	Sunday 15 June 2025
15.00-17.00	Registration
17.00-20.30	Welcome party

	Monday 16 June 2025								
08:30-08:45	**Welcome ceremony**								
08:45-09:45	**BL** (Tadafumi Adhisciri), Tohoku University, TBA								
09:45-10:45	**PL1** (Brian A. Korgel), University of Texas at Austin, TBA								
10:45-11:00	**coffee break**								
	Parallel session								
	Thermodynamic		**Separation**		**Process Intensification**		**Polymer**		**Natural Products**
11:00-11:30	INL1 (Chieh-Ming Hsieh), National Central University, *Prediction of Drug Solubility in Supercritical Carbon Dioxide by Machine Learning Methods*	11.00-11.30	KN1(Jerry W. King), Critical Fluid Symposia, *Converging Pressurized Carbon Dioxide and Water into Green Processing Platforms*	11.00-11.30	KN3 (Volkmar Steinberg), Uhde High Pressure Technolgies GmbH, *Scale-up of SCF High-Pressure Processes*	11.00-11.30	KN8 (Erdogan Kiran), Virginia Tech, *Foaming of Polymers with Physical Blowing Agents: Industry and University Perspectives*	11.00-11.30	KN12 (Owen Catchpole), Chief Engineer at Callaghan Innovation, *Gas-Expanded Liquid Extraction of Marine Biomass*
11:30-11:50	ORL1 (Attila), Budapest University of Technology and Economics, *The structure and origin of Widom-anomalies*	11:30-12:00	KN2 (Youn-Woo Lee), Seoul National University, *TBA*	11:30-12:00	KN4 (Shogo Suzuki), ALBION Co., Ltd., *Commercialization of Natural Plant Oil as a Cosmetic Ingredient using Liquefied Dimethyl Ether Extraction*	11:30-12:00	KN9 (Steven Howdle), University of Nottingham, TBA	11:30-12:00	KN13 (Marleny Saldana), University of Alberta, *TBA*
11:50-12:10	ORL2 (Cara E.Schwarz), Stellenbosch University, *Separation of Alkanes and Alcohols with Supercritical CO2: From Complex Phase Behavior to Pilot Plant Investigations*	12:00-12:10	*10 min early break*						
12:10-13:10	**Lunch**								
13:10-13:40	INL2 (Ardila Hayu Tiwi), National Taipei University of Technology, *A novel deep eutectic solvent for lithium extraction from spent lithium ion batteries (LIBs) with or without supercritical carbon dioxide*	13:10-13:40	INL3 (Hongshik Lee), Korea Institute of Industrial Technology, *Process Integration of Supercritical Fluid Extraction for Valorization of Waste Materials*	13:10-13:40	KN5 (Stéphane Sarrade), Director of the Energy Programs Division, *TBA*	13:10-13:40	KN10 (Ling Zhao), East China University of Science and Technology, *Efficient Preparation of High-Performance Microcellular Polymer materials by Supercritical Fluid Foaming*	13:10-13:40	KN14 (Sara Spilimbergo), University of Padova, *Supercritical CO2: A Non-Thermal Solution for Food Preservation, Medical Sterilization, and High-Quality Drying*
13:40-14:00	ORL3 (Hiroyuki Matsuda), Nihon University, *Vapor-liquid equilibria and excess molar enthalpies of the binary system carbon dioxide + ethyl lactate*	13:40-14:00	ORL10 (José Manuel del Valle), Pontificia Universidad Católica de Chile, *Supercritical extraction of suspensions: Application to plant flavonoids using aqueous-ethanol-modified CO2*	13:40-14:10	KN6 (Bao Xiaqing), R&D Manager at JOPE Technology Co., LTD, *TBA*	13:40-14:10	KN11 (Irina Smirnova), Hamburg University of Technology, *Batch- to continuous process transition in aerogel production using supercritical fluids*	13:40-14:10	INL4 (Ozan N. Cifci), University of Nebraska, *TBA*
14:00-14:20	ORL4 (Marton Korosi), BME, *Determination of melting point – depression: a comparison of two different measurement methods*	14:00-14:20	ORL11 (Kiran Khurshid), University of Alberta, *Hydrolysis of Waste Cardboard Using Pressurized Fluid Technology*						
14:20-14:40	ORL5 (Guo-Xiang Wang),University of North Texas, *Ultra-enhanced Pipeline Transport at Supercritical Conditions*	14:20-14:40	ORL12 (Sabrinna), Sungkyunkwan University, *Removal of volatile organic compounds (VOCs) from automotive waste by using supercritical carbon dioxide (scCO2)*	14:10-14:40	KN7 (James Tunstall), CORE separation, *TBA*	14:10-14:30	ORL21 (Xuelin Zhang), East China University of Science and Technology, *Curing and foaming behavior of polyvinyl chloride/epoxy resin blends in supercritical carbon dioxide*	14:10-14:40	INL5 (Artiwan Shoptiruk), Chulalongkorn University, *TBA*
14:40-15:00	ORL6 (Nathalie Piche), Ruhr University Bochum, *Liquid or supercritical CO2 as coolant in drilling applications*	14:40-15:00	ORL13 (Shuhao Zhang), China University of Petroleum, *Synergistic Effects of Foam-Assisted Mobility Control in Enhancing Miscibility Reduction during Supercritical CO_2 Flooding*	14:40-15:00	ORL17 (Stefano Barbini), NATEX Prozesstechnologie GesmbH, *Stretching the limits of industrial CO2 extraction processes*	14:30-14:50	ORL22 (Raquel Viveiros), NOVA School of Science & Technology, *Green design of antimicrobial cellulose for wound healing*		

15:00-16:20	**Coffee break and Poster session**									
16:20-16:40	ORL7 (Laura M. Almara), University of North Texas, *Anomalous Behavior from Subcritical to Supercritical States*	16:20-16:40	ORL14 (Stefan Pollak), Ruhr University Bochum, *High-pressure technology in geology*	16:20-16:40	*ORL18 (Ji Feng), University Of Washington, Supercritical CO2 Continuous Flow Synthesis of Metal-Organic Frameworks*	16:20-16:40	ORL23 (Dongdong Hu), East China University of Science and Technology, *Green preparation of biodegradable poly(butylene succinate-co-butylene adipate) based foams using supercritical fluid foaming*	16:20-16:40	ORL26 (José Manuel del Valle), Pontificia Universidad Católica de Chile, *1978's Essen symposium jump started our research field on supercritical fluid applications*
16:40-17:00	ORL8 (Laura Gohlich), Ruhr University Bochum, *Behavior of liquid carbon dioxide in a non-equilibrium state below its triple point pressure*	16:40-17:00	ORL15 (Hanin Samara), Clausthal University of Technology, *The influence of exposure to supercritical CO2 on the storage capacity and integrity of caprocks*	16:40-17:00	ORL19 (Wahyudiono), Institut Teknologi Sepuluh Nopember, *Alkaline subcritical water for microcrystalline cellulose generation from wood waste sawdust*	16:40-17:00	ORL24 (Xingyu. Jia), East China University of Science and Technology, *Density Gradient Structure Foams Prepared by Novel Two-step Foaming Strategy: Performance, Simulation and Optimization*	16:40-17:00	ORL27 (Ana N. Nunes), iBET, *Process intensification for phycoerythrin extraction from Phorphyridium cruentum using pressurized water: preliminary studies and process optimization*
17:00-17:20	ORL9 (Pietro Andrigo), Università degli Studi di Padova, *Designing Predictive Models for SC-CO_2 Solubility in Non-Thermal Food Processing*	17:00-17:20	ORL16 (Lukas Ehrlich), Ruhr University Bochum, *Improving the performance of geothermal systems through the development of filter technologies for the separation of heavy metals from geothermal water*	17:00-17:20	ORL20 (Dennis arigbe), Hamburg University of Technology, *AeroKinetics: modeling and optimization of a fixed bed aerogel supercritical drying process*	17:00-17:20	ORL25 (Luqman Umdagas), University of Bimringham, *Towards Sustainable PET Recycling: Insights into Neutral Hydrolysis and Process Optimisation*	17:00-17:20	ORL28 (Adane Tilahun G.), Technical University of Denmark, *Bioactive hydrolysate from supercritical CO2 defatted starfish: A comparatives study of subcritical water and enzymes hydrolysis*

	Tuesday 17 June 2025								
08:45-09:45	**PL2** (Buxing Han), Chinese Academy of Sciences, TBA								
09:45-10:45	**PL3** (Edward Lester), University of Nottingham, *Creating value through continuous hydrothermal/solvothermal reactions*								
10:45-11:00	coffee break								
	Parallel session								
	Hydrothermal & Solvothermal		**Pharmaceutical**		**Novel Materials**		**Reaction in Critical Fluids**		**Green Chemistry and Eng**
11:00-11:30	KN15 (Masahiro yoshimura), National Cheng Kung University, *Merits and Demerits of General Hydrothermal/Solvothermal Processing Using Autoclaves for Materials Production*	11:00-11:30	KN 19 (Elizabeth Badens), Aix Marseille University, *TBA*	11:00-11:30	KN21 (Shouhua Feng), Jilin University, *Hydrothermal disproportionation synthesis of atomic-scale p-n junctions with triple valence states*	11:00-11:30	KN25 (Zeljko Knez), University of Maribor, *Hydrothermal Processes for Recycling of Polymers*	11:00-11:30	KN28 (Richard Tilley), University of New South Wales, *TBA*
11:30-12:00	KN16 (Richard I. Walton), University of Warwick, *In Situ Neutron Diffraction of Hydrothermal Crystallisation for Understanding Synthesis of Precious-Metal Oxides for Electrocatalysis Applications*	11:30-11:50	ORL37 (Yusuke Shimoyama), Institute of Science Tokyo, *Supercritical CO2-mixed phase system for pharmaceutical cocrystal formation*	11:30-12:00	KN22 (Shu Yin), University of Tohoku, *Hydrothermal Synthesis of Vanadium Oxyphosphate Plate-like Pigment Particles with Excellent Pearlescent Effort*	11:30-12:00	KN26 (Bushra Al-Duri), The University of Birmingham, *Supercritical Water Hydrocracking of LD-polyethylene, Polypropylene and their Mixtures*	11:30-11:50	ORL58 (Peter W. Dunne), Trinity College Dublin, *DESIGN: Deep Eutectic Solvents for Inorganic Green Nanomaterials*
11:50-12:10	10 min early break	11:50-12:10	ORL38 (Carlos A García-González), University of Santiago de Compostela, *Sterilization of Biomaterials: A Vital Need in Biomedicine Solved with scCO2*	12:00-12:10	10 min early break	12:00-12:10	10 min early break	11:50-12:10	ORL59 (Hannah S. Mehringer), University of Konstanz, *Developing an Automated Platform for Optimizing Organic Reactions in Flow Based on Green Metrics*
12:10-13:10	**Lunch**								
13:10-13:40	KN17 (Lan Xiang), Tsinghua University, *Controllable synthesis of TiO2 from impurity-bearing TiOSO4 solution via hydrothermal hydrolysis-calcination route*	13:10-13:40	KN20 (Vivek Trivedi), University of Kent, *TBA*	13:10-13:40	KN23 (Yaping Zhao), Shanghai Jiao Tong University, *Supercritical CO2-Coupled Mechanochemistry: A Green and Scalable Strategy for Advanced Nanomaterial Synthesis*	13:10-13:40	KN27 (Mitsuru Sasaki), Kumamoto University, *Development of Horizontal Recycling Technology for Cotton/Polyester Blended Fabric Using Subcritical Water*	13:10-13:40	KN29 (Byoung-In Sang), *TBA*
13:40-14:10	ORL29 (Ji-Guang Li), National Institute for Materials Science, *Systematic hydrothermal synthesis of RE2(OH)4SO4·nH2O layered hydroxides for green preparation of RE2O2S (RE: rare-earth)*	13:40-14:10	ORL39 (Paolo Trucillo), University of Naples Federico II, *Drug Release in Curcumin-Loaded Polymeric Foams: A Modeling Approach*	13:40-14:10	KN24 (Shunsuke Asahina), JEOL Ltd, *Dynamic Observation of Redox Reactions Using an In Situ Scanning Electron Microscope*	13:40-14:10	ORL50 (V.D.B. Bonifacio), Instituto Superior Técnico, *Polyurea Dendrimers: Harnessing ScCO2 for Sustainable Nanotherapeutics*	13:40-14:10	INL8 (Taesung Kim), Sungkyunkwan University, *Evaluation of Particle Removal Efficiency Using Supercritical CO2 Integrating Physical and Chemical Cleaning with Surfactants*
14:10-14:20	*10 min break*					14:10-14:20	*10 min break*		
14:20-14:40	ORL30 (Shinji Iwamoto), Gunma University, *Formation mechanism of spherical mesoporous ZrO2 via thermal treatment of zirconium alkoxide in 1,4-butanediol*	14:20-14:40	ORL40 (David Piña), Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), *Highly homogeneous nanovesicles produced by DELOS-SUSP, a compressed fluid methodology. Application in pH-sensitive nanovesicles for DNA delivery.*	14:20-14:40	ORL43 (Ali Ubeyitogullari), University of Arkansas, *Upcycling rice processing byproducts into high-value nanoporous aerogels using supercritical carbon dioxide drying*	14:20-14:40	ORL51 (Makoto Akizuki), The University of Tokyo, *Two-stage flow reaction of α-pinene to p-cymene in sub- and supercritical water*	14:20-14:40	ORL60 (Mihael Irgolič), University of Maribor, *Green method for waste compact discs (CDs) recycling*
14:40-15:00	ORL31 (Kazuyuki Iwase), Tohoku University, *Supercritical hydrothermal synthesis of high entropy spinel oxide nanoparticles as electrocatalysts for oxygen evolution reactions*	14:40-15:00	ORL41 (Mohamad Baassiri), University of Limerick, *Supercritical-CO2 assisted methanol atomization for pharmaceutical spray drying applications: CFD modelling and real time characterization*	14:40-15:00	ORL44 (Petru Niga), RISE Research Institute of Sweden, *Surface passivation, loading, and coating of fine porous particles*	14:40-15:00	ORL52 (Armando T. Quitain), Kumamoto University, *CO2-Mediated Hydrothermal Liquefaction of Microalgae*	14:40-15:00	ORL61 (Alexandre CARELLA), CEA - ISEC, *Delamination process using supercritical CO2 for recycling end-of-life photovoltaic panels*
15:00-15:20	ORL32 (Tso-Fu Mark Chang), Institute of Science Tokyo, *Hydrothermal Synthesis of Multiferroic Ferrites Toward Photodegradation of Organic Dyes*	15:00-15:20	ORL42 (Ying-Chih Lu), National Taiwan University of Technology, *Preparation of pharmaceutical cocrystal using supercritical solvent cocrystallization process: case studies of pirfenidone-fumaric acid and p-toluenesulfonamide-sulfathiazole*	15:00-15:20	ORL45 (Deirdre A. McAdams), Trinity College Dublin, *Seaweed-Derived Carbon Dots for Green Energy Applications*	15:00-15:20	ORL53 (Chao Yu), China University of Petroleum, *A noval strategy for improving scCO2 drive recovery by using surfactant compound system*	15:00-15:20	ORL62 (Christelle CRAMPON), Aix-Marseille University, *Pretreatment of oils by supercritical CO2 fractionation for biofuel production*

15:20-16:20	**Coffee break and Poster session**								
16:20-16:50	KN18 (Masaru Watanabe), Tohoku University, TBA	16:20-16:50		16:20-16:50	INL6 (Ken Yoshida), Tokushima University, *Molecular Assembly Pathways of Corrosion-Protective Aliphatic Amine Films on Copper: From Individual Molecules to Surface Aggregates*	16:20-16:50	INL7 (Taejoon Yoon), Seoul National University, *TBA*	16:20-16:50	INL9 (Siti Machmudah), Institut Teknologi Sepuluh Nopember, *Liposomal delivery systems: preparation and encapsulation of phytochemical compounds under pressurized carbon dioxide - ultrasonic environments*
16:50-17:10	ORL33 (D. Alonso Cerron-Infantes), University of Konstanz, *Hydrothermal depolymerization of commercial standard polyesters*	16:50-17:10		16:50-17:10	ORL46 (Anith Dzhanxinah), Sungkyunkwan University, *Bi-Sn-Sb anodes with ultrahigh volumetric capacity for advanced lithium storage*	16:50-17:10	ORL54 (Ritesh Ghorpade), University of Central Florida, *Micro-PIV analysis of CO2 at near-critical and supercritical thermodynamic conditions*	16:50-17:10	ORL63 (Neha Karanwal), Sungkyunkwan University, *Electro-reductive Lignin Degradation: Optimizing Mild Cleavage Methods for Sustainable Depolymerization*
17:10-17:30	ORL34 (Florian D. Vollstaedt), University of Konstanz, *Synthesis of PI@MnO2 inorganic-organic hybrid materials via hydro- and solvothermal synthesis*	17:10-17:30	ISASF commitee meeting (17:10-18:10)	17:10-17:30	ORL47 (Eleanor Cripwell), Trinity College Dublin, *Synthesis and Characterisation of Solution Processable Surface Modified Antinomy Doped Tin Oxide Nanocrystals via Solvothermal Methods*	17:10-17:30	ORL55 (Ahmed Fathallah), National Taipei University of Technology, *Supercritical Fluids: a promising green delignification rice husks of using deep eutectic solvents*	17:10-17:30	ORL64 (Yasora Liyanage), Sungkyunkwan University, *Two-Step Process for High Yield of Phenolic Monomers from Lignocellulosic Biomass in Water Methanol Mixture*
17:30-17:50	ORL35 (Frank Sailer), University of Konstanz, *Hydrothermally synthesized layered organic-inorganic hybrid vanadium oxides for electrochemical storage devices*	17:30-17:50		17:30-17:50	ORL48 (Celine Kuchler), University of Konstanz, *Controlled Crystallization of All-Organic Salt Particles*	17:30-17:50	ORL56 (Jongho Choi), Sungkyunkwan University, *Producing biofuels from soybean oil and waste oils with homogeneous catalysts*	17:30-17:50	ORL65 (Sun Chi rong), Sungkyunkwan University, *Pressure-driven electrochemical conversion of CO2 to CO via nickel-encapsulated nitrogen Carbon nanotubes*
17:50-18:10	ORL36 (Lena Schittenhelm), University of Konstanz, *Development of One-Pot Multi-Step Hydrothermal Syntheses*	17:50-18:10		17:50-18:10	ORL49(Jiayang Sun), East China University of Science and Technology, *Long-chain Branched TLCP/SiO2 Foam with Ultra Low Dielectric, High Dimensional Stability, and High-temperature Infrared Stealth Properties*	17:50-18:10	ORL57 (Guangshe Li), Jilin University, *Synthetic Chemistry of Unconventional Oxides for Sustainable Development*	17:50-18:10	ORL66 (Nur Zulaikha), MISS, *Influence of Cooling Crystallization with Anti-Solvent on Succinic Acid Crystal Recovery from Biomass Fermentation Model Solution*

	Wednesday 18 June 2025								
08:45-09:45	**PL4** (Cyril Aymonier), Institut de Chimie de la Matière Condensée de Bordeaux, TBA								
09:45-10:45	**PL5** (Ming-Tsai Liang), Jope Technology, TBA								
10:45-11:00	coffee break								
	Parallel session								
	Hydrothermal & Solvothermal		**Sustainable Feedstock**		**Novel Materials**		**Natural Products**		**Pharmaceutical**
11:00-11:30	KN30 (Seichi Takami), Nagoya University, *TBA*	11:00-11:30	KN34 (Edit Szekely), Budapest University of Technology and Economics, *Controlled hydrothermal decomposition of polymers in a semicontinuous setup*	11:00-11:30	KN38 (Dan Wang), *TBA*	11:00-11:30	KN40 (Feral Temelli), University of Alberta, TBA	11:00-11:30	KN41 (Nora Ventosa), Institute of Materials Science of Barcelona (ICMAB-CSIC), *The key role of compressed CO2 based technologies in the production of metal-free nanoparticles for biomedical applications*
11:30-12:00	KN31 (Juan Carlos), CINVESTAV, 3D *hierarchical self-assembly of inorganic silicate materials under hydrothermal conditions: reaction pathways*	11:30-12:00	KN35 (Manfred Renner), *TBA*	11:30-12:00	KN39 (Takeshi Momose), *TBA*	11:30-11:50	ORL78 (Isaline Lhoste), Innovation Fluides Supercritiques (IFS), *Recovery of food by-products for cosmetic and nutraceutical applications via natural deep eutectic solvents coupled with supercritical CO2*	11:30-12:00	ORL85 (Zully Matamoros-Veloza), Instituto Tecnlógico de Saltillo, *Synthesis of SiHAp under hydrothermal and supercritical conditions*
12:00-12:10	10 min early break	12:00-12:10	10 min early break	12:00-12:10	10 min early break	11:50-12:10	ORL79 (Ana M. Ferreira), University of Aveiro, Portugal, *Optimization of Artemisinin Extraction from Artemisia annua L. Using Bio-Based Solvents and Accelerated Solvent Extraction*	11:50-12:10	ORL86 (Yasuhiko Orita), Institute of Science Tokyo, *Supercritical synthesis of CO2-loaded liposome for temperature/acoustic-responsive drug release*
12:10-13:10	**Lunch**								
13:10-13:40	KN32 (Mitsumasa Osada) , Shinshu University, *Development of plastics on the premise of chemical recycling & Prediction of organic reaction in high-temperature water using natural language processing*	13:10-13:40	KN36 (Danilo Cantero), *TBA*	13:10-13:40	INL10 (Sungsu Park), Sungkyunkwan University (SKKU), *Plasma Porous Lithography Enabling Precise Three-dimensional Patterning in Porous Membrane for Liquid Separation and Biosensing*	13:10-13:40	INL12 (Aye-aye Myint), Sungkyunkwan University, *Harnessing dimethyl ether for direct recovery of valuable bioactive compounds from wet tangerine pomace*	13:10-13:40	KN42 (Hsien-Tsung Wu), Ming Chi University of Technology, *Monodisperse nanoparticles of inhaled COVID-19 drug composites produced using supercritical assisted atomization*
13:40-14:10	KN33 (Akira Yoko), Tohoku University, *Continuous flow hydrothermal synthesis of ultrafine metal oxide nanoparticles*	13:40-14:10	KN37 (Takaaki Tomai), Tohoku University, *Hydrothermal Electrochemical System for Energy-Efficient CO2 Reduction*	13:40-14:10	INL11 (Zoran Novak), University of Maribor, Faculty of Chemistry and Chemical Engineering, SLOVENIA, *Hybrid Silica Aerogels: Hierarchically Porous, Lightweight, and Thermally Insulating Materials with Tunable Properties*	13:40-14:00	ORL80 (Takafumi Sato), Utsunomiya University, *Hydrothermal decomposition of strawberry leaves for solid weight reduction and recovery of variable components*	13:40-14:00	ORL87 (Yasmine Masmoudi), Aix Marseille University, *Innovative supercritical CO2-based preparation methods of polymer samples for dynamic nuclear polarization solid-state nuclear magnetic resonance*
						14:00-14:10	*10 min break*	14:00-14:10	*10 min break*
14:10-14:30	ORL67 (Giulia Ischia), Max Planck Institute of Colloids and Interfaces, *Hydrothermal humification: convert biomass in artificial humic matter for soil carbon sequestration*	14:10-14:30	ORL71 (Deepak Verma), Sungkyunkwan University, *Tuning Ru Surface Active Sites to Produce Sustainable Aviation Fuel and Commodity Chemicals from Lignin*	14:10-14:30	ORL74 (Ardiansyah Taufik), Advanced Institute for Materials Research (AIMR), Tohoku University, Japan, *Visible light active photocatalyst 2 nm TiO2 nanoparticles prepared by continuous flow-hydrothermal synthesis*	14:10-14:30	ORL81 (Sreenivasa Reddy P.), Singapore Institute of Food and Biotechnology Innovation (SIFBI), A*STAR, *Sequential drying, extraction of high value compounds from high moisture diverse food side streams: A new route to waste valorization*	14:10-14:30	ORL88 (Guillem Vargas-Nadal), Centro de Investigación Biomédica en Red (CIBER-BBN), *Nanoscopic characterization of ultrabright FRET-nanovesicles as bioimaging probes*

14:30-14:50	ORL68 (Oumayma Bezza), CEA, LITEN, DTCH, LRP, 38000 Grenoble, *Chemical kinetics of the hydrothermal conversion*	14:30-14:50	ORL72 (Sofia Messias), i3N/CENIMAT, *High-Pressure (Photo)Electrochemical conversion of CO2 to sustainable fuels*	14:30-14:50	ORL75 (Milica Pantic), University of Maribor, Faculty of Chemistry and Chemical Engineering, *Designing PCL-pectin gels: tuning between aerogels and foams*	14:30-14:50	ORL82 (Fabio Santi), Università degli Studi di Padova, *Application of supercritical carbon dioxide pasteurization coupled with natural antimicrobial substance on chicken breast meat*	14:30-14:50	ORL89 (Costa Clarinda), University of Limrick, *Integrated continuous manufacturing of celecoxib-loaded HPMCAS-LF nanoparticles onto microparticles for enhanced oral bioavailability*
14:50-15:10	ORL69 (Panpan wu), Tohoku University, *Corrosion Behavior of Citric Acid on Various Steel Materials During the Hydrothermal Leaching of Lithium-ion Battery Cathode materials*	14:50-15:10	ORL73 (Taishi Dowaki), The University of Tokyo, *Lignin conversion into aromatic monomers through transfer hydrogenolysis: comparative study of model compounds and wood-derived organosolv lignin*	14:50-15:10	ORL76 (A. B. Paninho), i3N/CENIMAT, Department of Materials Science, NOVA School of Science and Technology and CEMOP/UNINOV, *Solar-Powered CO2-to-Fuel Conversion using Nanostructured Aerogels*	14:50-15:10	ORL83 (Renna Yulia V.), Institut Teknologi Sepuluh Nopember, *Optimization of S-allyl-L-cystein extraction from black solo garlic (Allium sativum L.) by Hidrothermal Treatment*	14:50-15:10	ORL90 (María Carracedo-Pérez), University of Santiago de Compostela, *Scaling Up a scCO2 Sterilization Protocol for Safe and Sustainable Reuse of Medical Devices*
15:10-15:30	ORL70 (Jakaria Rambli),Department of Materials Science and Applied Chemistry, Kumamoto University, *Microwave hydrochar from Sago (Metroxylon Spp) as a catalyst for solvothermal conversion of glycerol to fuel additives*	15:10-15:30	-	15:10-15:30	ORL77 (Hyeon Seo Park), Sungkyunkwan university, *Micro-sized different SnBi alloy composites for high performance lithium-ion battery anode*	15:10-15:30	ORL84 (Ruqian Cao), Sungkyunkwan University, *High-yield recovery of crude lipids from wet Schizochytrium for biodiesel production using liquified dimethyl ether without cell disruption*	15:10-15:30	ORL91 (Qi-Jun qiu), National Taipei University of Technology, *Designing amorphous solid dispersion and inclusion complex formulation of niclosamide using the supercritical antisolvent process*
15:30-16:30	**Coffee break and Poster session**								
16:30-17:00	Move to Gala Dinner								
17:00~21:00	Gala Dinner								

	Thursday 19 June 2025								
	Polymer		**Sustainable feedstock**		**Hydrothermal & Solvothermal**		**Novel Materials**		**Commitee meeting**
08:40-09:00	ORL92 (Yichong Chen), East China University of Science and Technology, *A novel semi-continuous preparation mode of ultra-low density thermoplastic polyurethane foam*	08:40-09:00	ORL99 (Cataldo De Blasio), Åbo Akademi University, *An integrated process development approach for hydrothermal valorization of side-streams and synfuels production*	08:40-09:10	INL13 (Gimyeong Seong), The University of Suwon, *Chemical Looping Steam Methane Reforming using CeO2 Nanomaterials: Insight into Reactivity and Stability*	08:40-09:10	INL15 (David Jui-Yang Feng), National University of Kaohsiung, *A Novel Procedure of Fabricating MXenes-Ti3C2 Nanostructure via directly using Hydrofluoric Etchant in Supercritical CO2*		
09:00-09:20	ORL93 (Yu-Cheng Tong), National Taipei University of Technology, *Particle design of energetic material ammonium perchlorate using batch and continuous supercritical antisolvent processes*	09:00-09:20	ORL100 (Sheraz Ahmed), Sungkyunkwan University, *Selective production of CO/formates over Sn-based catalysts by electrocatalytic reduction of CO2 at higher pressure*	09:10-09:40	INL14 (Agung Nugroho), *TBA*	09:10-09:40	INL16 (Ratna Frida Susanti), *TBA*		
09:20-09:40	ORL94 (R.F. Hipolito), NOVA University of Lisbon, *Computational design & Supercritical CO_2–assisted development of tyrosol–molecularly imprinted polymers for their selective recovery from olive extracts*	09:20-09:40	ORL101 (Junjung Rohmat Sugiarto), Sungkyunkwan University, *Lignin Dimers Model Compound Depolymerization over various size of Pd and Ni: A Density Functional Theory Study*						
09:40-10:00	ORL95 (Yao Peng), East China University of Science and Technology, *Regulation of adhesive behavior and foaming behavior of thermoplastic polyurethane in supercritical carbon dioxide atmosphere*	09:40-10:00	ORL102 (Muhammad Shakir Hussain), Sungkyunkwan University, *Boosting Electrochemical reduction of CO2 to CO in a zero gap electrolyzer*	09:40-10:00	ORL106 (Tobias M. Klenk), University of Konstanz, *Hydrothermal Synthesis of a Platinum-Based Molecular Square*	09:40-10:00	ORL109 (Huan Doan), Australian National University, *Using supercritical CO2 in preparation of metal-organic frameworks: a promising way to achieve additional porosity?*		
10:00-10:20	ORL96 (Xuwei Li), East China University of Science and Technology, *Preparation of thermoplastic elastomer microcellular foams by supercritical fluid foaming and their wear resistance*	10:00-10:20	ORL103 (Syeda Sidra Sibi), Sungkyunkwan University, *Transforming CO2 to hydrocarbons: The impact of the ZrOx promoter in Cobalt catalyst*	10:00-10:20	ORL107 (Eri Kumai), Tsinghua University, *Synthesis of CGS@Li2TiO3 core-shell particles from TBFS and CGS*	10:00-10:20	ORL110 (Yuta Nakayasu), Tohoku University, *Structural Analysis of Quinone-Impregnated Porous Carbons via Supercritical CO2 for Dual-Quinone Organic Batteries*		ISHA commiteee meeting (10:00-11:00)
10:20-10:40	ORL97 (Xiulu Gao), East China University of Science and Technology, *Thermoplastic polyurethane foam with low density and superior mechanical properties by molecular structure modulation and supercritical fluid foaming*	10:20-10:40	ORL104 (Jiyeon Lee), Sungkyunkwan University, *Thermocatalytic CO2 conversion into carboxylic acid under high pressure conditions*	10:20-10:40	ORL108 (Qingxin Zheng), Tohoku University, *Hydrothermal Recycling of Polycarbonate Waste: From Batch-type Reactor to Continuous Flow System*	10:20-10:40	ORL111 (Chunli Han), Tohoku University, *Low-temperature CH4 Reforming and Water Splitting with Activated NiO/CeO2 as Oxygen Carrier*		
10:50-11:10	ORL98 (Lingying Wu), East China University of Science and Technology, *Study on Thermal Insulation Properties of Microcellular Polyamide Composites via foaming molding integration*	10:50-11:10	ORL105 (Darsha Prabhaharan), Hanyang University, *Microbial Strategies for Enhanced Biogas Production: A Genome-Resolved Study in Anaerobic Digesters Across South Korea*	10:50-11:10		10:50-11:10	ORL112 (A.I. Furtado), FSE Maastricht University, *ScCO2 modeling for design and green synthesis of metal–based MIP biosensors*		

11:10-11:20	*10 min early break*	11:10-11:20	*10 min early break*	11:10-11:20		11:10-11:20	ORL113 (manthila Perera), School of Chemical Engineering, Aalto University, Espoo, 02150, Finland, *Stepwise Extraction of Waxes from Lingonberry Pressed Cake Residues Using Supercritical CO_2*		
11:20-12:00	**Closing Ceremony**								
12:00-13:00	Lunch								
13:00-20:00	**Field trip I**								

	Friday 20 June 2025
09:00-18:00	**Field trip II**

Green Chemistry and Engineering

No.	Name	Affiliation	Title
P-101	Nao Takata	Kumamoto University	Microwave-solvothermal synthesis of GTBE with carbon-based catalysis
P-102	Taeyoon Kim	Hanyang University	Electrochemical Regeneration of TEMPO for Sustainable Cellulose Oxidation
P-103	YunHoi Choi	Hanyang University	Metabolic Influence of Amino Acids on Medium-Chain Carboxylic Acids Biosynthesis in Megasphaera hexanoica
P-104	Jiyun Lee	Hanyang University	Development of Biodegradable Plastics with Controlled Degradation Using Encapsulated Spore-Forming Bacteria
P-105	Hyebin Yu	Hanyang University	Metabolic Responses to the Decomposition of PLA/PBAT-Blended Mulch Films in Soil with A Meta-transcriptomic Analysis
P-106	Chanwoo Kim	Hanyang University	Kolbe Electrolysis for Bio-Based Alkane Production: Towards Sustainable Alternatives in the Cosmetic Industry

Hydrothermal or Solvothermal Synthesis

No.	Name	Affiliation	Title
P-107	Chunli Han	Tohoku University	Dynamic Mn Doping in CeO2 Nanoparticles and Superior Oxygen Storage Capacity of Mn-CeO2 Nanoparticles in a Non-equilibrium State
P-108	Jongho Choi	Sungkyunkwan University	Conversion of soybean oil into biofuels via sub-/supercritical water reaction without use of catalysts and hydrogen
P-109	Dohui Kwon	KITECH	Continuous hydrothermal reaction for biofuel production and the effect of basic catalysts
P-110	Shinji Iwamoto	Gunma University	Preparation of transparent colloidal solutions of Y-doped ZrO2 nanocrystals via thermal treatment of zirconium alkoxide and yttrium acetate in 1,4-butanediol
P-111	Beining Zheng	Jilin University	Hydrothermal disproportionation reaction for the regulation of ordered behavior of d-electron configurations
P-112	Wenshu Shi	Jilin University	Anion modulation of Mn–O bond length and magnetic properties in manganese-based perovskites

Natural Products and Food-related Materials

No.	Name	Affiliation	Title
P-113	Umair Zahid	University of Alberta	Valorization of shrimp shell using supercritical CO2, ultrasound, and enzymatic treatement: astaxanthin, hydrolysate, and protein rich residue
P-114	Ana N. Nunes	iBET - Instituto de Biologia Experimental e Tecnológica	Downstream fractionation process using compressed fluids for the isolation of bluish pigments
P-115	Priscilla Carvalho Veggi	Federal University of São Paulo	Green Extraction of Nectandra barbellata Bioactives Using Supercritical CO_2
P-116	Jin-Seok Park	Pukyong National University	Subcritical Water Extraction of Bioactive Compounds from Brown Seaweed Species
P-117	Renna Yulia Vernanda	Institut Teknologi Sepuluh Nopember	Optimization of S-allyl-L-cystein extraction from black solo garlic (Allium sativum L.) by Hidrothermal Treatment
P-118	Alvin Candra Febriansyah	Institut Teknologi Sepuluh Nopember	Extraction of S-Allyl-L-Cysteine (SAC) from Aged Solo Garlic (Allium Sativum L.) using Supercritical CO2
P-119	Ji Sun Lim	KITECH	Characterization of Porous Materials from Supercritical Fluid Extraction Residues Using Hydrothermal Carbonization
P-120	Aye Aye Myint	Sungkyunkwan University	Recovery of intracellular bioactive compounds directly from wet Haematococcus pluvialis using dimethyl ether-based method
P-121	Arkaan Helge Fausta	Institut Teknologi Sepuluh Nopember	Effect of Supercritical CO2 Extraction Paramaters on the Extraction Rate and Solubility of Black Solo Garlic (Allium Sativum L.)
P-122	Sagrario Beltrán	Universidad de Burgos	Study of the recovery of isoflavones from okara by different non-conventional processes, using water as solvent
P-123	Mitsuru Sasaki	Kumamoto University	Optimizing Subcritical Water Treatment for Reducing Food Waste and Producing Nutrient-Rich Vinegar

Novel Materials, Particle Formation, and Nanotechnology

No.	Name	Affiliation	Title
P-124	Cara E Schwarz	Stellenbosch University	Supercritical CO2 PGSS processing of Fischer-Tropsch waxes
P-125	Purin Puprompan	Institute of Science Tokyo	Estimation of inorganic nanoparticle size synthesized from supercritical microfluidic process using machine learning
P-126	Do-Heyoung Kim	Chonnam National University	Harnessing the power of multi-metallic phosphide heterostructures through atomic layer deposition for advanced hybrid supercapacitors
P-127	Hyeon Seo Park	Sungkyunkwan university	Micro-sized different SnBi alloy composites for high performance lithium-ion battery anode
P-128	Chi Rong Sun	Sungkyunkwan University	High-Capacity, High-Rate Nanosized Bismuth-Antimony Embedded in N-doped Carbon Matrix via Facile Pyrolysis as Anodes for Advanced Li Storage
P-129	Anith Dzhanxinah Mohd Sarofil	Sungkyunkwan University	High performance lithium storage with bismuth–zinc oxide heterojunction microspheres

Pharmaceutical & Biomedical Applications

No.	Name	Affiliation	Title
P-130	Sabrinna Wulandari	Sungkyunkwan University	Supercritical antisolvent (SAS) process to synthesize astaxanthin/β-cyclodextrin microparticles
P-131	María Carracedo-Pérez	Universidad de Santiago de Compostela	Combining Supercritical CO2 Technology in Bioaerogel Fabrication for Biomedical Applications

Polymers/Materials Applications and Processes

No.	Name	Affiliation	Title
P-132	Erdogan Kiran	Virginia Tech	A Novel Foaming Cell with Movable Boundaries for Foaming of Polymers with Supercritical Fluids as Physical Blowing Agents
P-133	Erdogan Kiran	Virginia Tech	A Novel Dual-Sinker High-Pressure Falling Body Viscometer
P-134	Gal Slaček	University of Maribor, Faculty of Chemistry and Chemical Engineering, (UM FKKT)	Supercritical extraction of turmeric for obtaining bioactive-rich extracts and the development of polymer based scaffolds for modern applications
P-135	Yasmine Masmoudi	Aix Marseille University - M2P2	Innovative supercritical CO2-based preparation methods of polymer samples for dynamic nuclear polarization solid-state nuclear magnetic resonance
P-136	Wenyu Zhong	East China University of Science and Technology	Preparation of Ultra-High Expansion Ratio PMMA/PVDF Foam with Efficient Radiative Cooling Performance by CO2 Foaming
P-137	jaeryeong jeong	Sungkyunkwan University	Recycling of Polyamide Composites from Automotive Materials via Solvent Extraction Technology
P-138	Elissandro Jair Klein	Federal University of Technology	Sustainable Aerogel Production from Food Industry Byproducts using Acerola (Malpighia emarginata) Seed as a Cellulose Source
P-139	Ayça Tüter Semercioğlu	Koç University	A novel preparation method for Cu-BTC and alginate aerogel nanocomposites: MOF triggered gelation of alginate

Process Intensification/Scale-Up

No.	Name	Affiliation	Title
P-140	Ed Lester	University of Nottingham	Life-cycle assessment of the solvothermal/hydrothermal MOF manufacture to evaluate process and reduce environmental impact

Reactions in Critical Fluids

No.	Name	Affiliation	Title
P-141	Shotaro Seki	The University of Tokyo	Kinetic study of acid-catalytic effect of alcohol dissociation in hot compressed water
P-142	Risa Fukuda	Kumamoto university, Japan	CO2-intensified hydrothermal conversion of C6 sugars using ultrafast flow reactor
P-143	Kota Nishimure	Kumamoto University	Microwave and CO2-intensified hydrothermal conversion of hesperidin into high-value chemicals
P-144	Aoi Muronosono	Institute of Science Tokyo	Kinetic analysis for synthesis of iron oxide nanoparticles using supercritical CO2 as medium
P-145	Maria Teresa Sanz	Universidad de Burgos	Study of the production of lactic by valorizing second-generation biomass using water under subcritical conditions and alkaline catalysis

Separation Processes

No.	Name	Affiliation	Title
P-146	Beatriz Gomes Monteiro	NOVA School of Science and Technology	Sustainable Extraction of Oil from Black Soldier Fly Larvae Using Supercritical Carbon Dioxide
P-147	Nathalie Piche	Ruhr University Bochum	Post-treatment of 3D-printed metal parts with supercritical water
P-148	Darija Cör Andrejč	University of Maribor	Extraction of pumpkin seeds (Cucurbita pepo) oil using supercritical carbon dioxide and compressed propane
P-149	Masaki Ota	Tohoku University	Development of a stagewise model for fixed-bed supercritical CO2 extraction
P-150	Ricardo Ferreira Hipólito	NOVA University of Lisbon	Supercritical CO_2 vs. Organic Solvents: A Sustainable Approach for the Recovery of Hydroxytyrosol from Olive Pomace
P-151	Laura M. Cuellar	Pontificia Universidad Católica de Chile & Tecnológico de Monterrey (México)	Effect of solvent (CO2/ethanol/H2O) on polyphenol extraction from calafate (Berberis microphylla G. Forts) fruit suspensions as substrate
P-152	Marco Antonio Mamani	Pontificia Universidad Católica de Chile & Tecnológico de Monterrey (México)	Supercritical CO2 extraction of phenolic compounds from red clover (Trifoliumpratense L.) using hydroethanolic mixtures as cosolvent/suspension medium
P-153	Ruqian Cao	Sungkyunkwan University	High-yield recovery of crude lipids from wet Schizochytrium for biodiesel production using liquified dimethyl ether without cell disruption
P-154	Yaoyao Zhu	Tsinghua University	Influence of hydrocyclone barrier structure on separation of low-grade phosphate ores
P-155	Wonbin Seo	Seoul National University	Enhancing Metal Recovery from Spent Lithium-Ion Batteries Using Supercritical Carbon Dioxide with Carboxylic Acids and Glucose

Sustainable Feedstock Utilization and CO2 Conversion

No.	Name	Affiliation	Title
P-156	Hanbit Jang	Chonnam National University	Harnessing Metal Oxides for Sustainable CH_3COOH Production from CO_2 and CH_4
P-157	Hyogeun Yang	Chonnam National University	Effect of Activation Sequence in CO2 and CH4 Sequential Reaction for Selective Production of Oxygenated Compounds
P-158	Hyeonji Yeom	Chonnam National University	CO2-derived Sustainable Gasoline Production through Balanced Interplays on Tailored FeK/CuAl2O4 Catalyst
P-159	Ana Xochitl Vidrio Sahagun	University of Alberta	Barrier properties of cellulose-based materials made of wheat straw using pressurized water + ethanol assisted by high-intensity ultrasound
P-160	Rizky Gilang Kurniawan	Sungkyunkwan University	Case study of mucic acid conversion to hexanedioic ester over bimetallic disperse Ru-Re, Ru-Mo, and Ru-W on activated carbon catalyst
P-161	Sheraz Ahmed	Sungkyunkwan University	Revealing the new role of ZrOx in CO2 hydrogenation to high-yield C5+ with long-term stability over Fe-based catalysts
P-162	Neha Karanwal	Sungkyunkwan University	Rhenium-promoter-free ruthenium–zirconia catalyst for high-yield direct conversion of succinic acid to 1,4-butanediol in water
P-163	Syeda Sidra Bibi	Sungkyunkwan University	Unlocking CO_2 hydrogenation efficiency with alkali-modified Cobalt-Zirconium oxide (CoZrOx) Catalysts
P-164	Seoyeon Kim	Sungkyunkwan University	Electrocatalytic cleavage of α-O-4, β-O-4 and 4-O-5 linkages using Pd/C catalyst

Thermodynamics and Fluid Phase Equilibria

No.	Name	Affiliation	Title
P-165	Jeong-Hoon Sa	Dong-A University	Thermodynamic study of HFC-125 + CO_2 mixed gas hydrates to develop clean hydrate-based fire extinguishing agent for inaccessible fire
P-166	Cara E Schwarz	Stellenbosch University	The application of the principle of congruence to mixtures containing CO2 and n-alkanes, 1-alcohols, n-carboxylic acids or methyl esters
P-167	Juan C. de la Fuente	Universidad Tecnica Federico Santa Maria	Solubility measurement of two new synthesized derivatives of 2,3-dichloronaphthalene-1,4-dione (dichlone) in supercritical carbon dioxide
P-168	Katsumi Tochigi	Nihon University	Evaluation of dispersion and aggregation for decanoic acid-modified ceria nanoparticle + solvent systems using ASOG group contribution method
P-169	BoMin Kim	School of Chemical and Biological Engineering, Institute of Chemical Processes, Se	Isothermal Vapor-Liquid Equilibria(VLE) of Organic Solvents in Electrolyte - Carbon Dioxide
P-170	Chieh-Ming Hsieh	National Central University	Prediction of Drug Solubility in Supercritical Carbon Dioxide by Machine Learning Methods
P-171	Erdogan Kiran	Virginia Tech	Rate of Density Change as a Probe of Phase Separation in Polymer Solutions in Compressed Fluids