




<div><div><div><div>Hellenic Society of Circular Economy</div><div>the pathway towards a Sustainable Development</div></div></div><div><div><div>17-19</div><div>september 2025</div><div>Chania, Greece</div></div></div><div><div>Organized by</div><div><div><div>Laboratory of Environmental Engineering and Management</div></div><div><div>Organized by</div></div><div><div>Democritus University of Thrace</div></div></div></div></div>		
Wednesday September 17	RESIDENCE – MUSEUM «ELEFTHERIOS K. VENIZELOS» (in Chalepa)	
18:00 - 20:30	Welcome reception + Registration	
Instructions for presenters: Oral presentation (15 min): 12 min talk + 2 min Q&A + 1 min buffer (Speaker change)		
Thursday September 18	Arsenali Centre of Chania - MAIN HALL	ROOM 1
08:00 - 09:00	Registration (lobby area, 1st floor)	
OPENING SESSION		
Chair: Alexandros Stefanakis, Ioannis Nikolaou, Stergios Vakalis		
09:00 - 09:20	CONFERENCE OPENING AND WELCOME MESSAGES	
09:20 - 10:00	KEYNOTE: Is the Circular Economy a Failing Sustainability Paradigm? Julian Kirchherr (Roskilde University, DENMARK/McKinsey & Company, GERMANY)	
10:00 - 10:40	KEYNOTE: Boosting the transformation of cities and regions through circular, digital, and social innovations: The Circular Systemic Solution approach Georgios Arampatzis (Technical University of Crete, GREECE)	
10:40 - 11:00	Coffee break (lobby area)	
	Session A1: Developing circular economy policies Chair: Efstratios Mikropoulos & Ioannis Nikolaou	Session A2: Society and circular economy Chair: Michael Geueke & Mihaela Cosnita
11:00 - 11:15	(C78) Institutional allocation of regulatory powers in the field of energy waste and water. A comparative perspective George Loizos (Regulatory Authority for Energy, Waste and Water, GREECE)	(C17) Stakeholder Engagement in Hubs for Circularity in Europe Michael Kohlgrüber (TU Dortmund, GERMANY)
11:15 - 11:30	(C54) Deconstructing security discourse in global circular economy governance Eugène Petelin (Lund University, SWEDEN)	(C83) Examining the consumer awareness, perception and behavior toward digital pollution Konstantinos Madias (Poznan University of Economics and Business, POLAND)
11:30 - 11:45	(C18) The socio-economic implications of circular measures in the context of decarbonising the energy system Leonidas Paroussos (RICARDO, GREECE)	(C49) The Circular vs Extraction Dilemma: Impacts of EU Critical Raw Materials Strategy on Poverty and Income Inequality in Finland, Greece, Poland, and Spain Dmytro Kazakov (Vrije Universiteit Amsterdam, THE NETHERLANDS)
11:45 - 12:00	(C44) Environmental Policy Instruments and Circular Economy Integration: A Comparative Analysis of Disparities between OECD and Non-OECD Countries in Europe Stoeniou Carmen Elena (Technical University of Cluj-Napoca, ROMANIA)	(C60) A review of justice considerations for mineral raw materials in Photovoltaic technologies Sarah Kollnig (University of Applied Sciences Wiener Neustadt, AUSTRIA)
12:00 - 12:15	(C39) Bridging Material and Energy Systems: Gaps, Synergies, and a Proposed Integrated Framework Efstratios Mikropoulos (Utrecht University, THE NETHERLANDS)	(C72) "Brand New & Shiny" vs. Upcycled: Understanding the Psychology Behind Consumer Choices in Circular Beauty Marta Szaban (Poznań University of Economics and Business, POLAND)
12:15 - 13:30	Lunch time!	
	Session A3: Business in circular economy Chair: Alexandros Stefanakis & Rachida Bouhid	Session A4: Circular design and manufacturing Chair: Alexandra Marin & Panagiotis Evangelopoulos
13:30 - 13:45	(C51) From Barrier to Catalyst: Reframing the Rebound Effect in Circular Economy Transitions Rachida Bouhid (Montral Quebec University, CANADA)	(C47) A shift towards green manufacturing and sustainable machining of aerospace parts: The SCORE project Chara Efsthathiou (International Hellenic University, GREECE)
13:45 - 14:00	(C48) Mapping Meso-Level Enablers in Circular Startups: A Quantitative Perspective from Austria Florian Dutzler (Technical University of Leoben, AUSTRIA)	(C55) Forming the future: Wood-based tooling approaches for green engineering applications Michael Geueke (University of Siegen, GERMANY)
14:00 - 14:15	(C23) Circular economy practices in complex products and systems: An integrative review Benito Mignacca (Technical University of Sofia, BULGARIA)	(C43) Lubrication and cooling of machining processes, developing a sustainability scoring methodology Nikolaos Tapoglou (International Hellenic University, GREECE)
14:15 - 14:30	(C25) Estimating the Direct and Indirect Circular Economy Rebound Effects in Input-Output Models Ivan Henderson V. Gue (De La Salle University, PHILIPPINES)	(C58) Towards a Sustainable Future: The Influence of Additive Manufacturing Shubhendu Singh (Goa Institute of Management, INDIA)
14:30 - 14:45	(C90) How Corporate Circular Economy Strategies Can Mitigate the Rebound Effect Ioannis Nikolaou (Democritus University of Thrace, GREECE)	(C05) Navigating Challenges: Entrepreneurial Traits driving Circular Economy adoption in Indian manufacturing start-ups Nandhini Priya Natarajan (Indian Institute of Technology Madras, INDIA)
14:45 - 15:00	(C37) Exploring the potential of network-based indicators for supporting corporate disclosure on resource use and circular economy (ESRS E5) and strategic decision-making for systemic resilience Vitor Miranda de Souza (Lund University, SWEDEN)	(C40) Reconditioning IT Equipment as a Circular Economy Model in Romania: Case Study of Educlick – Ateliere Fără Frontiere Alexandra Marin (Bucharest University of Economic Studies, ROMANIA)
15:00 - 15:15	(C42) Developing and implementing of a Circular Economy Management System in the Hotel Industry Panagiotis Vouros (University of the Aegean, GREECE)	(C38) Leveraging Smart Technologies for Sustainable Design and Circular Performance - A Systematic Literature Review Muhammad Noman Shafique (University of Aveiro, PORTUGAL)
15:15 - 15:45	Coffee break (lobby area) & Poster viewing	
	Session A5: Energy in circular economy Chair: Stergios Vakalis & Rodrigo Salvador	Session A6: Life Cycle Assessment and Business Sustainability Chair: Cleber J.C. Dutra & Jonna C. Baquillas
15:45 - 16:00	(C13) Energy-as-a-Service and Second Life Batteries in the Circular Economy: A Systematic Review on Scalability Challenges and Opportunities Muhammad Riezky Anindhitya Laksmana (University of Sumatera Utara, INDONESIA)	(C56) Modelling emissions reduction with circularity targets in a national energy system optimization model Kira West (Utrecht University / TNO, THE NETHERLANDS)
16:00 - 16:15	(C34) Energy Poverty in the Iberian Peninsula: Empirical evidence from EU-SILC Data Eleni Pastrapa (Harokopio University of Athens, GREECE)	(C19) Potential of Frugal Innovations to Tackle Challenges in the Chemical Industry Maria Tietz (Otto-von-Guericke University Magdeburg, GERMANY)
16:15 - 16:30	(C87) Eco Parks – The Catalysts for Regional Low Carbon Economic Transitioning John Ferguson (Binn Eco Park, SCOTLAND)	(C32) Optimal strategy in sustainable coffee capsule consumption: A game theory framework Jonna C. Baquillas (De La Salle University, PHILIPPINES)
16:30 - 16:45	(C88) EPR in Batteries for Automotive and industrial Batteries. The Case of Greece Dionissis Boudouvas (COMBATT S.A., GREECE)	(C106) Valorizing cocoa biowaste along the cocoa value chain: A Swiss-Ecuadorian case study. Maria Franco (Bern University of Applied Sciences, SWITZERLAND)
16:45 - 17:00	(C24) From Waste to Heat: Circular Valorization of Phosphogypsum and Red Mud for Thermal Energy Storage Applications Georgios Gaidajis (Democritus University of Thrace, GREECE)	(C52) Optimising the Use of Crop Residues for Bioenergy Generation and Soil Organic Carbon Enhancement in Italy Lucrezia Lamastra (Università Cattolica del Sacro Cuore, ITALY)
17:00 - 17:15	(C97) Biological Methanation as a Circular Strategy for Biogas Upgrading and CO ₂ Panagiotis Kougiass (Hellenic Agricultural Organisation Dimitra, GREECE)	(C53) Advances, Challenges, and Environmental Benefits of Utilizing Hermetia illucens for Bioenergy Production in a Circular Economy Framework Marco Trevisan (Università Cattolica del Sacro Cuore, ITALY)
17:15 - 17:30	(C98) Machine Learning-Assisted Optimization of Pressurized Biological Methanation via Trace Metal Supplementation Konstantinos Kontogiannopoulos (Hellenic Agricultural Organisation Dimitra, GREECE)	(C89) Carbon dioxide capture and biological conversion to methane using hydrogenotrophic methanogens in a trickle bed reactor Konstantina Papadopoulou (National Technical University of Athens, GREECE)
19:30 - ...	Conference dinner: GLOSSITSES Restaurant at the Old Port of Chania (very close to the conference venue)	

Friday September 19		Arsenali Centre of Chania - MAIN HALL	ROOM 1
		Session B1: Circular Entrepreneurship Chair: Eirini Athanasiadou & Giannis Tsoulfas	Session B2: Circular economy governance Chair: Asimina Tremouli & Corentin Juin
	08:45 - 09:00	(C104) Unlocking Circular Public Procurement: Harnessing Competency Matrix for Circular Economy Hareem Arshad (Nord University, NORWAY)	(C81) Separate Collection of Biowaste in Hungary: Readiness and Comparison with EU Best Practices Katalin Kovács (University of Pannonia, HUNGARY)
	09:00 - 09:15	(C28) Methodologies to Optimize Closed-Loop Supply Chains applied to Food and non-Food Chains: A Hybrid Literature Review Ehsan Gale Gafi (University of Helsinki, FINLAND)	(C07) Hubs4Circularity (H4Cs) role in regional integration of CE & I-US: The example of Theseus H4C Horizon Europe project as the first-of-its-kind Hub4Circularity in Greece Charalampos Manousiadis (Institute of Communication & Computer Systems - ICCS) , GREECE)
	09:15 - 09:30	(A70) Circular Economy in the Fashion Industry: A Multiple Case-study Approach Giannis Tsoulfas (Agricultural University of Athens, GREECE)	(C45) RetuRO – A Functional Model for Implementing the Circular Economy in Romania Alina Florentina Gheorghe (Bucharest University of Economic Studies, ROMANIA)
	09:30 - 09:45	(C30) Leveraging absorptive capacity for circular supply chains: A polar type comparative analysis of Italian firms Syed Muhammad Abbas (LIUC Università Cattaneo, ITALY)	(C41) Perspectives on influential factors for the adoption of circular economy practices Cleber J.C. Dutra (Jagiellonian University in Krakow, POLAND)
	09:45 - 10:00	(C99) The practical contribution of Complementarity Theory for advancing the predictive power of Supply Chain Management Theories Khalid Al Matrushi (University of Helsinki, FINLAND)	(C74) Refining ISO Circularity Metrics for Bio-Based Systems: A Critical Assessment and Indicator Enhancement David Renfrew (Imperial College London, UNITED KINGDOM)
	10:00 - 10:15	(C59) Sustainability in Practice: A Mixed-Methods Study of Transformation Drivers and Barriers in Swiss SMEs Richard Blaese (ZHAW School of Management & Law, SWITZERLAND)	(C80) Comparing Deposit Refund Systems in Europe: The Case of Hungary Janka Bobek-Nagy (University of Pannonia, HUNGARY)
	10:15 - 10:30	(C101) Supporting the role of certification on circular agrifood value chains: implementation of BioReCer framework in a Greek context Stamatia Skoutida (Centre for Research and Technology-Hellas, GREECE)	(C01) Closing the Loop: Bridging Academic Research and Business Practice in Circular Economy and SDGs Corentin Juin (École Polytechnique, FRANCE)
	10:30 - 10:50	Coffee break (lobby area) ☕	
		Session B3: Circular built environment Chair: Isaac Meir & Ioannis Asimakoulas	Session B4: Circular water economy Chair: Simos Malamis & Alexandros Stefanakis
	10:50 - 11:05	(C03) Lowering embodied energy in construction by introducing waste products. A review Isaac A. Meir (Ben-Gurion University of the Negev, ISRAEL)	(C103) Integrating constructed wetlands in circular wastewater management Alexandros Stefanakis (Technical University of Crete, GREECE)
	11:05 - 11:20	(C15) The Project “Provincial Strategy For Circular Economy” – Strategic Approaches to Circular Economy in the Construction Sector of South Tyrol Simon Pezzutto (Eurac Research, ITALY)	(C93) Studying advanced constructed wetland designs for wastewater management in a circular economy Emmanouela Karefylaki (Technical University of Crete, GREECE)
	11:20 - 11:35	(C10) Mainstreaming Hempcrete - a Carbon-Negative Solution, and a Greener Path to a “Cooler” Sustainable Built Environment in North America and Beyond Pandwe Gibson (Massachusetts Institute of Technology, USA)	(C71) Enhanced hydrocarbon degradation in horizontal subsurface flow constructed wetlands through microbubble-aeration and electrochemical treatment Petroura Seridou (Technical University of Crete, GREECE)
	11:35 - 11:50	(C64) Advancing territorial circularity assessments across sectors: Insights from four Circular Cities and Regions Initiative cases Maria Eleni Koulouri (Imperial College London, UNITED KINGDOM)	(C92) Developing a circular model for olive mill wastewater management: an experimental study using constructed wetlands Eirini Athanasiadou (Technical University of Crete, GREECE)
	11:50 - 12:05	(C62) Sustainable asset management in urban areas - Resource efficiency in road construction Alexande Buttgerit (Jade University of Applied Sciences, GERMANY)	(C95) Development of a novel fog harvesting panel: case studies in potable water production and in precision agriculture Alexandros Stefanakis (Technical University of Crete, GREECE)
	12:05 - 12:20	(C94) A circular model for sewage sludge management: a pilot study using nature-based solutions Ioannis Asimakoulas (Technical University of Crete, GREECE)	(C77) Evaluation of the efficiency of removing residual pollutants from treated wastewater Agata Włodarska-Jurkowska (Municipal Water Supply and Sewage Company in Warsaw, POLAND)
	12:20 - 13:40	Lunch time! 🕒	
	13:40 - 14:20	KEYNOTE: The Circular Analytical Chemistry Opportunity Elia Psillakis (Technical University of Crete, GREECE)	
	14:20 - 15:00	KEYNOTE: How can nature-based solutions support water circularity? Simos Malamis (National Technical University of Athens, GREECE)	
		Session B5: Circular bioeconomy Chair: Alina Florentina Gheorghe & Inka Orko	Session B6: Digital economy Chair: Khalid Al Matrushi & Ioannis Asimakoulas
	15:00 - 15:15	(C96) The green transition of Intensified Processes: The Hydrothermal Reactor of the BioFairNet Pilot Site 1 Stergios Vakalis (National Technical University of Athens, GREECE)	(C09) Barriers of Digital Product Passport implementation in Handloom Sector: An Exploratory Study Pinosh Kumar Hajoary (Indian Institute of Technology Guwahati, INDIA)
	15:15 - 15:30	(C33) Opportunities and challenges for the high-value use of waste biomass: learnings from the project Power Bio Rodrigo Salvador (Technical University of Denmark, DENMARK)	(C35) KIRAMET: Digital Product Passports for Optimized Metal Recycling Madhu Dasika (Salzburg Research Forschungsgesellschaft mbH, AUSTRIA)
	15:30 - 15:45	(C73) Performance evaluation of a pilot-scale integrated renewable energy system for biomethane production and hydrogen storage Christina Karyofyllidou (Democritus University of Thrace, GREECE)	(C36) Intelligence in Support of the Circular Economy: What about Sustainability? Paola Kouyoumji (University of Grenoble Alpes, FRANCE)
	15:45 - 16:00	(C14) Fish Hydrolysate in the Circular Economy: Regenerating Soils, Reducing Waste and Imports, and Replacing Synthetic Fertilisers Christina Lantzaki (Social Co-operative, GREECE)	(C105) TUC Ridesharing: A University-Oriented Social Ridesharing App Georgios Chalkiadakis (Technical University of Crete, GREECE)
	16:00 - 16:20	Coffee break (lobby area) & Poster viewing ☕	
		Session B7: Circular waste management Chair: Konstantinos Kontogiannopoulos & Vitor Miranda de Souza	Session B8: Materials in circular economy Chair: Panagiotis Regkouzas & Katerina Stamatelatou
	16:20 - 16:35	(C21) Reprocessing tailings to advance circular economy in mining Päivi Kinnunen (VTT Technical Research Centre of FINLAND)	(C91) Demonstrating the role of biochars in circular economy through an agronomic experiment Panagiotis Regkouzas (Technical University of Crete, GREECE)
	16:35 - 16:50	(C22) A circular economy framework for assessing minerals processing concept options Inka Orko (VTT Technical Research Centre of Finland Ltd, FINLAND)	(C68) Agroforestry waste biomass for biochar production: contribution to a circular bioeconomy model in Alto Minho (NW Portugal) Ana Isabel Ferraz (proMetheus-IPVC, PORTUGAL)
	16:50 - 17:05	(C27) Circular economy of waste tire rubber, silicon - photovoltaic modules and high density polyethylene Cosnita Mihaela (Transilvania University of Brasov, ROMANIA)	(C31) Optimizing Thermochemical Processes for Biochar and Biooil Production: A Sustainable Path for Steel and Petrochemical Industries Panagiotis Evangelopoulos (RISE Research Institutes of Sweden AB, SWEDEN)
	17:05 - 17:20	(C100) Optimization of magnesium extraction from ultrabasic rocks Evangelos Tzamos (Ecoresources PC, GREECE)	(C65) Analyzing the biocrude production from pyrolysis of hydrochar: A BioFairNet application Dimitris Liakos (University of the Aegean, GREECE)
	17:20 - 17:35	(C79) Assessing Growth Response and Nickel Uptake in Tagetes erecta Dwarf Under Varied Cultivation and Soil Nickel Concentrations Eliza Molnár (University of Pannonia, HUNGARY)	(C20) Reshaping Industrial Symbiosis in Timber: A Generative Design Method for Reclaimed Wood Ahmed K. Ali (Texas A&M University, USA)
	17:35 - 17:50	(C102) Soil phytoremediation in abandoned mines: an experimental study in Greece for metal recovery Eirini Athanasiadou (Technical University of Crete, GREECE)	(C29) Circular materials characterisation at research infrastructures through the European project ReMade@ARI; Laser photo chemistry and spectroscopy techniques at IESL-FORTH Maria Konstantaki (Foundation for Research and Technology- Hellas, GREECE)
	17:50 - 18:15	Discussion on future plans - International Society for Circular Economy CLOSING SESSION	

LIST OF POSTERS		
NAME	COUNTRY	POSTER TITLE
Akhiladas E K	India	(P04) Microcosm-Based Comparative Analysis of Biofilm-Forming Bacterial Communities in Constructed Wetlands Treating Diesel-Contaminated Wastewater
Bianca Maria Tragnone	Italy	(P06) Identification of agri-food Social Life Cycle Assessment material themes
Rosa Di Capua	Italy	(P07) Circular solutions in the sheep meat supply chain: a literature review
Marco Trevisan	Italy	(P10) Advances, Challenges, and Environmental Benefits of Utilizing Hermetia illucens for Bioenergy Production in a Circular Economy Framework
Vasileia Vasilaki	United Kingdom	(P11) Empowering Greek SMEs for Circular Economy Transition: A Digital Ecosystem Enhancing Competitiveness and Circularity
Agnieszka Jagoda	Poland	(P12) Green Consumer Motivation: An Empirical Study of Drivers Behind the Purchase of Recycled Refrigerators in Poland
Małgorzata Krzywonos	Poland	(P15) Unlocking Regional Circular Potential: A Qualitative Study on Rigid Polyurethane Foam Waste Management and Stakeholder Integration
Basileios Deligiorgis	Greece	(P16) Life Cycle Analysis of Selective Blasting Technique with Low Density Explosives
Blanca Maria Lekube	Spain	(P17) Implicit Project: recycling strategies for auxiliary materials
Katerina Stamatelatou	Greece	(P18) Biological biogas upgrade to biomethane under mesophilic conditions: biomethane profile composition across trickling bed reactors
Kinga M. Berta	Hungary	(P19) The utilization of red mud as artificial soil substitute: The influence of red mud on soil microbial life and plant-rhizobiome interaction
Róber Fejes	Hungary	(P20) Identification of the generation characteristics of municipal solid waste
Viktor Sebestyén	Hungary	(P21) Strategic Localization of Climate Actions: A Methodological Approach for Urban Climate Resilience
Dorota Burchart	Poland	(P22) New requirements for batteries in line with the principles of circular economy for specialized off-road electric vehicles for people with special needs
Xavier Colom	Spain	(P23) Impact of Incorporating Post Industrial Recycled LLDPE and Post Consumer PE in Packaging Films: A Macro and Microstructural Investigation
Jura Sebo	Slovakia	(P24) Eco-Innovations in Manufacturing Enterprises in Slovakia: A Data-Driven Analysis of Determinants and Trends
Judit Oláh	Hungary	(P25) Do Circular Economy Practices Drive Economic Growth? Evidence from Developing Countries Using Panel ARDL-PMG Estimation
Emmanouil Varouchakis	Greece	(P26) IMMERSE Virtual Training on Critical Raw Materials for the Clean Energy Transition
Asimina Tremouli	Greece	(P27) A Novel Approach of Microbial Electrolysis Cell - assisted Anaerobic Digestion with hydrogen injection for enhanced wastewater treatment and biogas production
Aggeliki Prapa	Greece	(P28) Sustainable Circular Economy Practices: The Case of INTERCOMM FOODS S.A.
Anurag Hazarika	USA	(P29) Commodification of Food Culture of Assam, India : An Analysis