

# COIL-10 Poster Presentation Schedule

Tuesday 18<sup>th</sup> November (14:15 – 15:15)

<b>Bio-based Materials, Pharmaceuticals, Cosmetics</b>		
P1	Mai Imamura	Long-Term Preservation of Spheroids at –85 °C in a Liquid State
P2	Ayame Matsumoto	Zwitterionic liquid design for drug dissolution and anti-precipitation
P3	Sae Matsuoka	Anti-precipitation of hardly soluble drugs by zwitterionic polymers
P4	Pedro Nakasu	IonoSolv process on plasterboard waste - a new approach to upcycle construction waste
P5	Hao Wang	Tetrabutylammonium-based Ionic Liquid Screening Strategy for Minimal Crystallinity Disruption: Surface-Acetylated Bamboo CNFs as Reinforcer in Cellulose Acetate
<b>Bonding, Reactivity, Catalysis and Properties</b>		
P6	Spencer Frederick	Simple and Selective Negishi Cross-Coupling in Deep Eutectic Solvents
P7	Malgorzata Nyga	Ionic liquids as mesa surface passivators in IR detectors
P8	Katie Savage	Exploring the Catalytic Behaviour of Indium Ionic Liquids for Sustainable Alkylation
P9	Kazuya Tanikawa	Physicochemical Behavior of Alkali Metal Chloride-Based Ionic Liquids
<b>Electrochemical Energy Applications</b>		
P10	Yoshifumi Hirotsu	Ion Transport Properties in Pyrrolidinium-Based Electrolytes Upon Mixing with Mg(FSA) <sub>2</sub>
P11	Keita Inoue	Development of organic ionic plastic crystals composed of tetrahydrothiophenium cation with high conductivity
P12	Yuna Kubo	Effects of polymer structure on supercooling behavior and ion transport of deeply supercooled Li salts containing polymer additives
P13	Yuna Matsuyama	Li Ionic Liquids Consisting of Novel Asymmetric Li Imide Salts
P14	Ken-ichi Okazaki	Fluoride Intercalation of Oxyfluorosulfide as an Active Material for a Liquid-Based Fluoride Shuttle Battery
P15	Elene Sasieta Barrutia	Development of high-performance ionic electrolytes by target-specific combination of novel cation and anion structures
P16	Taku Sudoh	Polymer-assisted Deep Supercooling of Li Salt: Effects of Polymer Additives on Suppression of Crystallization
P17	Andy Zhou	Molecular Scale Engineering of Locally Concentrated Ionic Liquid Electrolytes
<b>Electrochemical Solvents and Dynamics</b>		
P18	Erika Mitting	Optimizing Aqueous-Ionic Liquid Electrodeposition for Anisotropic Growth of Copper and Nickel Nanoparticles
P19	Cancelled	

<b>Emerging and Functional Materials</b>		
P20	Jiun-Jen Chen	Development of Novel Ionic Liquids for Dehumidification
P21	Mai Kamiyama-Ueda	Self-healable poly(ionic liquid) ion gel via vacuum polymerization
P22	Beatrise Silava	Pyridinium Ionic Liquids as Charge Transfer Complexes
P23	Laura Thomas	Novel Eutectic Thermal Energy Storage Materials
<b>Interfaces, Structure and Dynamics</b>		
P24	Zachary Candiloro	A Scattering Approach to Understanding Protein-Nanoparticle Interactions within Ionic Liquids and Deep Eutectic Solvents
P25	Cancelled	
P26	Anne Strate	Detailed Overview about Hydrogen-Bonding Motifs in Hydroxy-Functionalized Ionic Liquids
P27	Francesco Trequattrini	Formation and Analysis of Deep Eutectic Solvents in p-Toluenesulfonic Acid Monohydrate - Tetrabutylammonium Salt Systems
P28	Huaqing Xuan	Nanostructure and Friction of Choline AOT:Ethylene Glycol
<b>Solvation, Separations and Treatment</b>		
P29	Guilhem Arrachart	Selective recovery of valuable metals from e-waste using ionic liquids
P30	Joao Coutinho	Ionic Liquids for High-Temperature Separation of Methanol and Water
P31	Hanee Farzana Hizaddin	Application of deep eutectic solvents for oil extraction from rubber seed
P32	Spiros Koutsoukos	Selective Recovery of Critical Metals from Alkaline Battery Black Mass Using Ionic Solvents
P33	Kenny Liu	Investigation of solubility in protic ionic liquids and its implications for biotransformation reactions
P34	Leila Moura	Impact of nitrile functionalities in ILs for ethylene and ethane separation
<b>Theory and Simulations</b>		
P35	Shima Fazelzadehhabibabadi	Unlocking Atomic Insights into the Next Generation of Solvents for Biological Applications
P36	Jonatan Perez-Arce	Molecular Dynamics Insights into Polypropylene and Polyethylene Aggregation in Ionic Liquids: Towards Rational Solvent Design

## COIL-10 Poster Presentation Schedule

Thursday 20<sup>th</sup> November (14:25 – 15:25)

<b>Bio-based Materials, Pharmaceuticals, Cosmetics</b>		
P37	Takeru Ishizaki	Structure Optimization of Zwitterions for Cell Cryopreservation
P38	Keito Matsumoto	Synthesis and Evaluation of Cellulose Gel Materials Using Polymerizable Ionic Liquids
P39	Yuta Mizuno	Effect of ion structure on cellulase
P40	Ramana Pydi	Nutraceutical-Ionic Liquids (NILs): Synergists for Insecticide Formulations
<b>Bonding, Reactivity, Catalysis and Properties</b>		
P41	Holly Baker	Ionic liquid-mediated enzymatic polyethylene terephthalate degradation
P42	William Gaul	Quantifying nucleofugality in ionic liquids - extending the range of nucleofuges
P43	Moon Paul	Ionic Liquid-Assisted Thermal Degradation and Recycling of Polypropylene: A Study using 1-Ethyl-3-Methylimidazolium Acetate
P44	Gyanendra Sharma	Can Machine Learning help to Design Task Specific Ionic Liquid?
<b>Electrochemical Energy Applications</b>		
P45	Florian Hausen	Lithium Nucleation and Dynamics in Ionic Liquid Electrolytes
P46	Md. Sharif Hossain	Binary Molten Salt Systems Using Ether Functionalized Li-Salts
P47	Yasushi Katayama	In Situ Detection of the Solid-Electrolyte Interphase Formed in Bis(fluorosulfonyl)amide Ionic Liquids
P48	Wern Huay Mah	Towards Fluorine-Free Ionic Electrolytes Utilizing the Acesulfame Anion
P49	Choji Niwamura	Binder-free electrodes with Polymer-assisted Deeply Supercooled Li Salt
P50	Haruchi Sakurai	Systematic Molecular Design of Ionic Liquids Toward Formation of Ideal SEI Layers on Lithium Metal Anodes
P51	Pranav Sharda	Implementing ionic liquids in IT-PEMFCs
P52	Takayuki Yamamoto	Electrochemical Intercalation Behavior of Amide Anions into Graphite in Ionic Liquid Electrolytes
<b>Electrochemical Solvents and Dynamics</b>		
P53	Lennart Kruse	Ion-specific Translational and Rotational Motions in Isotopic Substituted Ionic Liquids by Means of NMR Relaxometry
P54	Jesse Mullen	Brewing up a Storm: Mixing Ionic Liquids to Optimise Electrochemical Reactions
P55	Andrew Wilson	Towards early diagnosis of Alzheimer's disease via volatile organic compound detection using ionic liquid-based electrochemical sensors

<b>Emerging and Functional Materials</b>		
P56	Kristin Di Bona	Novel Adsorbents for Li Recovery from Unconventional Sources
P57	Arturs Jubass	Family of Novel Silicon-Containing Imidazolium Ionic Liquids: Toxicity Study and Prospects for Reversible Ethylene Absorption
P58	Yudai Kojima	One-pot synthesis of multi-metallic alloy nanoparticle supported carbon nanotube composite materials using ionic liquid
P59	Marcin Smiglak	From Promising Curiosity to Functional Core: A Ten-Year Journey with Ionic Liquids in Epoxy Composites
P60	Hidenori Tomimatsu	Role of Side Chains in Determining the Electrochemical Properties of Pyrrolidinium-based Electrolytes
<b>Interfaces, Structure and Dynamics</b>		
P61	Ho Hong Chau	Molecular Resolution Nanostructure of Reline - Graphite Interface as a Function of Potential and Water content
P62	Tom Frömbgen	Polarizable Force Fields for Ionic Liquid-Graphite Interfaces
P63	Mitsuhiro Shimizu	Low-Viscous Zwitterionic Liquids with a Flexible Spacer
P64	Francesco Trequattrini	Exploring the Interactions Between Graphene Oxide and Deep Eutectic Solvents: A Combined Experimental - Theoretical Approach
P65	Kathleen Wood	Small Angle Neutron Scattering Capability at ANSTO
P66	Cancelled	
<b>Solvation, Separations and Treatment</b>		
P67	Amani Alzahrani	Investigating Solvation Properties of Ionic Liquids on Silica Nanoparticles Using Scattering Techniques
P68	Maxwell Coney	Predicting Reaction Outcomes in Ionic Liquids and their Mixtures: A Unified Framework Based on Dynamics and Nucleofugality
P69	Elise Guerinoni	Diluent-free extraction process based on quaternary ammonium ionic-liquid for uranium recovery
P70	Yu Kanasaki	Mixed ionic liquid membranes with 1-ethyl-3-methylimidazolium acetate and diamine-based ionic liquids for direct air capture application
P71	Yuki Kohno	Amino Acid-Derived Solid Adsorbents for Direct Air Capture Applications
P72	Prashant Kumar	Efficient Dissolution of Waste PVC Using Low-Cost Ionic Liquids for Sustainable Polymer Recycling
P73	Rubiat Sadia Mim	Tailor-designed Ionic Liquids Based Solvents For Polymer Dissolution
<b>Theory and Simulations</b>		
P74	Isak Bengtsson	Ionic liquid conductivity modelled by machine learning and symbolic regression
P75	Mengyang Qu	Mechanistic Insights and In Silico Identification of Novel Cationic Cores in Ionic Liquids for Cellulose Dissolution