

SYMPOSIUM PROGRAM

(Tentative)

Sunday, 24th June

Registration Open (14:00–)

Opening Remarks (17:00–17:10)

Session 1, 17:10–17:50, Chairperson: Masayoshi Watanabe

PL1 Akira Yoshino, Asahi Kasei Corp., Japan
17:10-17:50 Next Generation Batteries in Our Future: Beyond the LIB

Short Break (17:50–18:00)

Welcome Reception (18:00–20:30)

Monday, 25th June

Session 1, 8:30–10:20, Chairperson: Maria Forsyth

PL2 C. Austen Angell, Arizona State University, USA
8:30-9:10 Concepts and Conflicts in Polymer Electrolytes: The Search for Ion Mobility

K1 Michel Armand, Parque Tecnológico de Alava, Spain
9:10-9:40 Going Further with Polymer Electrolytes

I1 Jelena Popovic, Max Planck Institute for Solid State Research, Germany
9:40-10:00 Interfacial Effects and Charge Carrier Chemistry in Lithium Electrolytes

I2 Michael Zimmerman, Ionic Materials, Inc., USA
10:00-10:20 A Practical High-Conductivity Dry Polymer Electrolyte for Room Temperature Lithium Metal Batteries

Coffee Break (10:20–10:40)

Session 2, 10:40–12:20, Chairperson: Jean-Yves Sanchez

K2 Daniel Brandell, Uppsala University, Sweden
10:40-11:10 Pushing Past the Polyether Paradigm: Perspectives from a Polycarbonate-Polyester Platform

I3 Dale Teeters, The University of Tulsa, USA
11:10-11:30 Polymer Electrolyte/Lithium Electrode Interface Stabilization by Molecular Films Constructed Using Low Molecular Weight PE-*b*-PEO Diblock Copolymers

I4 Raman Vedarajan, Centre for Fuel Cell Technology, ARCI, India
11:30-11:50 Multifunctional Role of Organoboron Compounds in LiB Electrolyte

O1 Zhigang Xue, Huazhong University of Science and Technology, China
11:50-12:05 High-Performance Polymer Electrolytes Formed by Quadruple Hydrogen Bonding for Lithium-Ion Batteries

O2 Tingzi Yan, University of Leeds, UK
12:05-12:20 Solid Polymer Electrolytes Based on Polymer Blends

Lunch (12:20–13:50)

Session 3, 13:50–15:30, Chairperson: Luke A. O'Dell

K3 Louis Madsen, Virginia Tech, USA
13:50-14:20 Double Helix Polyanion Plus Ionic Liquid: Molecular Ionic Composites

- I5** **Monika Schönhoff, University of Münster, Germany**
14:20-14:40 Correlated Ion Drift and Effective Li Transference Numbers in Solvate Ionic Liquids and Salt-In- IL Electrolytes
- I6** **G. Z. Żukowska, Warsaw University of Technology, Poland**
14:40-15:00 Hydrolysis of Lithium 4,5-Dicyanoimidazolate Solvates. Impact of Water Molecules on Aggregation Processes in Lithium-Ion Battery Electrolytes
- O3** **Maryam Nojabae, Max Planck Institute for Solid State Research, Germany**
15:00-15:15 Controlling SEI in Glyme Electrolytes on Lithium Electrodes: Morphology vs. Chemical Composition
- O4** **U Hyeok Choi, Pukyong National University, South Korea**
15:15-15:30 Ion Conduction of Epoxy-Based Polymer Electrolytes

Coffee Break (15:30–15:50)

Session 4, 15:50–16:40, Chairperson: Daniel Brandell

- I7** **Guanglei Cui, Chinese Academy of Sciences, China**
15:50-16:10 Rigid-Flexible Coupling Solid Polymer Batteries: from Fundamental Research to Deep Sea Power System
- O5** **Ekaterina Pavlenko, University of Grenoble Alpes, France**
16:10-16:25 Adjuvantated Block Copolymer Electrolytes for LMP Battery Operation at 40°C
- O6** **Heng Zhang, CIC Energigune, Spain**
16:25-16:40 Solid Polymer Electrolytes for Safe and High Gravimetric Energy Density Lithium-Sulfur Batteries

Short Break (16:40–16:45)

Session 5, 16:45–17:20, Chairperson: Kaoru Dokko

- F1** **Leire Meabe, POLYMAT University of the Basque Country UPV/EHU, Spain**
16:45-16:50 P1-1, Free standing Solid Polymer Electrolyte Films Based on Poly(Ethylene Oxide Carbonates)
- F2** **Guiomar Hernández, Ångström Laboratory, Uppsala University, Sweden**
16:50-16:55 P1-2, Mechanically Robust and Highly Conductive Di-Block Copolymers as Solid Polymer Electrolytes for Room Temperature Li-ion Batteries
- F3** **Jihae Han, Yamaguchi University, Japan**
16:55-17:00 P1-3, TetraPEG Gel Electrolyte Containing a Nonflammable Fluoronated Alkyl Phosphate for Safer Lithium-Ion Batteries
- F4** **Mayu Kamimura, Sophia University, Japan**
17:00-17:05 P1-4, Addition Effects of Zwitterions on Electrodeposition Behavior of Magnesium in Ionic Liquid (II) Effects of Cation Structures of Zwitterions
- F5** **Zhaopeng Zhang, University of Leeds, France**
17:05-17:10 P1-5, PVdF/PVdF-HFP Based Gels and Polymer Blends for Li-ion Battery Electrolyte Applications
- F6** **G. Guzmán-González, Departamento de Ingeniería de Procesos e Hidráulica, Mexico**
17:10-17:15 P1-6, Unsymmetrical Sp³ Boron Atoms with Poly(Ethylene Glycol) Bridges as Single Lithium Ion Conducting Polymer Electrolytes
- F7** **N. N. Mobarak, Universiti Kebangsaan Malaysia, Malaysia**
17:15-17:20 P1-7, The Effect of Sugar Type on The Electrochemical Properties of Carboxymethyl Chitosan Derivatives

Short Break (17:20–17:30)

Poster Session 1, 17:30–19:30 @MARINERIA (1st Floor)

Tuesday, 26th June

Session 1, 8:30–10:20, Chairperson: David Mecerreyes

- PL3** **Maria Forsyth, Deakin University, Australia**
8:30-9:10 Enhanced Lithium Ion Transport in Polymer Composite Electrolytes for Lithium Metal Anodes
- K4** **Nitash P. Balsara, University of California, Berkeley, USA**
9:10-9:40 Predicting the Potential in Lithium-Polymer-Lithium Cells During Cycling
- I8** **Diana Golodnitsky, Tel Aviv University, Israel**
9:40-10:00 Polymer-In-Ceramic Electrolytes. Ion-Transport Peculiarities
- I9** **Michael Popall, Fraunhofer ISC, Germany**
10:00-10:20 Inorganic-Organic Polymer Lithium Electrolytes – A Bridge Between Existing Battery Technology and New Approaches towards Solid State Batteries

Coffee Break (10:20–10:40)

Session 2, 10:40–12:20, Chairperson: Patrik Johansson

- K5** **Vito Di Noto, University of Padova, Italy**
10:40-11:10 Innovative Electrolytes for Secondary Lithium and Magnesium Batteries
- I10** **Fannie Alloin, University of Grenoble Alpes, France**
11:10-11:30 New Electrolyte for High Electrochemical Performance Rechargeable Magnesium Batteries
- I11** **Masaki Matsui, Kobe University, Japan**
11:30-11:50 Crystal Structures and Electrochemical Properties of Intermetallic Anode Active Material for Magnesium Ion Batteries
- O7** **Jennifer L. Schaefer, University of Notre Dame, USA**
11:50-12:05 Ion Transport and Electrochemical Characterization of Polymer Gel Electrolytes for Magnesium Batteries
- O8** **Louise Frenck, University of California Berkeley, USA**
12:05-12:20 The Pressure Effect onto Dendritic Lithium Growth through a Polymer Electrolyte

Lunch (12:20–13:50)

Session 3, 13:50–15:30, Chairperson: Vito Di Noto

- K6** **Stefano Passerini, Karlsruhe Institute of Technology, Germany**
13:50-14:20 Ionic Liquids for Lithium–Oxygen Batteries
- I12** **Hajime Matsumoto, National Institute of Advanced Industrial Science and Technology, Japan**
14:20-14:40 Lithium Intermediate Temperature Molten Salt Based on asymmetric Amide Anion as a Zero-Solvent for Lithium Batteries
- I13** **Maria Assunta Navarra, University of Rome La Sapienza, Italy**
14:40-15:00 From Liquid to Gel Polymer Electrolytes, Based on Ionic Liquids, for High-Voltage Lithium Batteries
- O9** **Giulia Piana, Politecnico di Torino, Italy**
15:00-15:15 Highly Performing Cross-Linked Polymer Electrolytes for Lithium Batteries Working at Room Temperature

- O10** **Laurent Bernard, CEA-Grenoble, DRF/INAC/SyMMES/STEP, France**
15:15-15:30 Self-Assembled Liquid-Crystalline Single-Ion Conductors for Lithium Battery Electrolytes

Coffee Break (15:30–15:50)

Session 4, 15:50–16:40, Chairperson: Stefano Passerini

- I14** **Whan Gi Kim, Konkuk University, South Korea**
15:50-16:10 Synthesis and Characterization of Perfluoroalkylsulfonylimide Functionalized Imidazole Based Electrolytes for Rechargeable Li-Ion Battery
- O11** **Elie Paillard, Helmholtz Institute Muenster-Forschungszentrum Juelich, Germany**
16:10-16:25 Fluorine-Free ‘Water-In-Ionomer’ Electrolytes for Sustainable Lithium-Ion Battery
- O12** **R. F. P. Pereira, University of Minho, Portugal**
16:25-16:40 To be announced.

Short Break (16:40–16:45)

Session 5, 16:45–17:20, Chairperson: Masamichi Nishihara

- F8** **Klaus-Dieter Kreuer, Max-Planck-Institute for Solid State Research, Germany**
16:45-16:50 P2-1, From Polyelectrolytes to Robust, Highly Proton Conducting Hydrocarbon Membranes for PEM Fuel Cell Applications
- F9** **S. Themsirimongkon, Chiang Mai University, Thailand**
16:50-16:55 P2-2, New Catalytic Designs of Multi-Wall Carbon Nanotube-Nickel-Carbon Black Hybrid Supports for Enhanced Platinum Catalyst in Oxidations
- F10** **N. Pongpichayakul, Chiang Mai University, Thailand**
16:55-17:00 P2-3, Mixed Carbon Composites as Alternative Support Materials for Fuel Cell Anode Catalyst
- F11** **Asier Fdz De Anastro, POLYMAT University of the Basque Country UPV/EHU, Spain**
17:00-17:05 P2-4, New Poly(Ionic Liquid) Ionogels for NaFePO₄ Solid-State Rechargeable Battery
- F12** **Giulia Piana, Politecnico di Torino, Italy**
17:05-17:10 P2-5, Innovative Polymer Electrolytes for Sodium-Based Batteries
- F13** **Noorhaslin Che Su, National Defence University of Malaysia, Malaysia**
17:10-17:15 P2-6, Study of High Na-Ion Content *N*-Propyl-*N*-Methylpyrrolidinium Bis(Fluorosulfonyl)- Imide - Poly(Vinylidene Fluoride-Hexafluoropropylene) Solid State Electrolytes for Sodium Batteries
- F14** **A. S. Samsudin, Universiti Malaysia Pahang, Malaysia**
17:15-17:20 P2-7, Transport Properties Analysis via Theoretical and Experimental Based on Cellulose Derivative Doped NH₄CH₃CO₂

Short Break (17:20–17:30)

Poster Session 2, 17:30–19:30 @MARINERIA (1st Floor)

Wednesday, 27th June

Session 1, 8:30–10:20, Chairperson: Nitash P. Balsara

- PL4** David Mecerreyes, POLYMAT, University of the Basque Country UPV/EHU, Spain
8:30-9:10 Innovative Polymer Electrolytes for Electrochemical Devices
- K7** Patrik Johansson, Chalmers University of Technology, Sweden
9:10-9:40 Mixing Once, Twice, and Thrice: TFSI & FSI and Li-Salt & IL & PIL
- I15** Alexei Sokolov, University of Tennessee Knoxville, Oak Ridge National Laboratory, USA
9:40-10:00 Fundamental Limitations for Ionic Conductivity in Polymers and How Can We Overcome Them
- I16** Ralph H. Colby, The Pennsylvania State University, USA
10:00-10:20 Polarizability Volume of Ion Pair Dipoles in Ionomers and Polymerized Ionic Liquids

Coffee Break (10:20-10:40)

Session 2, 10:40–12:20, Chairperson: Louis Madsen

- K8** Steve Greenbaum, Hunter College of CUNY New York, USA
10:40-11:10 Recent NMR Investigations of Electrolytes for "Beyond Lithium Ion" Applications
- I17** Luke A. O'Dell, Deakin University, Australia
11:10-11:30 New Insights into Ion Interactions and Structuring in Ionic Liquid Electrolytes from Advanced NMR Techniques
- I18** Eugene S. Smotkin, Northeastern University, USA
11:30-11:50 Color Coding Functional Group Contributions to Polymer Electrolyte Membrane IR and Raman Normal Modes
- O13** Jonas Mindemark, Uppsala University, Sweden
11:50-12:05 Electrolytes for High-Performance Light-Emitting Electrochemical Cells: Going from Polyethers to Oligocarbonates
- O14** Thomas R  ther, CSIRO Energy, Australia
12:05-12:20 Integrating Polymer Electrolytes: A Step Closer to 3D-Microbatteries for MEMS

Excursion # TOKYO SKYTREE & Asakusa Bus Tour # (13:30–)

Thursday, 28th June

Session 1, 8:30–10:20, Chairperson: Manabu Tanaka

- PL5** Thomas Zawodzinski, University of Tennessee-Knoxville, USA
8:30-9:10 Fundamentals of Membranes for Open Electrochemical Systems
- K9** Klaus-Dieter Kreuer, Max-Planck-Institute for Solid State Research, Germany
9:10-9:40 Ion Transport/Selectivity Relations of Cation and Anion Exchange Membranes
- I19** Andrew M. Herring, Colorado School of Mines Golden, USA
9:40-10:00 A Versatile Triblock Anion Exchange Membrane for Practical Applications
- I20** Patric Jannasch, Lund University, Sweden
10:00-10:20 Hydroxide Ion Conducting Polymers and Membranes Functionalized with Mono- and Spirocyclic Quaternary Ammonium Cations

Coffee Break (10:20–10:40)

Session 2, 10:40–12:20, Chairperson: Klaus-Dieter Kreuer

- K10** **Kenichi Oyaizu, Waseda University, Japan**
10:40-11:10 Redox-Active Polyelectrolytes for Organic Fast-Charging Batteries
- I21** **Adam Best, CSIRO, Australia**
11:10-11:30 Ionic Liquid Electrolytes – From Novel Separators to Solid Polymer Electrolytes
- I22** **Michael Hickner, The Pennsylvania State University, USA**
11:30-11:50 Polyolefin-Based Anion Exchange Membranes
- O15** **Yuki Nagao, Japan Advanced Institute of Science and Technology, Japan**
11:50-12:05 Proton Conductivity Enhancement in Polymer Thin Films by Molecular Orientation and Organized Structure
- O16** **Filipe M. Santos, University of Trás-os-Montes e Alto Douro, Portugal**
12:05-12:20 Proton Conductivity of Acidic Chondroitin Sulfate-Based Materials

Lunch (12:20–14:10)

Board Meeting

Session 3, 14:10–15:20, Chairperson: Michael Hickner

- I23** **Peter Pintauro, Vanderbilt University, USA**
14:10-14:30 New Membrane Designs Using Dual Fiber Electrospinning
- I24** **Takeo Yamaguchi, Tokyo Institute of Technology, Japan**
14:30-14:50 Systematic Material Design for Fuel Cells and Liquid Energy Carrier Systems
- O17** **Cristina Iojoiu, University of Grenoble Alpes, France**
14:50-15:05 Anion and Cation Influence on PEM Microstructure and Transport Properties
- O18** **Adam Z. Weber, Lawrence Berkeley National Laboratory, USA**
15:05-15:20 On Understanding Interactions in and Effects of Ionomer Thin Films

Coffee Break (15:20–15:40)

Session 4, 15:40–16:50, Chairperson: Patric Jannasch

- I25** **Byungchan Bae, Korea Institute of Energy Research, South Korea**
15:40-16:00 Enhanced Durability of Polymer Electrolyte Membrane with Antioxidant for PEMFC Applications
- I26** **Suwabun Chirachanchai, Chulalongkorn University, Thailand**
16:00-16:20 Proton Transfer in Polymer Electrolyte Membrane through Heterocyclic Compounds: Studies from Molecular Level to Polymeric Membrane
- O19** **Rajashekar Badam, Japan Advanced Institute of Science and Technology, Japan**
16:20-16:35 Ionic Liquid Mediated Preparation of Active Material for Oxygen Reduction and Methanol Oxidation Reaction Catalysis
- O20** **Geonhui Gwak, Inha University, South Korea**
16:35-16:50 In-Situ Measurements of Vanadium Crossover Diffusivities in All-Vanadium Redox Flow Batteries during Charge- Discharge Cycles

Short Break (16:50–17:00)

Session 5, 17:00–18:00, Chairperson: Shiro Seki

- Y1** **Akiko Tsurumaki, Sapienza University of Rome, Italy**
17:00-17:10 Strategy for the Antistatic Treatment of Polymers by Using Ionic Liquids
- Y2** **Khalid Elamin, Chalmers University of Technology, Sweden**
17:10-17:20 Conduction Mechanisms in Polymeric Membranes Based on PEO or PVDF-HFP and Ionic Liquids

- Y3** **Gioele Pagot, University of Padova, Italy**
17:20-17:30 Structural and Conductivity Mechanism of a Boron-Based Ionic Liquid Electrolyte for Magnesium Batteries
- Y4** **Pantaree Pinprasong, Chulalongkorn University, Thailand**
17:30-17:40 Enhancing Proton Transfer via Grafting Proton Donor-Acceptor Branching onto Sulfonated Poly(Ether Ether Ketone) Membrane Surface
- Y5** **N. A. Y. B. M. Razamin, Universiti Teknologi MARA, Malaysia**
17:40-17:50 Textile Dyes and Their Effect on Efficiency of Dye-Sensitized Solar Cell
- Y6** **Mohd Sukor Su'ait, Universiti Kebangsaan Malaysia, Malaysia**
17:50-18:00 High Performance Solid-State Dye-Sensitized Solar Cell Using Bio-Based polyurethane Polycation

Banquet # Royal Wing Yokohama Bay Cruise # (19:30–21:20)

Friday, 29th June

Session 1, 8:30–10:00, Chairperson: Noriyoshi Matsumi

- K11** **Jean-Yves Sanchez, Universidad Carlos III de Madrid, Spain**
8:30-9:00 Polymer Electrolyte-Based Batteries: Their Future?
- I27** **A. K. B. H. M. Arof, Centre for Ionics University of Malaya, Malaysia**
9:00-9:20 Phthaloylchitosan Based Gel Polymer Electrolyte with *tert*-Butyl Pyridine for Dye Sensitized Solar Cell
- I28** **Federico Bella, Politecnico di Torino, Italy**
9:20-9:40 Overcoming the Instability of Dye-Sensitized and Perovskite Solar Cells through Biosourced, Fluorinated and Water-Based Polymers
- I29** **Verónica De Zea Bermúdez, Universidade de Trás-os-Montes e Alto Douro, Portugal**
9:40-10:00 Energy-Efficient Smart Windows for Buildings of Cold Climate Regions Based on Sustainable *k*-Carrageenan-Based Electrolytes

Coffee Break (10:00–10:20)

Session 2, 10:20–11:30, Chairperson: Kazuhide Ueno

- I30** **Azizan Ahmad, Universiti Kebangsaan Malaysia, Malaysia**
10:20-10:40 Potential of Rubber Electrolyte in Electrochemical Devices
- I31** **Agnieszka Pawlicka, Universidade de São Paulo, Brazil**
10:40-11:00 Study of Ionically Conducting Nanocomposites for Reflective Electrochromic Devices
- O21** **Maria Manuela Silva, University of Minho, Portugal**
11:00-11:15 To be announced.
- O22** **Junli Shi, Helmholtz Institute Münster, Germany**
11:15-11:30 Free-Standing Single-Ion Block Copolymer-Based Electrolyte for High Voltage Room Temperature Lithium Metal Batteries

Concluding Remarks (11:30–11:50)

POSTER SESSION PROGRAM

(Tentative)

Poster Session 1, Monday, 25th June, 17:30-19:30

No	Presenter	Poster Title
P1-1	Leire Meabe	Free Standing Solid Polymer Electrolyte Films Based on Poly(Ethylene Oxide Carbonates)
P1-2	Guiomar Hernández	Mechanically Robust and Highly Conductive Di-Block Copolymers as Solid Polymer Electrolytes for Room Temperature Li-Ion Batteries
P1-3	Jihae Han	Tetrapeg Gel Electrolyte Containing a Nonflammable Fluorinated Alkyl Phosphate for Safer Lithium-Ion Batteries
P1-4	Mayu Kamimura	Addition Effects of Zwitterions on Electrodeposition Behavior of Magnesium in Ionic Liquid (II) Effects of Cation Structures of Zwitterions
P1-5	Zhaopeng Zhang	PVDF/PVDF-HFP Based Gels and Polymer Blends for Li-Ion Battery Electrolyte Applications
P1-6	G. Guzmán-González	Unsymmetrical sp^3 Boron Atoms with Poly(Ethylene Glycol) Bridges as Single Lithium Ion Conducting Polymer Electrolytes
P1-7	Nadhratun N. Mobarak	The Effect of Sugar Type on the Electrochemical Properties of Carboxymethyl Chitosan Derivatives
P1-8	Haijin Zhu	Novel Polymeric Ionic Liquids Having Ammonium and Phosphoniumcounter-Cations for Proton Conducting Membrane Applications
P1-9	Dan He	To be announced.
P1-10	Ryansu Sai	Contribution of Ethyl Group in Poly(Oxetane) Electrolytes Having Nitrilegroups in Their Side Chain
P1-11	Binghua Zhou	Mechanically Robust and Self-Healing Polymer Electrolyte via Dual-Network
P1-12	Mizuki Hamada	Demonstration of 4 V Class All-Solid-State Polymer Sodium Battery
P1-13	Cai Zuo	Self-Healing Hybrid Polyurethanes Electrolytes for Lithium-Ion Batteries
P1-14	Yongcheng Jin	Polymerized Ionic Liquid-Based Composite Electrolyte for High Performance All-Solid-State Lithium Ion Batteries
P1-15	Manjit Singh Grewal	PEG-Based Solid-State Cross-Linked Polymer Electrolytes for Future Lithium Ion Battery Application
P1-16	Manabu Tanaka	Development and Fuel Cell Application of Polymer Electrolyte Membranes Based on Proton Conductive Polymer Nanofiber Framework
P1-17	Kazuhide Ueno	Polymer Electrolytes Containing Solvate Ionic Liquids
P1-18	Kei Hashimoto	Polymer Electrolyte Comprising Solvate Ionic Liquid: Effect of Homogeneous Network

P1-19	Keita Murai	Semi-IPN Polymer Electrolytes Consisting of Poly(Ionic Liquid)s and tetra-PEG Network and Its Application to Ionic EAP Actuator
P1-20	Ryota Tamate	Self-Healing Polymer Electrolytes Containing Ionic Liquid via Multiple Hydrogen Bonding
P1-21	Masamichi Nishihara	Polymer Electrolyte Blend Membranes with Charge-Transfer Complex Structure
P1-22	Masamichi Nishihara	Zeolite-PVA Composite Electrolyte Membrane for Water-Absorbing Porous Electrolyte Water Electrolysis Cell
P1-23	Mio Suzuki	Addition Effects of Cyclodextrin in Ionic Liquid Electrolytes (V) –Diffusion Behavior of Component Ions–
P1-24	Tamao Uemiya	Synthesis and Evaluation of Supramolecular Electrolytes with Boroxine Skeleton (II) –Effect of Boroxine Ring on Ionic Conductivity–
P1-25	Hiromasa Yamada	Development of Flexible Solid Electrolytes Composed of Plastic Crystals (V) –Effect of Anion Species on Properties–
P1-26	Shun Yamaguchi	Synthesis of Novel Organic Ionic Plastic Crystals and Evaluation as Electrolytes (II) –Effect of Anion Species on Properties–
P1-27	Monami Tosa	Salt-In-Polymer-Type Solid Polymer Electrolyte with Homogeneous Network
P1-28	Dongwon Shin	Functionalization and Quaternization of Multi-Block Copolymer for Anion Exchange Membrane Application
P1-29	Mayeesha Marium	Colloidal Suspensions Based on Protic Ionic Liquids and Metal Oxide Nanoparticles: Effect of Anionic Structures
P1-30	Nitish Yadav	Effect Of ZrO ₂ Nanofiller on The Characteristics of Porous Polymer Electrolytes Towards the Application In Electrical Double Layer Capacitor
P1-31	Hiroo Onuma	Graphite Negative Electrode in Ionic Liquid Electrolyte for K-Ion Batteries
P1-32	Viktor Nilsson	Solvation Kinetics and Ion Transport in Highly Concentrated Electrolytes
P1-33	Taewook Ryu	Novel Polyethylene Sulfonyl Imide Type Gel Polymer Electrolyte with High Ionic Conductivity and Electrochemical Stability for Rechargeable Li-Ion Battery
P1-34	R. F. P. Pereira	Improved Performance of Lithium Ion Battery Comprising Plasma Treated Silk-Based Separator Membranes
P1-35	Marliyana Mokhtar	Polymer Electrolyte Based on Chitosan-Sugar Derivatives
P1-36	Sung-Hee Shin	Development of Polymer Electrolyte Membrane with Organic Antioxidant for Highly Durable Pemfcs
P1-37	Takahito Itoh	Solid Polymer Electrolyte Based on Poly(2,2-Dimethyloxytri-methylene Carbonate) and Its Application to Polymer Battery

P1-38	Shun Nakazawa	Development of Lithium Single-Ion Conducting Polymer Electrolytes Based on Polymer Nanofibers
P1-39	Yuta Inafune	Fabrication And Evaluation Of Lithium Ion Conductive Nanofiber Composite Electrolyte Membranes
P1-40	Mohammad Hasani	Protic Ionic Liquids in Cellulose-Based Iongels: The Structural Effects of Neutral Cosolvents
P1-41	Mark P. Rosenwinkel	Direct Determination of the Effective Lithium Transference Numbers in PEO/LiTFSa Electrolytes Using Electrophoretic NMR
P1-42	Geonhui Gwak	Development of Soft Sensor Model to Predict the Performance of Polymer Electrolyte Fuel Cell Stack
P1-43	Hyunchul Ju	Numerical and Experimental Study of Cell Performance Behavior of Regenerative Hydrogen Vanadium Fuel Cell (RHVFC)
P1-44	Kyeongmin Oh	Numerical Study on Water Management in Hydrogen Bromine Redox Flow Battery
P1-45	Mari Yoshitake	Homogeneous TetraPEG Network Synthesized Using a Micheal Addition Reaction in Ionic Liquid Electrolytes for Lithium-Ion Batteries
P1-46	Therese Eriksson	Nanoparticle Additives in Poly(ϵ -Caprolactone)-Based Solid Polymer Electrolytes; Towards Lower Crystallinity and Higher Ionic Conductivity.
P1-47	Christofer Sångeland	Polyester/Polycarbonate-Based Polymer Electrolyte for Sodium Ion Battery Applications
P1-48	V. de Zea Bermudez	Improved Response of Ionic Liquid-Based Bending Actuators by Tailored Interaction A the Polar Fluorinated Polymer Matrix
P1-49	V. de Zea Bermudez	Carbon Dots Functionalized with Ionic Liquids for Highly Effective Proton Transport
P1-50	Kazuhiro Yamabuki	Development of Rotaxane Gel Electrolyte for Magnesium-Sulfur Battery
P1-51	Nobuo Tajima	Hydrated Perfluorosulfonic Acid Electrolyte at Platinum Interface: Dissipative Particle Dynamics Simulation
P1-52	Federico Bella	A Multipolymer Electrolyte Membrane Designed by Oxygen Inhibited UV-Crosslinking for Integrated Energy Conversion and Storage Devices
P1-53	Zhenguang Li	A Poly(Ethylene Carbonate)/Poly(Trimethylene Carbonate) Blend Electrolyte for Lithium Ion Batteries
P1-54	Sawako Kato	Electrochemical Performance of Crosslinked Poly (Tetrahydrofuran)-Based Gel and Poly(Ethylene Carbonate)-Based Solid Mg Electrolytes
P1-55	Yukino Kinno	Synthesis and Evaluation of End-Capped Poly(Ehtylene Carbonate)s for Li-Ion Conductive Electrolytes
P1-56	Jae-Kwang Kim	Promising Energy Storage System: Rechargeable Seawater Battery

Poster Session 2, Tuesday, 26th June, 17:30-19:30

No	Presenter	Poster Title
P2-1	Klaus-Dieter Kreuer	From Polyelectrolytes to Robust, Highly Proton Conducting Hydrocarbon Membranes for PEM Fuel Cell Applications
P2-2	S. Themsirimongkon	New Catalytic Designs of Multi-Wall Carbon Nanotube-Nickel-Carbon Black Hybrid Supports for Enhanced Platinum Catalyst in Oxidations
P2-3	N. Pongpichayakul	Mixed Carbon Composites as Alternative Support Materials for Fuel Cell Anode Catalyst
P2-4	Asier Fdz De Anastro	New Poly(Ionic Liquid) Iongels for NaFePO ₄ Solid-State Rechargeable Battery
P2-5	Giulia Piana	Innovative Polymer Electrolytes for Sodium-Based Batteries
P2-6	Noorhaslin Che Su	Study of High Na-Ion Content <i>N</i> -Propyl- <i>N</i> -Methylpyrrolidinium Bis(Fluorosulfonyl)Imide–Poly(Vinylidene Fluoride-Hexafluoropropylene) Solid State Electrolytes for Sodium Batteries
P2-7	Ahmad Salihin Samsudin	Transport Properties Analysis via Theoretical and Experimental Based on Cellulose Derivative Doped NH ₄ CH ₃ CO ₂
P2-8	Aniruddha Nag	Novel Synthetic Pathway for Polybenzimidazole Electrolytes with Single Conductivity
P2-9	L. TianKhoon	Solid Polymer Electrolyte Based Poly(Vinylidene fluoride-Hexafluoropropylene)-50%-Epoxidized Natural Rubber in Application of Li-Ion Polymer Battery
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