JTACC+V4 4th Journal of Thermal Analysis and Calorimetry Conference and 10th V4 (Joint Czech-Hungarian-Polish-Slovakian) Thermoanalytical Conference / JTACC+V4 2025 24-27 June 2025 / Budapest, Hungary Danubius Hotel Helia				
Final Program* Tuesday / 24 June				
14:00 - 16:00	Registration / Danubius Hotel Helia Lobby Helia	Tuesuay /	24 Julie	
16:00 - 16:30 16:30 - 17:10	Welcome Speech and JTACC Award Ceremony – Travel Grants & Best Reviewer Award & Scientific Excellence Award Dénes Lőrinczy (Hungary) / JTAC Scientific Excellence Award lecture: 50			
17:10 - 17:50	years in thermal analysis with biological and medical applications Plenary Lecture 1 / Luis A. Perez-Maqueda (Spain): Thermal analysis methods in thermal energy storage applications			
17:50 -18:10	Silver Sponsor Lecture / Tadashi Arii, Rigaku Corporation (Japan): Hyphenation and visualization techniques in thermal analysis and their applications			
18:10 - 20:00	аррисация	Welcome Reception	on / Helia Gallery	
8:00 - 8:30	Registration / Danubius Hotel Helia Lobby	Wednesday	y / 25 June	
8:30 - 9:10	Helia Session Chair: Plenary Lecture 2 / Qiang Xu (China): Microscale Combustion Calorimetry			
9:10 - 9:30	Used in Thermal Hazards Research Silver Sponsor Lecture / Keith Racman, Mettler Toledo (Slovenia): Revolutionary DSC 5+ — Sets new standard in research with Differential			
9:30 - 10:00	Scanning Calorimetry	Coffee Break and Poster	<u> </u>	_
	Helia Polymers; Pyrolysis; Fuels, biofuels I	Orion Energetic materials	Mercure Materials science; Nanomaterials and composites; Inorganic materials; Ceramics, glasses I	Panorama Bio sciences, including food, soil, textile, wood; Life sciences; Calorimetry I
10:00 - 10:30	Session Chair: Invited Speaker / Krzysztof Pielichowski (Poland): Thermal properties of "all-bio" polymeric materials reinforced by natural (nano)fibres	Session Chair: Invited Speaker / Katsumi Katoh (Japan): Thermal stability and decomposition mechanism of nitrocellulose	Session Chair: Invited Speaker / Paweł Pasierb (Poland): Different Approaches Towards the Optimization of BaCeO3-based	Session Chair: Invited Speaker / Vitaly Kocherbitov (Sweden): Hydration of biomolecules in the solid state: insights from isothermal and temperature scanning calorimetry
10:30 - 10:50	Paulina Parcheta-Szwindowska (Poland): Properties of cast polyurethanes synthesized from modified bio-based triisocyanates	Marcin Cegla (Poland): Determination of crucial thermo-mechanical properties of solid rocket propellants after long-time storage in terms of	Composite Protonic Conductors Anna Prnová (Slovakia): Al2O3/Y3Al5O12/ZrO2 glass-ceramics the influence of composition on thermal properties and sinter ability	Faezeh Khodabandehlou (Belgium): Measuring nonequilibrium heat capacities
10:50 - 11:10	Ewa Glowinska (Poland) : Relationship between structure and thermal properties of sustainable polyurethanes synthesized with the use of bio-	their safe usage Vaibhav Goud (India): Microcrystalline Graphite Extraction Process from low Grade Graphite Ores Using Surfactant	Melinda Majorová (Slovakia): Effect Of ZrO2 Addition On Thermal Behaviour And Structure Of Y2O3-Al2O3-ZrO2 Ternary Glasses	Xin Hao Huang (Taiwan): Impact of electrolyte and combustible gases on the control characteristics of lithium-ion batteries before thermal runaway
11:10 - 11:30	based diisocyanates Claire Strasser (Germany): Curing modeling of an amine-based epoxy resin system	Melih Yıldız (Türkiye): The Future of Hydrogen Fuel in Aviation: Economic Analysis of Current Applications	With Eutectic Composition Sorana Elena Lazar (Romania): Vanadium-doped mesoporous bioactive glasses as potential targeted therapy for osteosarcoma	Laura Nistor (Romania): Study of phase transitions in supramolecular materials for third-order nonlinear optics
11:30 - 11:50 11:50 - 12:10	Emese Győry-Slezák (Hungary): Thermoanalytical approach to assess riverine PET litter and its recycling potential Sophie Bistac (France): Study of semi-crystalline copolymers by differential	Malle Krunks (Estonia): Sb2S3 Thin Films By Ultrasonic Spray In Air: Formation And Application In Solar Cells Jurij Avsec (Slovenia): Thermal and radiation ageing evaluation of nuclear	Magdalena A. Krupska-Klimczak (Poland): BaTiO₃ ceramics: advances in synthesis methods and SPS sintering strategies Dawid Kozień (Poland): Resistance to ablation in composites based	Mateusz Pęśko (Poland): Investigation of the Thermal Stability and Degradation Kinetics of Hybrid Polymer Biocomposites Reinforced with Plant-Derived Additives Salma Daoufa (France): Thermal characterization of biobased alternatives to
12:10 - 13:10	scanning calorimetry Helia	Cables using DSC Buffet Lunch / Episode Restaurant, Orion	on titanium diborate produced through reactive sintering Ground Floor, Danubius Hotel Helia Mercure	paraffin wax for candle formulation Panorama
	Polymers; Pyrolysis; Fuels, biofuels II Session Chair:	Energy conversion and storage; Exergy, Experimental thermodynamics I Session Chair:	Materials science; Nanomaterials and composites; Inorganic materials; Ceramics, glasses II Session Chair:	Bio sciences, including food, soil, textile, wood; Life sciences; Calorimetry II Session Chair:
13:10 - 13:40	Invited Speaker / Kaustubha Mohanty (India): Catalytic Hydrodeoxygenation of Bio-Oil Produced from Co-Pyrolysis of Biomass and Plastic Waste	Invited Speaker / Müslüm Arıcı (Türkiye): The true role of phase change materials in thermal management and energy efficiency	Invited Speaker / Cristina M. Vladut (Romania): Thermal Analysis and Multifunctional Applications of Advanced ZnO-Based Materials Obtained By Various Chemical Methods	Mehmet Ziya Sogut (Türkiye): Developing an Energy-Efficient Responsibility Model for The Energy Transition of Shipyards
13:40 - 14:00	Maurice Brogly (France): Thermal behaviors and crystallization properties of new silicone-based polymers	Elif Zeyneb Tekin (Türkiye): Comprehensive Analysis of Turboprop Engine Performance Across Various Flight Conditions with Exhaust Gas Temperature Fluctuations Using Digital Twin Technology	Katarzyna Pasiut (Poland): Impact of SrO addition on the structure and thermal properties of the floor tile glazes with CaO/MgO changing molar ratio	Karim Fahmy (Germany): Retrieving pathway-specific substrate utilization rates from microbial heat flow curves
14:00 - 14:20	Maciej Kisiej (Poland): Green Epoxy Vitrimers Enhanced With Liquid Crystalline Phase	Aybüke Nacak (Türkiye): Brayton Cycle Design Mathematical Modeling And Digital Twin Integration	Marieta Zakaryan (Armenia): Modeling of Ultra-High-Temperature Complex Borides Synthesis Using Linear Heating: Effect of Heating Rate	Kakali Bhadra (India): Assessment of anti-cancer potential of harmaline: in vitro cytotoxicity and biocalorimetric analysis targeting nucleic acids
14:20 - 14:40	Cristina Pintón Riesgo (Spain): Crystallization behavior of poly(3-hydroxybutyrate) systems incorporating ATBC plasticizer and mesoporous silicas, neat or modified with ATBC	Ebru Bahcecioglu (Türkiye): Energy Dissipation and Thermal Effect in Cargo Parachutes	Hasmik Kirakosyan (Armenia): Magnetic property modification and reaction kinetics of manganese-doped Cr₂AlC MAX phases	Sibel Arslan (Türkiye): Driving towards a greener future: the environmental impact of connected vehicle technologies
14:40 - 15:00	Pankaj Tiwari (India): Optimizing Thermal Recycling of Glass Fiber-Reinforced Polymer Composites	Cihan Gokce (Türkiye) : Aeronautics Applications And Design Approaches Of Hybrid Electric Power Train	Nader Ghaffari Khaligh (Malaysia): Study of thermal behavior of ADEKA Kiku-Lube Z-112, a commercial ZDDP, and its tribology performance in lubricant Etro 6	
15:00 - 15:30 15:30 - 16:00		Coffee Break and Poster Coffee Break and Poster		
	Helia Polymers; Pyrolysis; Fuels, biofuels III	Orion Energy conversion and storage; Exergy, Experimental thermodynamics II	Mercure Heat transfer; Nanofluids; Thermal conductivity I	Panorama Bio sciences, including food, soil, textile, wood; Life sciences; Calorimetry III
16:00 - 16:20	Jonas Matijošius (Lithuania): Comparative analysis of Diesel and WCO blends in terms of engine emissions, efficiency, and fuel consumption	Christopher C. Enweremadu (South Africa): Predicting Solar Cell Temperature on Soiled Surfaces: A Study of Dust Thermophysical Properties	Mohammad Abdulaziz Tarawmeh (Jordan): Simulation Study on Enhanced Refrigeration System Performance Through The Integrated Use of Microtube Evaporator and Expander	Session Chair: Invited Speaker / Faraat Ali (Czech Republic): Solid state thermoanalytical characterization of Drugs and pharmaceuticals by Thermoanalytical techniques
16:20 - 16:40	Doğa Kılıç (Türkiye) : Application of Digital Twin Technology for Comprehensive Analysis of Turboprop Engine Performance, Combustion, and Emissions Across Varied Fuel Types	Properties Artūras Kilikevičius (Lithuania): Detailed analysis responsibility in energy management of enterprises: a case study	Integrated Use of Microtube Evaporator and Expander Tapuwa Makombore (South Africa) : Design, Manufacture and Characterisation of Cryogenic Test Facility for Low-noise Amplifiers	Joanna Grzelczyk (Poland): Assessing the affinity of bioactive isolates from different in vitro digested coffee fraction extracts by binding to PPAR-γ using isothermal titration calorimetry and docking simulation
16:40 - 17:00	and Emissions Across Varied Fuel Types Esma Ulusan (Türkiye): Hydrogen Economy And Thermal Management: Challenges, Opportunities, And Future Perspectives	Farzag Zolfaghari (Lithuania): Enhancing gasification net energy prediction using gan-based synthetic data and stacked learning	Bengisen Pekmen (Türkiye): Numerical investigation on bioconvection flow in the presence of two concentrations	isothermal titration calorimetry and docking simulation Xuehong Ren (China) : Flame Retardant Behaviour and Smoke/Heat Suppression of Organic-inorganic Intumescent Polyelectrolyte Complexes on Fabrics
17:00 - 17:20	Jerome Stanley Martin (India): Homogeneous Lean Methane Combustion in Direct Injection SI Engines	Alexander Sedykh (Germany): Thermal stability, thermochemical and thermophysical properties of lithium argyrodite solid electrolytes	Sardar Bilal (Saudi Arabia): Thermal Energy Optimization for Interacting Fluid with Solid Structure in Novel Configuration with Finite Element Simulations	
18:00 - 20:00 20:00 - 21:30		City Center Walking Wine Tasting in Domu		
		Thursday	/ 26 June	
8:00 - 8:30	Registration / Danubius Hotel Helia Lobby Helia			
8:30 - 9:10	Session Chair: Plenary Lecture 3 / Klára Hernádi (Hungary): Challenges with carbon allotropes			
9:10 - 9:30 9:30 - 10:00	Silver Sponsor Lecture / TA Instruments	Coffee Break and Poster	, , , , , , , , , , , , , , , , , , ,	
	Helia Polymers; Pyrolysis; Fuels, biofuels IV	Orion Heat transfer; Nanofluids; Thermal conductivity II	Mercure Materials science; Nanomaterials and composites; Inorganic materials; Ceramics, glasses III	Panorama Metals, alloys, intermetallics
10:00 - 10:30	Session Chair: Invited Speaker / Zoltán Sebestyén (Hungary): Thermal conversion and characterization of tanned leather	Session Chair: Invited Speaker / Chi-Min Shu (Taiwan): Electrical and thermal safety characteristics of aged lithium-ion batteries	Session Chair: Invited Speaker / Nataša Čelan Korošin (Slovenia): Off-Line Evolved Gas Analysis with the Coupled System TGA/DSC–IST16–	Session Chair: Invited Speaker / John Shelton (United States): Thermophysical characterization of functionalized metallic particles during phase change processes
10:30 - 10:50	Ravishankar Sathyamurthy (Saudi Arabia): Performance and Emission characteristics of Ternary Blends of Fish Oil Biodiesel in the Dual-Fuel	Ajit Kumar Parwani (India): Novel Approach to Identify the Effective Heating Region of Closed-Loop Pulsating Heat Pipe Using Four-Step	GC/MS: Case Studies Syuzanna Melkonyan (Armenia): High-entropy (Ti0.4Ta0.4V0.4Nb0.4Cr0.4)AlC Max Phase Synthesized By SHS:	Anna Wojtachat (Poland): Dilatometric study of phase transformation kinetics in advanced 3Mn bainitic steel subjected to isothermal heat treatment
10:50 - 11:10	Systems using single and split injection stratergy Sien Jie Wong (Malaysia): Computational fluid dynamics in hydrogen internal combustion engines: a review of current applications, challenges,	Method Merve Kayabasi (Türkiye): A Numerical Investigation on Bioconvection Flow Considering Growth RateTerm	Structural, Thermal, And Mechanical Insights Piotr Rytlewskio (Poland): Thermal and thermomechanical properties of laser-modified and electroplated thermoplastic	Tomasz Matuła (Poland): Application Of The DTA Method To Analyze The Critalization Process Of AlSi9Cu3(Fe) Alloy With Increased Iron Participation
11:10 - 11:30	and future directions Olivier Fischer (France): Thermochemical valorization of tomato plant	Huiyi Tan (Malaysia): Would Heat Sources And Human Thermal Plumes	polymer composites with electromagnetic field shielding properties Agnieszka Gładysz-Płaska (Poland): Use of thermal analysis to	Jarosław Piątkowski (Poland): The Use of Temperature Analysis of DTA and DSC to
11:30 - 11:50	residues: Characterization of the pyrolysis process through the coupling of TGA-based kinetic analyses and pilot-scale auger reactor tests Aleksandra Hudek (Poland): Follow-up study on valorization of carrot	Affect Indoor Airflow And Particle Dynamics In Healthcare Facilities? A State-Of-The-Art Review Hamza Babar (United Kingdom): Biomimetic liquid-cooled heat sink for	characterize composites obtained on the basis of diatomite, alumina or layered double hydroxides Djibril Rouzaud (France): CALO-IR: Development and first	Crystallization of A390 Alloy with Melt Overheating Degree Daniel R. Gruszka (Poland): Post processing thermal treatment of Binder jetting
11:50 - 12:10	pomace via pretreatment and hydrothermal liquefaction - characterization and thermal analysis of produced biocrude Rafał Łysowski (Poland): Properties of spinel-based oxygen carriers for	efficient thermal management applications Faezeh Mohammadi (Iran): Human Mental Search (HMS) algorithm and	Ademola Michael Adegbile (Estonia): Thermal-Kinetic Study of	3D printed no-bake sand moulds.
12:10 - 13:10	chemical looping combustion examined by using thermogravimetric analysis	Adaptive Network-based Fuzzy Inference System (ANFIS) to Model the Heat Transfer in a Heat Exchanger Equipped with a new type of self-rotating insert Buffet Lunch / Episode Restaurant,	Estonian Clays And Calcium/Sulphur-Rich Industrial By-Product Under Varied Calcination Atmospheres Ground Floor, Danubius Hotel Helia	
12.10 - 13.10	Helia Polymers; Pyrolysis; Fuels, biofuels V	Orion Heat transfer; Nanofluids; Thermal conductivity III	Mercure Materials science; Nanomaterials and composites; Inorganic	Panorama Bio sciences, including food, soil, textile, wood; Life sciences; Calorimetry IV
13:10 - 13:40	Session Chair: Invited Speaker / Matko Erceg (Croatia): Some factors affecting the results	Session Chair: Invited Speaker / Qingsong Wang (China): Lithium ion battery fire	materials; Ceramics, glasses IV Session Chair: Invited Speaker / Thomas Dippong (Romania): Impact of various	Session Chair: Invited Speaker / János Madarász (Hungary): Compressing Experiences of
13:40 - 14:00	of kinetic analysis Yashar Aryanfar (Taiwan): Exergy Analysis of Biomass Gasification Systems:	behavior and preventions Mariusz J Konieczny (Poland): Identification of Temperature Distribution	trivalent metal ions on thermal, structural, morphological and magnetic properties of zinc ferrite István Sándor Czirok (Hungary): Pyrolysis of PVC and leather	Resolution Trials into Ternary Equilibrium Melting Phase Diagrams by DSC and Powder XRD Saleh Muhammed Raqib (Oman): State Diagram of Freeze-Dried Coriander
14:00 - 14:20	A Pathway to Enhanced Energy Recovery and Process Sustainability Horng-Jang Liaw (Taiwan): A Model to Estimate the Flash Point of Binary	During the Welding Process Adnan Qayoum (India): Lithium-ion battery thermal management system	mixtures Veronika Vágvölgyi (Hungary): Modified zinc-oxide based	Leaves by Measuring and Modelling Freezing Curve, Maximal-Freeze-Concentration Condition, Glass and Solids-Melting Lines Nasser Al Habsi (Oman): Rumen Fermentation of Date Seed Fractions: Chemical,
14:20 - 14:40	Mixtures of Ionic Liquid and Solvent Andrea Majlingova (Slovakia): Moisture-driven modulation of combustion behaviour in oak litter: a thermoanalytical study	for regional temperature extremes in himalayan climates: A CFD analysis Joseph N E Lejeune (France): Preliminary study of textile structures with regard to their photonic radiative cooling properties	Afsaneh Rabiei (United States): Integrated Thermal And Thermo- Mechanical Performance Of Steel Composite Metal Foams	Structural, and Thermal Modifications for Potential Food Applications Xian-Wei Cheng (China): Reactive chlorinated triazine phytate ester for flame retardant modification of silk fabric: flame retardancy and mode of action
14:40 - 15:00		Phat T Duong (Taiwan) : Simulation of the PCM encapsulation effect on natural convection of a horizontally placed Li-ion battery using the lattice Boltzmann method	Hisham Khater (Egypt): Carbon dioxide emissions reduction through the development of ecological LC3 cement	Jin-Ping Guan (China) : Investigation on flame retardancy and mechanism of the coated PA6 fabrics by using phosphorylated bio-derivative
15:30 - 16:00		Coffee Break and Poster Coffee Break and Poster		
	Helia Polymers; Pyrolysis; Fuels, biofuels VI	Orion Heat transfer; Nanofluids; Thermal conductivity IV	Mercure Energy conversion and storage; Exergy, Experimental thermodynamics III	Panorama Cements, building materials I
16:00 - 16:20	Session Chair: Mohamed Bassyouni (Egypt): Optimization of non-recyclable medical plastics using pyrolysis for high-yield biofuel production	Session Chair: Quynh TN Nguyen (Taiwan): 3-D CFD Analysis of Convective Heat Transfer From a Heated Horizontal Cylinder Rotating In Air: From Laminar To	Session Chair: Martyna Szatkowska (Poland): Thermal properties of carbonised citrus peels biomass infiltrated with sugar alcohols modified with	Session Chair: Can Rüstü Yörük (Estonia): Thermal Activation and Pozzolanic Reactivity of Estonian Clays For Cementitious Applications
16:20 - 16:40	Bibari Boro (India): Investigation on pyrolysis of waste printed circuit board: kinetic analysis, product characterization and economic analysis	From a Heated Horizontal Cylinder Rotating In Air: From Laminar To Turbulent Flow Ashmore Mawire (South Africa): Thermal performance of a new standalone solar dryer for drying apple slices	citrus peels biomass infiltrated with sugar alcohols modified with graphene Natalia Paprota (Poland): Thermal properties of shape-stabilized thermochromic phase change materials	Renata Boris (Lithuania): Influence of Micro-silica and Superplasticizers on the Hydration and Rheological Behavior of Calcium Aluminate Cement
16:40 - 17:00	Pablo A Nieto (Colombia): Pyrolysis as a valorization strategy for OTR mining tires: Experimental study and kinetic modeling	Salman Ahmad (China): Comparative Heat Transfer Enhancement Analysis in Cu-H2O, Al2O3-H2O and Cu-Al2O3-H2O: Computational Approach	Bojan Z Jankovic (Serbia): Study of oxy-combustion of plane tree (Platanus orientalis) seeds in O2/ARGON atmosphere including kinetic analysis by the Fraser-Suzuki deconvolution for overlaping	Paul S Thomas (Australia): TG And XRD Characterisation of the Phases Developed in Heat Cured Pastes Susceptible To Delayed Ettringite Formation (DEF)
17:00 - 17:20		Jaya Joshi (India): Numerical Study of Stefan problem with two moving domains and variable thermal properties	complex reactions	Amani Mostafa (Egypt): Production of Low Carbon dioxide Cement Clinker by using industrial wastes
19:00 - 23:00		Dinner Cruise / Riv		
	Helia	Friday /	z/ June	
8:30 - 9:10	Session Chair: JTAC Young Scientist Award Lecture / Leire Sangroniz (Spain): Melt			
9:10 - 9:30	memory effect in semicrystalline polymers Michael Gerlach (Germany): Modular Peltier-based Isothermal Battery- Calorimeter			
9:30 - 10:00	Helia Materials science: Nanomaterials and composites: Inorganic materials:	Orion Energy conversion and storage: Exergy Experimental thermodynamics IV	Mercure	Panorama Kinetics and catalysis: Thermal hazards, lifetime prediction
	Materials science; Nanomaterials and composites; Inorganic materials; Ceramics, glasses V Session Chair:	Session Chair:	Heat transfer; Nanofluids; Thermal conductivity V Session Chair:	Session Chair:
10:00 - 10:30	Invited Speaker / Balázs Zsirka (Hungary): Application of thermal analysis in the synthesis and characterization of clay mineral-based nanostructures and photocatalysts Mahammada Roumbamdi (Roland): The Growth Optical and Thermal	Invited Speaker / Ágoston Restás (Hungary): Fire intensity driven suppressant optimization in case of forest fire supported by drone application Antonio Rebinet (France): Experimental investigation of peel fire behavior	Invited Speaker / Juan Carlos Moreno-Pirajan (Colombia): Immersion calorimetry in adsorption science: bridging thermodynamics and surface	Invited Speaker / Peter Šimon (Slovakia): Various degrees of conversion in thermoanalytical kinetics Lia Fana (China): Oxidation of soot by sorium dioxide synthesized under different
10:30 - 10:50	Mohammedo Boumhamdi (Poland): The Growth, Optical, and Thermal Characterization of CdBeSeTe Quaternary mixed Crystals using Photothermal methods Sarka Zuziakova (Czech Republic): High-Temperature Behaviour Of Ceramic	Antonin Robinet (France): Experimental investigation of pool fire behavior and unburnt gas ignition hazards in a reduced-scale model chamber of Chambord castle Ahmed Al Mers (Morrosco): Thermosline Energy Storage for Enhancing the	Ewelina Ziółkowska (Poland): Experimental-numerical determination of correlations for Nusselt numbers on the hot and cold medium sides of a tube-in-tube coil heat exchanger Ouan Zhang (China): Evaluation on comprehensive performance of	Jia Fang (China): Oxidation of soot by cerium dioxide synthesized under different hydrothermal conditions Rahar Pinar Diken (Türkiye): Thermal Behavior And Kinetics Of Crude Oil
10:50 - 11:10 11:10 - 11:30	Sarka Zuzjakova (Czech Republic): High-Temperature Behaviour Of Ceramic High-Entropy Films From Cr–Hf–Mo–Ta–W–N System Martin Keppert (Czech Republic): Influence of temperature on synthesis of	Ahmed Al Mers (Morocco): Thermocline Energy Storage for Enhancing the Thermal Performance of a Hybrid Compression-Absorption Cooling machine Powered by a Linear Fresnel CSP system Mahmoud Reda (Austria): Thermal Decomposition of Ordered and	Quan Zheng (China): Evaluation on comprehensive performance of drying system of spent resin integrated with a heat pump cycle by waste heat recovery Essam Mahmoud (Saudi Arabia): Enhancement of the	Bahar Pınar Diken (Türkiye): Thermal Behavior And Kinetics Of Crude Oil Enhanced With Copper Nanoparticles: A Thermogravimetric Approach Tibor Dubaj (Slovakia): Kinetic analysis of burnout of mineral-rich coal tailings for
11:10 - 11:30	Martin Keppert (Czech Republic): Influence of temperature on synthesis of acid geopolymer Angelika Kmita (Poland): Inorganic binders as a way for sustainability iron casting production	Mahmoud Reda (Austria): Thermal Decomposition of Ordered and Disordered LNMO Yousra Filal Baba (Morocco): Thermal Energy Storage Systems: PSO-Driven approach for improved performances and operational reliability	Essam Mahmoud (Saudi Arabia): Enhancement of the performance of a spherical distiller using hybrid nanofluids Abdallah S Berrouk (United Arab Emirates): Numerical Investigation of Chemical Reactive MHD Fluid Dynamics Over a	Tibor Dubaj (Slovakia): Kinetic analysis of burnout of mineral-rich coal tailings for geopolymer applications Shuo-Qian Huang (Taiwan): Study on thermal stability of ionic liquid [BMIM][TFO] in different atmospheres
11:50 - 12:10	Maciej Kaniewski (Poland): Revisiting Assumptions: Thermal Behavior of Ammonium Nitrate Systems with Additives Commonly Considered as	Ozan Öztürk (Türkiye): Management Of Combustion Instabilities: Analysis Of Passive And Active Control Methods	Porous Surface With Cattaneo –Christov Heat Flux Alina Adriana Minea (Romania): PEG based nanocolloids for heat transfer applications: a study on heat transfer enhancement in	Yun-Ting Wu (Taiwan): The thermal stability of [PYR14][NTf2] under different atmosphere
12:10 - 13:10	Stabilizers Helia	Buffet Lunch / Episode Restaurant,	Ground Floor, Danubius Hotel Helia	Panorama
	Helia Theory and instrumentation Session Chair:	Orion Energy conversion and storage; Exergy, Experimental thermodynamics V Session Chair:	Mercure Heat transfer; Nanofluids; Thermal conductivity VI Session Chair:	Panorama Cements, building materials II Session Chair:
13:10 - 13:30	Manuel Carmona Franco (Spain): Influence and Accuracy of Micro vs Macro Scale Thermal Characterization in Wall-Board PCM Gypsum Composites	Ozan Öztürk (Türkiye): Management Of Combustion Instabilities: Analysis Of Passive And Active Control Methods	Dong-Wook Oh (South Korea) : Thermal modelling of a suspended microheater surrounded by air and hydrogen	Chung-Hao Wu (Taiwan): Research on the compressive strength of MICP-modified aggregate concrete mixed cured with salt water
13:30 - 13:50 13:50 - 14:10	Petr Fiurasek (Canada): Quebec Centre For Advanced Materials (QCAM) – The Power Of Hyphenation Hitham M. N. Tlilan (Jordan): Design An Embedded Vest System for Human	Kiran Naik Bukke (India): Enhancing Atmospheric Sustainability With Vapour Ad/Ab-Sorption Systems Ali Fatih Yuksel (Türkiye): TEWI analysis and environmental impacts	Zalán István Várady (Hungary): Preparation and Investigation of Hybrid and Composite SiO2-ZnO Nanofluids Marcell Bohus (Hungary): Stability and thermal conductivity of	Martin Palou (Slovakia): Insights into the hydration reactions of low-carbon cements Izabel Polniaszek (Poland): Characterization of Carbonated Wollastonite-Based
14:10 - 14:30	being Real time Vibrations Measurement Somaraja Rajasomashekar (India): Real-Time Monitoring and Efficient Operational Strategies for Electric Vehicles using IoT	evaluation of the refrigerants used in the refrigerated display cabinets Orhan Mert Duraner (Türkiye): Theoretical and Experimental Study on the Usage of Alternative A2L Safety Class Refrigerants With Low GWP in	carbon nanotube - oxide type hybrid nanofluids Ali Abouais (Poland): Correlation Between Thermal and Optical Properties in ZnMnSe Mixed Crystals Grown by The Bridgman	Clinker by thermal analysis and isothermal calorimetry Michal Wieczorek (Poland): Influence of granulated blast furnace slag and silica fly ash on the hydration kinetics of multi-component cements
14:30 - 14:50		Vertical Type Display Cabinets Muhsin Kılıç (Türkiye): Comparative performance assessments of CO2 refrigeration cycles under subcritical and transcritical operating conditions	Technique Muhammad Farooq (Saudi Arabia): Optimizing Thermal Performance of Heat Sinks Using ZnO-Integrated Phase Change	, 2.1.2.1.0 SS.11.6.1.00
15:00 - 15:30 15:30 - 16:00		Coffee Break and Poster	Materials for Sustainable Energy Solutions Session 8 / Helia Gallery	
15:30 - 16:00	Helia Thermochemistry	Orion Energy conversion and storage: Exergy, Experimental thermodynamics VI	Mercure	
16:00 - 16:20	Thermochemistry Session Chair: Vera L.S. Freitas (Portugal): Thermodynamic Characterization of 2-	Session Chair: Syarifah Abd Rahim (Malaysia): Recovery of Succinic Acid through	Heat transfer; Nanofluids; Thermal conductivity VII Session Chair: Raj Nandkeolyar(India): Dissipative and radiative heat transfer in	
16:20 - 16:40	Picolinamide Polymorphs Jakob Smith (Austria): Mixed cation sulfates as thermochemical energy	Crystallization Process: Solubility and Thermodynamics Eswaramoorthy Muthusamy (India): Thermodynamic Analysis of Solar	the hydromagnetic nanofluid flow over an inclined rotating disk within a non-Darcy porous medium Suvanjan Bhattacharyya (India): Binary surfactants driven pool	
16:40 - 17:00	storage materials Mohammad Mustafa Ghafurian (Denmark): Utilization of Powdered	Photovoltaic Thermoelectric Generator With Composite Phase Change Material P. Premkumar (India): Effective Energy Conversion of Household Waste Food and its Packing Plastic Covers into Valuable Hydrocarbon Euels	boiling enhancement for microgravity applications Mrinal K. Jagirdar (India): Experimental investigation on a novel	
17:00 - 17:20	Hydrated Salt in Vacuum Heat Pipes for Enhanced Solar Energy Harvesting Peter Weinberger (Austria): TCMs for versatile thermal energy storage – from salt hydrates to oxides	Food and its Packing Plastic Covers into Valuable Hydrocarbon Fuels	cycle-operated desiccant dehumidifier driven by ultra-low grade heat sources	
17:20 - 17:40 *The organizers res	Closing Ceremony erve the right to make changes in the program!			