

Monday, September 5

Lisbon time

SESSION A - Ionic Liquids	13:00/13:15	Opening session
	Chairperson: João A.P. Coutinho	
	PLENARY LECTURE 1	
	13:15/14:00	Nanostructuring effect on the properties of ionic fluids Luís Santos
	ORAL PRESENTATIONS	
	14:00/14:15	Thermal properties and structure of <i>bis</i> (1-hexadecyl-3-methylimidazolium) tetrachloronickelate ionic liquid Magdalena Bendová
	14:15/14:30	iSenseDSC: Refurbishment and optimization of a high precision microcalorimeter Rodrigo Silva
	14:30/14:45	Improvement of CO ₂ capture processes by tailoring the reaction enthalpy of aprotic n-heterocyclic anion-based ionic liquids Daniel Hospital-Benito
	14:45/15:00	Thermodynamic properties of lithium <i>bis</i> ((trifluoromethyl)sulfonyl)amide and its solid-liquid equilibrium with water Eugene Paulechka
	15:00/15:15	BREAK
	Chairperson: Luís M.N.B.F. Santos	
	ORAL PRESENTATIONS	
	15:15/15:30	Encapsulated ionic liquids (enil) for CO ₂ /CH ₄ separation using fixed bed columns Jesús Lemus
	15:30/15:45	Asymmetric poly(ionic liquid)-ionic liquid membranes for gas separation Bruna Soares
	15:45/16:00	Design of biogas upgrading processes based on ionic liquids Cristian Moya
	16:00/16:15	Mixed matrix membranes composed of encapsulated amino acid-based ionic liquids for gas separation applications Liliana Silva
	16:15/16:30	BREAK
	Chairperson: Ala Bazyleva	
	INVITED LECTURE 1	
	16:30/17:00	Pharmaceuticals and ionic liquids Slobodan Gadžurić
	ORAL PRESENTATIONS	
	17:00/17:15	Extraction of dyes from polyester fibres using ionic liquids Guillaume Simon
	17:15/17:30	Reaction-extraction platforms towards CO ₂ -derived cyclic carbonates catalyzed by ionic liquids by COSMO models Alejandro Belinchón
	17:30/17:45	Low energy-demanding separation of propylene carbonate and ionic liquid catalyst after CO ₂ conversion Elisa Hernández
17:45/18:00	Extractive distillation for refrigerant blends separation: solvent selection and process simulation Miguel Viar	

Tuesday, September 6

Lisbon time

SESSION B - Modeling: Aqueous Solutions and Phase Equilibria	Chairperson: Selva Pereda	
	PLENARY LECTURE 2	
	13:00/13:45	Solubility of biomolecules Christoph Held
	ORAL PRESENTATIONS	
	13:45/14:00	In silico solvent screening in pharmaceutical drug development Michael Diedenhofen
	14:00/14:15	Solubility of orange peel oil components in supercritical CO ₂ +ethane azeotropic mixture Pablo Hegel
	14:15/14:30	Modeling CO ₂ solubility and pH in aqueous and organic solutions using ePC-SAFT Daniel Schick
	14:30/14:45	BREAK
	Chairperson: Bernd Rathke	
	ORAL PRESENTATIONS	
	14:45/15:00	Extended specific ion theory (ESIT) with ion pairing: 1-1 and 2-2 electrolytes in regular and modified molality scale Alex De Visscher
	15:00/15:15	A thermodynamic model for neodymium oxalate in aqueous solutions of HNO ₃ , HCl, HClO ₄ , and Nd(NO ₃) ₃ at 298 K and 0.1 MPa Charles S. Oakes
	15:15/15:30	Modeling phase equilibria and electrical conductivity for lithium-ion battery applications Peiming Wang
	15:30/15:45	Thermodynamic characteristics of salt dissolution processes in a three-component water-salt system CsCl – CaCl ₂ – H ₂ O Rabiga Tleuzhanov
15:45/16:00	The phase equilibria of aqueous electrolytes in confinement under martian condition Shaoheng Wang	
16:00/16:30	BREAK	
SESSION C - Computer Assisted Equilibrium Calculation	Chairperson: Earle Waghorne	
	PLENARY LECTURE 3	
	16:30/17:15	Association-based activity coefficient models for nonelectrolyte and electrolyte solutions Chau-Chyun Chen
	ORAL PRESENTATIONS	
	17:15/17:30	Solubility in "The Properties of Gases and Liquids" 6th Ed. Vladimir Diky
	17:30/17:45	High pressure multiphase phase equilibria of CO ₂ -water-lignin derivatives Francisco Sánchez
	17:45/18:00	Designer solvents by cycloaddition reactions of CO ₂ : carbonates and biocarbonates Pablo Navarro
18:00/18:15	High temperature vapor-liquid equilibrium of alcohols+water mixtures Cristiana Ferreira	

Wednesday, September 7

Lisbon time

Chairperson: Magdalena Bendová	
POSTER SESSION A	
13:00/13:04	A1. Effect of solvent composition onto composition and structure of metal-organic frameworks on the basis of copper and zinc terephthalates Mikhail Skripkin
13:04/13:08	A2. Thermodynamic elucidation of the relationship chemical species in water soil extracts - phytoaccumulation Diana Rabadjieva
13:08/13:12	A3. Solubility studies of monoterpenoids in organic solvents Sérgio Vilas-Boas
13:12/13:16	A4. Oxide film formation on construction materials of the nuclear reactor first circuit with water coolant Mikhail Skripkin
13:16/13:20	A5. Liquefying flavonoids with terpenoids through deep eutectic solvent formation Gabriel Teixeira
13:20/13:24	A6. Kamlet-Taft and pH polarity scales as tools to understand the hydrotrophy effect of alkanediols Bruna P. Soares
13:24/13:28	A7. Insights into the formation of (deep) eutectic solvents Mónia Martins
13:28/13:32	A8. Selective extraction of inhibitory compounds and sugars from aqueous media using green solvents Blanca Miera
13:32/13:36	A9. Experimental investigation and thermodynamic modeling of cannabidiol solubility in oils and acid-based eutectic solvents Ahmad Alhadid
13:36/13:40	A10. Removal of azo dyes with deep eutectic solvent doped chitosan beads Oscar Martínez
13:40/13:44	A11. Poly(ionic liquid)s for dyes removal agents Bruna F. Soares
13:44/13:48	A12. Computational modelling of type V deep eutectic solvents Gabriel Teixeira
13:48/13:52	A13. Ionic liquids as entrainers for the fractionation of terpene mixtures Sérgio Vilas-Boas
13:52/13:56	A14. Electrical conductivity measuring system based on a multi-frequency impedance methodology Carlos Miranda
13:56/14:00	A15. Impact of silicate on the solubility and aqueous speciation of U(VI) in alkaline to hyperalkaline systems Sarah Duckworth
14:00/14:04	A16. Actinide complexation with organic ligands in the WIPP: state-of-the-art Elisenda Colàs
14:04/14:08	A17. Solubility of Nd(OH) ₃ am and Nd(OH) ₃ cr in the presence of citrate and EDTA Ceren Aslani
14:08/14:45	POSTER DISCUSSION PERIOD
14:45/15:00	BREAK

Wednesday, September 7

Lisbon time

Chairperson: Johan Jacquemin	
POSTER SESSION B	
13:00/13:04	B1. The perspective of cooperative hydrotrophy on the solubility in aqueous solutions of cyrene Jordana Benfica
13:04/13:08	B2. Effect of activated carbon pore size on the sorption of aqueous benzene solution Madison Lasich
13:08/13:12	B3. Electrochemical platform based on nanostructured carbon electrode for determination of anti-inflammatory drugs (NSAID) in water Sorina Motoc (m. Ilies)
13:12/13:16	B4. Fatty acids-based eutectic solvents liquid membranes for removal of sodium diclofenac from water João Afonso
13:16/13:20	B5. COSMO-RS prediction and experimental physicochemical characterizations of aqueous solution of superbase ionic liquids Filipe Sosa
13:20/13:24	B6. A thermochemical contribution to the study of the conversion of biomass platform molecules Ana Silva
13:24/13:28	B7. Prediction models for aromatic/aliphatic and olefinic/aliphatic separation in ionic liquids Pedro Carvalho
13:28/13:32	B8. Methylimidazolium-based ionic liquids as separation agents for fuel processing Aline Coelho
13:32/13:36	B9. Hydrotropic effect in the presence of electrolytes: competition between solute salting-out and salt-induced hydrotrope aggregation Jordana Benfica
13:36/13:40	B10. Solubilities of amino acids in aqueous solutions of salts composed of divalent cations Mehriban Aliyeva
13:40/13:44	B11. Solid-liquid equilibria of organic acids in bio-based solvents Pablo Lopez-Porfiri
13:44/13:48	B12. Solvent screening for the separation of natural phenolic compounds using two computational models Isabella Cordova
13:48/13:52	B13. Zwitterionic ionic liquids as hydrotropes: The influence of cationic alkyl chains and spacer size on bioactive compounds solubility Ana Pinto
13:52/13:56	B14. Solubility of H ₂ S in ethylene glycol - based solvents José Sousa
13:56/14:00	B15. Aqueous biphasic system for separation of super base ionic liquids Filipe Sosa
14:00/14:04	B16. Enhancing pharmaceutical media solubility and stability by thermodynamic modeling Tianxin Zhang
14:04/14:08	B17. Solubility, liquid-liquid, vapor-liquid phase equilibria and critical states in the system with butyl acetate synthesis reaction at 323.15 K Georgii Misikov
14:08/14:12	B18. Formation and solubility of abellaite, NaPb ₂ (CO ₃) ₂ (OH)(s) Jay Jang
14:12/14:49	POSTER DISCUSSION PERIOD
14:49/15:00	BREAK

Lisbon time

WORKSHOP	
15:00/16:15	Assessment of reliability and uncertainty of solubility data Ala Bazyleva
16:15/16:30	BREAK
16:30/17:45	Gas solubility in materials – a technical evaluation of literature data Johan Jacquemin

Thursday, September 8

Lisbon time

SESSION D - Deep Eutectic Solvents	Chairperson: Maria González-Miquel	
	PLENARY LECTURE 4	
	13:00/13:45	DES, ES and ILS: tailoring solvents for sustainable applications Isabel Marrucho
	ORAL PRESENTATIONS	
	13:45/14:00	Deep eutectic solvents. A new approach to the separation and purification of substances for the food and cosmetic industry Alexandra Golikova
	14:00/14:15	Terpene based deep eutectic solvents for the removal of textile dyes Andrés Asla
	14:15/14:30	Efficiency of deep eutectic solvents based on choline chloride for the separation of alcohol – ester systems for the potential use in the biofuels production Alexander Smirnov
	14:30/14:45	BREAK
	Chairperson: Vladimir Diky	
	ORAL PRESENTATIONS	
	14:45/15:00	Design of deep eutectic systems: plastic crystalline materials as eutectic mixture constituents Ahmad Alhadid
	15:00/15:15	Poly(ethyleneterephthalate) and polyethylene targeted solubilization and recovery with green solvents João Afonso
	15:15/15:30	Zooming in with QSPR on solution enthalpies of API's in eutectic mixtures Nélson Nunes
	15:30/15:45	Solubility studies of amino acids in the eutectic solvent constituted by urea and sodium acetate trihydrate Cristina Gallego
15:45/16:00	Studies on the controlled release of metal ions from nanomaterials using neoteric solvents for agricultural applications Mónia Martins	
16:00/16:15	Ionic liquids and their analogues zwitterionic compounds as a pathway to alternative hydrotropes Ana Pinto	
16:15/16:30	BREAK	
SESSION E - Phase Equilibria & Solution Chemistry	Chairperson: Montserrat Filella	
	INVITED LECTURE 2	
	16:30/17:00	Illustrations of the synergy between thermodynamics and chemical reaction into the triptych "bioproducts-bioenergy-water" Lucie Coniglio
	ORAL PRESENTATIONS	
	17:00/17:15	Liquid-liquid phase behavior of binary mixtures of acetonitrile and n-alkanes Bernd Rathke
	17:15/17:30	Chromium behaviour in the environment Clara Magalhães
	17:30/17:45	Remediation of soils contaminated with total petroleum hydrocarbons through washing with surfactant's solutions Gabriela Caetano
	17:45/18:00	Solubility phenomena in enhanced oil recovery Alba Somoza
18:00/18:15	Sorption of hydrogen sulphide in cellulose + cement hydrate blends Madison Lasich	

Friday, September 9

Lisbon time

SESSION F - Aqueous Solution Chemistry	Chairperson: Christoph Held	
	ORAL PRESENTATIONS	
	13:00/13:15	Volumes of fun with electrolyte solutions Glenn Hefter
	13:15/13:30	Analysis by cyclic voltammetry of a concentrated ternary system of lithium acetate-cesium acetate-water Kirill Mukhin
	13:30/13:45	Neutralization of tricalcium aluminate hydrates with hydrochloric acid Eszter Kása
	13:45/14:00	Proton transfer from carbonic acid in aqueous solution Baranauskaite Valeriia
	14:00/14:15	Curation of scientific data at risk of loss: data rescue and dissemination Montserrat Filella
	14:15/14:30	Break
14:30/15:00	FRANZOSINI AWARD SESSION AND LECTURE	
SESSION G - Nuclear Waste	Chairperson: Marcus Altmaier	
	ORAL PRESENTATIONS	
	15:00/15:15	Solubility, TRLFS and IWA measurements of Eu(III) in dilute to concentrated nitrate and sulfate systems: thermodynamic and (SIT, Pitzer) activity models Pedro Santos
	15:15/15:30	Thermodynamic database for the solubility assessment in concentrated brines Elisenda Colàs
	15:30/15:45	Impact of gluconate on the solubility and redox chemistry of technetium Sarah Duckworth
	15:45/16:00	Citrate-mediated plutonium redox and effect of elevated temperature on americium-EDTA complexation Matthew Comins
	16:00/16:15	Venue ISSP21
16:15/16:45	Closing Remarks and Awards	