

**Eighth International Conference on Environmental Management,
Engineering, Planning and Economics (CEMEPE 2021)
and SECOTOX Conference**



CONFERENCE PROGRAM

Organized by:

- Division of Hydraulics and Environmental Engineering,
Department of Civil Engineering, Aristotle University of Thessaloniki
- Society of Ecotoxicology and Environmental Safety (SECOTOX)

In collaboration with:

- Sector of Industrial Management and Operations Research,
School of Mechanical Engineering, National Technical University of Athens, Greece
- Department of Civil Engineering, University of Thessaly, Greece
- Department of Food Science and Technology, International Hellenic University, Greece
- Department of Mechanical Engineering, University of Western Macedonia, Greece
- Department of Environmental Engineering, Democritus University of Thrace, Greece
- Department of Environmental Studies, University of Thessaly, Greece

July 20-24, 2021 • Thessaloniki, Greece

18:30-21:00 **Registration** (Grand Hotel Palace)

19:30-21:00 **CEMEPE/SECOTOX Conference opening session**

Chairs: **A. Kungolos, K. Aravossis, C. Laspidou, P. Samaras,
G. Marnellos, P. Melidis, G. Papapolymerou**

Opening remarks by officials

Invited lectures

Professor D. Sarigiannis

“COVID-19: the first global environmental disease has striken”

A. Bakousi, Th. Kassandros and K. Karatzas

“Citizen science in Greece for the environmental sector and beyond”

21:00 **Welcoming reception** at the Grand Hotel Palace

| ROOM A | |
|---|---|
| Energy and environment I | |
| <i>Chairs: G. Papapolymerou, C.S. Psomopoulos</i> | |
| 09:00-09:15 | Heterotrophic growth of <i>Chlorella sorokiniana</i>: temperature dependence of kinetics and of fatty acid distribution. |
| | <i>Chairs: G. Papapolymerou, M. N. Metsoviti, A. Papadopoulou, N. Gougoulas, A. Kokkalis and G. Papapolymerou</i> |
| 09:15-09:30 | A pan-hellenic research (2021) regarding people's attitudes towards renewable energy sources. |
| | <i>P. Kosmopoulos, A. Kantzioura, I. Kosmopoulos, K. Kleskas and A. M. Kosmopoulos</i> |
| 09:30-09:45 | End-of-Life high voltage measuring transformers. Materials recovery and recyclability evaluation for the 150kV transmission network. |
| | <i>G. Tarousinof, I. Chronis and C.S. Psomopoulos</i> |
| 09:45-10:00 | Environmental impact of nano-modified insulating oils in electrical transformers. |
| | <i>I. Chronis and C. S. Psomopoulos</i> |
| 10:00-10:15 | Thracian Sea wind climate analysis and wind power assessment based on gridded scatterometer data. |
| | <i>N. Kokkos, M. Zoidou, K. Zachopoulos, M. M. Nezhad, D. Astiaso Garcia and G. Syllaios</i> |
| 10:15-10:30 | Efficient energy recovery and sustainable utilization for industrial flaring: A probabilistic assessment framework. |
| | <i>M.-K. Kazi, F. Eljack, V. Kazantzis and N. Kazantzis</i> |
| 10:30-10:45 | Sustainable regional development and renewable energy sources - the case of the Prefecture of Cyclades. |
| | <i>I. Pasalakis, E. Sarlianou, K. Abeliotis, R. Mitoula and A. Papavasileiou</i> |
| 10:45-11:00 | Compiling the environmental crisis vocabulary |
| | <i>S. Christidou</i> |
| 11:00-11:30 | C O F F E E B R E A K |
| ROOM A | |
| Air quality and health | |
| <i>Chairs: K. Karatzas, R. San José</i> | |
| 11:30-11:45 | Study of air pollution in Thessaloniki using passive diffusion tubes for estimating NO₂ average levels. |
| | <i>Z. Papapolykarpou and K. Karatzas</i> |
| 11:45-12:00 | Modelling effects of broad and needle trees on urban air pollution with the WRF/chem - CFD PALM4U model. |
| | <i>R. San José and J.L. Pérez</i> |
| 12:00-12:15 | Environmental dimension of Covid-19 from insular communities through the assessment of air pollutant concentration variations during lockdown period. |
| | <i>M. Demetriou and A.A. Zorpas</i> |
| 12:15-12:30 | Size and number of fine particles in vehicle cabin. |
| | <i>D. Margaritis, C. Keramydas and D. Lambropoulou</i> |
| 12:30-12:45 | Wairit: monitoring of the personal exposure of the population to air pollution with the use of smart wearables and advanced methodologies for personalized decision support. |
| | <i>D. Dellioglani, P. Syropoulou, P. Kouris, P. Nestoras, A. Soukoulia and Th. Kouri</i> |

| ROOM A | |
|--|--|
| Air quality and health <i>Chairs: K. Karatzas, R. San José</i> | |
| 12:45-13:00 | Methods and applications of reliable air quality monitoring using low-cost sensors. <i>E. Katsiri</i> |
| 13:00-13:15 | Air quality index (AQI) in a medium sized Mediterranean city in Central Greece. <i>G. T. Proias, K. P. Moustris and P. T. Nastos</i> |
| 13:15-13:30 | First results for pesticide characterization in airborne particulate matter and comparison to major aerosol species in the Athens background atmosphere. <i>V. Vasiliatou, A. Marousopoulou, H. Karasali, S. Papagiannis, M. I. Gini, E. Diapouli and K. Eleftheriadis</i> |
| 13:30-13:45 | Trace elements in human health and diseases - focus on the role of environmental factors. <i>A. Almeida</i> |
| 13:45-14:00 | Levels of main pollutants during the Coronavirus pandemic in Rome urban air. <i>C. Fanizza, A. Risuglia, M. Inglessis, F. Ietto, M. Stefanelli and F. Incoronato</i> |
| 14:00-16:00 | LUNCH BREAK (lunch is offered to conference participants) |
| ROOM A | |
| Industrial waste management <i>Chairs: S. Dailianis, S. Ntougias</i> | |
| 16:00-16:15 | Efficiency of an immobilized cell bioreactor bioaugmented with a fluioxonil-degrading bacterium. <i>Z. Mavriou, I. Alexandropoulou, P. Melidis, D.G. Karpouzas and S. Ntougias</i> |
| 16:15-16:30 | A novel pretreatment approach for enhanced second generation bioethanol production from willow sawdust. <i>I. Ben Atallah, G. Antonopoulou, I. Ntaikou, T. Mechichi and G. Lyberatos</i> |
| 16:30-16:45 | Leather wastes as a potential source of biochemicals and biomaterials. <i>R. Dias, A. Crispim, P. Silva, P. Neto, L. Silva, J. Gaião and J. Oliveira</i> |
| 16:45-17:00 | Environmental and human risk of electronic wastes disposal into aquatic media. <i>G. Kalamaras, M. Kloukinioti and S. Dailianis</i> |
| 17:00-17:15 | Biosurfactants production from winery and olive oil residues and their use in soil washing. <i>A. Chebbi, M. Vaccari, M. Tazzari, F. H. Gomez Tovar, S. Scaffoni and A. Franzetti</i> |
| 17:15-17:30 | Adopting Circular economy's practices to the Ceramics Industry: The utilization of waste-derived fuels to the Ceramics production. <i>X. Spiliotis, D. Kasiteropoulou, G. Banias and G. Papapolymerou</i> |

| ROOM A | | ROOM B | |
|--|--|--|--|
| Green production and circular economy <i>Chairs: E. E. Golia, A. Xenidis</i> | | Advances in water and wastewater treatment <i>Chairs: V. Diamantis, P. Melidis</i> | |
| 09:00-09:15 | Synthesis of iron nanoparticles using garden wastes <i>C. Mystrioti, N. Papasiopi and A. Xenidis</i> | 11:30-11:45 | Enhanced removal efficiency of a full-scale landfill leachate treatment plant by introducing a coagulation/flocculation and ultrafiltration step after the biological process. <i>J. Glarakis, K. Azis, S. Ntougias and P. Melidis</i> |
| 09:15-09:30 | Chemical composition and trace elements content of <i>Sideritis scardica</i> and <i>Sideritis montana</i> spp. (Greek mountain teas) from different geographical origins. Potential effect of soil properties on metal accumulation in tea leaves. <i>E.E. Golia, E. Skoufogianni, A. Solomou, D. Bartzialis, K. Giannoulis, A. Angelaki and S. Vleioras</i> | 11:45-12:00 | Evaluation of the efficiency of two natural treatment CFW systems in the removal of agrochemicals. <i>G. Pavlidis, I. Zotou, H. Karasali, A. Marousopoulou, G. Bariamis, V.A. Tsihrintzis and I. Nalbantlis</i> |
| 09:30-09:45 | Assessment of biochemical methane potential of lignocellulosic agricultural residues <i>A. Makri, K. Azis, S. Ntougias and P. Melidis</i> | COFFEE BREAK | |
| 09:45-10:00 | High value products extracted from <i>Equisetum arvense</i> leaves <i>M. Dormousoglou, I. Efthimiou, D.L. Fetzer, F. Hamerski, M.L. Corazza, M. Papadaki, S. Santzouk and D. Vlastos</i> | | |
| 10:00-10:15 | <i>Origanum vulgare</i> cultivated in Cd-spiked soil as effected by nitrogen: Biomass production and Cd tissue content. <i>G. Thalassinos, E. Levizou, A. Batsila and V. Antoniadis</i> | | |
| 10:15-10:30 | Aluminum diethylphosphinate as a potential alternative for Brominated diphenyl ethers as flame retardant. <i>T.C.R. Rialto, R.V. Marino, D. J. Dorta and D.P.Oliveira</i> | | |
| 10:30-10:45 | Cow manure vermicomposting and an initial assessment of the vermicompost effect on the production of organic early crops vegetables in greenhouse. <i>V. Kinigopoulou, E. Hatzigiannakis, G. Geitonas, S. Stefanou, K. Kontos and A. Guitonas</i> | | |
| 10:45-11:30 | | | |
| ROOM A | | ROOM B | |
| Special session “Water 4cities” <i>Chairs: C. S. Laspidou, E. Creaco</i> | | Advances in water and wastewater treatment <i>Chairs: V. Diamantis, P. Melidis</i> | |
| 11:30-11:45 | The Water4Cities tool for informed decision making in the management of urban water supply. <i>D. Kofinas, K. Kokkinos and C.S Laspidou</i> | 11:30-11:45 | Enhanced removal efficiency of a full-scale landfill leachate treatment plant by introducing a coagulation/flocculation and ultrafiltration step after the biological process. <i>J. Glarakis, K. Azis, S. Ntougias and P. Melidis</i> |
| 11:45-12:00 | Data visualization for presenting urban water management indicators. <i>P. Pergar, K. Klemen, P.D. Ritsos, P.W.S. Butcher, M. Radinja and N. Atanasova</i> | 11:45-12:00 | Evaluation of the efficiency of two natural treatment CFW systems in the removal of agrochemicals. <i>G. Pavlidis, I. Zotou, H. Karasali, A. Marousopoulou, G. Bariamis, V.A. Tsihrintzis and I. Nalbantlis</i> |

| | ROOM A | ROOM B |
|-------------|--|---|
| | <p>Special session “Water 4cities” <i>Chairs: C. S. Laspidou, E. Creaco</i></p> | <p>Advances in water and wastewater treatment <i>Chairs: V. Diamantis, P. Melicis</i></p> |
| 12:00-12:15 | <p>Adaptation to climate change in Greece and urban resilience: The role of spatial planning. <i>M. Lazoglou</i></p> | <p>Effect of COVID19 lockdown on hydrogen sulfide production from sewer and its removal by a biotrickling filter. <i>V. Diamantis, T. Sideris, C. Michailidis and A. Eftaxias</i></p> |
| 12:15-12:30 | <p>Applying a resource Nexus analysis to quantify synergies and trade-offs in the agricultural sector and reveal implications of a legume production shift. <i>G. Tsimelas, D. Kofinas and Ch. Laspidou</i></p> | <p>Performance analysis and techno-economic evaluation of small and decentralized sewage treatment plants. <i>A. Eftaxias, G. Varelas, P. Levantis and V. Diamantis</i></p> |
| 12:30-12:45 | <p>Re-evaluating the importance of public green spaces in Thessaloniki <i>D. Latimopoulos</i></p> | <p>Photocatalytic performance assessment of graphene oxide-titanium dioxide (GO-TiO₂) nanocomposites for the treatment of landfill leachate under simulated solar irradiation. <i>N. Malesic, E. Ioannidou, E. Evgenidou, G.Z. Kyzas, D. Bikiaris and D. Lambropoulou</i></p> |
| 12:45-13:00 | <p>Using the Water Footprint Concept for water use efficiency labelling of consumer products: The Greek experience. <i>I. Nydrioti and H. Grigoropoulou</i></p> | <p>New materials in wastewater treatment plants’ construction. <i>S. Oikonomou, A. Zafirakou, K. Katakalos and M. Stefanidou</i></p> |
| 13:00-13:15 | <p>Urban water resources management under different climate scenarios in the municipal department of Aigeiros, Komotini. <i>I. Nydrioti, G. Kitsara, I. Sebos, P. Karka and D. Assimacopoulos</i></p> | <p>GIS-based multi-criteria analysis for optimal selection of APOC for wastewater treatment in the rural locality of Bent Saidane (NE Tunisia). <i>S. Chaabane, A. Ghattassi, K. Mensi and F. Mhiri</i></p> |
| 13:15-13:30 | <p>Exploring the relationship between individual farmer behavior and agriculture policies as a two-stage optimization problem. <i>K. Ziliaskopoulos and K. Papalamprou</i></p> | <p>Novel disinfection processes and simultaneous WWTPs effluent quality improvement with the aim of reuse and reclamation: Recent advancements. <i>G.B. Gholikandi and M. Amiri</i></p> |
| 13:30-13:45 | <p>A unified framework for the assessment of urban flash flood hazard in the city of Monza. <i>G. Gallupini, M. Arosio, M.L.V. Martina and E. Creaco</i></p> | <p>Natural wastewater treatment systems in Greek communities: Mesoropi and Moustheni constructed wetlands plants. <i>D. Markou, I.E. Margaritou, G.D. Gikas, G. Sylaios and V.A. Tsihrintzis</i></p> |
| 13:45-14:00 | <p>Sustainable stormwater management: A case study for the urban expansion of Kavala City. <i>D. Markou</i></p> | <p>Removal of pharmaceuticals from wastewaters in constructed wetlands: a review <i>G. Karyatis and G.D. Gikas</i></p> |
| 14:00-16:00 | <p>S N A C K B R E A K (Snack is offered to conference participants)</p> | |

| ROOM A | | ROOM B | |
|--|---|---|--|
| Sustainable urban planning <i>Chairs: T. Panagopoulos, T. Zaba</i> | | Ecosystems protection and restoration <i>Chairs: G. Kacienė, K. Kakavas</i> | |
| 16:00-16:15 | A satisfaction analysis of the urban green infrastructure in two municipalities of the metropolitan area of Athens, Greece. <i>P. Karanikola, T. Panagopoulos, S. Tampakis and A. Tzelepi</i> | Effects of subsequent drought events and abilities to recover of different forage plant species. <i>G. Kacienė, A. Dikšaitytė, D. Miškelytė, G. Sujetovienė, J. Žaltauskaitė, I. Januškaitienė and R. Juknys</i> | |
| 16:15-16:30 | Stakeholders' perception of suitable nature-based solutions in two Portuguese cities. <i>T. Panagopoulos, V. Ferreira, D. Antunes, A. P. Barreira, P. Karanikola, S. Tampakis and L. Loures</i> | Moisture adsorption and swelling rate of sweet chestnut wood (Castanea sativa Mill) from Greek origin. <i>K. Kakavas, M. Chavenetidou and D. Birbilis</i> | |
| 16:30-16:45 | Home and Community Composting in the Mediterranean area. <i>P. G. Saranti and Y. J. Stephannedes</i> | Field study for PAH absorption performances of butyl rubber, PDMS, and SPMD passive samplers. <i>O.E. Tureyen, S. D. Yakan, A. Yilmaz, B. Yetişkin, O. Okay and O. S. Okay</i> | |
| 16:45-17:00 | Networks in urban, rural and forest landscapes and in Environmental Education. <i>A. S. Tsiouri and T. D. Zagas</i> | Determination of metal content, PAHs and organotin compounds in Sutomore peloid and assessment of the state of the environment. <i>M. Bigović, M. Kosović-Perutović, L. Mehović, D. Šuković and Ž. Jacimović</i> | |
| 17:00-17:15 | Laser biotechnology for sustainable development of model areas in Poland, Brazil, India. <i>J. W. Dobrowolski, D.K. Belsare, J.O.B. Carioca, P. C. Alcantara and T. Zaba</i> | Toward the improvement of trail classification in European Atlantic regions using the Recreation Opportunity Spectrum approach. <i>G Lukoseviciute and T. Panagopoulos</i> | |
| 17:15-17:30 | Temperature regulation in urban open spaces: A preliminary approach. <i>M. Vordoglou and T. Tsitsoni</i> | Cultivation of fiber crops in soils contaminated with heavy metals. <i>D. Kotoula and E.G. Papazoglou</i> | |
| 17:30-17:45 | | Growth response to heavy metals and phytoremediation potential of <i>Camelina sativa</i> (L.) Crantz. <i>A. Krasopoulou, D. Kotoula and E.G. Papazoglou</i> | |
| 17:45-18:00 | | Massive fish death associated with the toxic cyanobacterial <i>Planktothrix</i> sp. bloom in the Béni-Haroun Reservoir (Algeria). <i>N.Y. Benayache, F.Z. Afri-Mehennaoui, S. Kherief Nacereddine, Q. Bao Vo, K. Hushchyna, T. Nguyen-Quang and N. Bouaicha</i> | |
| 18:00-18:15 | | Seasonal occurrence of cyanobacteria and first detection of microcystin-LR in water column of Foun-Gleita Reservoir, Mauritania. <i>A. S. Sadegh, Z. Sidoumou, M. Dia, J. L. G. Pinchetti and N. Bouaicha</i> | |
| 21.00 | BANQUET | | |

Optional field trip
to Chalkidiki

| ROOM A | |
|--|---|
| Environmental legislation and policies <i>Chairs: A. Kemal Konyalioğlu, V. Tryfona</i> | |
| 09:00-09:15 | How organizations present their environmental strategy in their sustainability reports. <i>A. Stauropoulou, D. Paparas and E. Sardianou</i> |
| 09:15-09:30 | Can z-score model predict listed companies' failures in Greece? <i>E. Arsenou</i> |
| 09:30-09:45 | Stakeholder engagement in circular collaborative ecosystems. <i>Y. Pavlopoulou and E. Maltezos</i> |
| 09:45-10:00 | Circular economy as a sustainable development tool in cities and public & private companies, relating to environmental, social and corporate governance (ESG) criteria. <i>S. Panagopoulos and V. Tryfona</i> |
| 10:00-10:15 | Improving face masks' waste management during COVID-19 pandemic: A Case of Turkey <i>A. Kemal Konyalioğlu and I. Bereketli</i> |
| 10:15-10:30 | A decade of environmental accounting reporting: What has changed? <i>E. Arsenou</i> |
| 10:45-11:00 | Greek secondary teachers' attitudes and perceptions on education for sustainable development. <i>K. Kougias, E. Sardianou and A. Saiti</i> |
| 11:00-11:30 | COFFEE BREAK |

| ROOM A | |
|---|---|
| Water resources management | |
| <i>Chairs: C. Evangelides, I. Kagalou</i> | |
| 11:30-11:45 | Recharging and discharging of unconfined aquifers. Case of nonlinear Boussines equation <i>C. Tzimopoulos, K. Papadopoulos, C. Evangelides and A. Spyrides</i> |
| 11:45-12:00 | Estimation of characteristics of surface water bodies based on Sentinel-2 images: The case study of Yilki reservoir. <i>N. Gourgouletis, G. Bariamis and E. Baltas</i> |
| 12:00-12:15 | Application of two different soil transportation methods and sensitivity analysis in Sperchios river basin. <i>F. Raïssis, A.-P. Theochari and E. Baltas</i> |
| 12:15-12:30 | Evaluation of Earth Observation products and their potential for crop loss assessment due to drought. The Case of Beacon Project. <i>E. Lekakis, A. Dimitrakos, S. Kotsopoulos, G. Mygdakos, I.M. Tsioutsia and V. Oikonomopoulos</i> |
| 12:30-12:45 | Strengthening the water management practices (in EMT-Region) through the development of innovative ICT methodologies and improvement of research infrastructures: The eye4water project. <i>I. Kagalou, G. Sylaios, S. Ntougias, C. Akkratos, P. Melidis, G. Mallinis, M. Spiliotis, F. Pliakos, F. Maris, P. Angelidis and D. Latinopoulos</i> |
| 13:00-13:15 | Investigation of pressures and impacts on water pollution of a stream in Antalya River Basin. <i>P. Orhan, S. Tuzun Dugan, M. A. T. Kocer, A. Muhammetoglu and H. Muhammetoglu</i> |
| 13:15-13:30 | Evaluation of water quality at Lower Aksu Stream Catchment using a water quality index. <i>A. Uslu, S. Tuzun Dugan, M. Yesiltas, M. A. T. Kocer, Muhammetoglu and H. Muhammetoglu</i> |
| 13:30-13:45 | Empirical estimation of surface water quality parameters in Lake Kerkini using Landsat ETM+/OLI. <i>M. Kanj, I. Manakos, I. Tsolakidis, N. Katselas and C. Kalaitzidis</i> |
| 13:45-14:00 | Silvicultural research of unmixed <i>Fagus sylvatica</i> L. stands in the Rodopi Mountain-Range National Park (RMRNP). <i>S. Kechagloglou and T. Tsitsoni</i> |
| 14:00-16:00 | SNACK BREAK (Snack is offered to conference participants) |

| ROOM A | |
|-------------------------------------|---|
| Coastal planning and policy | |
| <i>Chairs: G. Gikas, G. Sylaios</i> | |
| 16:00-16:15 | Some preliminary observations of river plume dynamics in a microtidal coastal setting. <i>M. Brocchini, P. Penna, L. Parlagreco, A. Baldoni and E. Perugini</i> |
| 16:15-16:30 | Climate change-driven wind-wave extremes and incident wave energy flux along the nearshore Western Thracian Sea. <i>N. Kokkos, K. Zachopoulos, M. Zoidou, G. Zodiatis and G. Sylaios</i> |
| 16:30-16:45 | Prospective marine aggregate deposits in Chios Island (Greece): a preliminary evaluation. <i>O. Andreadis, T. Hasiotis, E. Manoutsoglou, A. Chatzipavlis, I. Monioudi and A. Velegrakis</i> |
| 16:45-17:00 | Sustainable development and management of solid waste in the island ecosystem of Samothraki. <i>V. Th. Stavridis, C. Emmanouil, A. Kungolos, A. Zafirakou, V.K. Drosos and S. Th. Stavridou</i> |
| 17:00-17:15 | Experimental simulations of Thracian Sea oil spills forced by real-time met-ocean forecasts <i>P. Keramea, N. Kokkos, G. Gkikas and G. Sylaios</i> |
| 17:15-17:30 | Climate change and anthropogenic threats affecting the development of marine and coastal tourism in Lebanon. <i>S. Abidib and N. Msayleb</i> |

| | ROOM A | ROOM B |
|--------------|---|---|
| | <p>Energy and environment II/Pollution monitoring <i>Chairs: A. Zafirakou, X. Spiliotis</i></p> | <p>Ecotoxicology and environmental toxicology <i>Chairs: I. Calliani, F. Gagné</i></p> |
| 09:00-09:15 | <p>The role of transportation time on sustainable multimodal supply chain network design for perishable food products. <i>E. Iakovou, V. Yakavanka and D. Vlachos</i></p> | <p>Assessment of the toxicity of the insecticide Decis® 2.5 EC towards the zooplankton of fresh water. <i>A. Beš and L. Sikorski</i></p> |
| 09:15- 09:30 | <p>Financial assessment of small-scale LNG terminal for the case of Patra's port. <i>E. Strantzali, N. Panopoulos and K. Aravossis</i></p> | <p>Occurrence of Polychlorinated biphenyls (PCBs) and trace and macro elements in apiculture products from Slovakia. <i>K.M. Kasiotiis, E. Zafeiraki, R. Sabo, L. Sabova and K. Machera</i></p> |
| 09:30- 9:45 | <p>Effect of semi-batch mode operation during the heterotrophic cultivation of <i>Chlorella sorokiniana</i> & <i>Chlorella kessleri</i> on the fatty acid distribution and on FAME properties. <i>G. Papadopoulou, N. Gougoulas, A. Mpesios, A. Kokkalis, X. Spiliotis, A. Papadopoulou, D. Kasiteropoulou and M. N. Metsoviti</i></p> | <p>Zebrafish Phospholipase A2 enzymatic activity as a new biomarker of contamination by malathion. <i>I. Annunziato, B. Paes De-Carli, A. Manzi, C. Ramos da Cruz Costa, Mariana N. Belchor and M. Hikari Toyama</i></p> |
| 09:45-10:00 | <p>Economic evaluation of a hybrid renewable energy system (HRES) in Skyros island. <i>E. Mantzouranis, S. Skroufouta and E. Baltas</i></p> | <p>The use of an integrated approach on <i>Pachygrapsus marmoratus</i> to assess the effects of port contaminants on marine protected areas. <i>I. Calliani, C. Pretti, M. Barattii, S. Cannicci, M.C. Fossi, S. Casini and S. Fratini</i></p> |
| 10:00- 10:15 | <p>Sustainable onshore solar farm sitting in the Aegean islands-Greece. <i>G. Tzekakis and D. Vagfona</i></p> | <p>Toxicity of representative mixture of five rare earth elements in juvenile rainbow trout (<i>Oncorhynchus mykiss</i>). <i>H. Hanana, C. Kleinert and F. Gagné</i></p> |
| 10:15-10:30 | <p>Ciprofloxacin and Carbamazepine adsorption on activated carbons. <i>D. Marques, S. Mota, M.M. Freitas and P.C. Silva</i></p> | <p>Evaluation of sub-lethal effects of two different fungicides on <i>Apis mellifera</i> using a multibiomarker approach and IBRV2 index. <i>A. Di Noi, S. Casini, T. Campani, G. Cai and I. Calliani</i></p> |
| 10:30-10:45 | <p>Spatial and temporal variability of Copper, Lead and Zinc in Urban Soils of Volos (central Greece). <i>S. Papadimou, E.E.Golia, Ch. Cavalaris, O.D. Kantzou, A.M. Chartodiplomenou, N.G. Tsiropoulos, G. Thalassinou and V. Antoniadis</i></p> | |
| 10:45-11:00 | <p>Fate and transport of SARS-CoV-2 RNA into sewer system using EPA SWMM. <i>A. Gkatzoura and A. Zafirakou</i></p> | |
| 11:00-11:15 | <p>Battery Swapping in Waterborne Transport <i>Y. Kalenteridis, A. Mouchtaropoulos and D. Kontosfyris</i></p> | |
| 11:15-11:45 | COFFEE | BREAK |

Wednesday, 21 July 2021 | Day 2

| | | | |
|-----|---|-----|--|
| A01 | Fermentative hydrogen production from cheese whey: comparison of a continuous stirred tank reactor with an up-flow column bed bioreactor. M. Alexandropoulou, G. Lyberatos and G. Antonopoulou | A09 | Performance comparison of low-cost gas and particles sensors. I. Christakis, G. Hloupis, O. Tsakiridis, P. Syropoulou, N. Papadakis and I. Stavrakas |
| A02 | Willing or not to pay for renewable energy? R. Dagiliūtė and A. Dikšaitytė | A10 | On the correction of low-cost NO₂, O₃ and PM sensors. I. Christakis, P. Syropoulou, N. Papadakis and I. Stavrakas |
| A03 | Milk from Montenegro farms: Monitoring and quality of raw milk and dairy products M. Kosović Perutović, P. Zekić, Ž. Četković, D. Jačimović, Ž. Jačimović and M. Bigović | A11 | Examination of the environmental behavior of phosphogypsum with the application of lab-scale experiment. M. Pliaka and G. Gaidajis |
| A04 | Assessment of the antimicrobial potency on soil bacteria and coliforms of a water-soluble copolymer bearing both short-chain and long-chain quaternary ammonium groups. I. Ntaïkou, C. Anastasopoulos, G. Bokias and G. Voyiatzis | A12 | Towards valorization of agricultural and food waste for the adsorption of pharmaceuticals. M. Papadaki, V. Lenga, A. Annopoulou, O.S. Arvaniti, E. Giannakopoulos, S. Georgopoulos and M. Antonopoulou |
| A05 | Use of polyphenol-rich olive leaf extract for the preparation of novel green ZnOFe nanoparticles for enzyme immobilization. R. Fotiadou, M. Bellou, E. Aslanidou, A.C. Polydera and H. Stamatis | A13 | Valorization of phenolic compounds extracted from red wine lees. P. Athanasiou, M. Patila, A.C. Chatzikonstantinou, A. Kontostavlaki, A. Polydera and H. Stamatis |
| A06 | The positive effect of black locust plantations in the mitigation of atmospheric pollution. Ch.G. Sachanidis, M.N. Fotelli, N. Markos, N.M. Fyllas and K. Radoglou | A14 | Potential of olive tree residues to adsorb lead from contaminated waters D. Yamvuka, A. Teftiki, S. Dermitzakis and D. Pentari |
| A07 | AirDMS, an efficient web platform for environmental data management and alerting system. V. Evagelopoulos, N. Charsiou, M. Logothetis, G. Evagelopoulos and C. Logothetis | A15 | Assessing the performance of European Union countries on Sustainable Development Goal 15 "Life on Land" S. Tsiaras and V. Mandkou |
| A08 | Circular economy using waste from different industries in leather retanning. C. Alves, V.F.M. Silva, A. Crispim, J. Gaião, N. Sousa and J. Duarte | A16 | How the Internet promotes Greek protected areas as tourist destinations. L. Hatzilioridou, M. Katsakiori, A. Apostolakis and P. Kakouras |

Thursday, 22 July 2021 | Day 3

| | | | |
|-----|--|-----|--|
| B01 | A GIS-based flash flood hazard mapping and vulnerability assessment. S. Stefanidis, G. Kalantzi, Ch. Chatzichristaki and K. Karystinakis | B08 | Response of forage crops to drought stress under different nitrogen conditions. G. Sujetoviene, A. Dikšaitytė, G. Kacienė, I. Januškaitienė, D. Miškelytė, R. Juknys and J. Žaltauškaitė |
| B02 | Landfill leachate treatment by electrochemical processes. D. Marmanis, V. Diamantis, A. Thisiadaou, N. Kokkinos and A. Christoforidis | B09 | QuEChERS extraction for the analysis of Emerging Contaminants in aquaculture fish using liquid chromatography-high-resolution Orbitrap mass spectrometry. P.P. Martinaiou, V. I. Boti and T.A. Albanis |
| B03 | Multi method for the detection of trace and macro elements in drinking and surface water by ICP-MS. E. Zafeiraki and K. Macherera | B10 | Multiresidue determination of pharmaceuticals and their metabolites in fish tissue based on QuEChERS extraction and UHPLC LTQ/Orbitrap MS analysis. A. Kalogeropoulou, C. Kosma and T. Albanis |
| B04 | Photocatalytic performance of BIOCI towards sulfamethoxazole degradation in different water matrices. A. Petala, O.S. Arvaniti, G. Travlou, D. Mantzavinos and Z. Frontistis | B11 | Application of the SWAT model in the Aliakmonas and Axios river catchments for assessing soil erosion. E. Karantanellis, Z. Pataki, A. Patera, C. Kontopoulos, D. Kitsiou, T. Nitis, M. Kostopoulou, N. Grammalidis, A. Tzepekis and B. Charalambopoulou |
| B05 | An overview of fate of pharmaceuticals in WWTPs. Z. Karakatsani, C. Emmanouil, A. Zafirakou and A. Kungolos | B12 | Assessment of coastline change in the deltas of Aliakmonas and Axios rivers using automated workflows on multispectral timeseries imagery. C. Kontopoulos, B. Charalambopoulou, N. Grammalidis, A. Tzepekis, Z. Pataki, A. Patera, E. Karantanellis, D. Kitsiou and T. Nitis |
| B06 | Ecotoxicological assay as a tool to wastewater effluents quality assessment: comparison of three wastewaters treatment plants. C. Couto, A.R. Carvalho, A. Pérez-Pereira, M.E. Tiritan and C. Ribeiro | B13 | Marketing tools to maintain and develop responsible trail-related recreation. G. Lukoseviciute and T. Panagopoulos |
| B07 | Development and demonstration of key technologies for industrializable polyhydroxyalkanoates production from industrial and environmental waste streams. I. Ntaikou, G. Antonopoulou, I. Kokkinopoulou, D. Ladakis, K. Tragoulias, Y. Zhang, Q. Yan, J. Nan, K. Pissaridi, V. Spiliotis, D. Ladikos, P. Moutsatsou, A. Koutinas and G. Lyberatos | B14 | Analysis of Neonicotinoid pesticides in honey using QuEChERS coupled to liquid chromatography-high-resolution Orbitrap mass spectrometry. S. Pateras, Ch. Tsoutsis, V. Boti and T. Albanis |

| Saturday, 22 July 2021 Day 5 | |
|---------------------------------------|---|
| C01 | Operational function of a forecasting system providing sea characteristics and other support services on high local resolution, entitled sealoc. G. Kalantzi, I. Hatzopoulos, A. Partozis, K. Karystiniakis and S. Kotsopoulos |
| C02 | Geospatial analysis for coastal risk assessment on the island of Thassos, Greece. A. A. Georgiou and V. Alexandridis |
| C03 | An overview of water markets and lessons from their establishment worldwide. A. Tsiarapas and Z. Mallios |
| C04 | Biomarker approach to assess the chronic effects of realistic environmental concentrations of nickel nanoparticles in the water compartment using the gilthead seabream <i>Sparus aurata</i> . E. Mota, J. Neves, J.F. Gonçalves, E. Pinto, A. Almeida and A. T. Correia |
| C05 | Potential disruptive effects of copper-based antifouling paints on biodiversity of coastal macrofouling community. F. Cima and R. Varelo |
| C06 | GIS-based approach for solid waste disposal site mapping and rehabilitation. G. Georgiou and V. Karayannis |
| C07 | Cadmium phytoextraction potential by oilseed rape under warmer climate conditions. A. Dikšaitytė, J. Žaltauskaitė, I. Kniupytė and R. Juknys |
| C08 | Wet-white shavings as a potential source for leather retanning bioagents. T. Freitas, I. Marujo, D. Ribeiro, A. Crispim, P. Neto, J. Gaião and J. Oliveira |
| C09 | The response of earthworm <i>Eisenia fetida</i> to acute trichlosan exposure under elevated temperature. D. Miškelytė and J. Žaltauskaitė |
| C10 | Structural reforms and the effectiveness of environmental protection control. R. Dagliūtė, L. Kuginytė and G. Kacienė |
| C11 | Biochar-assisted phytoremediation of heavy metals contaminated soils in post-industrial areas. M. Radziemska and J. Dzięcioł |
| C12 | Blast furnace slags as an effective soil amendment in aided phytostabilization technique. M. Radziemska and J. Dzięcioł |
| C13 | Polycyclic aromatic hydrocarbons (PAHs) in the surface sediment of harbors and coasts of Greece. E. Zafeiraki, E. Balkeas, K. Macheras and E. Dassenakis |
| C14 | Supportiveness of Green Hydrogen energy transition towards decarbonization. V. Karayannis, P. Samaras, E. Lakioti and N. Koukouzas |
| C15 | Effects on onion growth under water-saving irrigation. A. Angelaki and E. Golia |
| C16 | Deformations related to the presence of sulfate ions in the mortar in a humid environment. S. Lamrabet, A. Choukir, K. Eljalaki and H. Zanzoun |

Major Sponsor



**HELLENIC
PETROLEUM**

[Hellenic Petroleum](http://HellenicPetroleum.com)

[Facebook](#) // [Twitter](#) // [LinkedIn](#)

Official Sponsors



**Ministry
of Environment and Energy**



**RESEARCH COMMITTEE
ARISTOTLE UNIVERSITY OF THESSALONIKI**

**A.U.TH.
Research Committee**



**REGIONAL ASSOCIATION
OF SOLID WASTE
MANAGEMENT
AGENCIES
OF CENTRAL MACEDONIA**

**Regional association
of solid waste
management agencies
of Central Macedonia**



**Thessaloniki
Water Supply
& Sewerage Co. S.A.**



DIMTECH S.A.



ROTOSAL S.A.



**ENVIA
Environmental
Solutions S.A.**

Sponsors



**Faculty of Engineering,
Aristotle University
of Thessaloniki**



ECOSTER S.A.



**INTERGEO Environmental
Technology Ltd**



Tziola Publications



Grafima Publications



Ktima Gerovassiliou



**Rhoé Urban
Technologies**