

## 39<sup>th</sup> International Conference on Solution Chemistry

14-17 September 2025, Rosa Beach Hotel, Skanès Monastir, Tunisia

### Program of the

# ICSC 2025

Sunday 14 September 2025	
14.00 - 17.00	Welcoming participants, Distribution of Documents and Check in
14.00 - 19.00	<b>Room B</b> Subcommittee on Solubility and Equilibrium Data (SSED) Annual Meeting
17.00 - 17.30	Opening Ceremony
17.30 - 18.20	<b>Topic C. Plenary Lecture 1</b> <b>DENG Tianlong</b> Chair: W. E. Waghorne <i>Tianjin University of Science &amp; Technology, Tianjin, China</i> <b>Room A</b> <b>Prediction System for Phase Equilibria in Salt Lake Brine Systems and Its Applications</b>
18.20 - 19.10	<b>Topic M. Plenary Lecture 2</b> <b>KISELEV Mikhail</b> Chair: Y. Zhou <i>Krestov Institute of Solution Chemistry of the RAS, Ivanovo, Russia</i> <b>Room A</b> <b>Screening of Polymorphism in Pharmaceutical Compounds Under Supercritical State Parameters</b>
19.10 - 20.00	Welcome Ceremony
20.00	Dinner

Monday 15 September 2025 (Morning)						
09.00 - 09.50	<b>Topic D. Plenary Lecture 3</b> <b>TERAZIMA Masahide</b> Chair: S. Gadžurić University of Kyoto, Japan <b>Room A</b> Dynamics of conformation changes and biological functions of proteins by time-resolved diffusion techniques					
09.50 - 10.30	<b>Room A</b> <b>Topic B. Keynote 1 - Naceur IDRISSE</b> "Structural and Dynamic Characteristics of Liquid-Vapor Interfaces in Aqueous Solutions, Ionic Liquids, and Supercritical Fluids" Chair: M. Kiselev	<b>Room B</b> <b>Topic I. Keynote 2 - Valentine ANANIKOV</b> "Solution state organometallic chemistry of Pd, Pt, Ni, Cu and Au complexes and clusters - the key to high performance catalysis" Chair: Z. Yu	<b>Room C</b> <b>Topic D. Keynote 3 - Virginie MARRY</b> "Understanding clay/water systems from the compacted to the colloidal state: Coupling modelling and experiments" Chair: M. Terazima			
10.30 - 11.30	Poster Session 1 (P 1 - P 20) Alphabetical Order					
Oral Communications - Session 1						
Room A - Chair: M. Kiselev <b>Topic: A</b>		Room B - Chair: M.T. Ben Dhia - V. Ananikov <b>Topic: H</b>		Room C - Chair: V. Marry <b>Topic: D</b>		
	Com.	Communicating	Com.	Communicating	Com.	Communicating
11.30 - 11.45	OC-01A	HEFTER Glenn <b>Australia</b>	OC-01B	BERGAOUI Souad <b>TUN</b>	OC-01C	BOHINC Klemen <b>Slovenia</b>
11.45 - 12.00	OC-02A	CERAR Janez <b>Slovenia</b>	OC-02B	BOUBAKRI Saber <b>TUN</b>	OC-02C	BOUZAIENE Roua <b>TUN</b>
12.00 - 12.15	OC-03A	EL HADI Djamel <b>ALG</b>	OC-03B	BOUKERROUI Abdelhamid <b>ALG</b>	OC-03C	CHANG Chien-Hsiang <b>Taiwan</b>
12.15 - 12.30	OC-04A	GALINDRES JIMÉNEZ Diana Madelen <b>Spain</b>	OC-04B	ZHOU Yongquan <b>China</b>	OC-04C	CHORAŻEWSKI Miroslaw <b>Poland</b>
13.00	Lunch					

Monday 15 September 2025 (Afternoon)						
14.45 - 15.35	<b>Topic K. Plenary Lecture 4</b> <b>LEBLANC Roger</b> Chair: G. Hefter University of Miami, Coral Gables, Florida, USA <b>Room A</b> Physicochemical Characterization of a Novel Carbon Nanomaterial: Carbon Dots					
15.35 - 16.15	<b>Room A</b> <b>Topic B. Keynote 4- D'ANGELO Paola</b> Deep Eutectic solvents: The relationship between structure and properties Chair: Y. Zhao	<b>Room B</b> <b>Topic H. Keynote 5 - DUFRECHE Jean-François</b> "Modelling complex solutions: separation chemistry and recycling of strategic metals" Chair: A. Amine	<b>Room C</b> <b>Topic L. Keynote 6- MATUBAYASI Nobuyuki</b> Cosolvent effects on aggregation of bio-related molecules studied with all-atom MD and a solvation theory Chair: A. Idrissi			
Oral Communications - Session 2						
Room A - Chair: G. Hefter <b>Topic: A</b>		Room B - Chair: Z. Yu <b>Topics: G, H, I</b>		Room C - Chairs: S. Boughammoura - P. D'Angelo <b>Topics: D, E, N</b>		
	Com.	Communicating	Com.	Communicating	Com.	Communicating
16.15 - 16.30	OC-05A	SOHR Julia <b>Germany</b>	OC-05B	TABASSUM Salma <b>Türkiye H</b>	OC-05C	GIACOMELLI Fernando C. <b>Brazil D</b>
16.30 - 16.45	OC-06A	MAJLESI Kavosh <b>Iran</b>	OC-06B	SALIH Kifah S.M. <b>Qatar G</b>	OC-06C	GÓMEZ ESTÉVEZ Juan Luis <b>Spain D</b>
16.45 - 17.00	OC-07A	POSTNIKOV Eugene <b>Russia</b>	OC-07B	MANNUCCI Giorgia <b>Italy I</b>	OC-07C	WANG Huiyong <b>China</b>
17.00 - 17.15	OC-08A	ŠARAC Bojan <b>Slovenia</b>	OC-08B	MRABET Molka <b>TUN I</b>	OC-08C	TÖRÖK Péter <b>Hungary N</b>
17.15 - 17.30	Coffee break + Poster Session 2 (P 21 - P 40) Alphabetical Order					
Oral Communications - Session 3						
Room A - Chair: W. E. Waghorne <b>Topic: G</b>		Room B - Chair: T. Deng <b>Topics: L, N</b>		Room C - Chairs: Y. Zhao - S. Gadžurić <b>Topic: E</b>		
	Com.	Communicating	Com.	Communicating	Com.	Communicating
17.30 - 17.45	OC-09A	RODRİK Geoffroy <b>France</b>	OC-09B	COSTENOBLE Sandrine <b>France N</b>	OC-09C	DOMANSKA-ŻELAZNA Urszula <b>Poland</b>
17.45 - 18.00	OC-10A	BRUDAR Sandi <b>Slovenia</b>	OC-10B	IBRAHIM Issaad <b>TUN L</b>	OC-10C	KHAN Imran <b>Oman</b>
18.00 - 18.15	OC-11A	ISHII Yoshiki <b>JPN</b>	OC-11B	SYCHEV Alexander <b>Russia L</b>	OC-11C	LI Zhiyong <b>China</b>
18.15 - 18.30	OC-12A	LIU Ruirui <b>China</b>	OC-12B	PAPP Judit <b>Hungary N</b>	OC-12C	ALMASY Laszlo <b>Hungary E</b>
19.30	Dinner					

<b>Tuesday 16 September 2025 (Morning)</b>						
09.00 - 09.50	<b>Topic G. Plenary Lecture 5</b> <i>University College Dublin, Ireland</i>		<b>WAGHORNE Winfield Earle</b>		Chair: P. D'Angelo	
<b>Room A</b>	<b>Empirical solvent parameters, computational chemistry and the real world</b>					
09.50 - 10.40	<b>Room A</b> <b>Topic H. Keynote 8- AMINE Aziz</b> <i>"Recent advances in molecular imprinting polymers for analytical chemistry"</i> Chair: M. Amara		<b>Room B</b> <b>Topic E. Keynote 7 - GADŽURIĆ Slobodan</b> <i>"Carboxylic ionic liquids: Synthesis, properties, acidic constants and application"</i> Chair: T. Deng			
10.40 - 11.30	Poster Session 3 (P 41 - P 65) Alphabetical Order					
Oral Communications - Session 4						
Room A - Chair: N. Matubayasi Topic: G		Room B - Chair: J-F. Dufreche Topics: D, N		Room C - Chair: A. Amine Topics: K		
	Com.	Communicating	Com.	Communicating	Com.	Communicating
11.30 - 11.45	OC-13A	LUKŠIČ Miha <b>Slovenia</b>	OC-13B	KOVÁCS Izabella <b>Hungary</b> N	OC-13C	BAOUEB Mohamed Hassen <b>TUN</b>
11.45 - 12.00	OC-14A	OKAZAKI Susumu <b>JPN</b>	OC-14B	KUTUS Bence <b>Hungary</b> N	OC-14C	BEN MANAA Marwa <b>TUN</b>
12.00 - 12.15	OC-15A	PIETROPAOLI Eva <b>Italy</b>	OC-15B	DAMMAK Ilyes <b>TUN</b> D	OC-15C	KHATTAK Rozina <b>PAK</b>
12.30	Lunch					

<b>Tuesday 16 September 2025 (Afternoon)</b>	
14.00	Cultural Activities: The Amphitheater of El Djem or Kairouan City
19.30	Conference Dinner (Banquet)

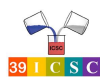
<b>Wednesday 17 September 2025 (Morning)</b>						
09.00 - 09.40	<b>Room A</b> <b>Topics N. D. Keynote 9 - AMARA Mourad</b> <i>From Polyelectrolyte Conformation to Species Selectivity: A PEI Chelation-Based Approach to Membrane Transport</i> Chair: J.-F. Dufreche		<b>Room B</b> <b>Topic H. Keynote 10 - YU Zhiwu</b> <i>"Excess Spectroscopy: Theoretical Considerations and Recent Applications"</i> Chair: V. Ananikov		<b>Room C</b> <b>Topic E. Keynote 11 - ZHAO Yang</b> <i>"Imidazolium - Based Ionic Liquids for CO<sub>2</sub> Capture and Electroreduction"</i> Chair: L. Latrous	
Oral Communications - Session 5						
Room A - Chair: A. Idrissi Topic: B			Room B - Chair: M. Amara Topics: F, J			
	Com.	Communicating	Com.	Communicating		
09.45 - 10.00	OC-16A	BUSATO Matteo <b>Italy</b>	OC-16B	AROUS Omar <b>ALG</b> F		
10.00 - 10.15	OC-17A	HAN Jihae <b>Korea</b>	OC-17B	VANINA Anastasia <b>Russia</b> F		
10.15 - 10.30	OC-18A	JING Zhuanfang <b>China</b>	OC-18B	ZOGHLAMI Nada <b>TUN</b> F		
10.30 - 10.45	OC-19A	SATO Hina <b>JPN</b>	OC-19B	KALLEL Jihene <b>TUN</b> J		
11.00	Closing Ceremony Remarks and Best Posters Awards					
13.00	Lunch					

PL (45min, +5), KN (35 min, +5), OP (15min)

Topics of ICSC 2025	E. Ionic liquids	J. Supra molecular chemistry
A. Solution thermodynamics	F. Polymers in Solution, Soft matter	K. Surface and Interfaces, Nano sensors
B. Solution structure and dynamics	G. Computational solution chemistry	L. Biochemical effects in solutions
C. Solubility phenomena	H. Analytical Chemistry	M. Supercritical fluids and solutions under extreme conditions
D. Electrolytes, Polyelectrolytes, Colloids and interfaces	I. Coordination Chemistry	N. Industrial applications of solutions

## Listing of Posters Communications

Communicating's Name & Title of Abstract	Ref
<b>ABID Hedia</b>   Synthesis and crystal structure of a novel Schiff base ligand with potential for transition metal coordination	PC 1
<b>AYAD Amal</b>   Thermodynamic Properties of N, N-dimethylacetamide with 1-butanol, 1-pentanol, furfural or furfuryl alcohol at temperatures from (293.15 to 323.15) K	PC 2
<b>AYAD Amal</b>   Experimental determination and modelling of high-pressure phase equilibrium for carbon dioxide solubility with biofuels	PC 3
<b>BELABBACI Aouicha</b>   Thermodynamic, ultrasonic, and transport study of binary mixtures containing 1-hexene and alcohols at (293.15 - 303.15) K	PC 4
<b>BELABBACI Aouicha</b>   Physicochemical properties of binary mixtures of furfural or furfuryl alcohol with 1-propanol or 2-propanol at temperatures from (293.15 to 323.15) K	PC 5
<b>BERGAOUI Souad</b>   Click reaction modification of a new anodic-synthesized oligophenylene material	PC 6
<b>BOUGHAMOURA Sondes</b>   Potentiometric and conductometric study of the speciation of zirconocene dichloride $Cp_2ZrCl_2$ in aqueous solution.	PC 7
<b>CHEHAIBI Mayssa</b>   Activity of terpenes-doped oxides against <i>Echinococcus granulosus</i> protozoa	PC 8
<b>DAMMAK Ilyes</b>   Natural extracts from <i>Acacia tortilis</i> subsp. <i>raddiana</i> as bio-based emulsifiers: Influence of solvent extraction on antioxidant and interfacial properties in colloidal systems	PC 9
<b>DENDENI Maha</b>   Eco-Friendly and cost-effective bioadsorbent for efficient dye removal: Structural characterization and kinetic modeling	PC 10
<b>DJAMA Mustapha</b>   Structural and morphological characterization of Sol-Gel derived ZnO thin films on Fe-10Cr alloy	PC 11
<b>ESSID Idriss</b>   Selective $C(sp^3)-C(sp^2)$ bond formation via homogeneous electrochemical cross-coupling in solution	PC 12
<b>ESTESO Miguel Angel</b>   The use of cyclodextrins for the complexation of hydrocortisone	PC 13
<b>ESTESO Miguel Angel</b>   The use of cyclodextrins for the removal of sodium sulfadiazine from hospital wastewater	PC 14
<b>GALINDRES JIMÉNEZ Diana Madelen</b>   Supramolecular interactions of an anionic resorcinarene with transition metal ions: Combined experimental and theoretical study	PC 15
<b>GOTLIB Igor</b>   Glycine and sodium glycinate in water: Molecular dynamics simulations and experiment	PC 16
<b>GRABA Zahra</b>   Removal of a dye, Bezacryl Yellow (BY), by crushed cardoon leaves	PC 17
<b>HAN Jihae</b>   Thermal properties of $AlCl_3$ mixtures with amides and carbamides	PC 18
<b>HEDHILI Lassaad</b>   Sustainable purification and deoxygenation of olive pomace oil using low-cost catalytic solutions for biofuel applications	PC 19
<b>HOSNI Nabil</b>   Enhanced electrocatalytic performance of $NiFe_2O_4$ -graphene oxide composites: Role of interfacial charge transfer	PC 20
<b>IDIR Brahim</b>   Eco-friendly corrosion inhibitor system based on expired pharmaceuticals and iodide ions for aluminum alloys	PC 21
<b>INGRACHEN Daouia</b>   Adsorption of methylene blue and the regeneration of MCM-41 mesoporous silica	PC 22
<b>ITO Yuki</b>   Insights into the structure and dynamics of a lithium sulfur battery electrolyte using molecular dynamics simulations	PC 23
<b>JANKOVIĆ Nenad</b>   Synthesis and antioxidative activity of self-assembled tetrahydropyrimidines-based organogels	PC 24
<b>JAOUADI Nermine</b>   In silico evaluation of the affinity of quinoline derivatives for the AChE receptor through molecular docking	PC 25
<b>JAOUADI Nermine</b>   In silico evaluation of the affinity of quinoline derivatives for the NMDA receptor through molecular docking	PC 26
<b>JEBRI Sonia</b>   Calcium phosphate-supported nanocomposites for enhanced visible-light photodegradation of methylene blue	PC 27
<b>JEGHAM Nour</b>   Study of the physicochemical and microbiological stability of dexamethasone-based mouthwashes	PC 28
<b>JEGHAM Nour</b>   Castor oil and laxative activity: Virtual screening of ricinoleic acid analogues	PC 29
<b>KALLEL Jihene</b>   Taste-masking of caffeic acid via inclusion complexation with hydroxypropyl- $\beta$ -cyclodextrin: Evidence from NMR and conductometric sensing	PC 30



Communicating's Name & Title of Abstract	Ref
<b>KAMIYAMA Tadashi</b>   Thermodynamic study of inclusion of ionic liquid by cyclodextrin in water	PC 31
<b>KHIREDDINE Hafit</b>   Effect of TiO <sub>2</sub> on the adhesion and bioactivity of a sol-gel-derived hydroxyapatite coating on 316L stainless steel surface: Biomedical application	PC 32
<b>KIKUCHI Kodai</b>   All-atom molecular dynamics study on cellulose dissolution in ionic liquids under high pressure: Prediction and mechanistic insights	PC 33
<b>KIRILOVA Elena</b>   Spectroscopic study of the coordination of metal ions with anthrone derivatives	PC 34
<b>KIRJUSINA Muza</b>   Photophysical properties and potential application of substituted benzantrones	PC 35
<b>KITAGAWA Taketoshi</b>   Molecular dynamics investigation of hydronium ion transport mechanisms in Nafion® membranes	PC 36
<b>LAFI Ridha</b>   Adsorption of Rhodamine B onto few layer graphene: Experiments, statistical physics and artificial neural network modeling	PC 37
<b>LEE Byeong Woo</b>   Influence of inorganic and organic additives on the properties of sodium silicate solutions	PC 38
<b>LEE Taesuk</b>   Manufacturing of hydrogel composition for extinguishing metal fires in electric vehicles	PC 39
<b>MA Jing</b>   Sodium ion electrolyte solution structures by excess spectroscopy	PC 40
<b>MAHFOUDHI Sarra</b>   Quality control of vitamin C in dietary supplements using HPLC-UV analysis	PC 41
<b>MAHFOUDHI Sarra</b>   Development and validation of two methods for the determination of magnesium and calcium ions by UV-visible spectrophotometry in dietary supplements	PC 42
<b>MAKHOLOUF Nawres</b>   Development and validation of a glassware cleaning protocol in a pharmaceutical quality control laboratory	PC 43
<b>MARS Abdelmoneim</b>   Efficient green hydrogen generation via catalytic hydrazine-assisted water splitting using PEDOT:PSS-stabilized lithium ferrite porous nanostructures decorated with MoS <sub>2</sub> quantum dots	PC 44
<b>MEJRI Alma</b>   CeO <sub>2</sub> quantum dot-decorated PEDOT:PSS-lithium ferrite porous nanostructures for high-sensitivity electrocatalytic detection of pesticides	PC 45
<b>MIHAILOVA Irena</b>   Electrochemical CuO sensor for H <sub>2</sub> O <sub>2</sub> detection and MgO nanoparticle remediation in drought-stressed oat	PC 46
<b>MIYAMOTO Takumi</b>   Effect of cyclodextrin on acidic and thermal denaturation of Cytochrome c	PC 47
<b>OKAZAKI Yuya</b>   Preferential solvation of lysozyme in aqueous DES solutions	PC 48
<b>SAIDANI Mohamed Ali</b>   Synthesis of multifunctional ternary Au@ZnO/α-Fe <sub>2</sub> O <sub>3</sub> nanocomposite for organic pollutant removal	PC 49
<b>SAOUDI Chaima</b>   Magnetic ferrite nanoparticles for the removal of textile dyes	PC 50
<b>SERFÓZÓ Ákos</b>   Stabilization study of sodium metamizole in aqueous medium by intercalation into layered double hydroxides	PC 51
<b>SHIMONO Yuki</b>   Thermodynamic investigation of the interaction between lipid bilayers and βLG using ITC	PC 52
<b>SUN Tianjiao</b>   Identifying species in imidazolium chloride-based ionic liquid with ε-caprolactone via excess infrared spectroscopy	PC 53
<b>TAOURI Lydia</b>   An innovative nanoparticle modified carbon paste micro-sensor for ultrasensitive and selective detection of ciprofloxacin in environmental	PC 54
<b>WAIDA Soya</b>   Dependence of alkyl chain length of ionic liquids on the thermal stability of cytochrome c	PC 55
<b>WANG Fang</b>   Effects of ionic liquid types on the structure and thermal properties of different silk fibroin	PC 56
<b>XU Shuting</b>   A hybrid computational framework for excess infrared spectral decomposition in tert-butanol-carbon tetrachloride solutions	PC 57
<b>YOSHIDA Chisa</b>   Thermodynamic study of cyclodextrin-protein interaction by titration calorimetry	PC 58
<b>ZITOUNI Nesrine</b>   Control of iron-based dietary supplements using flame atomic absorption spectrophotometry	PC 59
<b>ZITOUNI Nesrine</b>   Control of zinc-based dietary supplements using flame atomic absorption spectrophotometry (FAAS)	PC 60
<b>ZRAFI Sirine</b>   Efficient Beer-Lambert law for analyzing hybrid materials in sunscreen creams	PC 61