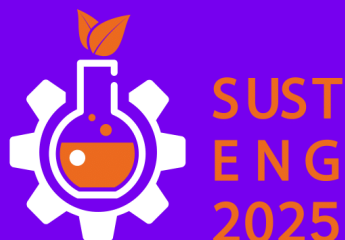


4th International Conference on Sustainable Chemical & Environmental Engineering



1 - 4 September 2025

Thessaloniki, Greece

hybrid event

www.susteng.tuc.gr

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+30 2821006208



organizers



Technical University of Crete
School of Chemical and
Environmental Engineering



**Cyprus
University of
Technology**

Dear friends and colleagues,

I am pleased to invite you to the **4th International Conference on Sustainable Chemical and Environmental Engineering (SUSTENG 2025)**, between **1st to 4th September 2025**.

The conference is organized by the "Design of Environmental Processes Laboratory", of the School of Chemical and Environmental Engineering, Technical University of Crete and the Cyprus University of Technology.

The **SUSTENG 2025** Conference will take place both with physical and virtual presence.

The conference aims to encourage the exchange of knowledge between academicians, scientists and engineers on hot issues and current developments in chemical and environmental engineering through sustainable perspective. The participants will have the opportunity to present their recent research findings on an extended spectrum of conference topics and be informed about new challenges, future trends, and technological innovations on sustainable processes following the principles of circular economy.

After the completion of the conference, all abstracts/full papers will be published in the **SUSTENG 2025** Conference Proceedings with ISBN number, while selected manuscripts will be published to at least one Special Issues at high IF scientific journals.

The conference Chair

Petros Gikas

Professor

Head of the "Design of Environmental Processes Lab"

School of Chemical and Environmental Engineering

Technical University of Crete, Greece



Session 1: Biochemical engineering and green chemistry

Session 2: Valorization of food waste

Session 3: Wastewater management

Session 4: Solid waste management and greenhouse gas monitoring

Session 5: Modeling and optimization in energy and environment

Session 6: Circular economy in waste management

Session 7: Sustainable agriculture and waste management

Session 8: Sustainable water management and reuse

Session 9: Biosolids management and valorization

Session 10: Life cycle assessment

Scientific committee:

Agboka, Komi, University of Lome, Togo	Loizidou, Maria, National Technical University of Athens, Greece
Akratos, Christos, Democritus University of Thrace, Greece	Lyberatos, Gerasimos, National Technical University of Athens, Greece
Andreopoulos, Andreas, National Technical University of Athens, Greece	Mahdjoub, Noredine Loeid, University of Kwa Zulu-Natal, South Africa
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Arampatzis, Georgios, Technical University of Crete, Greece	Mamais, Daniel, National Technical University of Athens, Greece
Ashraf, Muhammad Arslan, Government College University Faisalabad, Pakistan	Manariotis, Ioannis, University of Patras, Greece
Assogbadjo, Achille Ephrem, University of Abomey-Calavi, Benin	Mantzavinos, Dionissios, University of Patras, Greece
Azaizeh, Hassan, Tel-Hai College, Israel	Melidis, Paraschos, Democritus University of Thrace, Greece
Boileau, Herve, University of Savoie Mont-Blanc, France	Moustakas, Konstantinos, National Technical University of Athens, Greece
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Dach, Jacek, Poznan University of Life Sciences, Poland	Odirile, Phillimon, University of Botswana, Botswana
Dermantas, Dimitrios, National Technical University of Athens, Greece	Panagiotopoulou, Paraskevi, Technical University of Crete, Greece
Diamantopoulos, Evan, Technical University of Crete, Greece	Papadakis, Antonios, Region of Crete, Greece
Diangelakis, Nikolaos, Technical University of Crete, Greece	Papadakis, Georgios, Agricultural University of Athens, Greece
Elhag, Mohamed, King Abdulaziz University, Saudi Arabia	Papageorgiou, Lazaros, University College, UK
Fountoulakis, Michael, University of the Aegean, Greece	Papapolymerou, George, University of Thessaly, Greece
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Georgiadis, Michael, Aristotle University of Thessaloniki, Greece	Pistikopoulos, Stratos, Texas A&M University, USA
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Gikas, Petros, Technical University of Crete, Greece	Rakotondramiarana, Hery Tiana, University of Antananarivo, Madagascar
Ginn, Timothy, Washington State University, USA	Ranieri, Ezio, University of Bari, Italy
Gorgoglione, Angela, Universidad de la República, Uruguay	Rozakis, Stylianos, Technical University of Crete, Greece
Gregorio, Simona Di, University of Pisa, Italy	Sengor, Sema Sevinc, Middle East University, Turkey
Hatzikioseyan, Artin, National Technical University of Athens, Greece	Shaer, Mohamed El, Zagazig University, Egypt
Insel, Güçlü, Istanbul Technical University, Turkey	Stasinakis, Athanasios, University of the Aegean, Greece
Janajreh, Isam, Khalifa University, UAE	Stefanakis, Alexandros, Technical University of Crete, Greece
Juchelkova, Dagmar, Technical University of Ostrava, Czech Republic	Takavakoglou, Vasileios, Hellenic Agricultural Organization, DEMETER, Greece
Juizo, Dinis, University of Eduardo Mondlane, Mozambique	Tchobanoglous, George, University of California Davis, USA
Kakai, Romain Lucas Glele, University of Abomey Calavi, Benin	Tejeda, Lesly, University of Cartagena, Colombia
	Tekerlekopoulou, Athanasia, University of Patras, Greece
	Tiburue, Elvis, University of Ghana, Ghana

Kalavrouziotis, Ioannis, Hellenic Open University, Greece	Torosyan, Gagik, State Engineering University of Armenia, Armenia
Kalogerakis, Nicolas, Technical University of Crete, Greece	Trois, Cristina, University of Kwa Zulu –Natal, South Africa
Karatzas, George, Technical University of Crete, Greece	Tsanis, Ioannis, Technical University of Crete, Greece
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Katsaounis, Alexandros, University of Patras, Greece	Tsoutsos, Theocharis, Technical University of Crete, Greece
Kiratzis, Nikolaos, University of Western Macedonia, Greece	Vakalis, Stergios, University of the Aegean, Greece
Kokosis, Antonios, National Technical University of Athens, Greece	Vamvouka, Despoina, Technical University of Crete, Greece
Kolokotsa, Dionysia, Technical University of Crete, Greece	Vayenas, Dimitris, University of Patras, Greece
Komesli, Okan Tarık, Atatürk University, Turkey	Venieri, Danae, Technical University of Crete, Greece
Komnitsas, Konstantinos, Technical University of Crete, Greece	Vlysidis, Anestis, National Technical University of Athens, Greece
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Koutinas, Michalis, Cyprus University of Technology, Cyprus	Vyrides, Ioannis, Cyprus University of Technology, Cyprus
Koutroulis, Aristeidis, Technical University of Crete, Greece	Yentekakis, Ioannis, Technical University of Crete, Greece
Kumar, Manish, University of Petroleum and Energy Studies, India	Yi, Shan, University of Auckland, New Zealand
Kungolos, Athanasios, Aristotle University of Thessaloniki, Greece	Zhang, Ruihong, University of California Davis, USA
Kurniawan, Tonni Agustiono, Xiamen University, China	Zhou, Yaoyu, Hunan Agricultural University, China
Kuroda, Keisuke, Toyama Prefectural University, Japan	Zhu, Baoning, Beijing University of Chemical Technology, China
Kyzas, George, International Hellenic University, Greece	Zhuang, Wei-Qin, University of Auckland, New Zealand
Lin, Justin Chun-Te, Feng Chia University, Taiwan	Zouboulis, Anastasios, Aristotle University of Thessaloniki, Greece
Livingstone, Andrew, Queens Mary University, UK	

SUSTENG 2025- PROGRAMME AT A GLANCE

DAY 1 – Monday 1 September Susteng 2025	
Aristotle University Research Dissemination Center (KEDEA)	
Registration	14:00 - 16:00
Session 1: Biochemical engineering and green chemistry	16:00 - 18:00
Welcome Speeches Stavros Kalafatis-Vice Minister of Development Konstantinos Gioutikas-Vice Governor of Thessaloniki Stelios Angeloudis-Mayor of Thessaloniki Dimitris Aslanidis, Mayor of the Municipality of Pavlos Melas Kyriakos Anastasiadis-Rector of the Aristotle University of Thessaloniki Michael Zervakis-Rector of the Technical University of Crete George Savaidis-Dean of the Faculty of Engineering, Aristotle University of Thessaloniki Vasileios Zaspalis-School of Chemical Engineering, Aristotle University of Thessaloniki Aris Gorogias-President at Hellenic Association of Chemical Engineers Michael Geranis-President of the Regional Association of Solid Waste Management Agencies of Central Macedonia Yiannis Tsouloftas-President of the Local Government Organization of Limassol District, Cyprus	18:00 - 18:30
PLENARY LECTURE: Professor Petros Gikas	18:30 - 19:15
Welcome reception	19:30 - 22:00
DAY 2 – Tuesday 2 September Susteng 2025	
Aristotle University Research Dissemination Center (KEDEA)	
Session 2: Valorization of food waste	09:30 - 10:45
Coffee break - Posters viewing	10:45 - 11:00
Session 3: Wastewater management	11:00 - 12:30
PLENARY LECTURE: Professor Güçlü Insel	12:30 - 13:15
Lunch break	13:15 - 14:45
Session 4: Solid waste management and greenhouse gas monitoring	14:45 - 16:30
PLENARY LECTURE: Professor Paraschos Melidis	16:30 - 17:15
Session 5: Modeling and optimization in energy and environment	17:15 - 19:00
Gala dinner	20:30 - 23:00

DAY 3 – Wednesday 3 September Susteng 2025	
Aristotle University Research Dissemination Center (KEDEA)	
Session 6: Circular economy in waste management	09:30 - 10:45
<i>Coffee break - Posters viewing</i>	10:45 - 11:00
PLENARY LECTURE: Professor Jacek Dach	11:00 - 11:45
Session 7: Sustainable agriculture and waste management	11:45 - 13:15
<i>Lunch break</i>	13:15 - 14:45
PLENARY LECTURE: Professor Konstantinos Kakosimos	14:45 - 15:30
Session 8: Sustainable water management and reuse	15:30 - 16:15
Session 9: Biosolids management and valorization	16:15 - 18:30
Session 10: Life cycle assessment	18:30 - 19:15
Closing ceremony	19:15 - 19:45
DAY 4 - Thursday 4 September Susteng 2025	
Conference excursion at the capital of ancient Macedonia Aegae, in Vergina, and the grave of Philip II, father of Alexander the Great, and the Byzantine town of Veria	09:00 - 17:00

DAY 1 – Monday 1 September Susteng 2025	
Aristotle University Research Dissemination Center (KEDEA)	
Registration	14:00 - 16:00
Session 1: Biochemical engineering and green chemistry Chair: Emine Çokgör, Manal Haj Zaroubi	16:00 - 18:00
Anaerobic production of biosurfactants from contaminated soils: a waste valorization approach to soil remediation M. Puddu, G. Beretta, S. Saponaro and E. Sezenna	16:00 - 16:15
Microalgae-Based Carbon Capture and Bioproduct Synthesis Using Industrial Flue Gas: A Case Study with Stichococcus sp. G. Makaroglou, P. Gikas	16:15 - 16:30
From lab to pilot scale microalgae-based photobioreactors: statistical optimization of 3rd generation biofuel production A. Pavlou, G. Penloglou and C. Kiparissides	16:30 - 16:45
Willow (<i>salix acmophylla boiss.</i>) leaf and branch extracts inhibit in vitro sporulation of Coccidia (<i>Eimeria spp.</i>) from goats M. Haj-Zaroubi, N. Mattar, S. Awabdeh, R. Sweidan, A. Markovics, J. D. Klein and H. Azaizeh	16:45 - 17:00
Optimization of high-added value terpenes recovery from genetically engineered <i>Saccharomyces cerevisiae</i> and <i>Yarrowia lipolytica</i> strains A. Moschona, C. Gerasi, M. Moumin, F. Tsakiroglou, A. Assimopoulou and S.I. Patsios	17:00 - 17:15
Valorization of Invasive Macroalgae (<i>Asparagopsis armata</i> and <i>Sargassum spp.</i>) as Sources of Immune-Enhancing Aquafeed Ingredients: Recovery and In-Vitro Fish Digestibility Assessment S. Papadaki, C. Stergiopoulos, N. Tricha and M. Krokida	17:15 - 17:30
Life cycle assessment of systems exploiting microalgae for the wastewater treatment G. Dolci, M.J.F.A. Nichilo, M. Grosso, and L. Rigamonti	17:30 - 17:45
Efficient mechanochemical synthesis of conjugated porous (macro)molecules via multiple Sonogashira couplings and their energy storage application R. S. Rao, A. Shunnar, B. Pirzada, E. Oueis, A. B. Lowe and J. Shaya	17:45 - 18:00

Welcome Speeches Stavros Kalafatis-Vice Minister of Development Konstantinos Gioutikas-Vice Governor of Thessaloniki Stelios Angeloudis-Mayor of Thessaloniki Dimitris Aslanidis, Mayor of the Municipality of Pavlos Melas Kyriakos Anastasiadis-Rector of the Aristotle University of Thessaloniki Michael Zervakis-Rector of the Technical University of Crete George Savaidis-Dean of the Faculty of Engineering, Aristotle University of Thessaloniki Vasileios Zaspalis-School of Chemical Engineering, Aristotle University of Thessaloniki Aris Gorogias-President at Hellenic Association of Chemical Engineers Michael Geranis-President of the Regional Association of Solid Waste Management Agencies of Central Macedonia Yiannis Tsouloftas-President of the Local Government Organization of Limassol District, Cyprus	18:00 - 18:30
PLENARY LECTURE: Professor Petros Gikas Energy Self-Sustainable Wastewater Treatment Plants Chair: Güçlü Insel, Jacek Dach	18:30 - 19:15
Welcome reception Aristotle University Research Dissemination Center (KEDEA)	19:30 - 22:00

DAY 2 – Tuesday 2 September Susteng 2025	
Aristotle University Research Dissemination Center (KEDEA)	
Session 2: Valorization of food waste Chair: Caro Dario, Emine Çokgör	09:30 - 10:45
Comparing the carbon footprint of traditional beef burger with burgers fortified with by-products D. Caro	09:30 - 09:45
Sustainable valorization of seafood waste: enzyme-based chitin extraction as an alternative to chemical processes I. Kan, A. Morales, L. Sillero and X. Erdocia	09:45 - 10:00
Pomegranate Peel Bioplastic: Transforming Food Waste into Eco-Friendly Materials for Product Design L. Mailat, Delia A. Prisecaru	10:00 - 10:15
Valorisation of watermelon peel into an adsorbent for removal of hexavalent chromium Mangwandi Chirangano, GartlanCiaran, Khong Justin	10:15 - 10:30
Integrated Approach for Sustainable Protein Production: Utilizing Agricultural Waste for Black Soldier Fly Rearing and Feed Applications A. Jonas-Levi, I. Opatovsky, A. Hurvitz, A. Salomon, R. Gutman, R. Sivan	10:30 - 10:45
Coffee break - Posters viewing	10:45 - 11:00
Session 3: Wastewater management Chair: Paraschos Melidis, Güven Didem	11:00 - 12:30
Microalgal treatment of AnMBR Effluent: a low-energy approach to nutrient reduction E. Politou, A. Makri, D. Matziri, N. Remmas, S. Ntougias and P. Melidis	11:00 - 11:15
Circular economy strategy in wastewater treatment: the example of Limassol district local government organisation sewage treatment plant in Moni, Cyprus Y. Tsouloftas, S. Metaxas, M. Vrionides, P. Marti, V. Konstantinides and G. Panayiotou	11:15 - 11:30
Integrating greywater treatment and green façade creation using vertical flow constructed wetlands E. Stefanatou and M.S. Fountoulakis	11:30 - 11:45
An Appraisal for a Sustainable Process Design and Operation for Leachate Treatment D. Guven, E. Çokgör, G.E. Zengin Balci, B. Kaya, G. Ozyildiz, D. Soylu, I. Takacs, G. Insel, S. Sözen, and D. Orhon	11:45 - 12:00
Removal of non-steroidal anti-inflammatory micropollutants and nitrification in hybrid systems operating at low sludge age D. Soylu, B. Ciftcioglu Gozuacik, Ş. Yilmaz, G.E.Zengin, İ. Pala-Ozkok, E. Topuz, G. Ozyildiz, D. Guven, G. Insel and E. Çokgör	12:00 - 12:15

Quantitative Evaluation of Nitrification Inhibition in Petrochemical Wastewater AT. Cetinkaya, P. Eryavuz, G. Ozyildiz, D.Güven, N. Artan, E. Çokgör, G. Insel	12:15 - 12:30
PLENARY LECTURE: Professor Güçlü Insel Novel hybrid nutrient removal process for advanced nutrient removal: experimental based process development Chair: Paraschos Melidis, Petros Gikas	12:30 - 13:15
Lunch break	13:15 - 14:45
Session 4: Solid waste management and greenhouse gas monitoring Chair: Francesca Villa, Güçlü Insel	14:45 - 16:30
Dewatering of landfill leachate by combined flocculation with geotextile filtration B. Kaya, S. Dogruel, V. Oztug and E. Çokgör	14:45 - 15:00
Air Quality Assessment in the Municipality of Pavlos Melas, Thessaloniki S. Cheristanidis, E. Pitsalidis and D. Melas	15:00 - 15:15
The Problem Tree: a strategic tool for priorities' identification, applied to the assessment of operational and design issues of a solid waste treatment facility in Lebanon F. Villa, A. De Robertis and M. Grosso	15:15 - 15:30
Management of household hazardous waste: survey and comparative analysis M. Markantoni, T. Daras and A. Giannis	15:30 - 15:45
Ternary Deep Eutectic Solvent-Mediated Leaching of Valuable Metals from Waste Printed Circuit Boards A. Alaydaros, N. Chola, S. Stephen, G.E. Luckachan, G. Xavier, M. Elkadi, E. AlNashef, M. Abi Jaoude	15:45 - 16:00
Comparison of source and site level methane emissions measurements at gas installations N. Tsochatzidis	16:00 - 16:15
Preliminary investigation of removal of pharmaceuticals from aqueous solutions by potato peel based biochars produced from hydrothermal conversion and pyrolysis: a comparative study J.Khong, and C. Mangwandi	16:15 - 16:30
PLENARY LECTURE: Professor Paraschos Melidis Anaerobic Membrane Bioreactors for Sustainable Municipal Wastewater Treatment Chair: Petros Gikas, Jacek Dach	16:30 - 17:15
Session 5: Modeling and optimization in energy and environment Chair: Thomas Thomaidis, Vassilis Charitopoulos	17:15 - 19:00
An optimisation approach towards the integration of hydrogen in heat and power decarbonization	17:15 - 17:30

M.E. Efthymiadou, V.M. Charitopoulos and L.G. Papageorgiou	
Deciphering the impact of AI's energy demand on Europe's Green Deal M. Hemmati, V. M Charitopoulos	17:30 - 17:45
Assessment of water-energy-food-ecosystem nexus of sakarya river basin S. Yaykiran and A. Ekdal	17:45 - 18:00
Integrating sustainability into decision support for the transition to resilient business models I. Mavrogiannis	18:00 - 18:15
Development of a decision support system for shallow lakes under the impact of eutrophication and climate change and its application to a hypertrophic lake A. Ekdal, M. Gürel, C. Gurevin and A. Ertürk	18:15 - 18:30
Comparative Assessment of Alternative Waste Management Scenarios for Mixed Municipal Solid Waste: Case study of Cyprus S. Mai, E.M. Barampouti, D. Malamis, K. Moustakas and M. Loizidou	18:30 - 18:45
Policy Pathways for Marine Litter Prevention and Control: Insights from the SeaClear2.0 Project D. Orthodoxou, X. Loizidou	18:45 - 19:00
Gala dinner	20:30 - 23:00

DAY 3 – Wednesday 3 September Susteng 2025	
Aristotle University Research Dissemination Center (KEDEA)	
Session 6: Circular economy in waste management Chair: Fabio Hernández-Ramos, Abeer Albalawneh	09:30 - 10:45
Deep eutectic solvents and microwave heating for efficient oligosaccharide recovery from apple tree pruning waste L. Sillero, J. Labidi and A. Morales	09:30 - 09:45
From Waste to Value: Pilot-Scale EV Battery Recycling in Armenia H. Akarmazyan, G. Vardanyan, V. Marukhyan, A. Tadevosyan	09:45 - 10:00
Metal leaching from e-waste using phosphonium-based hydrophobic deep eutectic solvent N. M. Chola, S. Stephen, G. E. Luckachan, G. Xavier, M. Elkadi, I. Alnashef, M. Abi Jaoude	10:00 - 10:15
Sustainable Consumption Principles of the Circular Economy: Consumer Preferences and Willingness to Pay for Electric Vehicle (EV) Purchase Options: A Study in Klang Valley, Malaysia F. Shahudin, R. Ya'cob, L. Yiyang, G. Zihan	10:15 - 10:30
From urban pruning to sustainable films: unlocking the value of tree residues F. Hernández-Ramos, A. Morales, P. de Hoyos-Martínez, J. Pérez-Arce, X. Erdocia, L. Sillero	10:30 - 10:45
Coffee break - Posters viewing	10:45 - 11:00
PLENARY LECTURE: Professor Jacek Dach Biogas and biomethane as a key element of the circular economy and carbon footprint reduction in the products Chair: Konstantinos Kakosimos, Petros Gikas	11:00 - 11:45
Session 7: Sustainable agriculture and waste management Chair: Patrycja Pochwatka, Konstantinos Tsamoutsoglou	11:45 - 13:15
Traditional and Indigenous Knowledge and Conservation Practices of Forest Food Species in Guinean Forests of West Africa (GFWA) Biodiversity Hotspot A. E. Assogbadjo, G. Avakoudjo	11:45 - 12:00
Optimization of microwave assisted delignification of apple tree pruning using deep eutectic solvents A. Morales, X. Erdocia, J. Labidi, L. Sillero	12:00 - 12:15
Application of remote sensing technologies for sustainable forest fire monitoring and management A. Dudnyk, O. Opryshko, K. Witaszek	12:15 - 12:30
Scalable deployment of IoT systems for sustainable precision olive farming in Laconia, greece G. Panagopoulou, I. Moutsinas, T. Theodosiadis	12:30 - 12:45
The application of Revised Theory of Planned Behaviour (RTPB) model to assess the citizens' attitudes and intentions towards e-waste management in the circular economy.	12:45 - 13:00

F. Shahudin, R. Ya'cob, L. Yiyang, G. Zihan	
Microplastics an emerging environmental pollutant in agriculture: interaction between microplastics and soil humic substances on an agricultural crop M. Dimitropoulou, A. Ioannidi, I. Zafeiropoulos, K. Bourikas, M. Papadaki, E. Giannakopoulos	13:00 - 13:15
Lunch break	13:15 - 14:45
PLENARY LECTURE: Professor Konstantinos Kakosimos From bench to module scale hydrogen production via artificial and natural light water splitting Chair: Petros Gikas, Paraschos Melidis	14:45 - 15:30
Session 8: Sustainable water management and reuse Chair: Kupryaniuk Karol, Jakub Kostecki	15:30 - 16:15
Beyond Negative Environmental Results: The Critical Role of Risk Assessment in Legionella Control A. Papadakis, A. Roditakis, P. Manetakis, N. Gikas, E. Koufakis, K. Tsamoutsoglou, P. Gikas	15:30 - 15:45
Modification of membranes by using the layer by layer technology for the removal of Cr(VI) anions from groundwaters N. Malouchi	15:45 - 16:00
Sensors selection for real-time recovery of textile dyeing wastewater R. Partal, S. Murat Hocaoglu, M. Kitis, E. Ozturk, E. Simsek Yesil	16:00 - 16:15
Session 9: Biosolids management and valorization Chair: Patrycja Pochwatka, Jacek Dach	16:15 - 18:30
Conversion of sewage sludge to lipids for biofuels A. Jonas-Levi, Y. Gerchman, H. Azaizeh	16:30 - 16:45
Quantifying european biomass flows and certifying residual biomass valorization: a case from the region of central Macedonia, Greece A. Karanasiou, S. Skoutida, M. Batsioulas, G. Banias, S. Patsios	16:45 - 17:00
The role of demand-driven biogas plants in Europe's energy transition: potential for energy system stability and integration with other RES A. Łukomska, J. Dach	17:00 - 17:15
The role of animal biomass in the biogas sector in Poland: current status and potential P. Pochwatka, A. Kowalczyk-Juśko, A. Mazur, W. Czekala, J. Dach	17:15 - 17:30
Influence of the type of straw on the intensity of sewage sludge composting W. Bojarski, W. Czekala, M. Nowak, P. Sołowiej, K. Kupryaniuk, J. Dach	17:30 - 17:45

Spray mode and precursor molarity as key parameters in solution spray pyrolysis of oxygen electrodes for low temperature reversible solid oxide cells (socs) A. Kotsiolis, E. Reditis, C. Ziazias, N. Nikiforidis, A. Krestou, N. Kiratzis	17:45 - 18:00
Optimizing drying kinetics and calorific value assessment of wastewater sludge for enhanced waste-to-energy gasification L. Tshenyego	18:00 - 18:15
Innovative wastewater technologies for the treatment of sewage sludge at overloaded activated sludge plants K. Tsamoutsoglou, P. Gikas	18:15 - 18:30
Session 10: Life cycle assessment Chair: Gregoris Panayiotou, Janah Shaya	18:30 - 19:15
Is Life Cycle Assessment essential for sustainability in heritage? T. Tsoutsos, C. Nikoloudakis	18:30 - 18:45
Advanced Thermolysis of Waste Plastics into Sustainable Aviation Fuel Feedstocks and A Mass-Balance Certified Approach for Waste to Energy Solutions Aris Gorogias	18:45 - 19:00
Sustainable extraction of V and Ti from low-grade V-bearing titanomagnetite deposits G. Bartzas, D. Vathi, K. Komnitsas	19:00 - 19:15
Closing ceremony	19:15 - 19:45

DAY 4 - Thursday 4 September Susteng 2025	
Conference excursion at the capital of ancient Macedonia Aegae, in Vergina, and the grave of Philip II, father of Alexander the Great, and the Byzantine town of Veria	09:00 - 17:00

Bioremediation of secondary cheese whey effluent by *Pseudomonas* sp. pHDV1

E. Pappa, A. Lyratzakis, N.C. Stratigakis, G. Tsiotis

Hydrogen-Rich Gas Production From The Steam Gasification Of Olive By-Products With Minimum Carbon Dioxide Emissions

D. Vamvuka, S. Karvounis, K. Kyriakidis, I. Papakyriakopoulos and A. Strataki

Optimal wind power investments and bidding strategies in electricity market considering green certificates trading

M. Kanta, C. Dimitriadis, M. Georgiadis

Copper recovery from printed circuit boards: Alkaline glycine leaching system

J. Matado, L.H. Gomes and S.C. Pinho

Influence of operating parameters on lead hydrometallurgical leaching of lead-acid batteries with NaCl

L. H. Gomes, A. Lourenço, S. C. Pinho, M. J. J. de S. Ponte, H. de A. Ponte, H. de Santana

Adsorption of Reactive Red 120 dye by oxidized biochar from palm tree fibers

P. Haskis, F. Krommida, M. Vlastou, I. Varampoutis, D. Kyvrikoseos, D. A. Giannakoudakis, I. Ioannidis, I. Pashalidis, P. Mpeza and I. Anastopoulos

Valorization of industrial waste into silica based adsorbents for water OPPs removal

G. Silva, O. Freitas, V. Fernandes, F. Gomes

Assessment of marine fuels stability: a storage perspective

I. Kosma, L. Chysikou, S. Bezergianni

Immerse virtual training on critical raw materials: preparing responsible professionals for a sustainable future

E. Machairas, E. Varouchakis, B. Lottermoser, S. Hajinia Leilabadi

Analysis of Phospholipid Fatty Acids (PLFAs) as a soil bioindicator: the effect of vineyard abiotic stress on the soil microfauna as a case study

E. Ieronymaki, M. Drosos, I. Zafeiropoulos, M. Papadaki, E. Giannakopoulos

The use of coffee grounds as fuel

P. Sołowiej, W. Bojarski, J. Dach, A. Kowalczyk-Juśko

Agricultural biogas as a sustainable energy source for non-agricultural regions: the case of Lubuskie Province, Poland

J. Kostecki, S. Myszograj, E. Płuciennik Koropczuk

BSF larvae: a sustainable complementary solution for broiler carcass management

A. Jonas-Levi

Methane emission during degradation of microplastics in the aquatic environment

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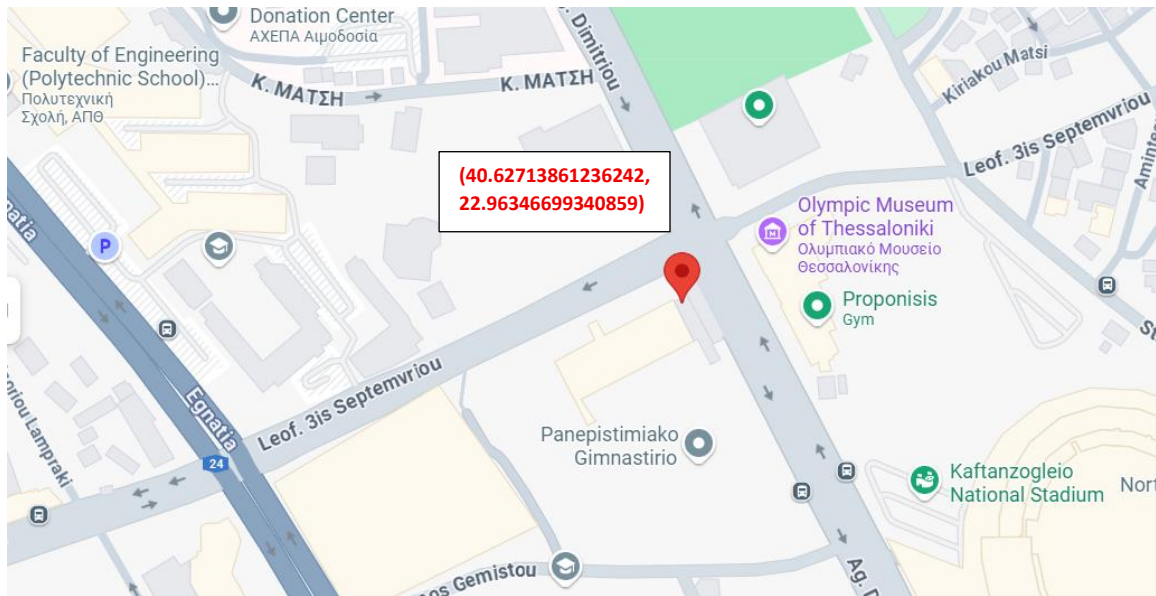
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