

**11, Sept. MONDAY**

All presentations held in this room will be available in interconnected rooms

	AUDITORIUM	FLOOR 1	ROOM O2	ROOM O1	ROOM N2	ROOM N1	ROOM M2	ROOM K	AITA ROOM J
Sept. 11, Mon. 9.00 - 10.00	<b>OPENING CEREMONY</b>								
Sept. 11, Mon. 10.00 - 10.50	<b>PLENARY LECTURE 1</b> <b>Alessandro De Angelis</b> <i>The role of light from Galileo's Starry Messenger to modern measurement in infrared astronomy.</i>								
Sept. 11, Mon. 10.50 - 11.10	<b>PRESENTATION OF FUTURE CONFERENCES</b>								
Sept. 11, Mon. 11.10 - 11.40	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break		
			<b>OS-1-1-A</b> <i>Chaired by J. Fernández</i>	<b>OS-1-1-B</b> <i>Chaired by G. Pottlacher</i>	<b>OS-1-1-C</b> <i>Chaired by I.H. Bell</i>	<b>OS-1-1-D</b> <i>Chaired by H.-P. Ebert</i>	<b>OS-1-1-E</b> <i>Chaired by M.J. Assael</i>		
Sept. 11, Mon. 11.40 - 12.00			OS1-1 L1A 8792 <i>Solubility of CO in water and NaCl (aq) at high pressures</i> <u>Q. Chen</u> , J.P.M. Trusler	OS1-1 L1B 8735 <i>Measurements of density, surface tension and viscosity of liquid steels and superalloys at high temperatures: influence on welding pool topology</i> <u>J. Delacroix</u> , S. Gounand, S. Pascal, D. Borel, J. Delmas, P.-O. Barrioz, A. Brosse	OS1-1 L1C 8897 <i>SO<sub>2</sub> Solubility in Polyethylene Glycol Dimethyl Ether (PEGDME) and its Correlation by using Macro ASOG Model</i> <u>T. Tsujii</u> , R. Wakasa, A.J.X. Lai, H. Matsukawa, T. Hoshina, H. Matsuda, K. Tochigi, K. Otake	OS1-1 L1D 8910 <i>Effect of interfacial reactions on contact angles of CaO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> melts and thermal barrier coatings</i> <u>M. Hayashi</u> , K. Tsukamoto, R. Endo, T. Watanabe, M. Susa	OS1-1 L1E 8933 <i>Heat Capacity and Thermodynamic Functions of NaREF<sub>4</sub></i> <u>B.F. Woodfield</u> , A. Gibson, R. Riman, A. Navrotsky		

Sept. 11, Mon. 12.00 - 12.20			OS1-1 L2A 9253 <i>Development of a Custom High-Temperature, High-Pressure Phase Behavior Apparatus</i>  A.J. Rowane	OS1-1 L2B 9007 <i>Surface tension measurements of steels by aerodynamic levitation. Influence of the chemical composition</i>  D. Le Maux, M. Courtois, T. Pierre, M. Carin, P. Le Masson	OS1-1 L2C 9278 <i>Peng-Robinson and Helmholtz-type Equations of State for CO<sub>2</sub>-rich Multicomponent Mixtures Relevant to CO<sub>2</sub> Transport: Density and VLE Predictions</i>  N. Razmjoo, A. Conversano, M. Gatti	OS1-1 L2D 8972 <i>Metrological Facilities for Thermophysical Properties Measurements at High Temperatures and Determination of the Adhesion of Coating Systems</i>  J. Manara, T. Stark, M. Arduini, S. Vidi, F. Hemberger, H.-P. Ebert, A. Shandy, M. Zipf, J. Hartmann	OS1-1 L2E 8996 <i>Mass transport control of remodeled microvascular system Using bio-3D-printing</i>  Y. Kumagai, A. Ono, R. Ouchi, R. Sudo, Y. Taguchi		
Sept. 11, Mon. 12.20 - 12.40			OS1-1 L3A 9266 <i>Simultaneous CCS and NG Storage in Salt Caverns</i>  S. Pollak, S. E. Quiñones Cisneros	OS1-1 L3B 9180 <i>Surface tension measurement of Cu<sub>2</sub>S-FeS melts by aerodynamic and electromagnetic levitation techniques</i>  M. Adachi, R. Masaoka, M. Watanabe, M. Ohtsuka, J. Takahashi, H. Fukuyama	OS1-1 L3C 9096 <i>Fuel-Nitrogen Vapor-Liquid Equilibria Modeling Using the Helmholtz Energy Equation of State Approach</i>  D. Menegazzo, A.J. Rowane, I.H. Bell	OS1-1 L3D 8991 <i>Anisotropy Study on Thermal Conductivity of MoS<sub>2</sub> and WS<sub>2</sub> Thin Films</i>  J. Xu, X. Xie, T. Lan, X. Liu, M. He	OS1-1 L3E 8997 <i>Wideband Mid-Infrared Thermal emitter based on multilayered Nanocavity Metasurfaces</i>  T. Cao, K. Liu, M. Lian, S.Zhang, Y.Ma, J. Luo, H. Lu		
Sept. 11, Mon. 12.40 - 13.00			OS1-1 L4A 9273 <i>Thermophysical characterization of Deep Eutectic Solvents using the soft-SAFT EoS for applications in Greenhouse Gas Capture and Separation</i>  L.V.T.D. Alencar, S.B. Rodríguez-Reartes, F. Llovell	OS1-1 L4B 9233 <i>Evaluation of thermophysical properties of liquid Ti-Al-Cr-Nb alloys: surface tension and viscosity</i>  R. Novakovic, D. Giuranno, M. Mohr, H.-J. Fecht		OS1-1 L4D 9024 <i>Large thermal conductivity switching ratio of Gd hydrides thin film with hydrogenation and dehydrogenation reactions</i>  R. Hirata, Y. Yamashita, T. Yagi, M. Kashiwagi, S. Takeya, Y. Oguchi, N. Taketoshi, Y. Shigesato	OS1-1 L4E 8998 <i>Broadband and ultra-thin cryogenic radiator based on MIM structure for infrared astronomical observations</i>  Y. Saisho, S. Tachikawa, Y. Taguchi		
Sept. 11, Mon. 13.00 - 14.00	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	IOC Meeting	
Sept. 11, Mon. 14.00		POSTER SESSION 1							

			<b>OS-1-2-A</b> Chaired by J. Blumm	<b>OS-1-2-B</b> Chaired by A. Muscio	<b>OS-1-2-C</b> Chaired by S.Z.S. Al Ghafri	<b>OS-1-2-D</b> Chaired by F. Peron	<b>OS-1-2-E</b> Chaired by P. Bison		
Sept. 11, Mon. 14.30 - 15.00			OS1-2 K1A <b>KEYNOTE LECTURE</b> 8776 <i>The Thermal Conductivity of Galinstan (Ga<sub>68.4</sub>In<sub>21.5</sub>Sn<sub>10</sub>) Alloy</i>  <b>M.J.V. Lourenço</b> , M. Alves, J.M. Serra, C. Nieto de Castro, M.H. Buschmann	OS1-2 K1B <b>KEYNOTE LECTURE</b> 9371 <i>Solidification process of SS316L containing B<sub>4</sub>C by a combination of ultra-high temperature thermal analysis and microstructural observation</i>  <b>H. Fukuyama</b> , H. Higashi, M. Adachi, M. Ohtsuka, H. Yamano	OS1-2 K1C <b>KEYNOTE LECTURE</b> 9059 <i>Assessment of Refrigerant Property Modeling with SAFT-based Thermodynamic Models</i>  <b>I.H. Bell</b>	OS1-2 K1D <b>KEYNOTE LECTURE</b> 9283 <i>Devices and methods for nano-and micro-scale measurement of heat transport properties of softmaterials</i>  <b>J. Morikawa</b> , S. Kamegaki, R. Morioka, S. Nakagawa, T. Kitamura, H. Haraguchi, M. Ryu	OS1-2 K1E <b>KEYNOTE LECTURE</b> 8750 <i>Hydrothermal synthesis of vanadium dioxide nanoparticles for architectural glazing applications.</i>  K. Khaled, <b>U. Berardi</b>		
Sept. 11, Mon. 15.00 - 15.20			OS1-2 L1A 9154 <i>Methyl myristate-in-water nanoemulsions as phase-change secondary working fluids for cooling applications</i>  <b>D. Cabaleiro</b> , C. Hermida-Merino, S. Losada-Barreiro, F. Agresti, L. Lugo, D. Hermida-Merino, M.M. Piñeiro	OS1-2 L1B 9062 <i>Applying thermoelectric device using decay heat in wireless communication module</i>  <b>T.-J.Park</b> , J.-W. Cho, Y.-R. Choi, J.-C. Lee, D. Yeo	OS1-2 L1C 8887 <i>Calculating phase equilibrium properties of the reactive N<sub>2</sub>O<sub>4</sub>-NO<sub>2</sub> system</i>  <b>K. Samukoy</b> , S. Lasala, J.-N. Jaubert, R. Privat	OS1-2 L1D 9163 <i>Measurement of the thermal conductivity at cryogenic temperature</i>  <b>J.-P. Monchau</b> , L. Ibos, E. Carminatti-Rousset, L. Raoult	OS1-2 L1E 8964 <i>Limits of Thermal Insulations – Heat Transfer within Evacuated Porous High-Performance Insulations</i>  <b>H.-P. Ebert</b> , J. Manara, G. Reichenauer		
Sept. 11, Mon. 15.20 - 15.40			OS1-2 L2A 9333 <i>Effect of the size and coating agents of the NPs and the dispersion method on the stability time of non-aqueous nanofluids</i>  <b>F. Mariño</b> , J.M. Liñeira del Río, E. R. López, <b>J. Fernández</b>	OS1-2 L2B 9116 <i>Coupled modelling of structural, thermodynamic and physicochemical properties of NaF-KF-UF<sub>4</sub> fuel salt</i>  <b>L. Ruszczynski</b> , A.L. Smith	OS1-2 L2C 9101 <i>Phase Behaviour of Isobutane + CO<sub>2</sub> and Isobutane + H<sub>2</sub> at Temperatures between 190 and 400 K and at Pressures up to 20 Mpa</i>  <b>R.V. Latcham</b> , J.P. Martin Trusler	OS1-2 L2D 9284 Probe based set up for the determination of local thermal diffusivity in soft materials  <b>M. Ryu</b> , M. Akoshima, J. Morikawa	OS1-2 L2E 9065 <i>Thermo-physical characterization of plasters containing phase change materials</i>  <b>E. Baccega</b>		
Sept. 11, Mon. 15.40 - 16.00			OS1-2 L3A 9401 <i>An approach to characterize the nanolayer for a nanofluid: thickness, density and molar mass</i>  <b>T.P. Iglesias</b> , A. Queiró, V. Salgueiriño, M.F. Coelho		OS1-2 L3C 9332 <i>A Helmholtz Energy Equation of State (EOS) for N,N-Difluoromethane (DMF) and Development of Equations of State for Metals</i>  <b>E.G. Rasmussen</b> , E.W. Lemmon	OS1-2 L3D 8967 Development of a Micro Guarded Hot Plate apparatus for lab scale samples  S. Vidi, <b>F. Hemberger</b> , J. Manara, H.-P. Ebert	OS1-2 L3E 9070 <i>Thermal Assessment of Hollow Micro-Sphere Based Ceramic Composite for High Temperature Application</i>  <b>C. Mukherjee</b> , S. Mukhopadhyay		

Sept. 11, Mon. 16.00 - 16.30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break		
			<b>OS-1-3-A</b> <i>Chaired by U. Berardi</i>	<b>OS-1-3-B</b>	<b>OS-1-3-C</b> <i>Chaired by S. Lasala</i>	<b>OS-1-3-D</b> <i>Chaired by J. Hartmann</i>	<b>OS-1-3-E</b> <i>Chaired by J. Morikawa</i>		
Sept. 11, Mon. 16.30 - 16.50			OS1-3 L1A 8832 <i>LH2 Facility: Advanced Measurement of Ortho-Para Conversion and Boil-Off Gas in Liquid H<sub>2</sub></i>  S.Z.S. Al Ghafri, K. Jeong, A. Siahvashi, E.F. May, M. John		OS1-3 L1C 8797 <i>Challenging ab initio calculations - Measurements of thermophysical properties of gases with dielectric-constant gas thermometry</i>  C. Gaiser, B. Fellmuth	OS1-3 L1D 8716 <i>Thermophysical properties and microstructure of lead-free solder joints reinforced by metal deposited nanoparticles</i>  Y. Plevachuk, P. Švec Sr, P. Švec, D. Janickovic, L. Orovčík, O. Bajana, V. Poverzhuk	OS1-3 L1E 8954 <i>Geometric optimization of thermochromic meta-surfaces using machine learning</i>  K. Isobe, T. Yamamoto, Y. Yamada, A. Horibe		
Sept. 11, Mon. 16.50 - 17.10			OS1-3 L2A 8894 <i>Crystal Structure Behavior Determination of Oxygen and Argon for Safer Liquefied Hydrogen Delivery</i>  X. Xiao, E.F. May, H.E. Maynard-Casely		OS1-3 L2C 8901 <i>How well does the Mie potential describe the thermodynamic properties of spherical fluids?</i>  S. Pohl, M. Thol, J. Vrabec, R. Span	OS1-3 L2D 8818 <i>Thermophysical Characterization of 1D Micro/Nanoscale Materials</i>  X. Wang	OS1-3 L2E 9008 <i>Metrological Framework for Passive Radiative Cooling Technologies and Development of Setups for Reproducible In-Field Performance Testing</i>  J. Manara, T. Stark, M. Arduini, J. Popp, A. Göbel, M. Brütting, H.-P. Ebert, J. Hartmann, L. Pattelli, G. Lopardo, F. Girard, F. Bertiglia, C. Cucchi, C. Sprengard, S. Efthymiou, M.-N. Assimakopoulos, D. Papadaki, G. Murano, A. Panvini, M. Voldán, Š. Kapouněk, L. Kňázovická, D. Tichý, G. Pérez, F. Martín-Consuegra, C. Alonso, B. Frutos, J. Jaramillo-Fernandez, A. Lladós, S. Meriç, Ö. Bazkir, J. Schumacher, A. Adibekyan, C. Monte		



Sept. 11, Mon. 17.10 - 17.30			<p>OS1-3 L3A 9122 <i>Solid-State hydrogen storage: Magnesium hydride with MXene catalysts in metal hydride tanks</i></p> <p>L. Abdolmaleki, <u>U. Berardi</u></p>		<p>OS1-3 L3C 9049 <i>Calculation of thermodynamic properties of neon using path integral Monte Carlo simulations and ab initio potentials</i></p> <p><u>P. Marienhagen</u>, K. Meier</p>	<p>OS1-3 L3D 9038 <i>Uncertainty evaluation associated with the measurement of thermal conductivity at the nanoscale</i></p> <p>N. Fleurence, S. Demeyer, S. Douri, B. Hay</p>	<p>OS1-3 L3E 9126 <i>Emissivity and Reflectivity Measurements for Passive Radiative Cooling Technologies</i></p> <p>A. Adibekyan, J. Schumacher, L. Pattelli, J. Manara, S. Meriç, Ö. Bazkir, C. Cucchi, C. Sprengard, G. Pérez, J. Campos, J. Hameury, A. Andersson, S. Clausen, A. Rasmussen, C. Belotti, L. Palchetti, M. Barucci, S. Viciani, S. Efthymiou, M.-N. Assimakopoulos, D. Papadaki, F. Manoocheri and C. Monte</p>		
---------------------------------	--	--	---	--	--	--	---	--	--

Sept. 11, Mon. 17.30 - 17.50			<p>OS1-3 L4A 9246 <i>Cryogenic Microwave Resonant Sensors for Inline Measurements of ortho-para Hydrogen Composition and Catalyst Kinetics</i></p> <p><u>G.M. Sellner</u>, M.G. Hopkins, L.D. Tenardi, M. Richter, E.F. May, P.L. Stanwix</p>			<p>OS1-3 L4D 9091 <i>Measurement of 2D-distribution of water rotational relaxation time by short-wave infrared (SWIR) micro spectroscopy</i></p> <p><u>K. Kawai</u>, R. Shirakashi</p>	<p>OS1-3 L4E 9308 <i>Solar Spectrum Reflectometer measurements on profiled and small samples: design and testing of adapters</i></p> <p>C. Ferrari, N. Morselli, <u>A. Muscio</u></p>		
---------------------------------	--	--	---	--	--	--	---	--	--

**12, Sept. TUESDAY**

Sept. 12, Tue. 9.00 - 9.50	<p><b>PLENARY LECTURE 2</b> <b>Carlos Nieto De Castro</b> <i>Thermophysical Properties for Sustainable Goals Development – Contributing to a New Research Approach</i></p>								
-------------------------------	--	--	--	--	--	--	--	--	--

			<b>OS-2-1-A</b> <i>Chaired by W.A Wakeham</i>	<b>OS-2-1-B</b> <i>Chaired by A.P. Fröba</i>	<b>OS-2-1-C</b> <i>Chaired by J.-L. Daridon</i>	<b>OS-2-1-D</b> <i>Chaired by L. Fedele</i>	<b>OS-2-1-E</b> <i>Chaired by J.C. Batsale</i>		
Sept. 12, Tue. 9.50 - 10.10			OS-2-1 L1A 9370 <i>The Thermal Conductivity of Ionic Liquids: A Key for New Heat Transfer Fluids</i>  R.M. Almeida, M.J.V. Lourenço, <u>C. Nieto de Castro</u>	OS-2-1 L1B 8983 <i>Thermal and mutual diffusivity of cyclohexane and ethanol mixture by the dynamic light scattering and Raman spectra</i>  <u>X. Tang</u> , J. Wang, G. Zhao, S. Bi, J. Wu	OS-2-1 L1C 9000 <i>Accurate Measurement of Speed of Sound in Fluid for Improving Prediction Precision of PC-SAFT Equation of State</i>  <u>H. Zhang</u> , A. Dong, M. He, Y. Zhang	OS-2-1 L1D 8876 <i>Correlations for the density, viscosity and thermal conductivity of liquid titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum, and tungsten</i>  <u>E. Ntonti</u> , S. Sotiriadou, K.D. Antoniadis, M.J. Assael, M.L. Huber, B. Wilthan	OS-2-1 L1E 8944 <i>Effect of stretching on the in-plane and out-of-plane thermal conductivities of natural rubber strips- Elastocaloric effect for the generation of solid-state cooling</i>  <u>B. Garnier</u> , M. Mortada, M. Rammal, A. Ould El Moctar, R. Olaya, G. Coativy, G. Sebald, L. Lebrun		
Sept. 12, Tue. 10.10 - 10.30			OS-2-1 L2A 8929 <i>The thermodynamic effects of using reactive working fluids in the Stirling cycle</i>  <u>A. Barakat</u> , S. Lasala, J.-N. Jaubert	OS-2-1 L2B 9061 <i>Prediction of partition coefficients of formic acid in water-soybean oil system</i>  <u>G.V. Olivieri</u> , T. Cogliano, R. Turco, R. Vitiello, V. Russo, R. Tesser, M. di Serio, R.B. Torres, R. Giudici	OS-2-1 L2C 9289 <i>Development of an Instrument to Measure the Sound Speed of Molten Metals at Extreme Conditions</i>  <u>E.G. Rasmussen</u> , M.O. McLinden	OS-2-1 L2D 8903 <i>Thermophysical properties of Al-Ti binary liquid alloys</i>  <u>J. Brillo</u> , B. Reiplinger, J.J. Wessing, H. Kobatake, H. Fukuyama	OS-2-1 L2E 8962 <i>Thermophysical properties of wooden material exposed to high temperatures</i>  <u>A. Cziegler</u> , E. Kaschnitz		
Sept. 12, Tue. 10.30 - 10.50			OS-2-1 L3A 9279 <i>Experimental thermophysical and rheological profile of cellulose nanocrystal nanofluids based on propylene glycol:water</i>  <u>M.A. Marcos</u> , J.P. Vallejo, S.M. Sohel Murshed, L. Lugo	OS-2-1 L3B 9066 <i>Determination of Diffusion Coefficients from Constant Volume Diffusion Tests through Numerical Simulation</i>  <u>W. Yan</u> , Y. Yang, E.H. Stenby	OS-2-1 L3C 9406 <i>Liquid-Phase Speed of Sound measurements of R-1130(E) at Temperatures Ranging from 230 K to 420 K and Pressures up to 25 Mpa</i>  <u>A.J. Rowane</u>	OS-2-1 L3D 8947 <i>A new approach for estimating the thermal diffusivity of molten metals at very high temperature</i>  <u>J. Houssein</u> , M. Courtois, T. Pierre, G. Le Goïc, M. Carin	OS-2-1 L3E 8982 <i>Effect of the delay time correction of laser pulse in thermal diffusivity measurement in a laser flash method</i>  <u>D. Kim</u> , S. Lee, Y.-G. Kim, S. Kwon		
Sept. 12, Tue. 10.50 - 11.10			OS-2-1 L4A 9280 <i>Parameter Estimation of Iron Oxide Nanofluids by Montercarlo Markov Chains in the Hyperthermia Treatment by Laser Induction</i>  <u>L.A. Bermeo</u> , D.M. Valdez-Cabrera, S. Amado-Ospina, N.	OS-2-1 L4B 9203 <i>Measurement and Evaluation of Diffusion coefficients of water and propylene glycol in CO2 under different pressure using the DPDVA method</i>  <u>R. Mukai</u> , Y. Kanda, Y. Hu, L. Chen, A. Komiya	OS-2-1 L4C 9016 <i>Self-diffusion coefficients of pure fluid using residual entropy scaling with PC-SAFT and group contribution method</i>  <u>Y. Su</u> , A. Dong, H. He, M. He, Y. Zhang	OS-2-1 L4D 8981 <i>Thermophysical property measurements of vanadium melts and discussion on thermal diffusivity of transition metals based on Mott's theory</i>  <u>M. Watanabe</u> , M. Adachi, H. Fukuyama	OS-2-1 L4E 9179 <i>Measuring the in-plane thermal diffusivity by photothermal spatially random pattern</i>  <u>P. Bison</u> , G. Ferrarini, C. Glorieux, J. Morikawa, S. Rossi, S. Kamegaki, M. Ryu		

			Pereira da Silva, H.R.B. Orlande						
Sept. 12, Tue. 11.10 - 11.40	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break		
			<b>OS-2-2-A</b> Chair T.H. Koller		<b>OS-2-2-C</b> Chaired by P.A. Giuliano	<b>OS-2-2-D</b> Chaired by R. Hellmann	<b>OS-2-2-E</b> Chaired by N. Milosević		
Sept. 12, Tue. 11.40 - 12.00			OS-2-2 L1A 9001 <i>A thermodynamic modeling of CO<sub>2</sub> absorption with amino acid ionic liquids</i> <u>Y. Wang, X. Liu, M. He</u>		OS-2-2 L1C 8975 <i>On the hunt for sustainable refrigerants fulfilling technical, environmental, safety, and economic requirements by using robust models</i> <u>C. G. Albà, I. I. I. Alkhatib, L.F. Vega, F. Lovell</u>	OS-2-2 L1D 8993 <i>Melting of oxide film containing Si formed on iron plate utilizing heat of oxidation reaction</i> <u>R. Endo, K. Mitsui, M. Ueda, M. Hayashi, M. Susa</u>	OS-2-2 L1E 8909 <i>Lock-in thermography of green powder metallurgy component flaws using preventive non-destructive imaging</i> <u>K. Sebastian, A. Melnikov, K. Sivagurunathan, X. Guo, X. Wang, A. Mandelis</u>		
Sept. 12, Tue. 12.00 - 12.20			OS-2-2 L2A 9221 <i>Isobaric heat capacities at high pressures of DEAE-water and EAE-water mixtures for CO<sub>2</sub> capture</i> <u>Y. Pérez-Milian, J.D. Arroyave Roa, A. Moreau, D. Vega-Maza, X. Paredes, J.J. Segovia</u>		OS-2-2 L2C 8995 <i>Combining Machine Learning with Thermodynamic Group-Contribution Methods</i> <u>N. Hayer, F. Jirasek, H. Hasse</u>	OS-2-2 L2D 8989 <i>Electrical Conductivity of CaO-Al<sub>2</sub>O<sub>3</sub>-CaF<sub>2</sub> melts</i> <u>N. Saito, K. Aya, T. Sumita, K. Nakashima</u>	OS-2-2 L2E 8992 <i>Thermal Diffusivity Measurement for μm-scale Single Wires Using Lock-in Thermography</i> <u>M. Hamada, R. Fujita, A. Ueno, H. Nagano</u>		
Sept. 12, Tue. 12.20 - 12.40			OS-2-2 L3A 9234 <i>Measurement and modelling of thermophysical properties of CO<sub>2</sub>-brine mixtures</i> <u>M. Cassiède, S.A.M. Smith, E.H. Stenby, W. Yan.</u>		OS-2-2 L3C 8937 <i>Group contribution-based graph convolution network: A versatile model for estimating thermodynamic properties</i> <u>J.W. Kang, B.C. Ryu, S.Y. Hwang</u>	OS-2-2 L3D 8824 <i>Electrical conductivity modelling of multicomponent molten slags</i> <u>R. Zhang, S. Hallström, H. Mao, L. Kjellqvist, J. Bratberg, Q. Chen</u>	OS-2-2 L3E 9014 <i>Optimal experiment design for thermal property measurement of orthotropic materials using infrared thermography</i> <u>G. D'Alessandro, S. Sfarra, F. de Monte</u>		

Sept. 12, Tue. 12.40 - 13.00			OS-2-2 L4A 9276 <i>Molecular modeling of the CO<sub>2</sub> interactions in Phosphonium-based Ionic Liquids through SAFT and COSMO approaches</i>  S.B. Rodríguez-Reartes, <u>Fèlix Llovell</u>		OS-2-2 L4C 9077 <i>Similarity-based Prediction of Activity Coefficients</i>  J. Arweiler, N. Hayer, T. Specht, H. Hasse, F. Jirasek	OS-2-2 L4D 9252 <i>Link between Structures and Thermophysical Properties of Melts for the Primary Elements of Metallic Glasses</i>  A. Mizuno, O. Terakado, A. Kamada, A. Nakano, K. Ohara, T. Masaki, S. Kohara	OS-2-2 L4E 9182 <i>IR thermography applied to the characterization of thermoelectric materials</i>  P. Bison, S. Boldrini, A. Famengo, T. Hashimoto, J. Morikawa		
Sept. 12, Tue. 13.00 - 14.00	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break		
Sept. 12, Tue. 14.00		<b>POSTER SESSION 2</b>							
			<b>OS-2-3-A</b> <i>Chaired by M.J.V. Lourenço</i>	<b>OS-2-3-B</b> <i>Chaired by I. Medved</i>	<b>OS-2-3-C</b> <i>Chaired by J. Manara</i>	<b>OS-2-3-D</b> <i>Chaired by B. Hay</i>	<b>OS-2-3-E</b> <i>Chaired by G. Ferrarini</i>		
Sept. 12, Tue. 14.30 - 14.50			OS-2-3 L1A 8868 <i>Surface Tension of HFCs, HFOs, and Their Mixtures Probed by the Linear Gradient Theory and Molecular Dynamic Simulations</i>  T. Yang, J. Li, C.Y. Zhu, J.T. Wu, J. Shen	OS-2-3 L1B 8999 <i>Improving the transport properties of ionic liquids by blending with fluorinated carbonates</i>  S. Xue, Y. Zhou, X. Liu, M. He	OS-2-3 L1C 8888 <i>Experimental and numerical study of the thermal radiative properties of Al/air flames</i>  I. González de Arrieta, C. Blanchard, P. Laboureur, C. Chauveau, C. Genevois, O. Rozenbaum, F. Halter	OS-2-3 L1D 8884 <i>Metrological improvement of a high temperature commercial calorimeter by embedding an in-situ electrical calibration system</i>  R. Razouk, O. Beaumont, B. Hay	OS-2-3 L1E 9218 <i>Thermal conductivity measurements for the hydrochloroolefin R1130(E)</i>  G. Lombardo, D. Menegazzo, M. Scattolini, G. Ferrarini, S. Bobbo, L. Fedele		
Sept. 12, Tue. 14.50 - 15.10			OS-2-3 L2A 8974 <i>Monte-Carlo-based data evaluation for surface light scattering (SLS) experiments in the presence of line-broadening effects</i>  J. Knorr, T.M. Koller, A.P. Fröba	OS-2-3 L2B 9003 <i>Effective thermal conductivity and specific heat capacity measurements of battery cells</i>  D. Lager	OS-2-3 L2C 9027 <i>Measuring the spectral emissivity up to 3000 K</i>  D. Urban, K. Anhalt, M. Arduini, J. Manara, P. Pichler, A. Eber, G. Pottlacher	OS-2-3 L2D 8953 <i>Relationship between configurational heat capacity and liquidus viscosity of glass-forming melts</i>  R. Kado, H. Tokunaga	OS-2-3 L2E 8994 <i>Development of a clinical diagnostic device for non-contact in-situ measurement of tear viscosity</i>  T. Onishi, Y. Taguchi		



Sept. 12, Tue. 15.10 - 15.30			OS-2-3 L3A 8990 <i>Dynamic Viscosity and Interfacial Tension of N2 and n-tetradecane System by Dynamic Light Scattering Method and Molecular Simulation</i>  Y. Li, X. Tang, S. Bi, J. Wu	OS-2-3 L3B 9013 <i>A modified method for measuring the mutual diffusion coefficients in liquid binary sodium-ion battery electrolytes</i>  Y. Su, W. Jia, S. Cao, M. He, Y. Zhang	OS-2-3 L3C 9046 <i>Emissivity measurements of NiTi shape memory alloys with different surface properties</i>  M A. Javed, B. Maaß, D. Ziplies, M. Richter	OS-2-3 L3D 8978 <i>NIST database for thermophysical property data of metal systems</i>  B. Wilthan, S. Townsend	OS-2-3 L3E 9063 <i>Transport properties measurement of CF<sub>3</sub>I</i>  A.R. Tuhin, K. Kariya, A. Miyara		
Sept. 12, Tue. 15.30 - 15.50			OS-2-3 L4A 9080 <i>An equation and an artificial neural network for the surface tension of organic sulfides</i>  M. Pierantozzi, P.F. Muciaccia, S. Tomassetti, G. Di Nicola	OS-2-3 L4B 9018 <i>Determination of effective thermal conductivity of Li-Ion cells – an uncertainty analysis</i>  M. Brütting, A. Göbel, J. Manara, M. Arduini, F. Hemberger, H.-P. Ebert	OS-2-3 L4C 9123 <i>Upgraded emissometer at the University of the Basque Country</i>  J. Gabirondo-López, M. Sainz-Menchón, I. González de Arrieta, T. Echániz, I. López-Ferreño, R. Fuente, G.A. López, I. Arredondo, J. M. Igartua	OS-2-3 L4D 9020 <i>Optical Differential Scanning Calorimetry For Modern Material Science At High Temperatures</i>  M. Zipf, A. Narymany Shandy, J. Manara, J. Hartmann	OS-2-3 L4E 9072 <i>Measurements and modelling of density and viscosity of methyl dodecanoate and ethyl tetradecanoate</i>  C. Wedler, J.P.M. Trusler		
Sept. 12, Tue. 15.50 - 16.10			OS-2-3 L5A 9239 <i>Pulsed laser viscometer: A contactless and high-speed technique to measure viscosity and surface tension with small sample volume (Re-examination of working equation)</i>  Y. Nagasaka	OS-2-3 L5B 9242 <i>Development process of interfacial chemical reaction in Ni-rich layered cathodes for all-solid-state batteries</i>  H. Liu, L. Zhu, X. Zhang	OS-2-3 L5C 9165 <i>Development of a bench for measuring emissivity at low temperature for the space industry</i>  J.-P. Monchau, B. Bras, N. Dias, E. Carminatti-Rousset, L. Raoult	OS-2-3 L5D 9105 <i>Specific heat capacities of Al-Si based alloys in a liquid state</i>  H. Fukuyama, H. Higashi, M. Adachi, M. Ohtsuka, M. Watanabe	OS-2-3 L5E 9248 <i>Viscosity measurements of (hydrogen + methane), (hydrogen + ethane), and (hydrogen + carbon dioxide) mixtures</i>  B. Betken, R. Span		
Sept. 12, Tue. 16.10 - 16.40	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break		

13, Sept.

**WEDNESD  
AY**

Sept. 13, Wed. 9.00 - 9.50	<b>PLENARY LECTURE 3</b> <b>Gernot Pottlacher</b> <i>Investigating the liquid phase of high melting metals and alloys - A review of selected Pulse</i>								
-------------------------------	--	--	--	--	--	--	--	--	--

	Heating Experiments								
			<b>OS-3-1-A</b> Chaired by C. Nieto De Castro		<b>OS-3-1-C</b> Chaired by Y. Zhang	<b>OS-3-1-D</b> Chaired by H. Fukuyama	<b>OS-3-1-E</b> Chaired by B. Garnier		
Sept. 13, Wed. 9.50 - 10.10			OS-3-1 L1A 8921 <i>The Temperature of Maximum Density for Aqueous Solutions</i>  <u>J. Troncoso</u>		OS-3-1 L1C 9071 <i>Speed of sound measurements in hydrogen up to 100 MPa and an equation of state for normal hydrogen</i>  <u>C. Wedler</u> , T.T.G. Nguyen, S. Pohl, R. Span, M. Thol, J.P.M. Trusler	OS-3-1 L1D 8988 <i>Effect of FeO and CaO/SiO<sub>2</sub> on the viscosity of EAF-type slags</i>  <u>W.Y. Son</u> , T. Sugimura, S. Kimura, N. Saito, K. Nakashima	OS-3-1 L1E 8850 <i>Evaluation of a Multilayer system using advanced laser flash analysis</i>  <u>A. Shandy</u> , F. Hermberger, J. Hartmann, J. Manara		
Sept. 13, Wed. 10.10 - 10.30			OS-3-1 L2A 8951 <i>Study of adhesion of cationic surfactant-added ice on various test plates under voltage application in a nanoscale field</i>  <u>R. Okada</u> , S. Kizuka, M. Chiwata, K. Matsumoto		OS-3-1 L2C 9244 <i>Experimental and Predicted Speed of Sound and Virial coefficients for Mixtures in Gaseous Phase</i>  <u>X. Peng</u> , L. Xu, Z. Yang, Y. Duan	OS-3-1 L2D 9009 <i>Liquid iron viscosity measurements by aerodynamic levitation, both numerical and experimental approaches</i>  <u>D. Le Maux</u> , <u>M. Courtois</u> , T. Pierre, M. Carin, P. Le Masson	OS-3-1 L2E 8912 <i>Methodology for estimating uncertainty on high-temperature thermal diffusivity measurements</i>  <u>B. Hay</u> , O. Beaumont, G. Failleau, J.Hameury		
Sept. 13, Wed. 10.30 - 10.50			OS-3-1 L3A 9036 <i>Isobaric Heat Capacity via MD and Quantum Corrections: the case of water</i>  <u>E. Savoia</u> , E. Oyarzua, B.D. Todd, R.J. Sadus		OS-3-1 L3C 9214 <i>Speed of sound measurements in binary mixtures of hydrogen with pentane and hydrogen with iso-pentane using a clamp-on ultrasonic flow meter</i>  <u>G. Cavuoto</u> , P. A. Giuliano Albo, R. Romeo, S. Lago	OS-3-1 L3D 9028 <i>Densities, Surface-tensions, and Viscosities of Molten Ni-based Superalloys</i>  <u>T. Nishi</u> , S. Matsumoto, K. Hayashi, M. Roberto Bellé, L. Neubert, G. Bartsch, O. Volkova	OS-3-1 L3E 8922 <i>Characterization of thermal properties of mold in petri dishes by laser flash</i>  <u>L.F.S. Ferreira</u> , <u>T. Pierre</u> , L.A.B. Varon, H.R.B. Orlande		

Sept. 13, Wed. 10.50 - 11.10			<p>OS-3-1 L4A 8904 <i>Reference Correlations of the Viscosity and Thermal Conductivity of 1-Hexene from the Triple Point to High Temperatures and Pressures</i></p> <p><u>S. Sotiriadou</u>, E. Ntonti, D. Velliadou, M.J. Assael, M.L. Huber</p>		<p>OS-3-1 L4C 9120 <i>Speed of sound measurements and correlation of <math>\{(1-x)3,3,3\text{-trifluoropropene (HFO-1243zf)} + x2,3,3,3\text{-tetrafluoropropene (HFO-1234yf)}\}</math> with <math>x=(0.1582, 0.4625, 0.7623)</math> at temperatures from 243.15 to 343.15 K and pressures up to 90 Mpa</i></p> <p><u>G. Lombardo</u>, D. Menegazzo, C. Wedler, L. Fedele, S. Bobbo, J.P.M. Trusler</p>	<p>OS-3-1 L4D 9229 <i>Thermophysical properties of liquid Al-Ni based alloys: experiments vs modelling</i></p> <p><u>D. Giuranno</u>, M. Mohr, J. Brillo, H. Fecht, R. Novakovic</p>	<p>OS-3-1 L4E 9041 <i>Photothermal investigation of original and degraded asphalt</i></p> <p><u>R. Krankenhagen</u>, S. Weigel</p>		
Sept. 13, Wed. 11.10 - 11.40	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break		

**OS-3-2-B**

Chaired by A. Mandelis

**OS-3-2-C**

Chaired by I.M. Abdulagatov

**OS-3-2-D**

Chaired by J.P.M. Trusler

**OS-3-2-E**

Chaired by S. Sfarra

Sept. 13, Wed. 11.40 - 12.00				<p>OS-3-2 L1B 8984 <i>Thermal expansion coefficients of laser surface-modified bimorph microactuator</i></p> <p><u>Y. Yamashita</u>, Y. Taguchi, M. Hashimoto</p>	<p>OS-3-2 L1C 8976 <i>Thermodynamic Properties of Binary Refrigerant Blends Containing R-32, R-152a, R-227ea, R-1234yf, and R-1234ze(E): Vapor and Liquid (p-rho-T-x) Measurements and Mixture Models</i></p> <p><u>T.J. Fortin</u>, M.O. McLinden, I.H. Bell</p>	<p>OS-3-2 L1D 8870 <i>Accurate Measurements of the Thermal Conductivity of n-Docosane, n-Tetracosane, 1-Hexadecanol, 1-Octadecanol, 1,6-Hexanediol, and 1,8-Octanediol in the Solid and Liquid Phases</i></p> <p><u>D. Velliadou</u>, K.D. Antoniadis, M.J. Assael, W.A. Wakeham</p>	<p>OS-3-2 L1E 8898 <i>Experimental and numerical study of the effect of surface texture on the emissivity of metallic materials</i></p> <p><u>M. Sainz-Menchón</u>, J. Gabirondo-López, I. González de Arrieta, T. Echániz, G.A. López</p>		
Sept. 13, Wed. 12.00 - 12.20				<p>OS-3-2 L2B 9054 <i>Validation of a Simple but Versatile Thermal Contraction Measurement Setup for Temperatures between Room Temperature and 1.8 K</i></p> <p><u>S. Hoell</u>, M. Guinchard, Ó. Sacristán de Frutos</p>	<p>OS-3-2 L2C 9006 <i>Thermodynamic Property Measurements of Binary Refrigerant Blends HFO1123 + R290</i></p> <p><u>N. Sakoda</u>, H. Ishimaru, Y. Higashi</p>	<p>OS-3-2 L2D 9010 <i>Investigation on influence of applying voltage to a mixture of two surfactants with different molecular diameters on supercooling degree</i></p> <p><u>R. Nanba</u>, K. Ando, K. Ito, K. Matsumoto</p>	<p>OS-3-2 L2E 9269 <i>Study on MEMS heat flux sensor calibrated for low frequency component</i></p> <p><u>M. Kamata</u>, O. Nakabeppu, F. Sukie, T. Nagahora</p>		
Sept. 13, Wed. 12.20 - 12.40				<p>OS-3-2 L3B 9056 <i>Feasibility Study of Rayleigh Backscattering Optical Fibre Strain Measurement Technique for Determining the CTE of Lightweight Composite Structures</i></p> <p>M. Guinchard, K. Kandemir, Ó. Sacristán de Frutos, <u>S. Hoell</u></p>	<p>OS-3-2 L3C 9064 <i>Gaseous pvTx experimental measurements and models for the binary mixtures of carbon dioxide(CO<sub>2</sub>) with 3,3,3-trifluoropropene(R1243z f) or 1,3,3,3-tetrafluoroprop-1-ene(R1234ze(E))</i></p> <p><u>E. Wang</u>, S. Peng, K. Qing, Z. Yang, Y. Duan</p>	<p>OS-3-2 L3D 9051 <i>Nano-enhanced isopropyl palmitate for cold storage applications</i></p> <p><u>M.A. Marcos</u>, J.I. Prado, J.P. Vallejo, S.M.S. Murshed, L. Lugo</p>	<p>OS-3-2 L3E 9225 <i>Emissivity-free two-dimensional radiation thermometry using a high-speed CCD camera</i></p> <p><u>H. Kobatake</u>, M. Adachi, M. Ohtsuka, H. Fukuyama</p>		
Sept. 13, Wed. 12.40 - 13.00				<p>OS-3-2 L4B 9060 <i>Expanding the Application Range of Vibrating-Tube Densimeters – Performance Test at Cryogenic Temperatures</i></p> <p><u>N. von Preetzmann</u>, D.</p>	<p>OS-3-2 L4C 9186 <i>Experimental densities of hydrogen-isobutane mixtures with three different compositions</i></p> <p><u>R. Romeo</u>, G. Cavuoto, P.A. Giuliano Albo, S. Lago</p>	<p>OS-3-2 L4D 9117 <i>Solid-liquid phase equilibrium: alkane systems for low temperature energy storage</i></p> <p><u>M.C.M. Sequeira</u>, B.A. Nogueira, F.J.P. Caetano,</p>	<p>OS-3-2 L4E 9031 <i>Multi-Wavelength Pyrometer for Ultra-Fast Temperature Measurements</i></p> <p><u>R. Belikov</u>, D. Merges, D. Varentsov, B. Winkler</p>		



				Zipplies, R. Span, M. Richter		H.P. Diogo, J.M.N.A. Fareleira, R. Fausto			
Sept. 13, Wed. 13.00 - 14.00	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break		
Sept. 13, Wed. 14.00		<b>POSTER SESSION 3</b>							
			<b>OS-3-3-A</b> Chaired by M. Pierantozzi	<b>OS-3-3-B</b> Chaired by V. Vesovic	<b>OS-3-3-C</b> Chaired by M. He	<b>OS-3-3-D</b> Chaired by M. Ryu	<b>OS-3-3-E</b> Chaired by S. Bobbo		
Sept. 13, Wed. 14.30 - 15.00			OS-3-3 K2A <b>KEYNOTE LECTURE</b> 8449 <i>Thermophysical properties of bicyclic hydrocarbon liquid organic hydrogen carriers</i>  M. Kerscher, J.H. Jander, J. Cui, T. Klein, M.H. Rausch, P. Wasserscheid, <b><u>T.M. Koller</u></b> , A.P. Fröba	OS-3-3 K2B <b>KEYNOTE LECTURE</b> 8970 <i>Thermophysical properties of oxygen gas from first principles</i>  <b><u>R. Hellmann</u></b>	OS-3-3 K2C <b>KEYNOTE LECTURE</b> 9405 <i>The fundamental role of multi-scale thermodynamics. An application to reactive media proposed as working fluids for thermodynamic cycles</i>  <b><u>S. Lasala</u></b> , J.-N. Jaubert	OS-3-3 K2D <b>KEYNOTE LECTURE</b> 8908 <i>Simultaneous density and thermal conductivity depth profile reconstructions from noised thermal-wave amplitude and phase data using a combined integral-equation and imperialist competitive algorithm method</i>  <b><u>Andreas Mandelis</u></b> , Sahar Kooshki, Alexander Melnikov	OS-3-3 K2E <b>KEYNOTE LECTURE</b> 8746 <i>Isothermal VLE measurements of tricosan in supercritical carbon dioxide</i>  V.F. Khairutdinov, I.S. Khabriev, <b><u>I.M. Abdulagatov</u></b>		
Sept. 13, Wed. 15.00 - 15.20			OS-3-3 L1A 8831 <i>Modelling of Boil-off From LNG and Liquid Hydrogen</i>  S.Z.S. Al Ghafri, V. Jusko, E.F. May	OS-3-3 L1B 8840 <i>Molecular Insight on the Properties of Ionic Liquid + Water Mixtures: From Experiment to Modelling</i>  <b><u>C. Nieto de Castro</u></b>	OS-3-3 L1C 9002 <i>MD simulations and excess entropy scaling for the transport properties of dense HFEs</i>  <b><u>A. Aminian</u></b> , V. Vinš	OS-3-3 L1D 9272 <i>Thermophysical properties of 3D-printed ceramics during binder burnout and sintering</i>  <b><u>C. Strunz</u></b> , J. Blumm	OS-3-3 L1E 8862 <i>An instrument for highly accurate density measurements of fluid mixtures including dew-point densities</i>  <b><u>L. Bernardini</u></b> , R. Kleinrahm, K. Moritz, M. O. McLinden, M. Richter		

Sept. 13, Wed. 15.20 - 15.40			OS-3-3 L2A 9243 <i>Effective extraction of benzene from benzene-n-hexane mixtures using polyols-based deep eutectic solvents at different temperatures</i>  A.H. Tiwikrama, S.H. Khudaida, M.-J. Lee	OS-3-3 L2B 8772 <i>Viscosity of Methyl and Ethyl Esters: Experiments and modeling</i>  J. Jovanović, D. Majstorović, I. Milošević, N. Grozdanić, E. Živković, V. Vesovic	OS-3-3 L2C 9026 <i>Prediction on the solubility of Ionic Liquid with HFC by Graph Neuron Network</i>  J. Chu, A. Li, X. Liu, M. He	OS-3-3 L2D 9021 <i>High temperature measurement for laser powder bed fusion</i>  D. Höfflin, C. Sauer, A. Schiffler, J. Hartmann	OS-3-3 L2E 8965 <i>Vapor pressure measurements for very-low volatile compounds, new static apparatus and selection of standards</i>  V. Štejfa, Š. Kocian, M. Fulem, K. Růžička		
Sept. 13, Wed. 15.40 - 16.00			OS-3-3 L3A 9201 <i>Measurements of critical properties for carbon dioxide (CO<sub>2</sub>) + fluoroethane (R-161) binary mixture</i> R. Sun, H. Tian, G. Shu	OS-3-3 L3B 9325 <i>An Equilibrium Approach to Modeling the Viscosity of Long Range Fluids</i>  C.D. Fieldstad, J. Bueie, A.S. de Wijn	OS-3-3 L3C 9190 <i>A Patel-Teja equation of state for R-1224yd(Z) refrigerant</i>  P.A. Giuliano Albo, S. Lago, R. Akasaka, R. Romeo	OS-3-3 L3D 9037 <i>Experimental set-up for dynamic material investigation at high temperatures</i>  A. Shandy, M. Zipf, J. Manara, J. Hartmann	OS-3-3 L3E 9255 <i>A Composite Microwave Resonator for Vapour-Liquid Equilibrium Measurement</i>  L.D. Tenardi, M.G. Hopkins, M. Richter, E.F. May, P.L. Stanwix		
Sept. 13, Wed. 16.00 - 16.20					OS-3-3 L4C 8956 <i>Chemical engineers' needs and the value of research publications</i>  V. Diky, M. Berger	OS-3-3 L4D 9171 <i>Effect of build orientation on the thermal conductivity of AlSi10Mg samples fabricated by Selective Laser Melting</i>  G. Cattelan, M. Bonesso, M. Azzolin, L. Moro	OS-3-3 L4E 9095 <i>Isothermal (vapour + liquid) equilibrium measurements and correlation of the binary mixture {3,3,3-trifluoropropene (R1243zf) + isobutane (R600a)} at temperatures from 283.15 to 323.15 K</i>  D. Menegazzo, G. Lombardo, S. Bobbo, L. Fedele		
Sept. 13, Wed. 16.20	Farewell cocktail	Farewell cocktail	Farewell cocktail	Farewell cocktail	Farewell cocktail	Farewell cocktail	Farewell cocktail		
Sept. 13, Wed. 17.30			AIPT meeting						