

3nd INTERNATIONAL CONFERENCE ON ENVIRONMENTAL DESIGN

ICED2022

https://iced.eap.gr/

22-23 October 2022

Athens, Greece and Virtual

Scope

The conference combines the latest scientific developments in Environmental Design. It provides a unique opportunity for experts to interact and apply their knowledge and latest research findings to environmental process design and developments.

Thematic Areas

Sustainability

Pollution – Pollution Control (outdoor and indoor air pollution, water pollution, soil pollution, noise and light pollution)

Analysis of Pollutants

Environmental Impact Studies

Circular Economy

Energy Sustainability, Environmental Impacts of Energy (RES/Fossil Fuels/Nuclear)

Sustainable Mobility, Impacts of Transportation on the Environment

Environmental Design of Buildings and Cities

Erosion, Protection of Specific Zones (Coastal Zone, Mountains,...), Geotechnical Projects

Climate Change, Meteorology, Mitigation of Greenhouse Gas, Adaptation and Impacts of Climate Change

Effects of Pollution, Climate Change and Environmental Parameters on Human Health and Ecosystems

Economic, Historical, Legal, Social and Political Issues of Energy and Environment, Political Ecology

Environmental Education

Environmental Policy

Social Acceptance of Environmental Problems

Theoretical Design Issues / Impacts of Environmental Design

Scientific Committee

Akdeve Erdal, Social Sciences University of Ankara, Turkey Anagnostopoulou Christina, Aristotle University of Thessaloniki, Greece Arabatzis Garyfallos, Democritus University of Thrace, Greece Bachawati Makram, University of Balamand, Lebanon. Bikas George, TH Nurnberg, Germany Del Rio Alberto, Innovamol, Italy Dijksterhuis Garmt, Wageningen University and Research, The Netherlands Doulos Lambros, Hellenic Open University, Greece Durgaprasad Bhandari, Nepal Engineering College, Nepal Drimili Efi, Hellenic Open University, Greece Evelpidou Niki, University of Athens, Greece Gareiou Zoe, Hellenic Open University, Greece Herrero-Martin Ruth, Polytechnic University of Cartagena, Spain Ioannidis Theofilos, FORTH/ICE-HT, Greece Kaika Dimitra, Hellenic Open University, Greece Karatzas George, Technical University of Crete, Greece Kechagia Fotini, Aristotle University of Thessaloniki, Greece Kontoleon Karolos, Aristotle University of Thessaloniki, Greece Kosmas Petros, Cyprus University of Technology, Cyprus Loupasakis Constantinos, National Technical University of Athens, Greece Makridis Sofoklis, University of Patras, Greece Manika Stella, Hellenic Open University, Greece Marcou Gilles, University of Strasbourg, France Matsouki Niki, Hellenic Open University, Greece Nastos Panagiotis, University of Athens, Greece Perez Gabriel, University of Lleida, Spain Poulopoulos Stavros, Nazarbayev University, Kazhakstan Pourchez Jeremie, School of Mines of St. Etienne, France Ramesh Shrestha, Sagarmatha Engineering College, Nepal Saba Marianne, University of Balamand, Lebanon Sakantamis Konstantinos, Aristotle University of Thessaloniki, Greece Stamatelatou Katerina, Democritus University of Thrace, Greece Theodosiou Theodoros, Aristotle University of Thessaloniki, Greece Tsagarakis Konstantinos, Technical University of Crete, Greece Tsoka Stella, Aristotle University of Thessaloniki, Greece Vatikiotis Leonidas, Hellenic Open University, Greece Vanzeveren Emmanuel, It Makes Sense, Belgium Zerefos Stelios, Hellenic Open University, Greece

Organizing Committee

Efthimios Zervas, Hellenic Open University, Chair of the Conference
Zoe Gareiou, Hellenic Open University
Ioannis Mandalas, Hellenic Open University
Stella Manika, Hellenic Open University
Niki Matsouki, Hellenic Open University
Konstantinos Sideris, Hellenic Open University
Chara Tsipa, Hellenic Open University

Zervas Efthimios, Hellenic Open University, Greece, Chair of the Conference

Conference Venue

ICED2022 is planned to take place in an hybrid mode:

- ONLINE
- INSITU, in Athens, Greece. The location is at one of the Hellenic Open University buildings in Athens, Gravias 4-6, 10678, Athens (between Exarchia and Kannigos Square).

Connection Links

ICED022_Connection_Test_Friday, Friday, Oct 21, 2022 10:00 am | (UTC+03:00) Athens, Bucharest Panelist

Join link: https://hou.webex.com/hou/j.php?MTID=m20ba0c6806fc94a8c48634c0332d2235

Webinar number: 2732 446 3876

Panelist password: jnMTV3HNW74 (56688346 from phones and video systems)

Join by video system

Dial 27324463876@hou.webex.com

You can also dial 62.109.219.4 and enter your meeting number.

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 244 63876

Attendee

Join link: https://hou.webex.com/hou/j.php?MTID=m20ba0c6806fc94a8c48634c0332d2235

Webinar number: 2732 446 3876

Webinar password: 6ARhRh5C6up (62747452 from phones)

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 244 63876

ICED2022_Saturday_Room A, Saturday, Oct 22, 2022 8:00 am | (UTC+03:00) Athens, Bucharest Panelist

Join link: https://hou.webex.com/hou/j.php?MTID=mff277163f6be3610c4ba23fd64b5300a

Webinar number: 2733 226 1530

Panelist password: yBePK5eMs82 (92375536 from phones and video systems)

Join by video system

Dial 27332261530@hou.webex.com

You can also dial 62.109.219.4 and enter your meeting number.

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 322 61530

Attendee

Join link: https://hou.webex.com/hou/j.php?MTID=mff277163f6be3610c4ba23fd64b5300a

Webinar number: 2733 226 1530

Webinar password: 44svFNuPNN5 (44783687 from phones)

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 322 61530

ICED022_Saturday_Room_B, Saturday, Oct 22, 2022 8:00 am | (UTC+03:00) Athens, Bucharest Panelist

Join link: https://hou.webex.com/hou/j.php?MTID=m5cbdd65b1fa6a7f28920ea52dede0a6d

Webinar number: 2734 028 7006

Panelist password: 9MfpP2zjX7T (96377295 from phones and video systems)

Join by video system

Dial 27340287006@hou.webex.com

You can also dial 62.109.219.4 and enter your meeting number.

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 402 87006

Attendee

Join link: https://hou.webex.com/hou/j.php?MTID=m5cbdd65b1fa6a7f28920ea52dede0a6d

Webinar number: 2734 028 7006

Webinar password: z6Cw59HuYJb (96295948 from phones)

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 402 87006

ICED2022_Saturday_Room_C, Saturday, Oct 22, 2022 8:00 am | (UTC+03:00) Athens, Bucharest Panelist

Join link: https://hou.webex.com/hou/j.php?MTID=m877a6ba046ce0d820d6d4a3d7d17ac40

Webinar number: 2731 031 5924

Panelist password: Jw53bF9RJXs (59532397 from phones and video systems)

Join by video system

Dial 27310315924@hou.webex.com

You can also dial 62.109.219.4 and enter your meeting number.

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 103 15924

Attendee

Join link: https://hou.webex.com/hou/j.php?MTID=m877a6ba046ce0d820d6d4a3d7d17ac40

Webinar number: 2731 031 5924

Webinar password: npK8jufvS63 (67585838 from phones)

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 103 15924

ICED022_Sunday_Room_A, Sunday, Oct 23, 2022 8:00 am | (UTC+03:00) Athens, Bucharest Panelist

Join link: https://hou.webex.com/hou/j.php?MTID=m9b61f72b763050c127557279b6a2f091

Webinar number: 2734 000 8819

Panelist password: TyDErv7iK77 (89337874 from phones and video systems)

Join by video system

Dial 27340008819@hou.webex.com

You can also dial 62.109.219.4 and enter your meeting number.

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 400 08819

Attendee

Join link: https://hou.webex.com/hou/j.php?MTID=m9b61f72b763050c127557279b6a2f091

Webinar number: 2734 000 8819 Webinar password:

7PmUuAFMj87 (77688236 from phones)

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 400 08819

ICED022_Sunday_Room_B, Sunday, Oct 23, 2022 8:00 am | (UTC+03:00) Athens, Bucharest Panelist

Join link: https://hou.webex.com/hou/j.php?MTID=mcc5b2c68814ed5a516f4b80e1a0a3870

Webinar number: 2730 881 5410

Panelist password: mRuXVyDZ845 (67898939 from phones and video systems)

Join by video system

Dial 27308815410@hou.webex.com

You can also dial 62.109.219.4 and enter your meeting number.

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 088 15410

Attendee

Join link: https://hou.webex.com/hou/j.php?MTID=mcc5b2c68814ed5a516f4b80e1a0a3870

Webinar number: 2730 881 5410

Webinar password: isRXvcbk226 (47798225 from phones)

Join by phone

+30-21-1990-2394 Greece Toll / +30-21-1198-1029 Greece Toll 2 / Access code: 273 088 15410

PROGRAM - General Overview

Start	End	Room	Session	Room	Session	Room	Session
Saturday							
8:45	9:15		Arrival, Connection				
9:15	9:30		Introduction				
9:30	11:00	Α	Cities and buidlings-1	В	Sustainability-1	С	Theory-1
11:00	11:15		Break		Break		Break
11:15	12:45	Α	Cities and buidlings-2	В	Sustainability-2	С	Theory-2
12:45	13:30		Break		Break		Break
13:30	15:15	Α	Cities and buidlings-3	В	Sustainability-3	С	Cities and buidlings-4
15:15	15:30		Break		Break		Break
15:30	17:30	Α	POSTERS	В	Sustainability-4		
Sunday							
9:00	9:30		Arrrival, Connection				
9:30	11:00	Α	Pollution-1	В	Transport-1		
11:00	11:15		Break		Break		
11:15	12:45	Α	Pollution-2	В	Transport-2		
12:45	13:30		Break		Break		
13:30	15:15	Α	Pollution-3	В	Energy		
15:15	15:30		Break		Break		
15:30	17:15	Α	Pollution-4	В	Materials		

The hours indicated here correspond to Athens, Greece, time zone

PROGRAM - Welcome

Saturday 22/10/2022, 09:15-09:30

Efthimios Zervas

Professor of Environmental Impacts Technology, Hellenic Open University Director of the MSc Program "Environmental Design" Chair of the Conference

PROGRAM - Chairs

Session	Chairs	email		
CITIES AND BUILDINGS-1	Pantoja, Theodosiou	mfabiene@gmail.com, tgt@civil.auth.gr		
CITIES AND BUILDINGS-2	Sahnoune, Perez	sara.sahnoune@univ-constantine3.dz, gabriel.perez@udl.cat		
CITIES AND BUILDINGS-3	Dumitrascu, Panaras	<u>aurora-</u> <u>irina.dumitrascu@academic.tuiasi.ro</u> , gpanaras@uowm.g <u>r</u>		
CITIES AND BUILDINGS-4	Grigoropoulos, Scandalos	cgri@upatras.gr, nikolaos.skandalos@cvut.cz		
ENERGY	Tsikalakis, Matsouki	gtsikalakis@hmu.gr, matsouki@latpee.eap.gr,		
MATERIALS	Matsouki, Tsipa	matsouki@latpee.eap.gr, tsipa@latpee.eap.gr		
POLLUTION AND POLLUTION CONTROL-1	Dzolijic, Zervas	jovana.dzoljic@akademijanis.edu.rs, zervas@eap.gr		
POLLUTION AND POLLUTION CONTROL-2	Matsouki, Satayeva	matsouki@latpee.eap.gr, aliya.satayeva@nu.edu.kz		
POLLUTION AND POLLUTION CONTROL-3	Mihajlovic, Zervas	msavic@tmf.bg.ac.rs, zervas@eap.gr		
POLLUTION AND POLLUTION CONTROL-4	Kalari, Karavasilis	kriskalari@iceht.forth.gr, mkaravas@iceht.forth.gr		
SUSTAINABILITY, CIRCULAR ECONOMY AND CLIMATE CHANGE-1	Alsboul, Svetozarević	z.alshboul@gmail.com, msvetozarevic@tmf.bg.ac.rs		
SUSTAINABILITY, CIRCULAR ECONOMY AND CLIMATE CHANGE-2	Kontopanou, Yfantis	kontopanou@aua.gr, elias.yfantis@cmmi.blue		
SUSTAINABILITY, CIRCULAR ECONOMY AND CLIMATE CHANGE-3	Tseliou, Gareiou	tseliou.areti@ac.eap.gr, gareiou@latpee.eap.gr		
SUSTAINABILITY, CIRCULAR ECONOMY AND CLIMATE CHANGE-4	Nefros, Markou	kostasnefros@gmail.com, dmarkou@sd-eco.gr		
THEORETICAL, ECONOMIC AND SOCIAL ISSUES-1	Tsiantikou, Vatikiotis	stsianti@fmenr.duth.gr, leonidas.vatikiotis@gmail.com		
THEORETICAL, ECONOMIC AND SOCIAL ISSUES-2	Vatikiotis, Faixová	<u>leonidas.vatikiotis@gmail.com,</u> <u>zita.faixova@uvlf.sk</u>		
TRANSPORT-1	Akac, Giannaki	akac.attila@certh.gr, mariannagiannaki439@gmail.com		
TRANSPORT-2	Nalmpantis, Giannaki	dnalba@civil.auth.gr, mariannagiannaki439@gmail.com		

PROGRAM – Papers per session

CITIES AND BUILDINGS-1 (Chairs: Pantoja, Theodosiou)

Sustainability through passive energy biomimetics systems in Architecture. Comparative analysis of case studies, C. Dikou and N. Kourniatis

THE GREEN LINE | A biodiversity corridor along the past and present Athens railway network, N. Kogia and M. Papafotiou

Current research trends into the effect of climate change on civil engineering infrastructures: A bibliometric review, M. Kalogeraki and F. Antoniou

Design and sustainable construction in the Contemporary Work of Norman Foster, M. F. F. Pantoja, R. H. F. Póvoas, J. C. Pantoja and A. C. M. N. Sales

Cultural and natural heritage as a driver of sustainable landscape development, J. Šćekić, M. Nikolić, E. Vaništa Lazarević and J. Marić

The image of the urban space. Social semiotics readings, data and assumptions, V. Pamporis and A. Micheli

CITIES AND BUILDINGS-2 (Chairs: Sahnoune, Perez)

Assessment of thermo-hygrometric environment of historic museum building in Constantine-Algeria, S. Benharkat, N. Benhassine, S. Sahnoune and A. Ouis

"Verd de proximitat BCN": Monitoring and evaluation plan for the operation and impact of green roofs and façades in the city of Barcelona, G. Pérez Luque, J. Coma Arpon, M. Reyes Rogget and G. Marias Gonzalez

BIM methods and CDE in professional education for sustainable design and production, P. H. Gonzalez Alfaro, N. Dimovski, L. Lamartina and P. J. de Sá

Strategy of integrated refurbishment of post-war housing stock in Serbia using exoskeletons, B. Levic and Lj. Djukanovic

Flow simulation of self-consolidating concrete through v-funnel for sustainable buildings, K. C. Onyelowe, D-P. N. Kontoni and A. M. Ebid

Environmental and Ecological Approach in the Restoration of Historical Monuments, S. Al Adgham, M. Saba, G. Sabalbal, W. Arairo and J. Absi

CITIES AND BUILDINGS-3 (Chairs: Dumitrascu, Panaras)

Passive house design in temperate continental climate for increasing indoor comfort conditions, A. I. Dumitrașcu, C. G. Corduban, T. M. Hapurne and I. Bliuc

Assessing the construction and demolition waste volume for a typical Mediterranean residential building, A. Karanafti, K. Tsikaloudaki and T. Theodosiou

Ventilation requirements and energy aspects: the case of hospitals, G. Panaras, R. Gropca and G. Papadopoulos

Energy consumption in Greek school buildings as a function of the climate zone, I. Karali, S. Giannarou and E. Zervas

The sustainable design of atrium at the times of adaptation to the impacts of climate change; The case of Mediterranean cities, M. P. P. Nastou and S. C. Zerefos

Investigation of the thermal environment in schoolyards under Mediterranean conditions. Contribution to bioclimatic conditions improvement with the application of mild interventions – The case study of a school within the urban environment, L-D. Gkaidatzi, A. Tseliou, G. Katsavounidou and E. Zervas

Energy efficiency of Greek school buildings and cost of bioclimatic intervention, T. Galanaki, S. Giannarou and E. Zervas

CITIES AND BUILDINGS-4 (Chairs: Grigoropoulos, Scandalos)

The effect of local climatic conditions on the building integration of photovoltaics, N. Skandalos, V. Kapsalis and D. Karamanis

Design And Development Of A Sustainable Environmentally Friendly And Human Centric Luminaire, E-N. Madias, E. Patrikios, C. Grigoropoulos and L. Doulos

The environmental impact of the new version of the Interior Lighting European Norm in Lighting and Circadian Design, I. Tservartsidis, C. Skandali and L. T. Doulos

The impact of lighting trespass on nearby buildings and their inhabitants which derives from municipal stadiums. Early results from a post occupancy evaluation survey, E. Ntarara, K. Syngkiridi, V. P. Androvitsaneas and L. T. Doulos

An Examination of use of Alternative Reference Sources in Colour Rendering of Environmental Lighting Applications, A. Dimitrakis, E-N. Madias and A. Kotsenos

Façade lighting of hotel buildings: Integration in the city and their impact on light pollution, G. Skiadopoulos, C. Sigala, A. Papalambrou, Th. Balafoutis, N.Kakogiannis and L. T. Doulos

Circadian stimulus calculators as environmental building design tools: Early results of a critical review, A. Kotsenos, E.-N. Madias, F. Topalis and L. Doulos

ENERGY (Chairs: Tsikalakis, Matsouki)

Transforming a power plant into an Educational Centre: Agia Small Hydroelectric Power Plant, P. J. Bourbourakis and G. J. Tsikalakis

Analysis of the world scientific production on Energy Poverty, Fuel Poverty and Energy Vulnerability, Z. Iliopoulou, N. Rapsomanikis and E. Zervas

Decompose worldwide energy demand and its decoupling from global economic growth, D. S Brilakis, D. Tsesmelis and E. Zervas

Assessing the environmental impacts of renewable energy sources with emphasis on wind energy, S. Gkalonaki and K. Karatzas

Energy valorisation of the residual biomass from greenhouses in the framework of a circular economy, K. Gioulounta, I. Kosmadakis, C. Elmasides, V. Diamantis, A. Piskilopoulos, I. Amiridis, K. Stamatelatou

MATERIALS (Chairs: Matsouki, Tsipa)

Integration of LCA and LCC for decision making in biocomposite production, N. Gkoloni, Ch. Golonis and V. Kostopoulos

Geopolymer: a New Sustainable Repairing Material for Concrete Cracks, C. Frangieh, M. Saba, D. Karmaoui and Z. Lafhaj

Simulation of self-compacting concrete (SCC) passing ability using the L-box model for sustainable buildings, K. C. Onyelowe, D-P. N. Kontoni and A. M. Ebid

Mechanical characterization and environmental assessment of stabilized earth blocks, W. Arairo, M. Saba, M. El Bachawati, J. Absi and K. J. Kontoleon

Characterization of Porous Geopolymers Mortars for the Production of a Sustainable Material, A. Ghauch, M. Saba and T. Sayet

Estimating the mechanical properties of sustainable concrete containing waste materials using machine learning techniques, A. Soleymani, M. Naseri Nasab, H. Jahangir and D-P. N. Kontoni

Constitutive and machine learning models of compaction rate based on brachistochrone and environmental considerations, K. C. Onyelowe, D-P. N. Kontoni and A. M. Ebid

Investigation of the fire effect on the behavior of corrugated steel plate shear walls considering environmental aspects, D-P. N. Kontoni, A. Ghamari and S. Mahmudi

POLLUTION AND POLLUTION CONTROL-1 (Chairs: Dzolijic, Zervas)

Urban traffic air pollution - case study City of Vranje, Serbia, J. Dzoljic, V. Popovic, S. Jovkovic and J. Misic Modelling the atmospheric dispersion of ammonia in an industrial area in northern Greece, I. Petrou, K. Psistaki, I. M. Dokas and A. K. Paschalidou

Forecast Smell Events in a Regional Pittsburgh Industrial Area with Machine Learning, A. Gavros, Y. C. Hsu and K. Karatzas

Barometric Pressure as a correction index for low-cost particulate matter sensors, I. Christakis, K. Moutzouris, O. Tsakiridis and I. Stavrakas

Modeling of NMVOC emissions from solvents use in Greece, I. Sebos and L. E. Kallinikos

Investigation of the particulate air pollution and the ratio of PM2.5 to PM10 concentrations in the atmosphere over the lignite mining and lignite-fired power plants region of Western Macedonia, Greece, V. Evagelopoulos, P. Begou, P. Kassomenos and S. Zoras

POLLUTION AND POLLUTION CONTROL-2 (Chairs: Matsouki, Satayeva)

Determination of Aspirin in Municipal Wastewaters of Nur-Sultan City, Kazakhstan, A. Satayeva, T. Kerim, A. Kamal, J. Issayev, V. Inglezakis, J. Kim and E. Arkhangelsky

Predicting coastal Dissolved Oxygen values with the use of Artificial Neural Networks: a case study for Cyprus, E. Hadjisolomou, K. Antoniadis, L. Vasiliades, M. Rousou, I. Thasitis, R. Abualhaija, H. Herodotou, M. Michaelides and I. Kyriakides

The impact of solids retention time (SRT) on Greenhouse Gases Emissions from biological wastewater treatment processes, L. Kemmou, G. Samiotis, I. Ristanis and E. Amanatidou

Photocatalytic treatment of metronidazole-containing wastewater, P. Abdirova, Y. N. Kanafin and S. G. Poulopoulos

Removal of Phenanthrene from wastewater with low-cost adsorbents, A. Stavrinou, M. A. Theodoropoulou, C. A. Aggelopoulos and C. D. Tsakiroglou

Design and 3D Print Mechanism to Eliminate Clogging in Sewers Caused by Roots to Improve Flow in Qatar, A. Gannan

POLLUTION AND POLLUTION CONTROL-3 (Chairs: Mihajlovic, Zervas)

Waste management strategies effects on GHG emission: Case study of Serbia, M. Mihajlović, A. Dajić and M. Svetozarević

A preliminary study of chemical parameters of water in the Albanian part of Lake Ohrid at the end of the spring season, E. Dalo, R. Sadikaj, M. Shygeriu and H. Sahiti

Comparison of RCC Hume and DWC HDPE pipe based on Life Cycle Assessment, B. Ojha and R. Khanal

Zeolite supported TiO2 for the degradation and mineralization of sulfamethoxazole under UV light irradiation, S. Mergenbayeva, Zh. Abitayev, M. Batyrbayeva, J. Vakros and S. G. Poulopoulos

Waste collection and treatment networks with source separation from Mobile Green Points (MGP): Citizen awareness and spacial planning for the collection of clean recycle materials, K. Tsimnadis, G. L. Kyriakopoulos, G. Arabatzis and E. Zervas

The application of the Bow Tie approach in the risk assessment of a municipal solid waste management system, K. Georgousoglou, Y. Mouzakitis and E. D. Adamides

POLLUTION AND POLLUTION CONTROL-4 (Chairs: Kalari, Karavasilis)

Optimization of the remediation of oil-drilling cuttings by combining artificial neural networks with knowledge-based models, K. Kalari, K. F. Christodoulis, D. Nikolakopoulou, N. Bali, M. Theodoropoulou, P. Economou and C. D. Tsakiroglou

Fate of perfluoroalkyl substances (PFAS) in subsurface, A. Melitsiotis, M. Theodoropoulou and C. D. Tsakiroglou

Degradation of the persistent organic pollutant-lindane in fixed-bed photoreactor packed with immobilized Zinc Oxide and Iron-doped Zinc Oxide photocatalysts, M. V. Karavasilis, M. A. Theodoropoulou and C. D. Tsakiroglou

Parametric study of the remediation efficiency of oil-drilling cuttings by ozonation, K. F. Christodoulis, D. Nikolakopoulou, M. Karavasilis, M. A. Theodoropoulou and C. D. Tsakiroglou

Biomass as adsorbent – A depollution cost effective material in a promising market, S. D. V. Giakoumatos and O. N. Kopsidas

Biodiesel production from high free fatty acid byproduct of bioethanol production process, N. Kokkinos, G. Theochari, E. Emmanouilidou, D. Angelova, V. Toteva, A. Lazaridou and S. Mitkidou

Polymer-functionalized nanoparticles as agents for the in situ remediation of oil-contaminated soils, C. Ntente, A. Strekla, Z. Iatridi, M. Theodoropoulou, G. Bokias and C. D. Tsakiroglou

SUSTAINABILITY, CIRCULAR ECONOMY AND CLIMATE CHANGE-1 (Chairs: Alsboul, Svetozarević)

Cross-linking the peroxidase: from potato peel valorization to colored effluents treatment, M. Svetozarević, N. Šekuljica, A. Dajić, M. Mihajlović, Z. Popovski and D. Mijin

Sustainable use of personal protective materials against COVID-19 will lower economic and environmental impacts, Z. Alshboul, K. Al-Shukri, B. Awais and M. A. Alrousan

Lighting products as part of the circular economy and strategies that affect it. A literature overview, C. J. Grigoropoulos, S. C. Zerefos, A. Tsangrassoulis and L. T. Doulos

Valorization of Greek – Naxos emery in environmental friendly applications, K. V. Kakavas, V. D. Binas, D. Kasiteropoulou and D. N. Christodoulou

Pinus nigra extractives analysis for green growth, M. A. Chavenetidou, K. V. Kakavas and D. Birbilis

Assessing 3D printing processes as enablers of circular economy, H. O. Psihoyos, Y. Mouzakitis, E. D. Adamides and G. N. Lampeas

SUSTAINABILITY, CIRCULAR ECONOMY AND CLIMATE CHANGE-2 (Chairs: Kontopanou, Yfantis)

Critical success factors towards resilient agri-food supply chains, M. Kontopanou and G. T. Tsoulfas

Introducing the use of Open Data into the secondary education curriculum: A study on inland water quality, C. Tziortzioti, E. Dimitriou and I. Mavrommati

The role of engineering design methodologies for new circular business models: a sustainable finance challenge, G. Kaisarlis and A. Sepetis

Global warming, thermal engines' efficiency and GHG emissions: The vicious circle of Climate Change, E. Yfantis, A. Paradeisiotis, C. Ioannou and I. Nikolaou

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