



INCORCP 2025 Programme

Monday, 22.09.2025

Imperial Hall - Underground Lobby

19:00 - 20:00 **Registration**

Minoa Palace Resort - "Thalassa" Restaurant by the sea

20:00 - 22:00 **Welcome Reception**

Tuesday, 23.09.2025

Imperial Hall - Underground Lobby

08:00 - 09:00 **Registration**

Imperial Hall - Main Hall

09:00 - 09:30 **Opening Ceremony**

Keynote

9:30 - 11:00 "What is the Future for Green and Sustainable Chemical Technology?"

Professor Jason Hallett

Department of Chemical Engineering, Imperial College London

Underground Lobby

11:00 - 11:30 **Coffee Break**

	Main Hall	Room 2	Room 3	Room 4
Session I	Eco-Governance	Recovery I	Sustainable Manufacturing	Eco-Friendly Chemical Technologies
	Session Chair: Boyd, J.	Session Chair: Simonnot, M.	Session Chair: Ozkavruk Adanir, E.	Session Chair: Maravelaki, N.
11:30 - 13:00	Bluszczyk, A. "New challenges for sustainable business ESG reporting under the European Green Deal"	Tampouris, S. "A leaching approach for the treatment of LARCO Evvoia Laterites"	Emer, A., Sandforth, G., Nezzi, C., Rauch, E., Matt, D. "An Axiomatic Design Approach to Data Collection Modeling for Sustainability Reporting in Manufacturing"	Maravelaki, P., Sartzetaki, E., Christodoulakou, S. "Revisiting the tetrachromy of Polygnotus: towards sustainable production of paints"
	Dutzler, F. "Exploring Perceived Enablers and Barriers in Circular Startups"	Hajdu-Rahkama, R. "Concentration and extraction of rare earth elements from mine tailing"	Ozkavruk Adanir, E., Aktas, C. "Timeless Sustainability: Zero-Waste Principles in Ottoman Shalwar and Their Modern Adaptations"	Dak-Albab, Y., Glöser-Chahoud, S. "Green Hydrogen in the Global Energy System: End-Use Applications and Challenges"

Boyd, J. "Does the Medium Exclude the Message? Rethinking Communicative Clarity in ESG Reporting"	Pinchaux, C., Laubie, B., Simonnot, M., Hazotte, C. "Development of a low-tech process for nickel extraction from tropical hyperaccumulator plants"	Espinoza, A., Vásquez Essus, J., Castañeda Rodríguez, I., Huerta Pérez, Á., Santander Tapia, P., Sepúlveda Salas, J. "Integrated sustainable supply chain design for End-of-life product valorization: Tires and Batteries"	Kaur, G., Fernández, J., Blasco, Í., Pavia, S., Álvarez, J. "Visible Light Active Fe ₂ O ₃ /TiO ₂ Heterostructure over Cementitious Material for NO _x Abatement"	
Ben Noamene, T., Al Ghouli, I. "Technology-Driven ESG Reporting: Overcoming Challenges and Enhancing Investment Decisions in Tunisia"	Petrakis, E., Alexopoulos, I., Nousia, O., Karmali, V., Kolev, N., Komnitsas, K. "Effect of media shape on grinding efficiency"	Müller, C., Schneider, M. "The Operational Integration of Reverse Logistics in Manufacturing Companies"	Siewniak, A., Mokrosz, W., Łukowiec, D., Jurczyk, S. "Green Immobilized Biocatalysts for the Sustainable Synthesis of Fragrance Esters"	
Salimbeni, S., Bataleblu, A., Jakobs, L., Rauch, E. "Dynamic Stakeholder Interactions in a Circular Economy"		Contreras Núñez, R., Cruz, F., Marche, B., Espinoza, A. "Bridging Ecosystem Services and Life Cycle Assessment: A Methodological Framework for Distributed Recycling"		

"Elia" Main Restaurant

13:00 - 14:00

Lunch Break

Underground Lobby

Poster Session

14:00 - 15:00

Pilarczyk, W. "Industry 5.0 as a Response to the Vision of Industry 4.0"

Spilka, M. "Safety and ergonomics at the workplace in the context of realization the social aspect of sustainable development"

Fuentes Fernández, R., Del Campo Villares, J., Regkouzas, P. "Natural wine and health promotion: practices and perceptions of producers towards sustainable wellbeing"

Torscht, L. "Circular Economy innovation for energy storage technologies, services and business models beyond batteries"

Manolas, E., Papadopoulou, E., Karanikola, P., Tampakis, S. "A satisfaction analysis of the infrastructure of Eleorema park in the municipal unit of Pilea, Thessaloniki"

Sensuła, B. "Monitoring of carbon cycle in Gliwice, Poland – a review of the research conducted over last 15 years"

Szufał, S., Unyay, H., Osmańska, J., Piersa, P., Johnson, R., Rozakis, S. "Technical and economic analysis of a wood biomass biorefining installation using the biomass torrefaction process, located in a sawmill in central Poland"

Patoń, N., Nowak, N., Brągoszewska, E. "Green walls as an element of sustainable development in workspaces – impact on microbiological air quality"

Sfakiotakis, S., Nanos, A., Triantafyllou, G., Vamvuka, D., Christidis, G. "Thermal Decomposition Kinetics of various Carbonate Rocks using Multivariate Kinetic Analysis"

Cujba Stepanek, R., Lazar, M. "Life Cycle Assessment (LCA) as a Key Tool for Responsible Copper Mining: Case Study of Rosia Poieni Mine"

Fălcău Dumitrache, M., Lazar, M., Traistă, E. "Recovery and valorization of useful elements from silico-manganese slimes:

Rduch, J., Amaladoss, A., Skarka, W. "Potential of Development of Multifunctional Energy Storage Composites"

Jandoo, J., Kubasik, I., Michalczyk, A., Golec, M., Smolarczyk, R., Skalski, T., Góra, A., Papaj, K. "Analysis of Low Molecular Weight Compounds From *Lucilia Sericata* (Calliphoridae: Diptera) Maggot Secretion: Sustainable Chronic Wound Healing Approach With Disease Prevention"

Traistă, C., Traistă, E. "Study on the possibilities of utilizing foundry slag"

Sławski, S., Woźniak, A., Mrówka, M. "Assessment of the Possibility of Reusing Industrial Waste as a Filler in Polymer-Based Composites"

Woźniak, A. "Enhancing Wear Resistance of Titanium Surfaces through Laser Texturing: A Sustainable Approach to Prolonging Component Lifespan"

Orlińska, B., Lisicki, D., Kolińska, J., Peckh, K. "Deep Eutectic Solvents in Catalytic Oxidation Processes of Alkylaromatic Hydrocarbons"

Lu, S., Passarella, M. "On the way to Assess the Sustainability and Circularity of Lithium mining: Two Portuguese Case Studies"

Pawlusińska, K., Górski, M., Ziemińska-Buczyńska, A. "Self-healing geopolymer as an example of bacteria usage in construction industry"

Starzyk, J., Pach, G., Niewiadomski, A. "Assessment of Gasogeodynamic Risk in the Context of Sustainable Copper Ore Mining in Poland – A Case Study"

	Main Hall	Room 2	Room 3	Room 4	
Session II	Clustering Workshop on Sustainable Pathways in Critical Raw Materials and Post-Mining Transitions	Recovery II	Energy Transition	Farm to Fork:	
	Session Chair: Galetakis, M.	Session Chair: Raonic, Z.	Session Chair: Bastürk, S.	Session Chair: Manolas, E.	
15:00 - 16:30	Galetakis, M., Moczko, P., Bajcar, A., Maksymowicz, M. "Innovative Approaches for Sustainable Transition of Former Coal Sites: A Review of GrEnMine, MidSafe, and REECOL research projects"	Raonic, Z., Gatschlhofer, C., Wiszniewski, L., Krammer, A., Doschek-Held, K. "Phosphorus and Lithium Recycling Using an Inductively Heated Reactor Concept"	Fernández, J., Lisbona, P., Llera, E. "Circularity assessment of lithium ion battery sector: Case study of Spanish scenario"	Leo, L., Agnusdei, L., Amoruso, M., Agnusdei, G., Miglietta, P. "Exploring sustainable food safety systems: a classification framework"	
	Galetakis, M., Raka, S., Stathogianni, F., Moczko, P., Bajcar, A., Lazar, M., Moni, V. "Transforming Decommissioned Surface Mines into Gravity Energy Storage Systems: Crucial Factors and Methodology for Assessing Suitability"	Gatschlhofer, C., Raonic, Z., Steindl, F., Krammer, A., Krenn, L., Doschek-Held, K., Grengg, C. "Thermochemical treatment of Moroccan rock phosphate using a zero-waste approach: phosphorus recovery and production of a binder component"	Bastürk, S., Karaismailoglu Elibol, M. "Adapting German Industry to Solar-Driven Electricity Price Volatility: Economic Risks and Flexibility Strategies"	Siskou, P., Manolas, E. "Sustainable School Meals in the Prefecture of Evros"	
	Komnitsas, K., Kinnunen, P., Bru, K., Zhang, T., Paavola, M., Kritikaki, A., Nasser, R., Jones, P. "Cost-effective processing and refining of lithium into lithium hydroxide from strategic European multi-mineral lithium hard-rock projects"	Jameshourani, S. "Exploring Pyrometallurgical and Hydrometallurgical Methods for Sustainable Copper and Gold Extraction from Mining Waste: A review"	Petřilean, D., Radu, S., Mija, N., Bogye, A. "Comparative Performance Assessment of Two Cogeneration Units"	Nugraha, W., Szakos, D., Kasza, G. "The role of consumer awareness in reducing greenwashing practices in food market"	
	Machairas, E., Varouchakis, E. "Immersive virtual tours on critical minerals for clean energy transitions"	Nyangadzayi, T. "Surface modification of biochar for effective utilization in pyrometallurgical processes"	Torscht, L. "Global Current and Future Environmental Costs and Impacts of Battery and Mechanical Electricity Storage"	Tsikalakis, G., Neofotistou, E. "Has European Directive 2019/1597 been able to serve the sustainable consumption of food waste?"	

	Komnitsas, K., Pentari, D., Karmali, V., Vathi, D. "Hydrochloric Acid Leaching of Low-Grade Limonitic Laterite"		Smailbegovic, U. "Estimation of the Environmental Impact of Food Systems Through Individual Consumption Patterns"	
Underground Lobby				
16:30 - 17:00	Coffee Break			
	Main Hall	Room 2	Room 3	Room 4
Session III	Digital Transformation I	Recycling of Plastics	Sustainable Cities	Sustainable Education I
	Session Chair: Doitsidis, L.	Session Chair: Nouvel, C.	Session Chair: Stangel, M.	Session Chair: Waligora, A.
17:00 - 18:00	Sánchez-Calleja, I., Martínez-Gutiérrez, A., Ferrero-Guillén, R., Pérez-Sánchez, F., Massardier-Nageotte, V., González, J., Álvarez, R., Díez-González, J. "Range Prediction in Collaborative Robotic Systems for Green Industrial Scenarios"	Sandei, B., Suescun-Gonzalez, C., Cruz Hoppe, S., Pearce, J., Boudaoud, H., Nouvel, C. "Product Engineering Approaches for Valorization of Plastic Blends by Additive Manufacturing"	Stangel, M. "Circular Urbanism: Sustainable Regeneration of Post-Industrial Sites in the Context of Responsible Consumption and Production (SDG 11 & SDG 12)"	Radu, S., Negru, N., Soica, A. "Green Rebirth of Jiu Valley: A Conceptual 10 R Framework for E-Mobility, Circular Economy, and Transformative Education"
	Kamman, T., Orłowski, J., Pirklbauer, J., Milovanovic, G., Biller, P., Steineke, H. "Augmented Reality Safety Zone Configurations in Human-Robot Collaboration: A User Study, and Potential Future Solutions"	Zorbas, L., Charalambaki, M., Kastanaki, E., Giannis, A. "Material flow analysis of water packaging waste in Greece"	Phillis, A., Kouikoglou, V. "Fuzzy Measurement of Tourism Sustainability in Crete"	Käding, L., Berkemeier, A., Zeidler, H., Bullinger, A. "Real-World Laboratories for Sustainable Innovation: Insights from the SAMSax Living Lab"
	Livanos, G., Doitsidis, L., Tsurveloudis, N., Aryblia, M., Arampatzis, G. "Towards Circular Value Chains, Sustainable and Resilient Product Management and Production Scheduling Using Digital Tools"	Shahroodi, Z., Kirschnick, U., Zidar, D., Kreml, N., Holzer, C. "Upcycling of regenerates and injection moulding through a new and sustainable approach"	Kempen, J., Plevoets, B. "Material Reuse in Brussels"	Seiradaki, E. "Fostering kindergarteners' environmental and ecological justice awareness through picture books"
	Loukakis, K., Ntousakis, E., Doundoulakis, E., Ipsakis, D., Papaefthimiou, S. "Development of an Intelligent and Sustainable Greenhouse System using Advanced Information and Control Technologies"	Ferrero-Guillén, R., Pérez-González, J., Martínez-Gutiérrez, A., Sánchez-Calleja, I., Perez, H., Díez-González, J. "Towards a more efficient Injection Molding Adjustment"	Przytuła, I., Burchart, D., Matla, J. "Sustainable Development of Public Transport: Environmental Analysis of Different Bus Propulsion Systems"	Penkala, M. "Social Innovation in Tackling Food Waste: Students' Awareness, Attitudes, and Actions Toward Responsible Consumption and Production"
19:00	Buses Depart from Minoa Palace			
20:00-23:00	Conference Dinner at "Gramvousa Restaurant", Kalyviani			

Wednesday, 24.09.2025

Imperial Hall - Main Hall

Plenary Talk

09:00 - 10:30

"Environmental Impacts of Wildfires on Global, Regional and Local Scales"

Professor Apostolos Voulgarakis

Department of Chemical and Environmental Engineering, Technical University of Crete

Underground Lobby

Coffee Break

10:30 - 11:00

	Main Hall	Room 2	Room 3	Room 4
Session IV	Sustainable Production	Sustainable Construction	Bioeconomy	Mathematical Modeling
	Session Chair: Schille, J.	Session Chair: Górski, M.	Session Chair: Zeidler, H.	Session Chair: Marinakis, Y.
11:00 - 12:30	Schille, J., Mauersberger, S., Gruner, A., Löschner, U. "Advanced laser surface machining for biomimetic applications"	Goldmann, E., Górski, M., Klemczak, B. "Carbonation resistance of cement mortars with carbon nanotubes under natural conditions"	Bretschneider, L., Gharehpapagh, B., Lamottke, M., Njiri, J., Bah, M., Zeidler, H. "Utilization of Agricultural Residues in Additive Manufacturing: Suitability study for Binder Jetting"	Chrysanthi, M., Pavlides, A., Varouchakis, E. "Geostatistical Modelling using Novel Covariance Functions and Application to Heterotopic Datasets"
	Krack, M., Cuyvers, S., Geurts, G., Rai, M., Deferm, W. "A Direct Writing System for the Responsible Deposition of Liquid Metal for Stretchable Electronics"	Gharehpapagh, B., Denker, M., Bretschneider, L., Schade, M., Gruhn, R., Grab, T., Zeidler, H. "Sustainable Geopolymer 3D Printing: Materials, Methods, and Applications"	Espinoza, L., Marche, B., Espinoza, A., Camargo, M., Vásquez, Ó. "Valorization of Grass Residues from Roadside Verges Maintenance: A Literature Review on Sustainability and Methodological Approaches"	Tsiftoglou, M., Marinaki, M., Marinakis, Y. "A Balanced Optimization of Energy-Efficient Scheduling in the Permutation Flowshop Problem"
	Ahadzadeh, S., de la Fuente, B., Hauffman, T., Deferm, W., Cambré, S. "Scalable and Sustainable Carbon Nanotube Layer Fabrication via Ultrasonic Spray Coating for Optoelectronic Devices"	Maravelaki, P., De Nardi, C. "Toward sustainable construction: replacing cement with calcined marl and clay"	Nikoloudakis, C., Tsoutsos, T. "Evaluating the Environmental Sustainability of Macroalgae as a Feedstock for Bioplastic Production"	Ahmed, B., Kubica, J., Ahmed, M., Zia, A. "Finite element study on steel-concrete composite beams with web openings"
	Maciej, A., "The use of modern anti-corrosion coatings as an element of responsible consumption and production"		Zhu, Y., Tsoulfas, G. "Insights into Circularity in Dairy Supply Chains: A Case Study from the Netherlands"	Babaryka, A. "A Mathematical Framework for Parameter Estimation in Subsidence Modeling: Addressing Spatial Data Bias"
				Krauze, P., Lisańczuk, M., Ogonowski, S. "Amplitude control for vibrating screen using semi-active dampers"

"Elia" Main Restaurant

12:30 - 13:30

Lunch Break

	Main Hall	Room 2	Room 3	Room 4	Room 1
Session V	Sustainable Water/Wastewater Management	Digital Transformation II	Recovery III	Environmental/Sustainability Management I	Sustainable Education II
	Session Chair: Moller, G.	Session Chair: Diangelakis, N.	Session Chair: Schroeeyers, W.	Session Chair: Topaloglou, L.	Session Chair: Tsoutsos, T.
13:30 - 15:00	Moller, G., Taslakyian, L., Baker, M., Strawn, D. "Reducing the Carbon Footprint of the Water Sector"	Costa, N., Lourenço, J. "Process and Product Optimization – Bridging the Gap Between Theoretical solutions and Practical Results"	Schroeeyers, W. "Recycling Fe-rich slags in alkali activated cements and concretes for nuclear safety applications"	Tourlis, N., Kanteler, D., Pavlidou, S., Topaloglou, L. "Enhancing Just Energy Transitions: A Comparative Analysis of Governance Frameworks and Stakeholder Engagement in Coal-Dependent Regions"	Tsoutsos, T. "Unlocking the potential of Heritage-based innovation for sustainable development. HI-EURECA-PRO project"
	Regkouzas, P., Koukouraki, E., Asimakoulas, I., Karefylaki, E., Athanasiadou, E., Diamantopoulos, E., Stefanakis, A. "Biochar and its role in circular economy and SDG12; multiple applications of a sustainable material"	Moonen, S., Salaets, R., Batstone, K., Bey-Temsamani, A., Michiels, N. "A Comparative Study of 3D Model Acquisition Methods for Synthetic Data Generation of Agricultural Products"	Tara, E., Wiessler, T. "Non-Ferrous Slags in the Circular Economy: Sustainable Valorization of Heavy-Metal-Containing Slags"	Pavlidou, S., Kanteler, D., Karagiannis, Y., Topaloglou, L. "Integrating Climate Vulnerability into Investment Strategies for Just Energy Transitions: Evidence from European Coal Regions"	Borrego-Ramos, M., Blanco, S., García-Llamas, P., Feuchter, M., Resch-Fauster, K., Tischberger-Aldrian, A., Laviale, M., Passarella, M., Moyón, J., Taboada, A. "Citizen Science to Assess the Environmental Impact of Biodegradable Packaging: A Step Towards Sustainable Consumption and Production"
	Asimakoulas, I., Regkouzas, P., Koukouraki, E., Stefanakis, A. "Development of a new circular model in sewage sludge management"	Itu, R., Rus, C. "AI-powered Digital Transformation in Advanced Manufacturing: From CNC Optimization to Smart Metrology for Engineering Education"	Ogonowski, S., Wójtowicz, P. "IoT-based supervisory control system for the flotation machine with electromagnetic regrinding impeller"	Romeo, L. "Future CO2 Emissions Scenarios in Europe. The Imperative of Carbon Capture and Economic Growth Limitation"	Waligora, A. "Sustainable education at the University in the students' perspective"
	Regkouzas, P., Karefylaki, E., Asimakoulas, I., Koukouraki, E., Stefanakis, A. "Artificially Aerated Constructed Wetlands, an innovative technology for wastewater management and treatment"	Jakobs, L., Mark, B., Rauch, E., Matt, D. "Mapping Industry 4.0 Technologies to Key Functions in Industrial Symbiosis"	Islam, M., Pavón, S., Lara, A., Hippmann, S., Gatz, J., Bertau, M., Michaelis, A. "Integration of digitalization in upcycling strategy for NdFeB permanent magnets: closing material loops"	Ali, M. "Assessing GHG Emissions from Passenger Cars in Poland Using MOVES: Trends, Projections, and Mitigation Strategies (2015–2023)"	Lohse, M., Naumann, K. "Health-related aspects of participatory teaching and learning.: A mixed-methods approach using standardized course evaluations, teaching analysis surveys and student research diaries"
	Ntousakis, E., Loukakis, K., Ipsakis, D., Papaefthimiou, S. "Digital Twin of an Intelligent Water Distribution Network in Crete integrating QGIS and EPANET"		Krammer, A., Doschek-Held, K., Gatschlhofer, C., Steindl, F., Raonic, Z. "Metal recovery from metallurgical residues through carbothermal reduction"	Marrucci, L., Iraldo, F. "Evaluating circular economy aspects in the EU Ecolabel criteria"	

Underground Lobby

15:00 - 15:30

Coffee Break

	Main Hall	Room 2	Room 3	Room 4	
Session VI	Sustainable Health	Digital Transformation III	Recovery IV	Environmental/Sustainability Management II	
	Session Chair: Mainka, A.	Session Chair: Stavroulakis, G.	Session Chair: Lazar, M.	Session Chair: Tsoutsos, T.	
15:30 - 17:00	Lenarcik-Hilmer, M. "Fun in the office as a factor in supporting office workers well-being"	Pavlopoulos, C., Stavroulakis, G. "Modeling and prediction of photovoltaic system performance using digital twin technology"	Tobór-Osadnik, K. "Problem of Sustainable Production - Methane Emissions from Polish Coal Mines"	Cuesta-González, A., Cabeza-García, L., Fernández-Gago, R. "Material Environmental Sustainability Disclosure and Firms' Market Capitalization in the Tourism Industry"	
	Mainka, A., Nocoń, W., Malinowska, A., Pfajfer, J., Komisarczyk, E., Wargocki, P. "Exposure to PM2.5 while cycling in the city center"	Manowska, A. "Application of machine learning algorithms to predict energy losses in industrial networks as part of a responsible production strategy"	Itu, R. "Repurposing Underground Mining Galleries for Sustainable Agriculture: A Solution for Ecological and Economic Revitalization in the Jiu Valley"	Morán-Muñoz, A., Fernández-Gago, R., Godos-Díez, J. "Institutional Incentives and Economic Outcomes of Corporate Human Rights"	
	Cholewa, K., Kurtyka, P., Gawlikowski, M. "Enhancing Safety and Sustainability in the Use of Mechanical Circulatory Support Devices"	Krenczyk, D. "Advancing Sustainable Manufacturing through Digital Twin-Supported Decision-Making in Production Management"	Athanasiadou, E., Koukouraki, E., Stefanakis, A. "Phytoremediation of mining sites polluted with toxic metals using Lantana camara and Helianthus annuus plant species"	Fischer, F., Seidel, P., Labudde, D. "EU Data Act - A new Hope for Sustainable Longtime Usability of Smart Home Devices"	
		Kalinowski, K., Kr enczyk, D. "Digital Twin and Production Scheduling Module Integration for Sustainable Manufacturing"	Karakoulas, V., Saratsis, G., Xiroudakis, G., Liolios, P. "Optimizing the Ventilation System of an Underground Artificial Mine Using VentSim: Analysis of Results & Economic Impacts"	Bouillon, J. "Rewarding voluntary plastic sorting: a digital pathway toward a circular and regenerative Economy"	
		Linnéusson, G. "Simulation-Supported Transition to Responsible Production System Design Through DES Modeling"		Wannack, V. "Blockchain for Sustainable Biomass: Ensuring Compliance and Interoperability in Decentralized Markets"	
17:00 - 17:30	Imperial Hall - Main Hall Closing Ceremony				