation of eco-friendly non-isocyanate polyurethane foam reinforced with cellulose nanocrystals for thermal insulation, flame retardancy, and sustainable utilization	Huimin Ren (Shanghai Jiao Tong University, China)
S22	14:50	Numerical simulation to study the drying behavior of colloid-polymer mixtures	Hyunjeong An (Hankyong National University, Korea)
S23	14:54	Wet Capillary Thinning (WCT) method for analyzing blood flow behavior in a microchannel	Hyunsoo Kim (Dong-A University, Korea)
S24	14:58	Rheological Behaviors of Dry Electrode Dough	Jiwon Woo (Sookmyung Women's University, Korea)
S25	15:02	Effects of density contrast and inertia on dynamics of a droplet in shear flow	Jiyun Jeong (Hankyong National University, Korea)
S26	15:06	A numerical algorithm for inferring residence time distribution without assumption of any model	Jungmin Tak (Kungpook National University, Korea)
S27	15:10	Monte Carlo simulations of crystallization in polyethylene nanocomposites: Effect of nanofiller shape	Kanokporn Rueangsri (Yamagata University, Japan)
S28	15:14	Innovative eco-friendly filaments: Carboxymethyl cellulose reinforced with polylactic acid for sustainable 3D printing development	Kawisara Sirichaicharoenkol (Kasetsart University, Thailand)
S29	15:18	Evaluation of Dual Curing Initiators by Photo Rheometer	Shinnosuke Nagasaki (Kanazawa University, Japan)
S30	15:22	Preparation and Properties of Polylactic Acid/Semi-Aromatic Polyester Polycarbonate Propylene Copolymer Biaxially Oriented Films	Shuna Gao (Shanghai Jiao Tong University, China)
S31	15:26	Preparation and mechanical properties of composite materials containing of konjac glucomannan sheet	Shunya Nagano (Nagoya Institute of Technology, Japan)

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S32	15:30	Production of direct bonding specimens of metal and resin by the fused filament fabrication (FFF) method	Soma Kojitani (Kanazawa University, Japan)
S33	15:34	Sensory Prediction Model of Greek Yogurt by integrating Rheology and Machine Learning	So Jeong Oh (Sookmyung Women's University, Korea)
S34	15:38	Coupled map lattice for whipped cream: A novel approach to characterize dairy processing based on chaos theory	Takumu Yodokawa (Yamagata University, Japan)
S35	15:42	Viscoelastic-tuned single-wall carbon nanotubes for high-performance silicon-based lithium-ion batteries	Yangyul Ju (Chonnam National University, Korea)
S36	15:46	Effect of Particle Shape on the Rheology of Battery Slurry: A Theoretical Perspective	Yu Jin Jeong (Dong-A University, Korea)

Poster Presentations

	Title	Speaker (Affiliation)
P01	Reinforcement Effect of Microgel/Silica Composite System	Arisa Ishizu (Osaka University, Japan)
P02	Numerical study on the coating process of lithium-ion battery slurry using the finite element method	Chaemin Song (Hankyong National University, Korea)
P03	Inferring Stokes Flows using Physics Informed Machine Learning	Daiki Fujita (Kyoto University, Japan)
P04	Data-Driven Modeling of Hydrogel Ink Printability Based on Rheological Properties	Eun Hui Jeong (Sookmyung Women's University, Korea)
P05	Rheological Properties and Drying Rates of Ethanol-Added Anode Slurry for Lithium-Ion Batteries	Eun Jo Kim (Pusan National University, Korea)
P06	DLVO stability by excluded volume and orientation of tactoid in graphene oxide dispersion	Eun Young Jeon (Dong-A University, Korea)
P07	Crack-Free High-Areal Capacity Electrodes: Design and Implementation Using CNT	Garim Kim (Chonnam National University, Korea)
P08	Polymerized Ionic-Liquid-Based Gels: Swelling Characteristics and Ionic Conductivity	Haruki Izutsu (Osaka University, Japan)
P09	Time-Stress superposition on the elongation creep behavior of high-density polyethylene	Haruki Kuroyanagi (Nagoya University, Japan)
P10	Preparation of highly concentrated agarose gels by high-temperature and high-pressure treatment and their mechanical and thermal properties	Haruna Oshita (Kyoto University, Japan)
P11	Direct observation of polystyrene microspheres in a diamond anvil cell (DAC) under high pressure and ambient temperature	Haruto Moriguchi (Nagoya University, Japan)
P12	Rheological characterization and drying behavior of battery slurries	Hyuga Miyamura (Kanazawa University, Japan)
P13	Examining storge effect on the dispersion and rheology of all-solid-state battery slurries	Hyunjoon Jung (Seoul National University, Korea)
P14	Rheological and Mechanical Properties of Catalyst-free Polyethylene Terephthalate (PET) Vitrimers and Silica Nanocomposites for Upcycling	Ji Seok Jung (Pusan National University, Korea)
P15	Numerical study on the filtration of lithium-ion battery slurry using the finite element method	Jihun Kim (Hankyong National University, Korea)
P16	Hyper-elastic behavior of soft-tissue like microgels in two-phase converging microchannel flow	Ju Han Yang (Dong-A University, Korea)
P17	Preparation of Thermally Stable and Flame-Retardant Carbon Fiber Reinforced Composites	Junyeong Jeong (Chonnam National University, Korea)

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P18	Influence of Ionic Liquids on the Performance of PVC Gel Actuators	Kazuki Takahashi (Osaka University, Japan)
P19	Visualization of flow instabilities in a slot-die coating process	Keigo Sato (Kanazawa University, Japan)
P20	Multiaxial Deformation Analysis of Mechanical Properties of CNT-Based Soft Nanocomposites	Keni Ma (Kyoto University, Japan)
P21	Effects of ionic liquid addition on the physical properties in phase-separated vitrimer-like materials composed of quaternized pyridine groups	Koki Yamamoto (Nagoya Institute of Technology, Japan)
P22	Measurement of Phase Separation Processes for Structural Control of Polymer Separation Membranes	Kosei Kita (Kanazawa University, Japan)
P23	Cancelled	
P24	Local viscoelasticity of polymer solutions measured with optical tweezers	Koshiro Nakamura (Nagoya University, Japan)
P25	Impact of L-Quebrachitol Impurity on End-Group Cluster Formation in Natural Rubber	Kosuke Morishita (Kyoto University, Japan)
P26	Stability Evaluation of Cathode Slurry for Lithium-Ion Batteries Using an Oscillation Viscometer	Kotaro Fujita (Kobe University, Japan)
P27	Rheological properties of concentrated solutions of dextran/pullulan blends	Mahiro Toda (Kyoto University, Japan)
P28	Study of counterion condensation in polyelectrolyte solutions using viscometric analysis	Marina Ikeda (University of Fukui, Japan)
P29	Effect of temperature on the bond exchange dynamics of vitrimers	Mayu Nakanowatari (Yamagata University, Japan)
P30	The Relationship Between Rheological properties and Morphology in Biodegradable Polymer Blends	Min Chan Kim (Pusan National University, Korea)
P31	Optimizing the Carbon Nanotubes (CNTs) Dispersion Conditions to Enhance Silicon-Based Lithium-Ion Battery Performance	Mire Cha (Chonnam National University, Korea)
P32	Stress Relaxation Analysis of Liquid Marbles Using Lycopodium Spores	Mitsuki Tokuno (Nagoya University, Japan)
P33	Effect of PEG entanglement on phase separation behavior of ionic gels	Nan Li (Shanghai Jiao Tong University, China)
P34	Molecular simulation of random copolymer nanofiber	Nichapat Suksri (Suranaree University of Technology, Thailand)
P35	Rheological study of ABA triblock polymers with A domains rich in hydrogen bonds	Peitong Li (Chinese Academy of Sciences, China)

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P36	Effects of curing conditions on relaxation behavior in photocurable vitrimer-like elastomers	Ryota Ohnishi (Nagoya Institute of Technology, Japan)
P37	Spread Characteristics of Latex Suspension Droplets on a Liquid Surface	Ryotaro Oka (Kobe University, Japan)
P38	Dispersibility and internal structure of high-solid acetylene black slurries for lithium-ion batteries.	Ryusei Soyama (Kobe University, Japan)
P39	Turbulent production by polymers observed in two-dimensional turbulent flow	Seita Suzuki (Nagoya University, Japan)
P40	Investigation of the Molecular Origins in the Nonlinear Rheological Behavior of Unentangled Polymers	Taichi Hayashi (Kyoto University, Japan)
P41	Anomalous Deformation and Shape Evolution of a Circular Defect in Liquid Crystal Elastomer Membranes	Takumi Kato (Kyoto University, Japan)
P42	Viscosity growth function of CTAB/NaSal wormlike micelle solutions with different concentrations ratios under high shear rate	Takuya Shirota (Nagoya University, Japan)
P43	Crystallization kinetics of PPTA in H ₂ SO ₄ solution	Tianyu Jia (Chinese Academy of Sciences, China)
P44	Correlating Crack Propagation Paths with Strain/Stress Fields in Elastomers	Tomoki Mishima (Kyoto University, Japan)
P45	Deformation of Emulsions and Bubbles Jammed in a Microfluidic Device	Tomoya Adachi (Kobe University, Japan)
P46	Rheo-impedance analysis of the conductive network structure formed in LiB cathode slurry	Toshiki Tanisada (Kobe University, Japan)
P47	Linear and Nonlinear Rheological Study of PEG/ α -CD Polyrotaxane Solution	Yi Huang (Shanghai Jiao Tong University, China)
P48	Rheological and Sedimentation Characteristics of Microcapsule Suspensions with Surfactants	Yugo Nakai (Kobe University, Japan)
P49	Synthesis and rheological properties of bond exchangeable ionone with nano-aggregated structure of quaternized pyridine bonds	Yusuke Sasaki (Nagoya Institute of Technology, Japan)
P50	Dynamics of Pseudorotaxan Consisting of Cyclodextrin and Polyacrylate	Yuta Kashino (Osaka University, Japan)
P51	Analysis of Constraint Release Relaxation in Entangled Linear Polymethacrylate Mixtures with Different Chain Lengths	Yuya Tomiura (Kyoto University, Japan)