

# ILMAT 2025

8-12 SEPTEMBER 2025 ROME – ITALY

8<sup>TH</sup> INTERNATIONAL CONFERENCE ON  
IONIC LIQUID-BASED MATERIALS



## Programme

**CNR Headquarters (Aula Convegni)**

**P.le A. Moro 7 Rome**

# ILMAT 2025

VIII International Conference on  
Ionic Liquid-Based Materials  
8-12 September 2025, Rome, Italy





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## Useful Links

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ILMAT2025 will be held at the  
CNR Headquarter  
P.le A. Moro, 7 Rome



ILMAT 2025  
Scientific and Social Program



ILMAT2025 Welcome Party  
will take place at  
*The Apartment*  
Via dei Marrucini, 1A Rome  
8.9.2025 7:00 pm



ILMAT2025 Social Dinner  
will take place at  
*The Hive*  
Via Torino, 6 Rome  
11.9.2025 8:00 pm



## Sponsors

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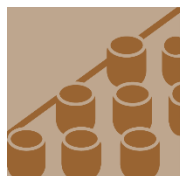
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## Organization

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*ILMAT2025 is organised by the Department of Chemistry of the University of Rome Sapienza and the Istituto Struttura della Materia of the Italian National Council of Research (CNR-ISM) in Rome (Italy).*

### Chairpersons

**Prof. Olga Russina**

Department of Chemistry of the University of Rome Sapienza (Italy);

**Dr. Alessandro Triolo**

Laboratorio Liquidi Ionici (LiqIonLab) - Istituto Struttura della Materia of the Italian National Council of Research (CNR-ISM), Rome (Italy)

### *Organising Committee*

Olga Russina  
Franca Rossi  
Carlo Ottaviani  
Emanuela Mangiacapre  
Fabrizio Lo Celso  
Oriele Palumbo  
Francesco Trequattrini  
Giulia Adriana Bracchini

Alessandro Triolo  
Marco Ortenzi  
Andrea Laruffa  
Simone Di Muzio  
Annalisa Paolone  
Fabio Ramondo  
Tommaso Gentili



## *Scientific Committee*

Olga Russina (ITA)

Alessandro Triolo (ITA)

Margarida Costa Gomes (FR)

Paola D'Angelo (ITA)

Abdenacer Idrissi (FR)

Anna Martinelli (SWE)

Andrea Mele (ITA)

Luis M.N.B.F. Santos (PT)

Christian Schröder (AT)

Andreas Taubert (DE)

L. M. Varela Cabo (ES)

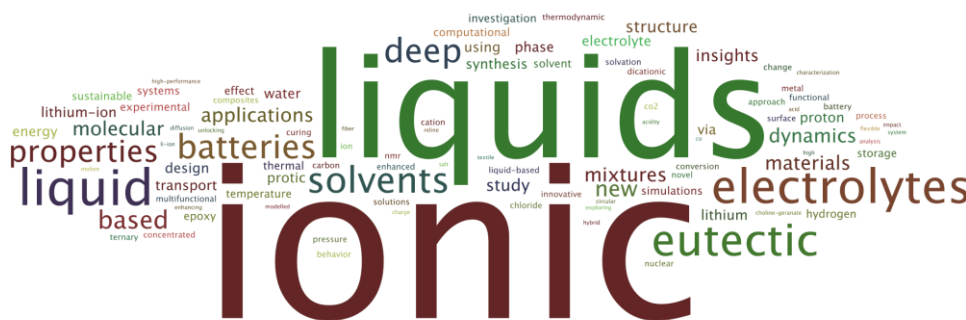


## Welcome address

We are delighted to welcome the Ionic Liquid (IL) Community at the 8<sup>th</sup> International Conference on Ionic Liquid Based Materials (ILMAT2025), taking place at the CNR Headquarters in Rome, Italy, from September 8 to 12, 2025!

Over the years, the ILMAT Conferences have earned a growing reputation as a premier platform for scientists exploring both the fundamental aspects and emerging applications of ionic materials. Following the successful footsteps of previous editions in Vienna (2011), Montpellier (2013), Berlin (2015), Santiago de Compostela (2017), Paris (2019), Alsace (2021), and Porto (2023), we are now proud to host the 8<sup>th</sup> edition in the heart of Rome — a city steeped in history and perfectly suited to inspire scientific exchange and collaboration.

At its core, ILMAT celebrates the remarkable breadth of ionic liquid science. Reflecting the interdisciplinary nature of the field, the conference welcomes contributions from chemists, physicists, materials scientists, engineers, and biologists - all united by a shared passion for IL-based materials. This convergence of disciplines sparks a dynamic exchange of ideas, consistently making ILMAT a thrilling and forward-looking experience. This year's edition will spotlight cutting-edge advances in structural, dynamic, and thermodynamic properties, electrochemistry, materials science, bio-applications, and sustainability — illustrating the continuous evolution and impact of ionic liquid research.



The ILMAT2025 program includes 6 Plenary Lectures, 8 Keynote Lectures, 63 Oral Communications and 42 Poster Presentations. The event brings together 125 participants from 21 countries — including 15 European nations, three from Americas, two from Asia and one from Oceania — underscoring the truly international scope and collaborative spirit of the ionic liquid research community.

With this spirit, we look forward to your participation in ILMAT2025 and hope the conference will offer a stimulating, fruitful, and memorable experience for everyone involved.

On behalf of the Organising Committee,

Prof. Olga Russina  
Chemistry Dept.; Univ. of Rome Sapienza

Dr. Alessandro Triolo  
Istituto Struttura della Materia (CNR-ISM)





## Plenary Speakers

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***Prof. S. Passerini***

Austrian Institute of  
Technology,  
Wien, Austria



***Dr. S. Dai***

Oak Ridge National  
Laboratory & Uni-  
Tennessee, USA



***Prof. A. V. Mudring***

Dept. of Biological  
and Chem. Eng.  
Process and  
Materials Eng.,  
Aarhus University,  
Denmark



***Prof. T. Greaves***

School of Science,  
RMIT University  
Melbourne, Australia



***Prof. F. D'Anna***

Dept. of Bio.-  
Chem.- and  
Pharmaceutical  
Sciences and  
Technologies,  
Uni-Palermo, Italy



***Prof. J. A. P. Coutinho***

Chemistry Dept.,  
University of Aveiro,  
Portugal



## The Ruth Lynden-Bell Award

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ILMAT2025 proudly hosts the fourth edition of the **Ruth Lynden-Bell Award**.

The **Ruth Lynden-Bell Award** is a prestigious recognition named in honor of **Professor Ruth Marion Lynden-Bell**, a pioneering British chemist whose groundbreaking contributions have shaped the field of ionic liquids. Born on 7 December 1937, Professor Lynden-Bell is a Fellow of the Royal Society and holds the title of Emeritus Professor at both **Queen's University Belfast** and the **University of Cambridge**.



The award celebrates a **distinguished career of sustained excellence and innovation** in the study of ionic liquids, acknowledging individuals whose scientific achievements have made a lasting impact on the community. In bearing the name of one of the field's most influential figures, the Ruth Lynden-Bell Award serves both as a tribute and as an inspiration for future generations of researchers.

### The IV R. Lynden-Bell Award

The IV R. Lynden-Bell Award recipient is **Prof. J. A. P. Coutinho**, from the University of Aveiro (Portugal). He will be awarded the prize during a dedicated ceremony at the ILMAT2025 Conference, in recognition of his outstanding contributions to the field of Ionic Liquids and related materials. During the celebration, Prof. Coutinho will be awarded a commemorative plaque and will deliver a plenary lecture on: *"When did the chicken cross the Path?"*





## Program

### Monday 8<sup>th</sup> September

AULA CONVEGNI Foyer		
13:00	Registration	
AULA CONVEGNI		
	Chair	<i>O. Russina / A. Triolo</i>
15:00	Opening	Prof. A. Di Carlo (CNR), Prof. O. Lanzalunga (UniRome Sapienza)
15:30	PL1	<b>S. Passerini</b> "Locally Concentrated Ionic Liquid Electrolytes for High-Energy Batteries"
16:10	KN1	<b>F. Philippi</b> "Ion Aggregates and Their Mobility in Concentrated Electrolytes"
16:30	OP1	<b>E. Paillard</b> "Modifications of lithium metal anodes and ternary polymer electrolytes using ionic liquids for improved lithium metal battery cycling"
16:50	OP2	<b>F. Del Monte</b> "DES-based leachates containing LCO, NMC or NCA oxides as electrolytes for energy storage and conversion"
17:10	OP3	<b>A. Taubert</b> "Zwitterions as building blocks for new self-organized soft matter and ionic liquid crystals"
17:30	OP4	<b>T. Schubert</b> "Ionic liquids as Promising Electrolytes for Metal-Air Batteries"
17:50	OP5	<b>A. Tsurumaki</b> "New application of ionic liquids as the cathode additive for Li-ion batteries"
18:10	OP6	<b>R. Cortes-Huerto</b> "Thermoresponsive ionic liquid/water mixtures: nanostructuring and phase separation in energy and environment applications"
19:00	Welcome Party (@ the Apartment, via dei Marrucini, 1A)	



## Tuesday 9<sup>th</sup> September (SESSION A)

AULA CONVEGNI		
	Chair	M. Paluch
09:00	PL2	S. Dai "Nanoporous Ionic Liquids: Challenges and Opportunities "
09:40	KN2	N. Abdou "Multifunctional structural composites based on a protic ionic liquid: what for?"
	Chair	C. Schroeder
10:00	OP7A	M. Otero-Lema "Anomalous transport in mixtures of protic ILs: a computational study"
10:20	OP8A	J.-F. Gerard "Back to ionomers by designing ionic liquid nanostructures in polymers"
10:40	Coffee	
	Chair	L. Santos
11:20	OP9A	S. Livi "Design of a new generation of multifunctional degradable and reusable networks "
11:40	OP10A	J. Duchet-Rumeau "Ionic Liquids: relevant solvents to contribute to circular economy of polyvivyl chloride"
12:00	OP11A	P. Hesemann "Ionic Guest in Ionic Host: all-ionic Composites via Ionic Liquid Confinement in Ionosilica Supports"
12:20	OP12A	A. Paolone "Dicationic ionic liquids: synthesis, vapor pressure, thermal and vibrational properties"
12:40	OP13A	O. Cabeza Using hygroscopic character of ionic liquids to make high precision hygrometers"
13:00	Lunch	
AULA CONVEGNI		
	Chair	F. Del Monte
14:10	KN3	D. Paschek "Hydrogen Bonding Motifs in Hydroxy-Functionalized Ionic Liquids and Their Mixtures with Hydrogen Bond Catchers"
14:30	OP14A	B. Bracco "Insight into the molecular structure on protic ionic liquids"
14:50	OP15A	L. B. Santos "Impact of Nanostructuration on the Transport Properties of Ionic Liquids"
15:10	OP16A	T. Mendez-Morales "Effect of the cation aromaticity upon the structure of ionic liquids near carbon surfaces: a computational study"
15:30	OP17A	M. Busato "Impact of Cosolvent on Co <sup>2+</sup> Ion Speciation in 'Reline' Deep Eutectic Solvent"
15:50	OP18A	E. Rezabal "Structure and solvation behavior of Choline-Geranate: Insights into Drug Delivery"
16:10	Coffee & Poster Session A	
AULA CONVEGNI		
	Chair	O. Palumbo
17:10	OP19A	M. Paluch "Understanding of charge transport mechanism in ionic liquids and their macromolecular counterparts"
17:30	OP20A	R. Lois-Cuns "Exploring the nanoscale behaviour of confined water-in-salt mixtures in zeolite-templated carbons"
17:50	OP21A	S. Mattedi "Sustainable printed electrodes based on graphene and ionic liquids"
18:10	OP22A	S. Russo "Polarizable Molecular Dynamics of Biocompatible Ionic Liquids "



## Tuesday 9<sup>th</sup> September (SESSION B; Aula Marconi)

AULA CONVEGNI [Joint session]		
	Chair	M. Paluch
09:00	PL2	S. Dai "Nanoporous Ionic Liquids: Challenges and Opportunities "
09:40	KN2	N. Abdou "Multifunctional structural composites based on a protic ionic liquid: what for?"
AULA MARCONI		
	Chair	H. Montes-Campos
10:00	OP7B	X. Sun "Advancing Textile Sustainability: Fiber Recycling and Circular Dyeing from Multi-Component Textile Waste via Ionic Liquids"
10:20	OP8B	G. A. Bracchini "Urea-Zinc Chloride DES as a precursor for the synthesis of room temperature afterglow phosphorescent materials"
10:40	Coffee	
AULA MARCONI		
	Chair	V. Dracopoulos
11:20	OP9B	A. Miguez-Roel "Interfacial Analysis of a Ternary Ionic Liquid Electrolyte with Water and Lithium Salt: A Computational Study"
11:40	OP10B	E. Mangiacapre "PET Dissolution in bio-based eutectic solvents: Experimental findings and MD"
12:00	OP11B	L. Simonnet "Metal Ionic Liquids (MILs) as new catalytic curing agents of epoxy prepolymer for the design of high-performance materials"
12:20	OP12B	R. Almeida "Enhancing solar collector efficiency through melanin particles from human hair and unlocking the potential of ionic liquids as heat transfer fluids"
12:40	OP13B	S. Romano "Effect of Mono- and Dicationic Ionic Liquids on Starch Film Properties for Flexible Supercapacitor Devices "
13:00	Lunch	
AULA CONVEGNI [Joint session]		
	Chair	F. Del Monte
14:10	KN3	D. Paschek "Hydrogen Bonding Motifs in Hydroxy-Functionalized Ionic Liquids and Their Mixtures with Hydrogen Bond Catchers"
AULA MARCONI		
	Chair	M. Yousfi
14:30	OP14B	K. Aidas "Structural and NMR properties of ILs systems modelled by an integrated MD-QM/MM approach"
14:50	OP15B	N. Rafique "(Deep) Eutectic Solvents as Phase Change Materials for Thermal Energy Storage"
15:10	OP16B	O. Boces "Functional ionic liquids for the (electro)enzymatic conversion of CO2 to formate"
15:30	OP17B	L. M. Kaljusmann "Vapour pressure measurements of [2-HEAA] and [bis-2-HEAA] and their mixtures with water by thermal analysis"
15:50	OP18B	I. Souza "Distinctive strategies of ionic liquids in polymeric membranes for indoor air quality"
16:10	Coffee & Poster Session A	
AULA MARCONI		
	Chair	K. Aidas
17:10	OP19B	A. Rensonnet "Hammett acidity functions via Raman spectroscopy as a tool to probe the acidity levels of ionic liquids"
17:30	OP20B	A. Lunot "Design of a Proton Exchange Membrane Using ILs Structured in a PVDF Matrix"
17:50	OP21B	E. Pelegano-Titmuss "Dynamics of Pyrazole-LiTFSI Eutectic Solvents as Promising Lithium-Ion Battery Electrolytes"
18:10	OP22B	A. M. Czerska "To the thermodynamic origins of “deep eutectic” behavior: experimental determination of urea activity in reline by effusion-based techniques"



### Wednesday 10<sup>th</sup> September (SESSION A)

AULA CONVEGNI		
	Chair	P. Hesemann
09:00	PL3	A. V. Mudring "Ionic Liquids as Smart Solvents for Nanomaterials Syntheses"
09:40	KN4	M. L. Ferrer "Lessons from DESs to Design Novel Electrolytes for Electrochemical Energy Storage"
10:00	OP23	K. Goloviznina "Oxide speciation and dynamics in molten chloride salt-based nuclear fuel"
10:20	OP24	S. Kondrat "Low-dimensional Ionotronics: New Insights from Old Models"
10:40	Coffee & Poster Session B	
AULA CONVEGNI		
	Chair	F. Philippi
11:40	KN5	Z. Wojnarowska Self-Assembled Nanostructures in Aprotic Ionic Liquids Facilitate Charge Transport at Elevated Pressure""
12:00	OP25A	S. Legeai "Electrowinning-Electrodeposition Process development for Selective Separation of Noble Metals from Waste-Electronic-Equipments in DES"
12:20	OP26A	B. Iliev "Ionic liquid mediated polymer dissolution and conversion to value added products "
12:40	OP27A	E. Auffret "Molten salt treatment process for recycling nuclear cladding"
13:00	Lunch	
14:15	Group Photo	
14:30	Guided Tours (A & B options). Bus starts from CNR Headquarters	





## Wednesday 10<sup>th</sup> September (SESSION B)

AULA CONVEGNI		
	Chair	P. Hesemann
09:00	PL3	A. V. Mudring "Ionic Liquids as Smart Solvents for Nanomaterials Syntheses"
09:40	KN4	M. L. Ferrer "Lessons from DESs to Design Novel Electrolytes for Electrochemical Energy Storage"
10:00	OP23	K. Goloviznina "Oxide speciation and dynamics in molten chloride salt-based nuclear fuel"
10:20	OP24	S. Kondrat "Low-dimensional Ionotronics: New Insights from Old Models"
10:40	Coffee & Poster Session B	
AULA CONVEGNI		
	Chair	F. Philippi
11:40	KN5	Z. Wojnarowska Self-Assembled Nanostructures in Aprotic Ionic Liquids Facilitate Charge Transport at Elevated Pressure""
AULA MARCONI		
	Chair	A. Paolone
12:00	OP25B	J. Lopez De Lacalle "Multifunctional ionic polymers from deep eutectic monomer based on polyphenols"
12:20	OP26B	I. Fabrizi "Imidazole based Deep Eutectic Solvents: How ring substituent affects the chemical physical properties of binary mixtures"
12:40	OP27B	I. Bengtsson "Ionic liquid conductivity modelled by machine learning and symbolic regression "
13:00	Lunch	
14:15	Group Photo	
14:30	Guided Tours (A & B options). Bus starts from CNR Headquarters	



## Thursday 11<sup>th</sup> September

AULA CONVEGNI		
	Chair	A. Martinelli
09:00	PL4	<b>T. Greaves</b> "Biomolecules in Ionic Liquids"
09:40	KN6	<b>K. Bica-Schröder</b> "Ionic liquid-based materials driving photocatalytic carbon dioxide valorization"
10:00	OP28	<b>A. Wolny</b> "Sustainable biocatalytic system for efficient esterification: Immobilized lipase in deep eutectic solvent"
10:20	OP29	<b>L. Branco</b> "Ionic Systems for Bio-Science Applications"
10:40	Coffee	
	Chair	N. Abdou
11:20	OP30	<b>A. Mirjafari</b> "Design Principles of Functional Ionic Liquids for High Temperature Applications "
11:40	OP31	<b>A. Mezzetta</b> "The lignin side of Ionic Liquids: novel corrosion inhibitors"
12:00	OP32	<b>V. Dracopoulos</b> "Amino acid-based ionic liquids (AILs) investigation for an industrial CO <sub>2</sub> -assimilating anaerobe process"
12:20	OP33	<b>M. Yousfi</b> "In-situ (Nano) fibrillation of biopolymer blends based on poly(butylene-adipate-co-terephthalate)/poly(lactic acid) (PBAT/PLA) : effect of ethan-1-aminium ionic liquids on rheological, mechanical and barrier properties"
12:40	OP34	<b>A. Puga</b> "Carboxylate ionic liquid hydrates as CO <sub>2</sub> sorbent materials exhibiting amine-like efficiencies"
13:00	Lunch	
	Chair	T. Mendez-Morales
14:10	KN7	<b>H. Montes Campos</b> "Simulation of Proton Transfer Reactions in Ionic Liquids Using Neural Network Force Fields"
14:30	OP35	<b>S. Di Muzio</b> "Tetrabutylammonium based deep eutectic solvents: role of counter-anion and H-bond donor in the stabilization of liquid phase"
14:50	OP36	<b>C. Schröder</b> "Reactive molecular dynamics simulations: Proton transfers in protic ionic liquids"
15:10	OP37	<b>O. Palumbo</b> "p-toluenesulfonic acid monohydrate-Tetrabutylammonium salts systems: detection and characterization of deep eutectic solvents "
15:30	OP38	<b>M. Paolantoni</b> "Revisiting the State of Water in [BMIM][BF <sub>4</sub> ] Aqueous Solutions"
15:50	OP39	<b>M. A. Salvador</b> Pyrrolidinium-based Ionic Liquid Electrolyte Solutions for Application in Li-Ion Batteries: A Molecular Dynamics Approach"
16:10	Coffee & Chat	
16:45	ESIM Meeting	
20:00	SOCIAL DINNER (@ The Hive, via Torino, 6)	



## Friday 12<sup>th</sup> September

AULA CONVEGNI		
	<i>Chair</i>	<i>L. Guazzelli</i>
09:00	PL5	<b>F. D'Anna</b> "Ionic liquid gels as tools to confine ionic liquids and boost their applications"
09:40	KN8	<b>G. de Araujo</b> "Uncovering Relaxation Mechanisms in Ionic Liquids, Electrolytes, and Ionogels via Nuclear Magnetic Resonance Dispersion"
10:00	OP40	<b>R. Silva</b> "The Fluorination Effect on the Properties of Ionic Liquids"
10:20	OP41	<b>F. Mouillard</b> "Thermoplasticization of Paramylon by Biobased Ionic Liquids"
10:40	OP42	<b>L. M. Varela</b> "Hydrogen absorption in ionic liquids: computer simulations of water dissociation and proton transport"
11:00	Coffee	
	<i>Chair</i>	<i>L. M. Varela</i>
11:30	Lynden-Bell Award	<b>J. A. P. Coutinho</b> "When did the chicken cross the Path?"
12:10	Prizes	
12:30	Concluding Ceremony	



## Poster Session A

**Tuesday 9<sup>th</sup> September 16:10-17:10**

Index	Author	Title
PA-1	T. T. Borović	Advances in Electrolyte Additives for Enhanced Performance of Lithium-Ion Batteries
PA-2	A. M. Czerska	Thermodynamic investigation of ionic components of Type III DES by vapor pressure measurements and ab initio calculations
PA-3	E. Formoso Estensoro	Solute–Solvent Interactions in Choline–Geranate: Structure and Solvation Pattern of a Collagen-Mimetic Peptide
PA-4	D. Goste	Modeling thermodynamic properties of mixtures of water and functionalized 1,3-dialkylimidazolium ionic liquids with PC-SAFT
PA-5	L. Hernandez-Fernandez	Solvation Behavior of Choline-Geranate: Insights into Organometallic Anticancer Drug Delivery
PA-6	J. Ingenmey	Structure–Diffusion in a Ternary Protic System: Tuning the Proton Mobility in [HmIm][Ac]–H <sub>2</sub> O
PA-7	S. Kitaoka	Synthesis and properties of GABA-based ionic liquids and deep eutectic solvents
PA-8	E. Mangiacapre	Beyond water: Aquoline, a versatile wbDES for host-guest and self-assembly systems
PA-9	S. Mattedi	Study on cation effect on decanoate ionic liquids self-assembly properties through isothermal titration calorimetry experiments
PA-10	Z. Murnikova	Study of Enhanced Solubility of Glibenclamide in Aqueous Ionic Liquid Solutions
PA-11	K. Nobuoka	Solvent Effects of Imidazolium Ionic Liquids on Optical Properties of $\pi$ -Electron Extended Rhodamine Dye ABPX
PA-12	D. Paolini	Optimizing device configuration for enhanced supercapacitor performance
PA-13	R. Pollet	Diffusion studies of water-in-salt electrolytes using molecular dynamics simulations and Static Field Gradient (SFG) quadrupolar NMR
PA-14	F. Ramondo	Deep Eutectic Solvents on graphene oxide surface: lighting from experimental and computational jointed investigation
PA-15	M. A. Salvador	Molecular modeling studies on the effect of polymer-electrolyte interactions in the Li-ion diffusion
PA-16	L. Silvestri	Thermodynamic study of evaporation and thermal decomposition of dicationic aprotic ionic liquids with a symmetrical imidazolium cation
PA-17	F. Trequattrini	Dynamic processes in highly concentrated electrolytes
PA-18	L. Villa	A Metal-Free approach to CO <sub>2</sub> valorization: Unlocking the potential of ionic liquids and organic photosensitizers
PA-19	A. Mukhtiar	Halogen-Free Deep Eutectic Solvents as Electrolytes for Ambient Temperature Supercapacitors
PA-20	A. Triolo	5-Hydroxymethylfurfural (HMF): structural organization and solubility in selected DES.



## Poster Session B

**Wednesday 10<sup>th</sup> September 10:40-11:40**

Index	Author	Title
PB-1	D. Ariaudo	Innovative ionic liquid-based electrolytes for sodium ion batteries
PB-2	M. Campoverde	Exploring Pyrazole Eutectic Solvents as Sustainable Alternatives for Lithium-Ion Batteries
PB-3	E. De Santis	Innovative ionic liquid electrolyte technologies for enhancing the safety and reliability of lithium battery systems in harsh operating conditions
PB-4	M. Di Pea	Innovative ionic liquid-based electrolytes for Li batteries applications
PB-5	B. J. Gomes de Matos da Costa e Silva	Use of [2HEA] and [DBU] ionic liquids as electrolytes for ammonia electrooxidation
PB-6	U. H. Ishaque	Advancing Capacitive Energy Storage with Quaternary Electrolytes
PB-7	T. H. Jeong	Engineering Tri-Metal Hybrid-Modified Separators for High-Performance Lithium–Sulfur Batteries: Mechanistic Insights and Practical Applications
PB-8	M. Królikowska	Eutectic phase change materials based on novel ionic liquids: synthesis and characterization.
PB-9	M. Królikowski	Investigation of eutectic phase change materials composed of diols and ionic liquids. Experimental study and correlations
PB-10	A. Nikolopoulou	Bio-inspired ionic liquids for reversible CO <sub>2</sub> capture
PB-11	S. Papović	The new ionic additives for safer and durable electrolytes in lithium-ion batteries
PB-12	G. Park	A Flexible and Scalable NASICON-Structured LiZr <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Hybrid Solid Electrolyte for High-Voltage Lithium-Based Hybrid Batteries
PB-13	S. Reigl	Concept and Applications of Metal-Based COMPLET Ionic Liquids
PB-14	C. Rizzi	To have and have not ... an ionic liquid grafting rate control in composite material for lithium-ion batteries anode
PB-15	C. Samuels	Molecular Level Insights on The Gelation Influence on the Dynamics of Sustainable Eutectogels
PB-16	M. Smiglak	Cellulose dissolved in ionic liquids as in situ generated filler in epoxy biocomposites with simultaneous curing initiated by ionic liquids
PB-17	A. Szpecht	Influence of cation structure with allyl group and different anions on the glass transition and heat deflection temperatures of fiber reinforced epoxy composites
PB-18	A. Zajac	New Surface Passivating Ionogel Technology for Mesa-Type Detector Structures (PASION project)
PB-19	D. Zielinski	New Insights into Epoxy Resin Curing: Functional Coatings with Anilinium-Derived Ionic Liquids
PB-20	G. Tatrari	Fluorine-Free Heterocyclic Anions-Based Ionic Liquid Electrolytes for Variable Temperature Supercapacitors.



# Special Issue dedicated to ILMAT Proceedings

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Aiming at promoting and consolidating the scientific output of ILMAT2025, we are pleased to announce a dedicated Special Issue (SI) in *Materials*, focused on “*Ionic Liquid-Based Materials: Fundamentals and Applications*” ([link](#)). The issue will highlight research presented during the conference, as well as broader advances in the field of ionic liquids and related materials.

*Materials* is a peer-reviewed, open access journal by MDPI. It is indexed in both Scopus and Web of Science (WoS).

The SI will feature contributions from ILMAT2025 participants, while remaining open to high-quality submissions from researchers worldwide working on fundamental or applied aspects within the scope of the conference.

We invite original research articles and focused review papers from ILMAT participants, aiming at showcasing the quality and diversity of the ILMAT2025 scientific programme.

Authors will receive detailed instructions via email following the conference. All submissions will undergo rigorous peer review in line with the journal’s editorial standards.

## *Benefits for ILMAT2025 Participants.*

- Best Presentation Award winners will receive a full fee waiver.
- A limited number of 50% publication fee discounts will be offered to selected contributions.

Publishing in the ILMAT2025 Special Issue will not only enhance the visibility of ILMAT participants through thematic grouping and targeted promotion, but also provide a lasting scientific reference to this edition of ILMAT. By contributing, you will help foster a shared identity within the ionic liquids community and support ongoing collaboration in this rapidly evolving field.

We warmly encourage all participants to contribute and help capture the innovation and excellence that will emerge during ILMAT2025!

**Special Issue**  
Ionic Liquid-Based Materials:  
Fundamentals and Applications

Guest Editors  
Dr. Olga Russina  
Dr. Alessandro Triolo

Deadline  
10 May 2026

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