

WEDNESDAY, 15 OCTOBER	
15:00–19:00	Arrival and registration. Venue: Hotel lobby
THURSDAY, 16 OCTOBER	
8:30–8:45	Welcome by Symposium Chairs
8:45–9:45	<p>Keynote session 1. Chair: M. Pinar Mengüç</p> <p>Keynote lecture K-4: Sophia Haussener. Thermal science in photo-electrochemistry and solar thermochemistry</p>
9:45–11:00	<p>Technical session 1. Chair: Wojciech Lipiński</p> <p>9:45–10:15 Invited lecture I-4: Timothy Fisher. Solar-synthesized hydrogen and cylindrical graphite via direct concentrated pyrolysis</p> <p>10:15–10:30 C-9: Klinac EMA. A new heat integration approach for decarbonisation of non- continuous and semi-continuous processes</p> <p>10:30–10:45 C-3: Garrido-Fayad E. Optimization of the operating modes of a solar thermal power plant to increase its economic profitability</p> <p>10:45–11:00 C-11: Magdziarz A. Circular solutions for marine plastic waste: sustainable thermochemical pathways from waste to resource</p>
11:00–11:15	Coffee break
11:15–12:15	<p>Technical session 2. Chair: Timothy Fisher</p> <p>11:15–11:45 Invited lecture I-7: Tuba Okutucu. Thermal management solutions for electric vehicle batteries</p> <p>11:45–12:00 C-20: Yang R. Adaptive thermal energy storage with dynamic insulation envelopes for distributed thermal storage in buildings</p> <p>12:00–12:15 C-17: Vişne S. Comparative analysis of pseudo 2d and fully 3d electrochemical- thermal models for large-scale lithium-ion batteries</p>
12:15–14:00	Lunch
14:00–15:00	<p>Keynote session 2. Chair: Wojciech Lipiński</p> <p>Keynote lecture K-5: Gary Rosengarten. What's hot and what's not: From high flux cooling to powering the future</p>
15:00–16:00	<p>Keynote session 3. Chair: M. Pinar Mengüç</p> <p>Keynote lecture K-1: Oğuz Can. Energy Transformation: Türkiye Practices and Targets Towards to Zero Carbon</p>
16:00–16:15	Coffee break
16:15–18:15	<p>Technical session 3. Chair: Timothy Fisher</p> <p>16:15–16:45 Invited lecture I-1: Derek Baker. From SolarHub to HelioHub: A Greek–Turkish Solar Energy Excellence Hub</p> <p>16:45–17:00 C-4: Gürel K. A sectoral benchmarking analysis of industrial energy efficiency across Türkiye: challenges and opportunities</p> <p>17:00–17:15 C-12: Özsoy C. Identifying non-technical risks towards low-carbon energy transition: lessons learned from Turkish industrial sector</p> <p>17:15–17:30 C-14: Sağlam Y. A multi-objective optimization approach in defining the decarbonization strategy of a district heating network: the case study of Oslo</p>
17:30–18:30	<p>Keynote session 4. Chair: Timothy Fisher</p> <p>Keynote lecture K-3: Yogi Goswami. Title TBA</p>
From 19:30	Dinner. Separate announcement will be made
FRIDAY, 17 OCTOBER	
8:30–9:30	<p>Keynote session 5. Chair: M. Pinar Mengüç</p> <p>Keynote lecture K-2: Bassam Dally. Synergetic technologies for low carbon power and industry</p>
9:30–10:45	<p>Technical session 4. Chair: Tuba Okutucu</p> <p>9:30–10:00 Invited lecture I-3: Ofodike Ezekoye. Low-order heat transfer modeling of thermal runaway in a prismatic lithium-ion battery module</p> <p>10:00–10:15 C-1: Biyikoglu A. Experimental study for the recovery of low temperature flue gas waste heat using heat pipe</p> <p>10:15–10:30 C-6: Halvasi B. Influence of radiation models and melt temperature on glass furnace efficiency</p> <p>10:30–10:45 C-2: Bouanani M. Coupled natural convection and radiation and in a square enclosure heated by a tilted square centric cylinder</p>
10:45–11:00	Coffee break
11:00–12:15	<p>Technical session 5. Chair: Derek Baker</p> <p>11:00–11:30 Invited lecture I-6: Wojciech Lipiński. Mixed metal oxides for enhanced solar fuel production via thermochemical redox cycling</p> <p>11:30–11:45 C-8: Ismail M. Shape memory alloys for next-generation low-carbon heat-pumps</p> <p>11:45–12:00 C-10: Kubačka J. Comparative study of deep co-axial closed loop and u-shape wellbore geothermal systems</p> <p>12:00–12:15 C-5: Georgiou M. PROTEAS: A platform for advancing and demonstrating renewable energy and seawater desalination technologies</p>
12:15–14:00	Lunch
14:00–15:00	<p>Keynote session 6. Chair: Wojciech Lipiński</p> <p>Keynote lecture K-6: Wen-Quan Tao. Energy and carbon emission efficiency of data centres enabled by thermal management and hydrogen fuel cells</p>
15:00–16:15	<p>Technical session 6. Chair: Wojciech Lipiński</p> <p>15:00–15:30 Invited lecture I-5: Ali Kosar. Energy efficiency and harvesting with phase change phenomena on functional surfaces and emerging applications</p> <p>15:30–15:45 C-13: Park BC. Analysis of separation characteristics of inline type separator for water-oil two-phase flow separation</p> <p>15:45–16:00 C-15: Shorbagy A. A novel experimental investigation of poppet clearance effects on the dynamic behavior of direct-acting pressure relief valves</p>
16:00–16:15	Digital poster session. Chair: Wojciech Lipiński
16:00–16:05	P-1: Kim YJ. Comparison of experimental and numerical analysis results of inline type separator for water-gas two-phase flow separation
16:05–16:10	P-3: Woo NS. Developing HILS based verification technology for offshore drilling and production plants
16:10–16:15	P-2: Misale M. Experiments in a multi-connected natural circulation loops working by a water-glycerin mixture
16:15–16:30	Coffee break
16:30–18:00	<p>Technical session 7. Chair: Timothy Fisher</p> <p>16:30–17:00 Invited lecture I-2: Ozgur Bayer. Innovative strategies for PCM-based energy storage: From scientific insights to industrial practice</p> <p>17:00–17:15 C-18: Yerdesh Y. Optimizing ground source heat pump performance under imposed heat transfer rates for low-carbon thermal systems</p> <p>17:15–17:30 C-16: Song Y. Deep learning-based diagnostic framework for electric submersible pump failure in thermal energy operations</p> <p>17:30–17:45 C-7: Hamid K. Development and experimental study of an oil-free high-temperature heat pump for industrial heating and cooling applications</p> <p>17:45–18:00 C-19: Yerdesh Y. Thermodynamic and environmental assessment of low-GWP refrigerants for ground source heat pump applications in continental climates</p>
18:00–18:55	Panel. Chair: M. Pinar Mengüç
18:55–19:00	Concluding remarks by Symposium Chairs