AWPP2025 Program

Monday, December 1, 2025

Welcoming	Kanazawa New Grand Hotel
17:00-18:00	Registration
18:00-20:00	Welcome Party

Tuesday, December 2, 2025

Opening Ceremony		Hall
9:00-9:10	Opening Remarks and Welcome Speech Prof. Kentaro Taki (Kanazawa University)	
Plenary Lecture 1	Chair: Prof. Hiroshi Ito	Hall
9:10-10:00	Customizable 3D-Printed Biodegradable Implants: A New Frontier in Targeted Orthopedic Treatment Prof. Shih-Jung Liu (Chang Gung University)	
10:00-10:15	Coffee Break	
	Session 1A Room A	Session 1B Room B
	Chair: Yuya Sasai	Chair: Takumitsu Kida
10:15-10:45	Keynote 1 AI Driven Frontiers in Polymer Processing: Multimodal Deep Learning, Autonomous Experimentation, and Large Language Models Dr. Shun Muroga	Keynote 2 Regeneration of Polyolefin Structure towards the Next Generation of Plastic Circular Economy Dr. Patchiya Phanthong
10:45-11:05	A-101 Transfer Learning to Predict Injection Molded Part Quality Across Machines Ming-Shyan Huang	B-101 Mechanistic Insights into Strength Evolution of CMF/PP Composite Materials Sho Muneta

11:05-11:25	A-102 Influence of Secondary Weld Lines on Appearance in Injection Molded Filler-Containing Materials Atsushi Mizutani	B-102 Coextrusion multilayered films of polypropylene homo- and copolymers Masataka Sugimoto
11:25-11:45	A-103 Injection Molding of Plastic Manifolds Using Ice Core Technology Chung-Chih Lin	B-103 Liquid-Crystalline Polymer (LCP) Alloy Design: From In-Situ Polymerization to Reactive Blending with Poly(Phenylene Ether) (PPE) Gosuke Washino
11:45-13:00	Lunch	
Plenary Lecture 2	Chair: Prof.Takushi Saito	Hall
13:00-13:50	Slurry Coating for Battery Electrode Manufacturing Prof. Jaewook Nam (Seoul National University)	
13:50-14:00	Coffee Break	
	Session 2A Room A	Session 2B Room B
	Chair: Kenji Yoshimoto	Chair: Asae Ito
14:00-14:15	Student Oral A1 Effect of Heat Generation Behavior on CFRTP-Steel Joint Performance in Induction Heating Direct Joining Jiaxing Ren	Student Oral B1 Modification of Dimensional Changes for Poly(lactic acid) by Addition of Polytetrafluoroethylene Dai Hoang-Giang Vo
14:15-14:30	Student Oral A2 Effects of Surface Treatments on the Water and Moisture Resistance in Metal-Polymer Direct Joints Mei Jiajie	Student Oral B2 Improving Heat Resistance and Transparency of Polystyrene-Based Blends for Food Container Applications Kota Suto
14:30-14:45	Student Oral A3 Drug-Eluting Nano-Hydroxyapatite Reinforced Resorbable Nanofibrous Scaffolds for Pelvic Floor Repair: in vitro and in vivo Evaluation Yihua Kuo	Student Oral B3 Fabrication of Gradient Structure for Polystyrene with Dibutyl Phthalate Thi Kim Thoa Huynh

14:45-15:00	Student Oral A4 Modification of Rheological Properties for Biodegradable Polyester Nantinee Tassakarn	Student Oral B4 Analyzing Microstructure of LIB Anode Slurry with Microfluidic Extensional Rheological Methods Jeongwook Lim	
15:00-15:15	Student Oral A5 Deformation Behavior of Semi-Crystalline Polymer Conducted Heat-Elongation under High-Pressure CO_2 Mamoru Endo	Student Oral B5 Simulation for Particle Dynamics using 3D Immersed Lattice Boltzmann Method Gwanhee Jeong	
15:15-15:30	Student Oral A6 Fabrication and Characterization of Transparent Quartz Glass by using 3D Printing with High-Filler Silica Composite Materials Kazuma Kurosawa	Student Oral B6 Effect of Length of Cellulose Nanofibers on Tensile Strength of 3D-Printed Continuous Natural Fiber Reinforced Composites Yuichiro Handa	
15:30-15:45	Student Oral A7 Research on the Mechanical Properties of Same-Polymer-Family Long-Fiber-Reinforced Thermoplastic Composites Keita Nishizono	Break	
15:45-15:50	Coffee Break		
15:50-16:30	Poster Session (Odd)		Poster Session Room
16:30-17:10	Poster Session (Even)		Poster Session Room
17:10-18:00	Break		
18:00-20:00	Banquet		Kanazawa Castle

Wednesday, December 3, 2025

Plenary Lecture 3	Chair: Prof. Takeshi Kikutani	Hall
9:00-9:50	Mechanical Properties of Thermoplastic Vulcanizate-Based Plastic/Rubber Blends Prof. Toshiaki Ougizawa (Institute of Science Tokyo)	
9:50-10:00	Coffee Break	
	Session 3A Room A	Session 3B Room B
	Chair: Masayuki Yamaguchi	Chair: Yusuke Kajihara
10:00-10:30	Keynote 3 Enhancement of Mechanical Properties through Flow Control of Molten Resin Reservoir Prof. Hiroki Uchiyama	Keynote 4 Twisted Polyimide Aerogel Fiber Bundles with Enhanced Strength, Superior Flexibility and Thermal Insulation for Extreme Environments Prof. Hani Naguib
10:30-10:50	A-201 Surrogate Model of Fluid Analysis for Twin-Screw Extruder Yuya Sasai	B-201 Compression Properties of Carbon Fibers Wataru Takarada
10:50-11:10	A-202 Numerical Simulation of Capillary Extrudate Swell of Vulcanized SBR Rubber Composites with Wall Slip Effect Shuichi Tanoue	B-202 Effect of Glycol Lignin Addition on the Mechanical Properties of in-situ Polymerizable Thermoplastic Epoxy / Carbon Fiber Reinforced Composites Wataru Okumura
11:10-11:30	A-203 Rubber Nanocomposites Fabricated by Mixing under High-Pressure CO_2 Shin-ichi Kihara	B-203 Review on Developments in Twin Screw Extrusion Technology to Bridge to SDGs in the Polymer Industry Tadamoto Sakai
11:30-12:40	Lunch	
Plenary Lecture 4	Chair: Prof. Kentaro Taki	Hall
12:40-13:30	Continuous Catalyst Cracking in Twin-Screw Extrusion: A New Approach to Upcycling at Scale of Polyolefins Prof. Joao Maia (Case Western Reserve University)	
13:30-13:40	Coffee Break	

	Session 4A Room A	Session 4B Room B
	Chair: Yusuke Hiejima	Chair: Wataru Takarada
13:40-14:10	Keynote 5 Molecular Simulations on Semicrystalline Polymers: A Virtual Microscopy Approach to Crystallization, Entanglement, and Mechanical Behavior Dr. Mohammed Althaf Hussain	Keynote 6 In-line Near Infrared Spectroscopy for Quantitative Monitoring of Composition during Polymer Processing Dr. Yuta Hikima
14:10-14:30	A-204 Delamination of Metal–Polymer Composites Using Foaming Technology for Material Recycling Rajesh Kumar Sharma	B-204 Kinetic Monte Carlo Prediction of Molecular Weight Distribution in Chain-Extended Poly(lactic acid) under Thermal Degradation Itsuki Yoshikawa
14:30-14:50	A-205 Re-joining Strength Evaluation of Polymer-Metal Direct Joining Shuohan Wang	B-205 Theoretical Study on Product Behavior using Quantum Chemical Computation of Plastic Pyrolysis Mechanisms in a Twin-Screw Extruder Ryusuke Mitani
14:50-15:10	A-206 Relationship between Thermal Resistance and Adhesive Force at Contact Surface of Dissimilar Materials Takushi Saito	B-206 In-situ Observation of Enzymatic Degradation of Polyester Thin Films Hisao Matsuno
15:10-15:30	A-207 Synthesis and Characteristics of Polymer Gels with High Adhesion to Polytetrafluoroethylene Jin Gong	B-207 Application and Validation of an Anisotropy-Based Viscosity Model for Compression Molding of Laminated Composites Daisuke Itakura
15:30-15:50	Coffee Break	

	Session 5A Room A	Session 5B Room B
	Chair: Takeshi Sato	Chair: Itsuki Yoshikawa
15:50-16:20	Keynote 7 Accelerated Curing of One-Component Moisture-Curing Polyurethane Adhesive using Microcrystalline Cellulose and Sawdust Additions Prof. G.D. Janaki Ram	Keynote8 Sustainable Polymer Packaging Materials based on Ternary Polymer Blends with High Barrier Prof. Abdellah Ajji
16:20-16:40	A-208 Rheological Behaviour and Gelatinization Dynamics of Corn Starch under Controlled Hydration Priyanka Sharma	B-208 Analysis and Modelling of Temperature and Stress Dependence of Tensile Creep Phenomena in Different Types of Polypropylenes Yasuhiko Otsuki
16:40-17:00	A-209 Roll-to-Roll Coating Machine for Perovskite Solar Cells Wataru Shimoji	B-209 Coarse-Grained Elongation Simulations for Crystalline Polymer Solid: Structural Deformation and Its Relation to Mechanical Behavior Takashi Uneyama
17:00-17:20	A-210 Cradle-to-gate Carbon Footprint Evaluation of Stainless-Steel Manufacturing via Injection Moulding (IM) and 3D Printing Techniques Kanjanawadee Singkronart	B-210 Structural Analysis of Polyurethane Elastomers with Various Polyols Go Matsuba
17:20-17:40	A-211 Tailoring Binder Formulations to Enhance the Printability of 316L Stainless Steel Filaments in Metal 3D Printing Bongkot Hararak	B-211 Molecular Orientation and Mechanical Properties of Biomass-Derived Aliphatic Polyamide by High-Pressure and Hot Compression Molding Keisuke Ura
Closing Ceremony		Hall
17:40-17:50	Closing Speech Prof. Kentaro Taki (Kanazawa University)	

Thursday, December 4, 2025

Labo Tour **It was canceled**		***
10:00-12:00	Lab Tour (Kanazawa University)	
Excursion **It was canceled**		
13:00-17:00	Excursion	

*The lab tour and excursion have been canceled due to circumstances.