

18

INTERNATIONAL
CONFERENCE ON
ENVIRONMENTAL
SCIENCE &
TECHNOLOGY

GREEN & CIRCULAR

HYBRID EVENT

athens / greece
2023



CEST 2023

athens / greece
30 Aug - 2 Sep 2023

cest.gnest.org

Conference Programme



Prince Sultan Bin Abdulaziz International Prize for Water

Recognizing Innovation



Winners for the 10th Award (2022)



Creativity Prize

1) The team led by **Thalappil Pradeep** (**Indian Institute of Technology, Madras, India**) for the creation and successful deployment of environmentally friendly "water positive" nanoscale materials for the affordable, sustainable and rapid removal of arsenic from drinking water. Team members include Avula Anil Kumar, Chennu Sudhakar, Sritama Mukherjee, Anshup, and Mohan Udhaya Sankar.



Dr. Thalappil Pradeep

2) The team led by **Dionysios D. Dionysiou** (**University of Cincinnati, USA**)

for the development of innovative advanced oxidation technologies and nanotechnologies for environmental applications, particularly in the removal and monitoring of emerging contaminants. Team members include Wael H.M. Abdelraheem, Abdulaziz Al-Anazi, Jiong Gao, Ying Huang, and Vasileia Vogiasi.



Dr. Dionysios D. Dionysiou



Surface Water Prize

Dennis D. Baldocchi (**University of California Berkeley, USA**)

for the development and implementation of effective models to understand, evaluate and predict evapotranspiration and water-use efficiency in various environments under climate change conditions.



Dr. Dennis D. Baldocchi



Groundwater Prize

Linda M. Abriola (**Brown University, USA**)

for pioneering research on toxic Dense Non-Aqueous Phase Liquids (DNAPLs) in groundwater, ranging from the simulation of their fate to effective methods for cleaning contaminated sites.



Dr. Linda M. Abriola



Alternative Water Resources Prize

The team of Menachem Elimelech (**Yale University, USA**) and **Chinedum Osuji** (**University of Pennsylvania, USA**)

for wide-ranging advances in nanostructured materials for next-generation water purification, focusing on implementation issues like manufacturing, sustainability, self-assembly, and biofouling.



Dr. Menachem Elimelech

Dr. Chinedum Osuji



Water Management and Protection Prize

The team led by Matthew McCabe (**KAUST, Thuwal, Saudi Arabia**)

for employing CubeSat constellations in the sustainable management and security of linked water-food systems, along with estimates of agricultural water use at unprecedented spatial and temporal resolutions and with global coverage. Team members include Bruno Aragon (KAUST) and Rasmus Houborg (Planet Labs, USA).



Dr. Matthew McCabe

Invitation for Nominations

11th Award (2024)

Nominations open online until 31 December 2023

www.psipw.org

e-mail: info@psipw.org

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Welcome

On behalf of the Organizing and Scientific Committees, it is our great pleasure to welcome you to the 18th International Conference on Environmental Science and Technology in Athens, one of the most ancient cities in the world. Visiting the birthplace of democracy can be a unique experience as the heritage of the Classical Era is still evident in the city. Acropolis, Parthenon, and Ancient Agora can be a perfect way to explore ancient Greeks' daily lives and get to know their culture. The conference will host 47 sessions and over 430 oral and poster presentations from all the fields of environmental science and technology. Apart from the presentations in the Opening Session, 8 plenary speeches and 7 side events have been scheduled.

CEST2023 is again a hybrid event supporting physical and virtual sessions simultaneously. Our intention was to organize a physical event and at the same time to support participants that could not travel, to participate and feel as close as possible to the conference rooms. We are now welcoming all participants, those who traveled to Athens, and those that will be participating through our virtual platform: <http://cest.gnest.org>.

Personally, I would like to thank the conference committees for the excellent and fruitful collaboration, CEST staff, participants, session chairs, and keynote and plenary speakers for helping us to build this very exciting conference program. Our team has been making significant effort so that your participation will be scientifically rewarding and at the same time you will enjoy your stay in Athens!



Demetris F. Lekkas
Chairman of CEST2023

CEST2023

The facts related to natural resources availability, climate change, land, and ecosystem degradation along with population growth are not new. Linear economic models based on production-consumption-disposal schemes tend to be replaced by circular and resource-efficient economic models and to a greater extent, by the so-called circular bioeconomy (CBE), focusing on the whole material cycle to promote waste reduction, waste reuse and efficient use of resources. Bioeconomy is considered a game changer for climate action as it was emphasized in the 27 th Conference of the Parties to the UN Framework Convention on Climate Change (COP27). Business sector is developing and applying corporate social responsibility programmes and actions based on the triple-helix ESG (Environment, Social, Governance) aiming to promote their social role and environmental care, while ensuring the protection of man, earth, and the increase of economic profit. Digital technologies already play a central role, however tools and smart services that could support more efficient access to information relating to availability, monitoring, data utilisation, performance feedback and policy planning cycles, such as electronic platforms and databases, especially in the field of bioeconomy, are not widely available yet.

The UN Biodiversity Conference (COP15) ended in Montreal, Canada, on 19 December 2022 with a landmark agreement (the Kunming-Montreal Global Biodiversity Framework – GBF) to guide global action on nature through to 2030. The GBF seeks to stop the loss of biodiversity, restore ecosystems, and

protect indigenous rights. The window of opportunity for reversing detrimental trends and averting worse outcomes is rapidly closing and there is a need to strengthen ties between various societal actors and advance knowledge.

Now, more than ever it is critical to support evidence-based research, technological development, innovation and Science to Policy Interfaces to support the transition to a low-carbon economy as demanded by the EU Green Deal. Established in 1989, the International Conference on Environmental Science and Technology (CEST) is a leading environmental conference where top experts, scientists, entrepreneurs, representatives of public administration and social initiatives present state-of-the-art research on current and emerging environmental issues.

The conference is organized biannually by the Global Network of Environmental Science and Technology jointly with the University of the Aegean (Greece) and the National and Kapodistrian University of Athens (Greece). It is scientifically supported by the Open University of Cyprus (Cyprus), the University of Salerno (Italy) and the University of Cincinnati (USA). It is under the auspices of the Ministry of Environment and Energy, the Region of Attica, the Municipality of Athens and the European Public Law Organization (EPLO) and under the patronage of the World Water Assessment Programme of UNESCO. It is supported by the International Water Association (IWA), the European Water Association (EWA), the Natural Environment and Climate Change Agency, the A.C. Laskaridis Charitable Foundation and the Circle the Med Forum.

Show me some stats!

CEST2023 is for everyone involved with environmental science and technology



4 days



5+ side events



47+ sessions



18 invited speakers



60
participating
countries



450+
oral/poster
presentations



10
collaborating
scientific journals

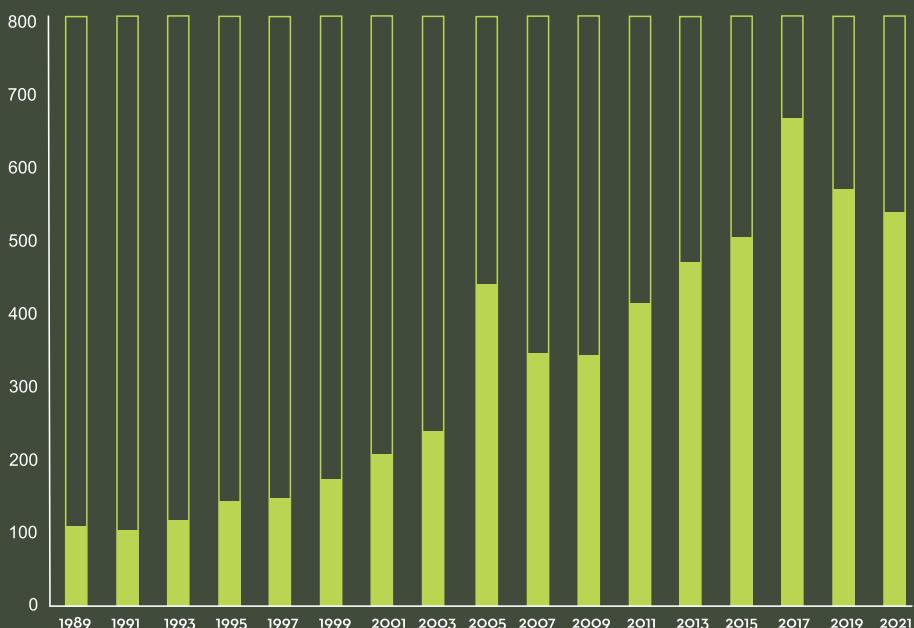
CEST Series Metrics

5622 papers
presented (1989-2023)

50 h-index

7906 CEST citations*

Number of papers presented in CEST conferences (1989-2021)



*refers to number of times
CEST papers were
published in special issues
of the collaborating journals
since 2005

Source: Web of Science, data retrieved in July 2023

Guide for delegates

Venue

CEST2023 will take place this year at **Wyndham Grand Athens** between **30 August to 2 September**. The Wyndham Grand Athens is a 5-star hotel conveniently located in the commercial and business district of the city right next to Metaxourgeio metro station. **The 14 multi-functional conference rooms** provide a total capacity of up to **2000 people** & state-of-the-art equipment combined with highly trained and experienced staff and free Super Speed Wi-Fi.

Location: Megalou Alexandrou 2,104 37 Athens

Conference language

The official conference language is **English**

Liability

The Conference fees do not include provisions for the insurance of participants or their accompanying guests against personal injuries, sickness and theft or property damage. Participants are advised to arrange for any insurance they consider necessary. Neither the Conference Organising Committee, nor Scientific and Programme Committee Members assume any responsibility for loss, injury, or damage to persons or belongings, whatever the cause may be.

Programme

CEST2023 Scientific Programme includes:

47  sessions running in **5**  parallel rooms

with **332** Oral, **85** Flash, **65** Poster presentations.

The conference sessions cover **28**  unique scientific topics.

The **up-to-date programme** for each session is posted every morning in front of the **respective room** or the **respective poster area**.

Invited Speakers



Prof. Irini Angelidaki
Technical University
of Denmark
Denmark



Prof. Damià Barceló
Catalan Institute for Water
Research (ICRA-CERCA)
Spain



**Prof. Vincenzo
Belgiorno**
University of Salerno
Italy



Prof. Kwang-Ho Choo
Professor at Kyungpook
National University (KNU)
South Korea



Prof. Giorgos Demetriou
Circular Economy Research
Center (CERC), École des Ponts
Business School
France



**Prof. Dionysios (Dion)
Dionysiou**
University of Cincinnati
USA



Mr. Michele Giavini
CIC Italian Composting
and Biogas Association
Italy



Prof. Evangelos Gidarakos
Technical University of Crete
Greece



Prof. Chrysi Laspidou
University of Thessaly
Greece



Prof. Gerasimos Lyberatos
National Technical University
of Athens
Greece



Prof. Hagit Messer
Tel Aviv University
Israel



Prof. Vincenzo Naddeo
University of Salerno
Italy



Prof. Ilias Pechlivanidis
Swedish Meteorological and
Hydrological Institute (SMHI)
Sweden



Prof. Susan Richardson
University of South Carolina
USA



**Prof. Mohammad J.
Taherzadeh**
University of Borås
Sweeden



Dr. Jean Venables
CBE FREng CEng CEnv FICE MCIWEM
FCGI HonDSc
Venables Consultancy
UK



Dr. Antonis A. Zorpas
Open University of Cyprus
Cyprus



Dr. Jaroslav Slobodník
Environmental Institute
Slovakia

Conference Chairs



Dr. Demetris-Francis Lekkas
University of the Aegean
Greece



Prof. Nikolaos Thomaidis
National and Kapodistrian University of Athens
Greece



Dr. Antonis A. Zorpas
Open University of Cyprus
Cyprus

Scientific and Social Events

1 Opening ceremony

*Wednesday 4 September, Room A, Zeus, 17.30,
Cocktail reception at 20.00 at ABOVE Roof Top Bar Restaurant*

The agenda of the opening session comprises of:

- Welcome speeches
- Welcome speech and practical information about the event from Dr Demetris F. Lekkas (CEST2023 chairman)
- Recognizing Innovation, Dr David Solomon Jalajel, Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW)
- Sustainable Water Management: Global and Regional Challenges and Opportunities, Prof. Dionysios Dionysiou, University of Cincinnati (USA), winner of the Creativity Prize (10 th award, PSIPW)
- New challenges for water and wastewater infrastructures, Prof. Vincenzo Belgiorno, University of Salerno, Italy

A welcome cocktail will be offered at 20.00

2 Sustainable Tourism in protected areas: Balancing Ecotourism and Conservation

Panel discussion

Thursday 31 August, Room Zeus I, 12.00

The World Tourism Organization (UNWTO) strives to promote tourism development that supports, in equal measure, the conservation of biodiversity, the social welfare the economic security of the host countries and communities. Ecotourism, defined as responsible travel to natural areas that conserves the environment and improves the well-being of local people, has gained significant attention in recent years as a way to balance economic growth with environmental protection. The panel aims to:

- Delve into the intersection between tourism & conservation, with a particular focus on protected areas & the potential for ecotourism to promote sustainable development
- Address the impact (physical, economic effects) of climate change on biodiversity and water resources
- Discuss best practices for designing & managing ecotourism activities in protected areas, ensuring that they benefit both the natural environment and local communities.

The session is organized in collaboration with **Natural Environment & Climate Change Agency (NECCA)**. N.E.C.C.A was founded in 2020 and aims to implement the policy formulated by the Ministry of Environment and Energy (MEEN) for the management of protected areas. N.E.C.C.A is charged with coordinating a series of actions, projects and procedures regarding: the implementation of national policies set by the MEEN for the management of protected areas in Greece, biodiversity conservation, promotion and implementation of sustainable development actions and climate change mitigation.

Prof Maria Papadopoulou (National Technical University of Athens, Greece) the president of the Board of Directors of NECCA will be among the panellists.

3 An Editor's Perspective on the Publication Process in an Evolving Era: Insights and New Developments

Thursday 31 August, Room ZEUS I, 18.30

The session (coordinated by **Prof Dionysios Dionysiou** and **Dr Polycarpos Falaras**) aims to give participants a clear idea of the publishing landscape and provides detailed insights into identifying the right journal for their papers. Authors are also made aware of what aspects of their papers editors and reviewers look at critically, and to ensure that in taking care of these areas, their papers are much more likely to be accepted.

Dr. Dionysiou is a Herman Schneider Professor of Environmental Engineering and

Distinguished Research Professor-STEM at the University of Cincinnati. He is an Executive Editor of *Chemical Engineering Journal* (Elsevier Journal, Impact Factor: 15.1), co-Editor in *Current Opinion in Chemical Engineering* (Elsevier), Editor-in-Chief of the *Journal of Environmental Engineering* (American Society of Civil Engineers), Associate Editor of *Water Research* and member of the editorial board of several other journals in the field of environmental and chemical engineering. Prof Dionysiou is the PSIPW "Creativity Prize" Award winner (2022). Dr Falaras is a Research Director at the National Center for Scientific Research "Demokritos"-NCSR (Athens, Greece) working on nanomaterials and nanotechnology driven processes. Dr Falaras is the PSIPW "Alternative Water Resources" Award Winner (2014) and an Editor of *Applied Catalysis B: Environmental* (Elsevier Journal, Impact Factor: 22.1)

The presentation will focus on the above-mentioned journals but discussion will include points based on their experience in publication and review. It will include aspects of understanding the scope of the journal, aims, editorial quality, presentation of the manuscript, quality of figures and images, quality of graphical abstract, the importance of novelty, key points the editors and reviewers consider to be of great importance and what they look for, insights for successful peer-reviewed outcome, why even some well written papers still get rejected, actions that must be avoided, and ethics.

4 PFAS impacted soil in the new circular economy era - Reuse on redevelopment of brownfield sites

Virtual event

Friday 1 Sep 2023 11.00-15.30 (Online)

Per- and polyfluoroalkyl substances (PFAS) are a large, complex group of synthetic chemicals that have been used around the world since about the 1950s with unique desirable properties. They are some of the most persistent pollutants detected in various land uses including firefighting training areas, textiles & leather industries, airports, wastewater treatment plants & landfills among others. Recently, the need to maximise the regeneration of brownfield land in line with the 'healthy soils' upcoming EU framework, & the constantly evolving requirement for material reuse on reconstruction sites in the new era of the Circular Economy, are both growing fast. PFAS, like any other potentially carcinogenic substances, can cause serious damage to human health & ecosystems. This workshop intends to cover the available regulatory frameworks in the most advanced countries (EU & worldwide) & demonstrate case studies & lessons learned on this environmental hot topic. The agenda will include lectures from invited speakers only & discussions with the audience. **Registration is free.**

Organized by: **ENYDRON**

Supported by: **National Technical University of Athens (NTUA, Greece)**

5 UrbanWaterSECURITY Academy (UWSA)

30 August 2023 to 2 September 2023 (in parallel with CEST2023)

The International Academy in **UrbanWaterSECURITY** is an intensive training opportunity open to Master's and PhD students, post-docs, and young researchers. Urban Water Security is characterized by complex, so-called wicked, problems where traditional assumptions of causality and predictability may not apply. The fundamental importance of better connections between science, policy and society provides new demands on candidates, who are increasingly expected to possess not only a deep knowledge of their own discipline but are additionally capable of placing that knowledge in a wider understanding of societal needs. The **UrbanWaterSECURITY** is one of the most important and priority issues to be resolved for both current and next generations. **The Waste Management Laboratory of the Department of Environment of the University of the Aegean** (Greece) in cooperation with **The Sanitary Environmental Engineering Division (SEED)** of the **University of Salerno** (Italy) and the **Advanced Institute of Water Industry at Kyungpook National University** (Korea) is organizing the second Edition of **UrbanWaterSECURITY** Academy. The lectures are included in CEST2023 daily programme.

Important notice: Attendance of the Academy is free of charge for CEST2023 registered participants and a certificate will be provided. Students who are not registered for CEST2023 and wish to participate should contact the Secretariat.

6 CRESCENTO Summer School on Circular Economy

Friday 1 September to Tuesday 12 Sep 2023, Room ZEUS II

Contributing institutions: **University of the Aegean** (Greece)
Politecnico di Milano (Italy)

Moving from linear economy models to circular economy ones seems to be the only way to address both short and long-term sustainability challenges: keeping resources in the economy even beyond the end of the product's life cycle, reducing waste through reuse, recycling, or remanufacturing. The above change in the economic model is not simple and requires profound modifications in the entire value chain: products must be designed in a sustainable way and easily usable in a circular economy paradigm, new business and market models are needed, innovation is requested to turn waste into resources and consumer behavior has to change significantly. The entire quadruple helix

needs to be involved in transforming the way businesses, academia & research, decision-making and civil society operate, as well as new skills to facilitate this transition.

CRESCENTO (<https://crescento.adrioninterreg.eu/>) addresses these challenges by setting up an **ADRION** transnational cooperation network on the circular economy, defining an education and training program and developing a joint master's program on circular economy. The project is based on a partnership of 11 partners from all over the **ADRION** area (4 ERDF and 4 IPA countries), thus covering the entire **EUSAIR** macro-area. A network of more than 60 stakeholders from academia, research, business and policymakers is expected. The **CRESCENTO** Summer School on Circular Economy is a training activity in the form of a Joint Summer School which aims to educate and inspire students, professionals, and enthusiasts about the principles and practices of a circular economy, fostering innovation and collaboration towards a sustainable future.

A full time, weekend physical lessons and workshops are envisaged as Summer School starting point, followed by the preparation of specific projects to be delivered in two weeks by attendees in teams of 1 – 2 persons. A final pitching event will be organized for the presentation of the outcomes of the project on a second weekend.

Notice: A certificate of attendance will be provided to the participants.

The registration is free.

Duration: 2 phases of 2-days tutoring (31 August and 1 September and 11 and 12 September). Project proposals will be prepared by attendees for the pitching event from 1 to 12 September.

7

EU Projects showcase: Sharing Results for a Sustainable Future

Thursday 31 Aug - Saturday 2 September 2023, Conference lobby

Join an exciting side-event, where we will showcase the results of various EU-funded projects (HORIZON, Interreg, ERASMUS+, PRIMA, ENI CBC MED, LIFE etc) from all fields of Environmental Science and Technology. The event aims to foster knowledge-sharing and collaboration among researchers, practitioners, and stakeholders. Attendees will have the chance to interact with project representatives, gain insights into the projects' findings and impacts, and learn about the latest environmental research trends. The participants can choose to present their findings in conference sessions, to book space in the exhibition area with poster stand, place for roll-up banners and a table and to organize/participate in round tables for networking and exploring future partnerships.

8 Conference dinner

The conference dinner will be held on Saturday 2/9 at 21.00.

More details will be provided to you during the conference.

The entrance is free for the registered delegates, while the accompanying persons can purchase vouchers at the secretariat.

Proceedings & Publication of Papers

All the papers presented at the conference will be published in CEST proceedings (<https://cms.gnest.org/proceedings>, ISSN 2944-9820) and are assigned a DOI number as soon as they are published.

Papers presented in CEST2023, will be submitted for review in the cooperating journals for inclusion in special issues after the normal peer review process of the journals.



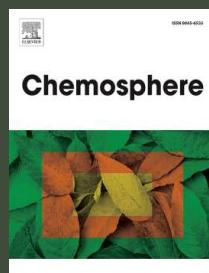
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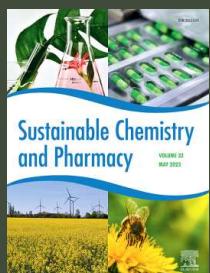
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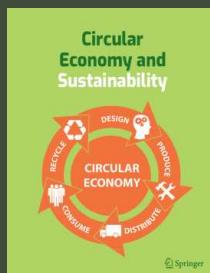
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1st Conference on Environmental Science and Technology, CEST1989

September 1989, Mytilene, Lesvos, Greece

2nd Conference on Environmental Science and Technology, CEST1991

2 to 5 September 1991, Molyvos, Lesvos, Greece

3rd Conference on Environmental Science and Technology, CEST1993

6 to 9 September 1993, Molyvos Lesvos, Greece

4th Conference on Environmental Science and Technology, CEST1995

4 to 7 September 1995, Molyvos, Lesvos, Greece

5th Conference on Environmental Science and Technology, CEST1997

1-4 September 1997, Molyvos, Lesvos, Greece

6th Conference on Environmental Science and Technology, CEST1999

30 August to 2 September 1999, Pythagorion, Samos, Greece

7th Conference on Environmental Science and Technology, CEST2001

3 to 6 September 2001, Hermoupolis, Syros

8th Conference on Environmental Science and Technology, CEST2003

8 to 10 September 2003, Lemnos Island Greece

9th Conference on Environmental Science and Technology, CEST2005

1 to 3 September 2005, Rhodes Island, Greece

10th Conference on Environmental Science and Technology, CEST2007

5 to 7 September 2007, Cos Island, Greece

11th Conference on Environmental Science and Technology, CEST2009

3 to 5 September 2009, Chania, Crete, Greece

12th Conference on Environmental Science and Technology, CEST2011

8 to 10 September 2011, Rhodes Island, Greece

13th Conference on Environmental Science and Technology, CEST2013

5 to 7 September 2013, Athens, Greece

14th Conference on Environmental Science and Technology, CEST2015

3 to 5 September 2015, Rhodes Island, Greece

15th Conference on Environmental Science and Technology, CEST2017

31 August to 2 September 2017, Rhodes Island, Greece

16th Conference on Environmental Science and Technology, CEST2019

4 to 7 September 2019, Rhodes Island, Greece

17th Conference on Environmental Science and Technology, CEST2021

1 to 4 September 2021, Athens, Greece

Conference proceedings ISSN Series Number: 1106 – 5516 until 2019 and 2944-9820 afterwards

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JIANG J-Q Glasgow Caledonian University, <i>UK</i>	LI F. Tongji University, <i>China</i>
KALANTZI O.I. University of the Aegean, <i>Greece</i>	LOUKAS A. University of Thessaly, <i>Greece</i>
KALAVROUZIOTIS I. Hellenic Open University, <i>Greece</i>	LYDAKIS-SIMANTIRIS N. Hellenic Mediterranean University, <i>Greece</i>
KALLOS G. National and Kapodistrian University of Athens, <i>Greece</i>	MACROPOULOS C. National Technical University of Athens, <i>Greece</i>
KALOUDIS T. EYDAP SA, <i>Greece</i>	MAKRIS K. Cyprus International Institute for Environmental and Public Health, <i>Cyprus</i>
KANAKIDOU M. University of Crete, <i>Greece</i>	MAMAIS D. National Technical University of Athens, <i>Greece</i>
KARANTANELI M. University of the Aegean, <i>Greece</i>	MANCINI I. University of Basilicata, <i>Italy</i>
KARAPANAGIOTI H. University of Patras, <i>Greece</i>	MANDARAKA M. National Technical University of Athens, <i>Greece</i>
KARATZAS G. Technical University of Crete, <i>Greece</i>	MANIOS T. Hellenic Mediterranean University, <i>Greece</i>

MANTZAVINOS D.

University of Patras, *Greece*

MARTÍNEZ DELGADO S.

Saint Louis University Madrid, *Spain*

MESSER H.

Tel Aviv University, *Israel*

MIHALOPOULOS N.

University of Crete, *Greece*

MISTRIOU C.

National Technical University of Athens, *Greece*

MOSQUERA-LOSADA M. R.

University of Santiago de Compostela, *Spain*

MOUSSIOPoulos N.

Aristotle University of Thessaloniki, *Greece*

MUNOZ R.

Valladolid University, *Spain*

MYLOPOULOS I.

Aristotle University of Thessaloniki, *Greece*

MALLIKARJUNA N.N.

EPA, *USA*

NASTOS P.

University of Athens, *Greece*

NAVARRO P.J.

University Miguel Hernandez Elche, *Spain*

NEIRA M.

World Health Organization

NIKOLAOU A.

University of the Aegean, *Greece*

NORIEGA ORTEGA B.E.

European Citizen Science Association (ECSA), *Germany*

NOUTSOPoulos C.

National Technical University of Athens, *Greece*

NZIHOU A.

Ecole des Mines Albi-France,

ONOF C.

Imperial College London, *UK*

PANTERA A.

Agricultural University of Athens, *Greece*

PAPAEFTHIMIOU S.

Technical University of Crete, *Greece*

PAPASSIOPIS N.

National Technical University of Athens, *Greece*

PAPATHEODOROU G.

University of Patras, *Greece*

PAVLOGEORGATOS G.

University of the Aegean, *Greece*

PETANIDOU T.

University of the Aegean, *Greece*

PETREAS M.

California Environmental Protection Agency, *USA*

PICO Y.,

CSIC-GV- UV, *Spain*

PILINIS C.

University of the Aegean, *Greece*

PLAKAS K.

Centre for Research and Technology, Hellas (CERTH), *Greece*

POZOUKIDOU G.

Aristotle University of Thessaloniki, *Greece*

RAMALINGAM K.

The City College of New York, *USA*

RAMOS M.H.

IRSTEA, *France*

RICHARDSON S.

University of South Carolina, *USA*

RINCON S.

Universidad Nacional de Colombia, *Colombia*

ROSTKOWSKI P.

Norwegian Institute for Air Research, *Norway*

RUTSCHMANN P.

Technical University of Munich, *Germany*

SHALABY M.S.

National Research Centre, Cairo, *Egypt*

SIQUEIRA RODRIGUES M.A.

Feevale University, *Brazil*

SKIADAS I.

Technical University of Denmark, *Denmark*

SKOULLOUDIS A.

University of the Aegean, *Greece*

SOARES H.

University of Porto, *Portugal*

SOSPIRO P.

Marche Polytechnic University, *Italy*

STAMATELATOU K.

Democritus University of Thrace, *Greece*

STAMOU A.

National Technical University of Athens, *Greece*

STASINAKIS A.

University of the Aegean, *Greece*

STOLLER M.

Sapienza University of Rome, *Italy*

THANOS C.

University of Athens, *Greece*

THOMAS K.
Norwegian Institute of Water Research, Norway

TOPOUZELIS K.
University of the Aegean, *Greece*

TRIANTAFYLLOU A.
University of Western Macedonia, *Greece*

TRISUNARYANTI W.
Gadjah Mada University, Indonesia

TSIHRINTZIS V.
National Technical University of Athens, *Greece*

TSIROS I.
Agricultural University of Athens, *Greece*

TSOUKALA V.
National Technical University of Athens, *Greece*

VAGENAS D.
University of Patras, *Greece*

VAKALIS S.
University of the Aegean, *Greece*

VARNAVAS S.
University of Patras, *Greece*

VAROUHAKIS E.
Technical University of Crete, *Greece*

VELEGRAKIS A.
University of the Aegean, *Greece*

VELIS C.
University of Leeds, *UK*

VENABLES R.
Environmental Crane Ltd, *UK*

VENABLES J.
Venables Consultancy, *UK*

VENIERI D.
Technical University of Crete, *Greece*

VLACHOS N.
University of Thessaly, *Greece*

VOUDRIAS E.
Democritus University of Thrace, *Greece*

VOUKKALI I.
Open University of Cyprus, *Cyprus*

VOULVOULIS N.,
Imperial College London, *UK*

WANG C.
Tsinghua University, *China*

WEIGAND H.
University of Applied Sciences, Giessen, *Germany*

XEKOUKOULOTAKIS N.
Technical University of Crete, *Greece*

ZANETTI M.
Polytechnic of Turin, *Italy*

ZARRA T.
University of Salerno, *Italy*

ZEREFOS C.
University of Athens, *Greece*

CONFERENCE PROGRAMME

DAILY TIMETABLE

Thursday 31 August 2023

	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II	
09:00	SESSION 2 Water and wastewater treatment and reuse (1)	SESSION 3 Recycling of materials to new products	SESSION 4 Sustainable development in insular regions under tourism pressures: an integrated approach (1)	SESSION 5 Sustainable production and management of biomass	SESSION 6 ESG (Environmental, Social and Governance) and circular economy	
10:30-11:00	Plenary speech					
11:30-12:00	Plenary speech					
	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II	Room VR1
12:00	SESSION 7 Water and wastewater treatment and reuse (2)	SESSION 8 Beach erosion of island beaches in Eastern Mediterranean (Greece and Cyprus): Assessment, monitoring and management	SESSION 9 Sustainable development in insular regions under tourism pressures: an integrated approach (2)	SESSION 10 Circular economy and bioeconomy (1)	SESSION 11 Ecology, environmental change and management	SESSION 12 Advanced oxidation processes and water treatment (V)
	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II	
15:30	SESSION 13 Water and wastewater treatment and reuse (3)	SESSION 14 Marine Litter - New perspectives and methodologies	SESSION 15 Air pollution and health	SESSION 16 Life Cycle Analysis (LCA)	SESSION 17 Renewable energy sources	
17:30-18:30	Poster session					
18:30	An Editor's Perspective on the Publication Process in an Evolving Era: Insights and New Developments					

Friday 1 September 2023

	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II	Room VR1	OFFICE I
09:00	SESSION 18 Water and wastewater treatment and reuse (4)	SESSION 19 Climate change (1)	SESSION 20 Environmental data analysis and modelling (1)	SESSION 21 Environmental biotechnology and bioenergy	SESSION 22 Sustainability & the SDGs	PFAs workshop (V)	LIFE CLIMAMED Workshop (1)
10:30-11:00	Plenary speech						
	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II	Room VR1	OFFICE I
11:30	SESSION 23 Hydrology and water resources management (1)	SESSION 24 Climate change (2)	SESSION 25 Environmental data analysis and modelling (2)	SESSION 26 Circular economy and bioeconomy (2)	SESSION 27 Waste management and technologies (1)	PFAs workshop (V)	LIFE CLIMAMED Workshop (2)
	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II	Room VR1	
15:30	SESSION 28 Hydrology and water resources management (2)	SESSION 29 Artificial intelligence in environmental applications	SESSION 30 Citizen science	SESSION 31 Circular economy and bioeconomy (3)	SESSION 32 Waste management and technologies (2)	PFAs workshop (V)	
17:30-18:30		Poster session					

Saturday 2 September 2023

	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II
09:00	SESSION 33 Circular economy and Bioeconomy (4)	SESSION 34 Advanced oxidation processes (1)	SESSION 35 Soil and groundwater contamination and remediation	SESSION 36 Emerging pollutants (1)	SESSION 37 EU projects showcase (1)
10:30-11:00	Plenary speech				
	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II
11:30	SESSION 38 Environmental management and policies	SESSION 39 Advanced oxidation processes (2)	SESSION 40 Environmental Health (1)	SESSION 41 Emerging pollutants (2)	SESSION 42 EU projects showcase (2)
	Room Zeus I	Room Athena I	Room Athena II	Room Hera I	Room Hera II
15:00	SESSION 43 Agroforestry, Forest and Agricultural Sustainability	SESSION 44 Water and wastewater treatment and reuse	SESSION 45 Environmental Health (2)	SESSION 46 Emerging pollutants (3)	SESSION 47 Energy recovery from waste
17.30-18.15	Plenary speech				
18:30	Closing ceremony (Room Zeus)				

PLENARY LECTURES

Wednesday 30 August 2023 (18.30)

Sustainable Water Management: Global and Regional Challenges and Opportunities

by Dionysiou D., University of Cincinnati, USA

Wednesday 30 August 2023 (19.15)

New challenges for water and wastewater infrastructures

by Belgiorno V., University of Salerno, Italy

Thursday 31 August 2023 (10:30)

Improving Drinking Water Safety: Addressing New Impacts and Identifying Important Toxicity Drivers

by Richardson S., University of South Carolina, USA

Thursday 31 August 2023 (11:30)

Paradigm shift from waste and wastewater treatment to Resource Recovery

By Taherzadeh M.J., University of Boras, Sweden

Friday 1 September 2023 (10.30)

Bacterial Battle: Unleashing Nature's Mediators to Combat Biofouling

by Choo K-H., Kyungpook National University (KNU), South Korea

Saturday 2 September 2023 (10.30)

High-Resolution Mass Spectrometry Proteomics in Wastewater-based Epidemiology: Discovery of large biomolecules as biomarkers of population and industrial activities

by Barcelo D., Catalan Institute for Water Research (ICRA-CERCA), Spain

Saturday 2 September 2023 (17.30)

Emerging biotechnologies supporting transition to Bioeconomy

by Angelidaki I., Technical University of Denmark, Denmark

KEYNOTE LECTURES

Thursday 31 August 2023

Circular business model in the era of fashion waste

by Zorpas A., Open University of Cyprus, Cyprus

Session 6 ESG (Environmental, Social and Governance) and circular economy

Room Hera II, 09:00-09:30

Combined management of food waste and municipal wastewater

by Lyberatos G., National Technical University of Athens, Greece

Session 7 Water and wastewater treatment and reuse

Room Zeus I, 12.00-12.30

Valuing water for a Blue Circular Economy: advanced technologies for turning wastewater treatment plants into sustainable biorefineries

by Naddeo V., University of Salerno, Italy

Session 13 Water and wastewater treatment and reuse

Room Zeus I, **15.30-16.00**

Friday 1 September 2023

Climate-resilient Regions through Systemic Solutions and Innovations: the ARSINOE project

Laspidou C., University of Thessaly, Greece

Session 19 Climate change

Room Athena I, 09.00-09:30

Improving the utilisation of rainwater and effluent in urban areas

Venables J., Venables Consultancy, UK

Session 23 Hydrology and water resources management

Room Zeus I, 11.30:12:00

Microbes assisting the Green Transition

Angelidaki I., Technical University of Denmark, Denmark

Session 26 Circular economy and bioeconomy

Room Hera I, 11:30-12:00

Separate collection of biowaste: current status of implementation across the EU

by Giavini M., CIC Italian Composting and Biogas Association, Italy

Session 27 Waste management and technologies

Room Hera II, 11.30-12.00

Customizing global hydrological models for local applications: It is not only about informative data!

by Pechlivanidis I., Swedish Meteorological and Hydrological Institute (SMHI), Sweden

Session 28 Hydrology and water resources management

Room Zeus I, 15.30-16.00

Opportunistic Integrated Communication and Weather Sensing	Session 29 Artificial intelligence in environmental applications
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by Messer H., Tel Aviv University, Israel

Room Athena I, 15:30-16:00

Future trends on circularity comparing with state of the art	Session 31 Circular economy and bioeconomy
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Demetriou G., Circular Economy Research Center (CERC), École des Ponts Business School, France

Room Hera I, 15:30-16:00

Never let a good crisis go to waste	Session 32 Waste management and technologies
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Gidarakos E., Technical University of Crete, Greece

Room Hera II, 15:30-16:00

Saturday 2 September 2023

Degradation of Contaminants of Concern on Reactive Surfaces: Kinetics, Mechanisms and Transformation Products	Session 34 Advanced oxidation processes
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Dionysiou D., University of Cincinnati, USA

Room Athena I, 09:00-09:30

Next generation environmental monitoring data for chemicals management: the NORMAN approach	Session 36 Emerging pollutants
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Slobodnik J., Environmental Institute, Slovakia

Room Hera I, 09:00-09:30

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ORAL PRESENTATIONS

Thursday 31 August

Session 2 Water and wastewater treatment and reuse (1)

Room Zeus I

Chairs: Naddeo V., Dionysiou D.

09:00-09:15 Castrogiovanni F. , Salerno C. , Berardi G., Tumolo M., Pollice A.

[522] An easy numerical evaluation of the DM growth in Self-Forming Dynamic Membrane Bioreactors (SFD MBR) for Wastewater Treatment

09:15-09:30 Ren S., Peng Y.

[385] One-stage and multistage anoxic/oxic systems based on continuous plug-flow anammox process for mature landfill leachate treatment

09:30-09:45 Papaslioti, E.M., Tabuteau H, Vantelon D., Le Bouteiller P., Greneche J.M., Fernández-Martínez A., Charlet, L.

[35] Retention potential of contaminants by (nano)magnetite in batch and microfluidic systems

09:45-10:00 Dessì E., Milia S., Cara S., Carucci A.

[91] Concomitant phosphorus and nitrogen removal from agro-industrial wastewater through Partial Nitritation/Anammox process

10:00-10:15 Papamichael I., Tsangas M., Economou F., Bandi D., Samaras P., Zorpas A.

[412] LCA of wastewater treatment plant for energy valorization of primary solids

10:15-10:30 Khamis F., Hegab H., Arafat H., Banat F., Hasan S.

[96] Development of pH-Responsive Adsorptive Ultrafiltration Membrane for the treatment of Heavy Metals from Aqueous Solution

Session 3 Recycling of materials to new products

Room Athena I

Chairs: Alexopoulos N.

09:00-09:15 Lourmpas N., Efthimiadou E., Filippidis A., Papanikos P., Lekkas D., Alexopoulos N.

[248] Degradation assessment of high-density polyethylene (HDPE) debris after long exposure to marine conditions

09:15-09:30 Ferreiro-Dominguez N., Salman S., Mosquera-Losada M.R.

[329] Chemical properties of plant-based biochar to be used as soil fertiliser in Galicia (NW Spain)

09:30-09:45 Ying T., Sethupathi S., Hon L.

[456] Coffee ground biosorbent for nitrite and nitrate recovery and soil

nutrient

09:45-10:00 Lourmpas N., Kyriakakis E., Efthimiadou E., Papanikos P., Lekkas D., Alexopoulos N.

[515] Towards sustainable plastics recycling: assessing the integrity status of polypropylene (PP) debris to recycle marine-degraded materials

10:00-10:15 Alexopoulos N., Filippidis A., Lekkas D., Metaxa Z., Prokopiou V.

[532] EPS waste management from coastal cleaning actions: identification of contamination sources, collection, treatment, and re-use in cement-based materials

Flash presentations

10:15-10:18 Liotta I., Avolio R., Castaldo R., Gentile G., Errico M.E., Cocca M.

[108] Recycling approaches of marine plastic litter (V)

10:18-10:21 Langousi I., Markou G., Arapoglou D.

[113] Valorization of poultry manure extract enriched with sodium acetate in mixotrophic cultivation of Auxenochlorella protothecoides

10:21-10:24 Castro A., Gomes A., Correia A., Ribeiro H., Queirós A.

[116] Reimbursement of aluminum and PET packaging project at a University Campus: a case study

10:24-10:27 Butu A., Rodino S., Butu M.

[218] Microbial inoculum production for bioleaching of critical metals from tailings

Session 4 Sustainable development in insular regions under tourism pressures: an integrated approach (1)

Room Athena II

Chairs: Spilanis I., Lekkas D.F.

09:00-09:15 Spilanis I., Veriou S.

[561] Carrying capacity in islands. The case of Mykonos

09:15-09:30 Spilanis I., Katsounis Y., Alexiou E., Mitropoulou A.

[564] Integrated approach for Sustainable Development in islands under tourism pressure: First findings Serifos and Tinos

09:30-09:45 Pagoni I., Polydoropoulou A., Anagnostopoulos K., Gioldasis C., Spilanis I.

[560] Sustainable mobility on insular regions with significant tourism pressures

09:45-10:00 Daskalakis I., Sapountzaki K.

[541] Conflicts between development patterns, hydrological resilience and water justice in insular tourism destinations – the necessity for water governance.

10.00-10.15 Skiniti G., Lilli M., Skarakis N., Tournaki S., Nikolaidis N., Tsoutsos T.

[246] Environmental monitoring and sustainable planning for tourism in Balos lagoon in Western Crete

10:15-10:30 Leka A., Dionysopoulou A., Papadopoulou M.

[585] Tourism Carrying Capacity in Natural Protected Areas. The case of Voidokilia Beach - Messinia, Greece

Session 5 Sustainable production and management of biomass

Room Hera I

Chairs: **Fountoulakis M., Taherzadeh M.J.**

09:00-09:15 Patsios S., Batsioula M., Skoutida S., Gerololios D., Melas L., Karkanias C., Karanasiou A., Saliakellis P., Malamakis A., Banias G. F.

[294] Mapping of available biological feedstock streams: The case of agro-industrial waste and by-products in the Region of Central Macedonia - Greece

09:15-09:30 Orfanou A., Daskaloudis I., Wern B., Vakalis S. Lekkas D.,

[372] Towards bioeconomy implementation – hotel's biomass potential and the use of it

09:30-09:45 Attia M. H.

[496] Paradigm Shift Towards Integrated Sustainability and High Performance Machining

09:45-10:00 González Martinez M., Graul T., Nzihou A.

[452] Preparation, Characterization And Utilization Of Biosourced Nickel And Iron-Based Catalysts For Hydrogen Production

10:00-10:15 Carone M., Costamagna L., Zanetti M., Riggio V.

[481] Assessment of water reuse potential for the cultivation of the red microalga *Galdieria sulphuraria*

10:15-10:30 Costamagna L., Carone M., Zanetti M., Riggio V.

[482] Evaluation of microalgae CO₂ bio-fixation efficiencies under controlled growth conditions in a closed pilot-scale planar photobioreactor

Flash presentations

10:30-10:33 Lorwanishpaisarn, N., Kaewkannetra, P.

[510] Valorisation of biomass waste into bioproduct: Potential use of cannabis extracts for bacterial inhibition activity

Session 6 ESG (Environmental, Social and Governance) and circular economy

Room Hera II

Chairs: **Zorpas A., Voukkali E.**

09:00-09.30 *Invited speaker* Zorpas A.

Circular business model in the era of fashion waste

09:30-09:45 Miranda A., Fidélis T., Roebeling P., Meireles I.

[95] Water-wise approaches for circular cities – lessons learned from Amsterdam.

09:45-10:00 Alizadeh L., Liscio M.C., Sospiro P.

[363] The Phenomenon of Greenwashing In The Fashion Industry: A Conceptual Framework

10:00-10:15 Liogkas V.

[447] Circular Cities: Challenges and Opportunities towards their transition to a green, smart and circular economy.

10:15-10:30 Dedi L., Nađ T.

[494] Volatilities and returns of selected ESG ETFs and SRI ETFs

Flash presentations

10:30-10:33 Tripathi S., Kiritisi A., Patinotis I.

[519] Collective Action for Sustainable Water Resource Management: Analytical Framework and Company Initiatives

Session 7 Water and wastewater treatment and reuse (2)

Room Zeus I

Chairs: Hansen H., Verlicchi P.

12.00-12.30 *Invited speaker* Lyberatos G.

Combined management of food waste and municipal wastewater

12:30-12:45 Cairone S., Hasan S., Zarra T., Belgiorno V., Naddeo V.

[353] Optimization of wastewater treatment by integration of artificial intelligence techniques: recent progress and future perspectives

12:45-13:00 Wu F., Deng F., Liu S., Hose G., Simon G.

[357] Understanding the alteration of organic pollutants and microbiome profiles in a petrochemical wastewater biotreatment process

13:00-13:15 Di Trapani D., Cosenza A., Bosco Mofatto P., Mannina G.

[422] Oxic-Settling-Anaerobic under intermittent aeration: effect on system performance, sludge minimization and greenhouse gas emissions

13:15-13:30 Posavcic H., Halkijevic I., Vouk D., Nakic D.

[439] Settling and filtration experiments for the removal of flocs produced by a hybrid sono-electrochemical process

13:30-13:45 Angus F., Clemente E., Ballesteros Jr. F.

[139] Investigative Study on the Effectivity of Plant-Based Coagulants for the Siltation Pond of an Aggregate Crushing Plant in Southern Luzon, Philippines

13:45-14:00 Carlier J., Lara-Moreno A., Ngonyani A., Martins A., Villagomez A., Igobodo B., Cox C., Ismail F., Marín-Beltrán I., Palma T., Costa M.

[371] Selection of bacterial strains to bioaugment granular sludge and improve the removal of recalcitrant pollutants

14:00-14:15 Karkou E., Savvakis N., Aryblia M., Arampatzis G.,

[565] Modelling Closed-Water Loops in the Process Industries

Flash presentations

14:15-14:18 Hansen H., Gutierrez C., Alarcon J., Lazo A., Hansen M., Lazo P., Ortiz R.

[153] Use of residues from Eucalyptus Globulus as biosorbents for cadmium removal

14:18-14:21 Hansen M., Gutierrez C., Lazo A., Lazo P., Hansen H.

[271] Application of electrochemical peroxidation with nanoscale zero-valent iron particles (nZVI) for selenium removal from oil refinery wastewater

Session 8 Beach erosion of island beaches in Eastern Mediterranean (Greece and Cyprus): Assessment, monitoring and management

Room Athena I

Chairs: **Hasiotis T., Velegrakis A.**

12:00-12:15 Velegrakis A., Monioudi I., Voudoukas M., Tzoraki O., Hasiotis T.

[490] Drivers and impacts of beach erosion in Eastern Mediterranean Islands

12:15-12:30 Velegrakis A., Papadatou K., Hasiotis T., Monioudi I., Hadjimitsis D., Kontopyrakis K.

[477] Coastal flood and erosion risk under climate change: An overview of policies and legislation in Greece and Cyprus

12:30-12:45 Hasiotis T., Velegrakis A., Hadjimitsis D., Loizidi M.

[295] Beach erosion due to climate change: evaluation and best mitigation practices in touristic beaches of North Aegean Islands and Cyprus – The methodological structure of BEACHTECH project

12:45-13:00 Chatzipavlou A., Andreadis O., Psarros F., Hasiotis T., Evagorou E., Loizidi M., Chrysostomou G.

[298] Morphological changes recorded from an automated beach optical monitoring system in a highly touristic pocket beach, Coral Bay, Pegeia, Cyprus

13:00-13:15 Gkaifyllia A., Sahtouris S., Đorđević N., Papasarafianou S., Monioudi I., Tzoraki O., Hasiotis T.

[511] Coastal Zone Vulnerability Analysis in East Mediterranean Basin: Greece, Cyprus and Montenegro

13:15-13:30 Monioudi I., Chatzipavlou A., Nikolaou A., Velegrakis A., Hasiotis T.

[478] Exploring beach visitors' willingness to pay for protecting island beaches from erosion: The case of Marmari beach in Kos, Greece

13:30-13:45 Chatzipavlou A., Monioudi I., Velegrakis A., Chalazas T., Chatzistratis D.

[453] Application of a Bioclimatic Index for Evaluating the Attractiveness of Two Highly Touristic Beaches in Santorini and Kos

Flash presentations

13:45-13:48 Monioudi I., Andreadis O., Chatzistratis D., Chalazas T., Hasiotis T., Velegrakis A., Monioudis E., Mettas C., Koutsantonaki C.

[299] An Example of a Detailed Beach Inventory at an Island Scale: The Case of Chios, Greece

13:48-13:51 Stamatiadou V., Mazaris A., Katsanevakis S.

[454] Uncovering the Hidden Treasures: A Meta-Analysis and Map of the Monetary Value of Mediterranean Seagrass Ecosystem Services

Session 9 Sustainable development in insular regions under tourism pressures: an integrated approach (2)

Room Athena II

Chairs: **Spilanis I., Lekkas D.F.**

12:00-12:15 Manolia M., Orfanou A., Klontza E.E., Hatziantoniou M. Lekkas D.F.

[418] Insights from empirical data and prevention techniques for food wastage in the hotel industry

12:15-12:30 Iakovoglou V.

[548] Ecotourism; a tool to achieve sustainable Ecosystems

Session 10 Circular economy and bioeconomy (1)

Room Hera I

Chairs: **Fountoulakis M., Taherzadeh M.J.**

12:00-12:15 Soleimani T., Hayek M., Junqua G., Salgues M., Souche J.

[20] Environmental and economic assessment integrated into laboratory-based scenario development for the valorization of dredged sediment

12:15-12:30 Filippou K., Bouzani E., Kora E., Ntaikou I., Papadopoulou K., Lyberatos G.

[310] Polyhydroxyalkanoates (PHAs) Production from the Liquid Fraction of dried/shredded Food Waste

12:30-12:45 Tsaridou C., Karanasiou A., Sioutopoulos D., Plakas K., Tzioumaklis C., Patsikas N., Gliaos P., Karabelas A.

[314] Nutrients recovery from liquid anaerobic digestate by combining nanofiltration and struvite precipitation - The case of dairy effluents valorization (V)

12:45-13:00 Kazana V., Raptis D., Topliceanu L., Arus A., Puiu P.G.

[525] Exploring awareness and practices of rural firms towards a circular economy: A study in rural areas of Greece and Romania

13:00-13:15 Dolgen D., Alpaslan M.

[194] Green Transformation of Organized Industrial Zones (OIZ) to Eco – Industrial Park (EIP): Experiences from Turkiye

13:15-13:30 Mendonça R., Roebeling P., Fidélis T., Saraiva M.

[102] Nature-based solutions and policy instruments towards an optimal urban design

13:30-13:45 Mgilane N., Marimuthu F., Maama H.

[521] Impact of environmental disclosure on financial health of manufacturing firms

Flash presentations

13:45-13:48 Kiouranakis G., Ioannou Z., Gkatzionis K., Papanikolaou S., Sarris D.

[345] Treatment of three agro-industrial wastewaters by dried bio-absorbent orange peels and brewery spent grains. (V)

13:48-13:51 Chaski C., Batziou E., Giannoulis K., Petropoulos S.

[301] The effects of biostimulant application on *Lavandula angustifolia* cultivation under deficit irrigation

13:51-13:54 Polyzos N., Paschoalinotto B., Compocholi M., Prieto M., Dias M., Barros L., Petropoulos S.

[307] Drought stress effect on crop development and chemical composition of field grown *Scolymus hispanicus* L. plants

13:54-13:57 Tsaoisis P.C., Andrikopoulos K.S., Mathioudakis G.N., Beobide A.S., Sideri S., Deze E., Voyatzis G.A.

[495] PLA based nanocomposites with Cellulosic and Lignocellulosic nanofibers as a biodegradable solution for green food packaging

Session 11 Ecology, environmental change and management

Room Hera II

Chairs: **Butu A., Luo y., Sukiasyan A.**

12:00-12:15 Akogwu S., Wan Maznah W.O., McGowan S., Luki S., Fielding J.

[21] Paleolimnological approach infers past environmental changes archived in lake sediments of Bukit Merah Reservoir, Malaysia.

12:15-12:30 Enova A.E., Jaraula C.M., Villanoy C.

[223] Decreased Dissolved Oxygen Affecting Sustainability of Mussel Farming in East Manila Bay, Philippines

12:30-12:45 Franco Grandas T.I., Furtado Torres F.C., Trindade H., Alvarez López V., Ferreiro-Dominguez N., Mosquera-Losada M.R.

[115] Knowledge Evolution in Agroecology in Mediterranean Areas: A Bibliometric Analysis

12:45-13:00 Pablo Núñez-Cárdenas, Guillermo San Miguel, José María de la Rosa Belén Diezma, Constantino Valero & Eva Cristina Correa

[498] Techno-economic, environmental and social assessment of precision agriculture for stone fruit production (V)

13:00-13:15 Sukiasyan A., Kirakosyan A.

[311] Season dynamics of pollution and changes in enzymatic activity in agricultural soil near an industrial area

13:15-13:30 Farruku M., Xhanari K., Xhaxhiu K., Lame A.

[406] Study Of The Performance Of Ruscus Aculeatus Leaves Alcoholic Extract As Corrosion Inhibitor For Carbon Steel In 1 M HCl Solution

Flash presentations

13:30-13:33 D'Elia L., Cicalese F., Grimaldi M., Fasolino I., Troisi E., Dello Ilio T., Zarra T., Belgiorno V., Naddeo V.

[509] Strategies for the implementation of the sustainable development in protected areas: the case study of the Regional Park of Monti Lattari (Italy)

13:33-13:36 Xhanari K., Farruku M., Xhaxhiu K., Kokalari E.

[408] Cornus Sanguinea Leaves Alcoholic Extract As Corrosion Inhibitor For Carbon Steel In Acidic Solutions

13:36-13:39 Varios G., Gialeli M., Zaragkali F., Roumelioti A., Tsioda G., Koufos G., Tapazidou P., Kakaroglou I., Antoniadis I., Troumbis A.

[288] Transforming wild rabbits' overpopulation problem into a local biotic resource of Lemnos island (V)

13:39-13:42 Merchán-Fernández Y., García Ontiyuelo M., Acuña Alonso C., Alvarez X.

[359] Study of Fragmentation And Land Use Changes In The Natural Parks of Galicia

13:42-13:45 Balestra V., Drudi L., Bellopede R.

[377] The invisible environmental impact of tourism in show caves: microplastic pollution in three Italian show caves

Session 12 Advanced oxidation processes and water treatment (V)

Room VR1

Chairs: Andrzejewski P., Nowakowski M.

12:00-12:15 Meropoulis S., Aggelopoulos C.

[70] Comparison between plasma microbubbles and gas-liquid dielectric barrier discharge (DBD) plasma for pollutants degradation in water (V)

12:15-12:30 Papalexopoulou K., Ronen A., Aggelopoulos C.

[72] Destruction of Perfluorooctanoic acid (PFOA) in water by cold atmospheric plasma (V)

12:30-12:45 Hayri-Senel T., Kahraman E., Sezer S., Erdol-Aydin N., Nasun-Saygili G.

[89] Removal Of Ciprofloxacin From Waste Water By Photocatalytic Method

With Waste Polystyrene And Tio2 Composites (V)

12:45-13:00 Immandhi A., Maddila S., Jonnalagadda S.

[479] Photocatalytic Degradation Of Aldrin Under The Influence Via Ozonation In The Presence Of Ag2O/Smfeo3 Under Visible Light (V)

13:00-13:15 Nowakowski M., Andrzejewski P., Wolski R.

[483] Application of KO2/ClO- advanced oxidation process to degradation of polycyclic aromatic hydrocarbons on example of phenanthrene (V)

13:15-13:30 Giannoulia S., Triantaphyllidou E., Tekerlekopoulou A., Aggelopoulos C.

[69] Adsorption of antibiotics and dyes with individual and simultaneous mechanisms onto halloysite nanoclay and regeneration by cold plasma bubbling technology of saturated adsorbent (V)

13:30-13:45 Lopez-Tojos L., Rodriguez E., Garcia R., Martinez-Tarazona M.R., Lopez-Anton M.A

[356] Removal Of Selenium From Polluted Water By Fexoy-Sucrose Foams (V)

13:45-14:00 Ouda M., Banat F., Naddeo V., Hasan S.

[82] Electrified membranes for microplastic fouling mitigation (V)

14:00-14:15 Gomes I., Arruda V., Simões M.

[203] Impact of synthetic musks on interspecies interactions among drinking water-isolated bacteria (V)

14:15-14:30 Alves A.S., Rodrigues C.S., Madeira L.M.

[196] Treatment of a Toluene Gas Stream by Persulfate-based Advanced Oxidation Process in a Bubble Column Reactor (V)

Session 13 Water and wastewater treatment and reuse (3)

Room Zeus I

Chairs: Choo K-H, Yavari Z.

15.30-16.00 Invited speaker Naddeo V.

Valuing water for a Blue Circular Economy: advanced technologies for turning wastewater treatment plants into sustainable biorefineries

16:00-16:15 Almashaqbeh O., Lyu T., Alsalhi L., Dotro G., Salaimeh L.

[73] Testing a pilot-scale of constructed wetlands for pharmaceutical wastewater treatment using Jordanian zeolitic tuff

16:15-16:30 Boguniewicz-Zablocka J., Naddeo V., Corpuz M.A.

[424] Sustainable and cost-effective approach for treatment of plating industrial wastewater effluents

16:30-16:45 Htwe, N.H.N., Rollon, A.P., Miyanaga, K. And Tanji, Y.

[276] Metagenomic profile of bacterial community and phage in domestic wastewater treatment plant

16:45-17:00 Tsamoutsoglou K., Gikas P.

[365] Application of the Advanced Primary Filtration (APF) process for upgrading overloaded Wastewater Treatment Plants

17:00-17:15 Yavari Z., Al Amri A., Nikoo M.R.

[403] The Occurrence and Risk Assessment of Microplastics: different treatment technologies for wastewater treatment plants in Oman

17:15-17:30 Hawkins J.

[586] Balaena - Floating offshore Island Utility Platforms

Flash presentations

17:30-17:33 Tsianta N., Keliri E., Fotidis I., Mazur-Marzec H., Neofytou G., Chrysargyris A., Tzortakis N., Antoniou G. M.

[574] CYANOTECH: A sustainable and innovative management system for toxic cyanobacteria blooming of surface waters with combined energy production, sustainable agriculture, and food safety

17:33-17:36 Vagi M.C. Leventelli M. Petsas A.S.

[467] Adsorption-desorption of methylene blue dye onto marine sediments: Kinetics and equilibrium studies

Session 14 Marine Litter - New perspectives and methodologies

Room Athena I

Chairs: Papatheodorou G., Topouzelis K.

15:30-15:45 Alexiadou I.

[550] Understanding local communities' perception of marine pollution: a case study of two islands of the Cyclades, Greece

15:45-16:00 Topouzelis K., Papakonstantinou A., Moustakas A., Kosmopoulou A., Xirotagarou P.

[547] Exploring the Coastal Marine Litter Observatory (CMLO): An Innovative Approach for Monitoring and Managing Marine Litter Pollution

16:00-16:15 Yang Z., Jespersen S., Hansen D., Pajuro K., Liu F., Vollertsen J.

[486] Capturing Microplastics from Aquatic Systems Using Vortex- based Cyclone Technique

16:15-16:30 Giannattasio A., Giannattasio A., Iuliano V., Oliva G., Giaquinto D., Capacchione C., Korshin G., Barcelo D., Naddeo V., Belgiorno V., Buonerba A., Grassi A.

[540] Low molecular weight polymers in aquatic environments as pollutants of emerging concerns: recovery, quantification and microstructure

16:30-16:45 Kosmopoulou A.

[549] Using stories to tackle marine pollution

16:45-17:00 Kouvara K., Kosmopoulou A., Fakiris E., Christodoulou D., Filippidis A., Katsanevakis S., Ioakeimidis C., Geraga M., Xirotagarou P., Papatheodorou G.

[554] Assessing Marine Litter on beaches and the seafloor in the Saronikos

Gulf, Greece

17:00-17:15 Karapanagioti H., Mourkogiannis N., Tzachristas A., Yeo B.G., Alidoust M., Takada H.

[557] PCBs measured in plastic pellets from different beaches in Saronikos Gulf, Greece

17:15-17:30 Fakiris E., Papatheodorou G., Kordella S., Christodoulou D., Galgani F., Geraga M.

[589] Shallow Seafloor Litter: Tracking their Sources and Spatiotemporal Trends in the Presence of Oceanographic Drivers through efficient monitoring.

17:30-17:45 C.A. Velis, J.W. Cottom, E. Cook

[597] Modelling plastic pollution at local level to inform action plans: Plastic Pollution Calculator

Session 15 Air pollution and health

Room Athena II

Chairs: **Marques de Oliveira M.M., Bellopede R.**

15:30-15:45 Lopes D., Augusto B., Rafael S., Graça D., Rosa M., Relvas H., Ferreira J., Reis J., Lopes M.

[16] Multi-scale high-resolution atmospheric emission inventory for the transport sector

15:45-16:00 Drudi L., Giardino M., Janner D., Pognant F., Matera F., Sacco M., Bellopede R.

[88] Black Carbon characterization with Raman spectroscopy and machine learning techniques: first results for urban and rural area

16:00-16:15 Ravina M., Cerutti A., Marotta E., Zanetti G., Ruffino B., Zanetti M.

[272] Evaluation of solid sorbents for acid flue gas emissions treatment

16:15-16:30 D'Elia L., Longobardi A., Pirozzi F., Bonadies A., Spagnuolo M., Ferraro S., Del Negro G., Zarra T., Belgiorno V., Coscioni E., Naddeo V.

[415] Air pollution and cardiovascular disease: state of art and control strategies within "One Health" approach

16:30-16:45 Zarra T., Mariniello A., Marino V., Oliva G., Valentino E., Lalicata G., Caputo F., Naddeo V., Belgiorno V.

[506] Air quality monitoring and control in complex environments by advanced and integrated system

16:45-17:00 Teixeira J., Morais S., Rodrigues F., Delerue-Matos C., Oliveira M.

[109] Assessment of exposure to fine and ultrafine particulate-bound polycyclic aromatic hydrocarbons during prescribed burns

17:00-17:15 Panlaqui A., Ballesteros Jr. F.

[143] Radon Levels Inside the Caves of Bohol Island, Philippines

17:15-17:30 Fameli K., Kotrikla A., Polydoropoulou A., Mihalopoulos N., Grivas G.,

Stavroulas I.

[331] Seasonal fluctuations of PM2.5 concentrations at six Greek islands

Flash presentations

17:30-17:33 Christofidou M., Michael N., Rossidou E., Kozakou S., Poulli K., Kokkinofta R.

[414] Monitoring Air Quality in Cyprus

17:33-17:36 Gkaras S., Triantafyllou E., Dougali A., Diamantopoulos C., Tolis E.
Triantafyllou A.

[123] Source profile of PM10 emission sources in Western Macedonia, Greece, during 2022

17:36-17:39 Muhammad Nazir A.U., Ramli N.A., Ismail M.R., Awang N.R., Nordin N., Abdul Wahab S.Z.

[451] Fluctuation of Nighttime Ground Level Ozone Due to Artificial Light

Session 16 Life cycle analysis (LCA)

Room Hera I

Chairs: Tsangas M., Abeliotis K.

15:30-15:45 Liscio M.C., Sospiro P.

[283] Life Cycle Assessment on fashion industry: four case studies

15:45-16:00 Koidis C., Vlachokostas C., Achillas C., Michalidou A., Aidonis D., Bantsos A., Makris D., Mertzanakis C., Savva C.

[158] Design requirements for the development of an LCA Engine

16:00-16:15 Cely-Parra P., San Miguel G., Beltrán M.

[180] Environmental and economic Life Cycle Assessment of a Spanish whisky (V)

16:15-16:30 Tournaviti M., Savva C., Vlachokostas C.

[193] Comparative life cycle assessment of lithium-ion batteries

16:30-16:45 Karagkounis A., Fragkou E., Tsegas G., Barmpas F., Moussiopoulos N.

[354] LCA of Applying a Smart Farming System – Implementing a Territorial Approach for Recommending Good Agricultural Practices

16:45-17:00 Karagkounis A., Fragkou E., Barmpas F., Efthimiou G., Tsegas G., Moussiopoulos N.

[355] Life Cycle Assessment and Cost Benefit Analysis for the integrated assessment of an innovative Mn-TiO₂ nanoparticle photocatalytic paint

17:00-17:15 San Miguel G.

[475] Classification, characterisation, standardisation and weighting in life cycle analysis (LCA): a case study of teaching innovation for higher education (V)

17:15-17:30 Vardopoulos I., Chroni C., Synani K., Abeliotis K., Lasaridi K.

[382] More than meets the eye: Uncovering the social impacts of a household hazardous waste management system

Flash presentations

17:30-17:33 Stylianou M., Papamichael I., Voukkali I., Tsangas M., Omirou M., Ioannides I., Zorpas A.

[332] Life Cycle Assessment of fertilization practices on greenhouse gas emissions in Cyprus

17:33-17:36 Martinez-Hernando M., Bolonio D., Garcia-Martinez M., F. Ortega M.F., Llamas J.

[67] Environmentally-Extended Multi-Regional Input-Output Analysis of neodymium, cobalt and lithium used in electric vehicles (V)

Session 17 Renewable energy sources

Room Hera II

Chairs: **Vakalis S., Venables R.**

15:30-15:45 Spyridonidou S., Vagiona D.

[18] Social Acceptability of Offshore Wind Projects in Greece: Citizen Perspectives on Challenging Issues of Site-Selection Problem

15:45-16:00 Venables R.

[62] Domestic Photo-Voltaic installations - their contribution and practicalities

16:00-16:15 Vlachokostas C., Papadopoulos A., Makris D., Alexopoulos S.O., Schruefer J., Hoegemann D.

[124] Techno-economic assessment of a high temperature thermal storage integration into a sludge drying process in combination with PV electricity

16:15-16:30 Longinos S.N., Tuleugaliyev M., Begaliyev D., Hazlett R.

[161] Effects of High Temperature and Liquid Nitrogen Cooling: A Case Study of granite rocks from Kazakhstan

16:30-16:45 Falaras P.

[277] Interface engineering approaches for efficient and robust perovskite solar cells

16:45-17:00 Bertsou M.M., Baltas E.

[208] Water scarcity, energy independence and the role of hybrid renewable energy systems

17:00-17:15 Boulogiorgou D., Kaldellis J.

[337] Time evolution of renewable energy applications social acceptability. The wind energy case in decarbonization areas

17:15-17:30 Konuklu Y., Yildirim B., Gezici O.

[530] A new material for microencapsulation of phase change material (V)

17:30-17:45 Konuklu Y.

[546] Thermal energy storage properties of gelatin-gum arabic microcapsules containing lauric acid (V)

Flash presentations

17:45-17:48 Alajlan M., Alsalem K.

[463] Solar attenuation due to particulate matter in arid environments

Friday 1 September

Session 18 Water and wastewater treatment and reuse (4)

Room Zeus I

Chairs: Richardson S., Noutsopoulos C.

09:00-09:15 Keliri E., Zindrou A., Deligiannakis Y., Antoniou G. M.

[573] Application of peroxide-releasing compounds for the removal of cyanobacteria cyanobacteria harmful blooms (cyano-HABs) in contaminated waterbodies: properties, toxicity and mitigation efficiencies (V)

09:15-09:30 Verlicchi P., Grillini V., Maffini F., Benini A., Casoni R., Mari M.

[57] Drinking water from surface and ground water: production costs and influence of the climate change

09:30-09:45 Plevri A., Ioannidis C., Noutsopoulos C., Mamais D.

[290] Global Sensitivity Analysis of a Mathematical Model for AnMBR Systems Treating Municipal Wastewater

09:45-10:00 Yueting W., Hang X., Tianpei M.

[419] Unveiling the transformation of dissolved organic matter in drinking water treatments based on FT-ICR-MS and spectral analysis

10:00-10:15 Tournis I., Sideratou Z., Kouvelos E., Sapalidis A., Panagiotaki K.

[252] Wetting study of PVDF - carbon nanodiscs membranes for water treatment applications via membrane distillation

10:15-10:30 Larasati A., Bernadet O., Pinela S., Meulepas R., Gagliano M.

[368] Biological Oxygen-dosed Activated Carbon (BODAC) filters - A bio-based treatment for wastewater reuse and reclamation

Session 19 Climate change (1)

Room I Athena I

Chairs: Laspidou Ch., Bagtzoglou A.

09.00-09.30 *Invited speaker* Laspidou C.

Climate-resilient Regions through Systemic Solutions and Innovations: the ARSINOE project

09:30-09:45 Tzouvaras N.

[297] Electricity generators in the European Union emissions trading system: definitional aspects in the light of a judicial decision

09:45-10:00 Mavroulidou M.

[333] A study of the properties of alkali activated cement concrete with potassium carbonate activator.

10:00-10:15 Safdar M., Mavroulidou M., Gunn M., Garelick J.

[347] Investigating ammonia-free urea hydrolysis biocementation processes

10:15-10:30 Bithas K., Latinopoulos D., Petridou F., Spanos I., Sotiropoulos A., Haroutounian S., Roussos P., Montanaro G., Evergetis E., Intrigliolo D., Misis A., Sotiropoulou R., Tagaris E.

[376] Exploring the mitigation potential of tree crops ecosystems in the Mediterranean region

Session 20 Environmental data analysis and modelling (1)

Room Athena II

Chairs: **Simone A., Zarra T.**

09:00-09:15 Ozcan T., Konyalioglu A.K., Beldek B.

[117] Grey forecasting models optimized by firefly algorithm for natural gas consumption prediction in Turkey (V)

09:15-09:30 Camaclang R., Ballesteros Jr. F., Labao A.

[171] Predicting Land Cover Map Changes in the Philippines for use in LULC-based Carbon Capture Monitoring using Deep Learning

09:30-09:45 Li L., Li X.

[387] Remote Sensing Mapping of Fine Particulate Matter Concentrations by Random Forest Modeling

09:45-10:00 Schlutow A., Schröder W., Nickel S., Jenssen M.

[130] Rule-based Quantification and Mapping of Ecosystem Services Across Three Spatial Scales by Example of Germany (V)

10:00-10:15 La Cecilia D., Malvolfi G., Despini F., Teggi S., Bigi A., Bach P.

[287] Urban Heat Island mitigation scenarios by Blue-Green Infrastructures modelling

10:15-10:30 Dimos S., Fotakis D., Mathioudaki A., Papadopoulos K.

[77] Fair and Efficient Allocation of EU Emission Allowances

Session 21 Environmental Biotechnology and Bioenergy

Room Hera I

Chairs: **Angelidaki I., Papadopoulou K.**

09:00-09:15 Vela-Garcia N., Bolonio D., J. Chuck C., Garcia-Martinez M.

[71] Biorefinery model for the production of biofuels and bioproducts from lignocellulosic biomass (V)

09:15-09:30 Garcia S., Muñoz R., Lebrero R.

[94] Enrichment of mesophilic syngas-converting consortia for methane production

09:30-09:45 Bonaccorsi L., Fazzino F., Fotia A., Malara A., Pedullà A., Calabò P.

[448] Direct upgrading of biogas produced by anaerobic digestion:

preliminary results at laboratory scale

09:45-10:00 Pilafidis S., Tsouko E., Diamantopoulou P., Gkatzionis K., Papagiannopoulos A., Sarris D.

[502] Production of sustainable exopolysaccharides from *Schizophyllum commune* using brewery spent grain and physicochemical and rheological characterization (V)

10:00-10:15 Fodor F., Müller B., Solti Á., Arcoverde Cerveira Sternér V., Rana D., May Z., Sipos G.

[523] Increasing Tolerance of the Biomass Plant Szarvasi-1 Energy Grass to Abiotic Stresses by S-methylmethionine and Na-salicylate

10:15-10:30 Talapatra K.N., Ghosh U.

[505] Comparative Analysis of Two Microalgae-Bacterial Symbiotic Association Growth in Papermill Effluent Enriched Through Food Waste Digestate

Session 22 Sustainability & the SDGs

Room Hera II

Chairs: **Chroni C., Kotrikla A.**

09:00-09:15 Kerpelis P., Golfinopoulos S., Alexakis D.

[61] Re-assessment Estimation of the Wastewater Treatment Plants' Seismic Vulnerability

09:15-09:30 Dereń A., Kamińska A., Rutkowska M., Skonieczny J.

[151] Green management as an instrument of activation of employees in the mature age

09:30-09:45 Romano F., Mariniello A., Oliva G., Naddeo V., Belgiorio V., Zarra T.

[375] OTAER biotechnology: a new pathway of reaching the Zero Net Carbon in Odours Treatment

09:45-10:00 Astara Z., Panagiotakis I., Dermatas D.

[461] Evaluating effectiveness of Environmental Impact Assessment procedure in Greece.

10:00-10:15 Chalastani V., Veniou M., Tsoukala V.

[263] Assessing the progress of insular areas in relation to the Sustainable Development Goals (SDGs): The case of six isolated Greek islands

10:15-10:30 Amorocho-Daza H., van der Zaag P., Susnik J.

[32] Ethical considerations of participatory modelling in the context of sustainable development

Flash presentations

10:30-10:33 Vgenopoulou E., Evgenoglou L., Damikouka I.

[457] The education approach to sustainable water management (V)

Session 23 Hydrology and water resources management (1)

Room Zeus I

Chairs: **Gani M.A., Pechlivanidis I.**

11.30-12.00 *Invited speaker Venables J.*

Improving the utilisation of rainwater and effluent in urban areas

12:00-12:15 Susnik J., Masia S., Teutschbein C.

[48] Water centrality to enabling water-energy-food systems

12:15-12:30 Farmaki P.

[279] Behind the scenes: The WFD 2000/60 policy making.

12:30-12:45 Yang F., Gato-Trinidad S., Hossain I.

[370] Evaluating the water quality of stormwater runoffs in urban area (V)

12:45-13:00 Gani M.A.

[259] Changes in geomorphic units alter nitrogen fixation in a large lowland tropical river

13:00-13:15 Preziosi E., Parrone D., Frollini E., Ciotoli G., Sciarra A., Ruggiero L., Ghergo S.

[569] A comprehensive monitoring approach to evaluate the impact of an urban landfill on a naturally reducing aquifer

13:15-13:30 Kountouri J., Mettas C., Evagorou E., Hadjimitsis D.

[267] Development of flood risk maps using Remote Sensing Techniques in Cyprus

13:30-13:45 McBrien R., Tijani A.

[366] Coding Water Efficiency (V)

Flash presentations

13:45-13:48 Bandari A., Puttapparthi P.V., Sadhukhan S.

[65] Domestic water consumption determinants in urban neighborhoods: A case study of Vijayawada, India (V)

Session 24 Climate change (2)

Room Athena I

Chairs: Laspidou Ch., Bagtzoglou A.

11:30-11:45 Li M., Zheng X., Wang C.

[394] Fair guidance in ratcheting up the national net-zero emission ambitions

11:45-12:00 Oliveira M.Y., Guerrero C., Panagopoulos T.

[400] Review and evaluation of the methods for building the Carbon Farming Calculation Tool

12:00-12:15 Bagtzoglou A., Khadim F., Lazin R., Dokou Z., Anagnostou E.

[409] Assessing Climate Change Impacts in the Tana Basin, Ethiopia

12:15-12:30 Tsemekidi S., Tsoutsos T.

[66] Climate change, overheating and public health: analysis of dynamic and correlations in EU regions (V)

12:30-12:45 Soares S., Delerue-Matos C., Oliveira M.

[107] Climate change, air pollution, and risks to honeybees – a review of biomonitoring data

12:45-13:00 Kotrikla A., Fameli K., Polydoropoulou A., Di Ciommo F., Alonso Raposo M.

[325] Living labs in climate response

13:00-13:15 Antoniou A., Tsegas G., Moussiopoulos N.

[358] Dynamical downscaling of medium- and short-term climate series for assessing climate impacts on a world heritage site

13:15-13:30 Rodriguez Rigueiro F.J., Santiago-Freijanes J.J., Fountas S., Panoutsopoulos H., Ferreiro-Dominguez N., Mosquera-Losada M.R.

[114] EIP-AGRI innovation drivers on the path to climate change mitigation and adaptation: multi-actor approach mapping

13:30-13:45 Njaim G., Giannaros E., Varvarousis A.

[570] Island sustainability means much more than smart and green infrastructure. Learning from Astypalea.

13:45-14:00 Boycheva S., Dimitrov M., Zabov E., Winter F., Popova M.

[555] Utilization of alkaline converted ash blends from lignite and biomass combustion for carbon capture

14:00-14:15 Markaki M., Papadakis S.

[23] The Carbon Footprint of International Tourism in the European Union (V)

Flash presentations

14:15-14:18 Athanassiou M., Shanmugham J., Zavras A.

[434] Bidirectional effects between the dental industry and climate change

14:18-14:21 Zhang T., Chen L.

[389] Spatiotemporal Characteristics of Industrial Carbon Emissions in Anhui Province, China: A Multiscale Analysis

14:21-14:24 Polemis D., Mamalis V.

[504] The geopolitical risk index effect on the energy market, emissions and climate change

Session 25 Environmental data analysis and modelling (2)

Room Athena II

Chairs: **Simone A. Zarra T.**

11:30-11:45 Austero S., Resurreccion A., Rollon A., Ballesteros Jr. F., Kwan C., Herrera E.,

Sinoy M.C., Macasieb R.

[264] Predictive Transport Model of Bisphenol-A in Main Pampanga River (V)

11:45-12:00 Mazioti A.A., Kolovoyiannis V., Petalas S., Mamoutos I., Potiris E., Krasakopoulou E., Tragou E., Zervakis V.

[221] Simulating the fate of selected PAHs in Saronikos Gulf, Eastern Mediterranean, using a far-field water-quality model.

12:00-12:15 Celik N., Konyalioglu A.K.

[118] A Machine Learning Approach for the prediction of solid fuels consumption in Turkey (V)

12:15-12:30 Kalari K., Christodoulis K., Bali N., Theodoropoulou M., Tsakiroglou C.

[166] A Deep Learning Model, interpreted with an XAI technique, to simulate and optimize the remediation of oil-drilling cuttings in bubble flow reactors

12:30-12:45 Simone A., Cesaro A., Esposito G.

[202] Analysis of the Sars-COVID 19 trend: from time series to visibility graphs (V)

12:45-13:00 Agustin R., Rollon A., Kwan C., Ballesteros Jr. F.

[433] Assessment of Pesticide Occurrence, Attenuation, and Transport Dynamics in the Pampanga River Basin

13:00-13:15 Gkeka Serpetsidaki P., Tsoutsos T.

[131] A critical review of the site selection process for offshore wind farms (V)

Flash presentations

13:15-13:18 Despini F., Costanzini S., Parmeggiani D., Ferrari C., Teggi S., Muscio A., Silvestri M., Rabuffi F., Musacchio M.

[133] Capability of high resolution satellite images to characterize urban surfaces: spectra comparison and correlation with in field/lab measurements

13:18-13:21 Kakouri A., Ramacher M., Kuenen J., Speyer O., Gerasopoulos E., Athanasopoulou E.

[219] UrbEm: a method and tool to refine regional emission inventories for urban atmospheric studies

13:21-13:24 Delgado Y., Lopez E., Martin M., Llanos J., Fernandez-Morales F.J.

[462] Modelling metal and energy recovery from Acid Mine Drainage by means of Bioelectrochemical Technology (V)

13:24-13:27 Paraskevopoulou V., Panagopoulou G., Yfanti A., Anagnostou E., Vrettou E., Filippi G., Xarlis P., Botsou F., Andreopoulos N., Moratis D., Stergiou N., Damianou R., Chatziathanasiou C., Dalianis A., Tsiparis I., Dassenakis M.

[469] Anthropogenic metal pollution in Saronikos gulf: historical evolution and risk assessment based on selected sediment cores (V)

13:27-13:30 Butu M., Rodino S., Butu A.

[275] The benefits of introducing digitization in agricultural sectors

Session 26 Circular economy and bioeconomy (2)

Room Hera I

Chairs: **Vakalis S., Klontza E.**

11:30-12:00 *Invited speaker* Angelidaki I.

Microbes assisting the Green Transition

12:00-12:15 Almpani-Lekka D., Zavoleas Y.

[106] The building façade as an active skin: Water bioremediation through a probiotic layer system

12:15-12:30 Earnshaw S., Dedousis P., Vyrkou A., Pieri T., Arampatzis G., Angelis-Dimakis A.

[446] The AquaSPICE Industrial Symbiosis Enabling Platform

12:30-12:45 Lapp F., Brück F., Liebich T., Lang M., Theilen U., Weigand H.

[249] Biogas Desulfurization by Granulated Biomass Ash in a Fixed Bed Arrangement

12:45-13:00 Dodos G., Karonis D., Zannikos F.

[499] Utilization of olive pomace derivatives in the production of sustainable lubricants

13:00-13:15 Dodos G., Dima C., Kaframani N.

[508] Sustainability performance prospects across the lubricants value-supply chain

13:15-13:30 Kora E., Ntaikou I., Lyberatos G.

[126] Poly-hydroxyalkanoates production from mixed microbial cultures: effect of dissolved oxygen and pH

13:30-13:45 Plevri A., Gkoumas F., Koumaki E., Noutsopoulos C., Mamaïs D., Nikolaou M., Magrariatis M., Malamis S.

[103] Comparative evaluation of three different membranes for the treatment of a brewery and a dairy treatment effluent

13:45-14:00 Kiouranakis G.N., Margioulia D., Gkatzionis K., Ioannou Z., Papanikolaou S., Gunde-Cimerman N., Sarris D.

[346] Screening of oleaginous yeast *Trichosporon coremiiforme* EXF-8679 in commercial sugars and treatment of olive mill wastewaters (V)

14:00-14:15 Kanellos G., Monokrousou E., Tremouli A., Lyberatos G.

[250] Treatment of two-phase olive mill waste and degradation of phenolic compounds with simultaneous bio-electrochemical conversion of CO₂ to CH₄ using a Microbial Electrolysis Cell

Session 27 Waste management and technologies (1)

Room Hera II

Chairs: Lasaridi K., Lyberatos G.

11.30-12.00 *Invited speaker* Giavanni M.

Separate collection of biowaste: current status of implementation across the EU

12:00-12:15 Di Costanzo N., Cesaro A., Di Capua F., Mascolo M.C., Esposito G.

[90] Exploring the effects of static magnetic fields for the enhanced valorization of sewage sludge by anaerobic digestion

12:15-12:30 Vogt S., Brueck F., Schnabel K., Weigand H.

[284] Improving the homogeneity of a sewage sludge-based phosphorus fertilizer by Monte Carlo simulation of the production chain

12:30-12:45 Folino A., Gentili E., Komilis D., Calabò P.

[338] Lessons learned by modelling biogas production in an Italian state-of-the-art landfill active for 35 years

12:45-13:00 Premathilake D.S., Vaccari M., Botelho Junior A.B., Tenório J.S., Espinosa D.R., Colombi F.

[266] Valorization of waste graphite deriving from "End of Life Lithium-Ion Battery recycling" for a second use in wastewater treatment.

13:00-13:15 Hosseinipooya A., Li J.

[122] Development of Scenario-based Decision-Making Framework for Marine Oil Spill Waste Management

13:15-13:30 Lasaridi K., Chroni C., Abeliotis K., Boikou K., Sigala E.

[562] AI assisted food waste prevention in the hospitality sector: the case study of two hotels in Santorini and Kos, Greece

13:30-13:45 Chroni C., Fortatos S., Abeliotis K., Lasaridi K.

[563] Assessing self-reported food loss and waste in primary production in Greece

13:45-14:00 Caniani D., Mazzone G., Masi S., Mancini I.

[542] Community composting as a tool for sustainable municipal solid waste management and social and economic sustainability: a decision support tool

Session 28 Hydrology and water resources management (2)

Room Zeus I

Chairs: Pechlivanidis I., Gani M.A.

15:30-16:00 *Invited speaker* Pechlivanidis I., Musuuza J.

[34] Customizing global hydrological models for local applications: It is not only about informative data!

16:00-16:15 Gül B., Kayaalp N.

[381] Disaggregation of global climate model data to create idf curves under RCP8.5 scenario

16:15-16:30 Masia S., Susnik J., Indriksone D., Bremere I., Vamvakeridou-Lyroudia L.

[430] Assessment of policy impact on Water-Energy-Food-Climate- Land Nexus in Latvia

16:30-16:45 Khan N., Singh S. Afzal K., Simranjeet S.

[374] Advancements, design, and improvement strategies for modern- era membranes for the treatment of wastewater

Flash presentations

16:45-16:48 Tarawneh Z.

[386] Simulating the 1-hr Unit Hydrograph for the Ungauged Watershed of Swaqa

16:48-16:51 Chen L., Yu Z.

[388] Understanding Urban Expansion in the Yangtze River Delta Region: Insights for Urban Agglomeration Development

Session 29 Artificial intelligence in environmental applications

Room Athena I

Chairs: Yang Z., Messer H.

15:30-16:00 *Invited speaker* Messer H.

[444] Opportunistic Integrated Communication and Weather Sensing

16:00-16:15 Skianis K., Giannopoulos A., Spantideas S., Hatzaki M., Karditsa A., Trakadas P.

[100] SWIRL: Statistical downscaling for Wind Pattern Reconstruction using Machine Learning (V)

16:15-16:30 Pappas G., Siegel J., Papamichael I., Zorpas A.

[411] A Metaverse framework for waste management

16:30-16:45 Guerrero C. ,Panagopoulos T.

[455] Drone Imagery Combined with Soil Moisture Monitoring for Efficient Irrigation

16:45-17:00 Katsiri E.

[152] Air-19: Reliable monitoring of air quality and microorganisms in postpandemic municipality building

17:00-17:15 Suits K., Rajarao G., Kändler N., Vassiljev A., Annus I.

[303] Insights gained from stormwater e-monitoring in Viimsi, Estonia

17:15-17:30 Kounani A., Lavazos N., Tsimpiris A., Varsamis D.

[14] Sustainable Smart Agriculture: Plant disease detection with deep learning techniques in cotton cultivation (V)

17:30-17:45 Pan Y., Hui Q., Yang Z

[458] Low-cost and rapid paper-based microfluidic device for wastewater surveillance at low-resource settings

Flash presentations

17:45-17:48 Chrysanthopoulos E., Floros E., Pouliaris C., Tsirogiannis I., Kofakis P., Kallioras A.

[320] Monitoring soil water content using IoT Time and Frequency Domain Reflectometry Sensors

Session 30 Citizen science

Room Athena II

Chairs: Samaras P., Orfanou A.

15:30-15:45 Alexopoulos C., Karelis C., Keramidis P., Orfanou A., Lekkas D., Charalabidis Y.

[167] Analysing the indicators and the associated recommendations of household emission calculators

15:45-16:00 Bonincontro T., Cerneau J., Tena-Chollet F., Becerra S.

[256] How science-society interactions design post-mining territories: transdisciplinary patterns in Cevennes, France

16:00-16:15 Kazana V., Raptis D., Chrysanthidou E., Kazaklis A., Moumtzidou D., Papadopoulou D.

[489] Artificial Neural Network prediction of citizens' climate mitigation perception related to urban green infrastructure: The Case of Drama City in Greece:

16:15-16:30 Mysirlakis N.

[551] From Awareness to Action: Environmental Education as a catalyst for change

16:30-16:45 Kogut P., Celikkol B., Vervaet G., Schreer O., Renault S., Alexopoulos C., Raes L., McAleer S.

[204] Designing Citizen Science tools towards increased awareness and participatory policy making for air quality: The Case of COMPARE (V)

16:45-17:00 Theodoridou G., Avramidou P., Kassianidis P., Partalidou M., Samaras P.

[258] Understanding of consumers' water consumption preferences and environmental consciousness

17:00-17:15 Jianying X. Wang Q.

[399] Urban residents' perceived risk and green agricultural products consumption decision: A case study in China

17:15-17:30 Ktenidis P., Boulogiorgou D., Andrianopoulou A., Kavadias K., Kaldellis J., Exarchakos G.

[339] Citizens Awareness Energy Park. The value of knowledge sharing and energy science in local communities

Session 31 Circular economy and bioeconomy (3)

Room Hera I

Chairs: Zorpas A., Stylianou M.

15.30-16.00 *Invited speaker* Demetriou G.

Future trends on circularity comparing with state of the art

16:00-16:15 Ort V., Ruiz H., Katusic V., Demetriou G.

**[289] Mapping the path of an inclusive transition towards circular economy:
Local accelerator hubs as enablers of circular business model innovation?**

16:15-16:30 Kounani A., Pavloudi A., Aggelopoulos S., Kontrogeorgos A.

[11] Circular Economy: Assessment of Circularity in Olive Oil Mills (V)

16:30-16:45 Butu M., Rodino S., Butu A.

[217] Circular bioeconomy in the sustainable biotransformation of agri-food residues and waste

16:45-17:00 Loizia P., Zorpas A., Voukkali I., Papamichael I.

[46] The transition to a circular economy through the development of a waste management strategy: the case study of Sotira Municipality

17:00-17:15 Maceda M.C., Rollon A., Sinoy M.C.

[137] Nitrogen & Phosphorous Removal via Anaerobic / Anoxic-Aerobic Processes and Struvite Formation in Mall Wastewater: Performance of Retrofitted Full-Scale Plants

17:15-17:30 Papamichael I., Voukkali I., Loizia P., Navarro-Pedreño J., Rodriguez-Espinosa T., Zorpas A.

[120] Investigation of customer behavior regarding circular fashion: A case study of Cyprus

17:30-17:45 Voukkali I., Papamichael I., Loizia P., Zorpas A., Stylianou M.

[195] A new trend for urban planning: the vision and the challenges

17:45-18:00 Gautam R., Ghosh U.

[466] Enhanced hydrogen production rates in Microbial Electrolysis Cell using Biocatalyst

18:00-18:15 Altiparmaki G., Papamavrou A., Liakos D., Vakalis S.

[572] Green hydrogen production via hydrothermal gasification of anaerobic sludge: a case study on Lesvos Island

Session 32 Waste management and technologies (2)

Room Hera II

Chairs: Weigand H., Li J.

15:30-16:00 *Invited speaker* Gidarakos E.

[592] Never let a good crisis go to waste

16:00-16:15 Vogt S., Koeniger L., Brueck F., Weigand H.

[265] Improved storage and handling of fine recycled concrete aggregates by accelerated carbonation: towards a quantification method

16:15-16:30 Esterhuizen M., Pflugmacher S.

[214] Survival and antioxidative stress responses in oligochaetes exposed to concrete demolition debris leachates

16:30-16:45 Panagiotakis I., Strompoula E., Misyris N.

[417] Promoting circularity and in-situ reuse of Construction & Demolition Waste on redevelopment of potentially contaminated sites: The EU experience

16:45-17:00 Badran S., Massoud M., Elbassuoni S., Stephan R., Chalak A., Abiad M.G.

[378] Circular Economy Potential in Waste Reuse and Preparation for Reuse (PfR): Insights from Social Media Data Mining (V)

17:00-17:15 Boikou K., Chroni C., Sigala E., Abeliotis K., Lasaridi K.

[472] Exploring the consumers' behaviour towards storing, repairing and second-hand purchasing of mobile phones in Greece.

17:15-17:30 Pavlopoulos C., Panitsa O.A., Theodoropoulou M., Gkioni S., Papadopoulou K., Kioupis D., Kakali G., Lyberatos G.

[583] Production of hydrogen and geopolymers from end-of-life photovoltaic panels

Flash presentations

17:30-17:33 Yohai L., Garrido Molina C., Resina Gallego M., López Mesas M., Valiente M.

[257] Heavy metal assessment in vineyard sludge. Copper lixiviation and recovery studies.

17:33-17:36 Firfiri M., Chatziantoniou M.

[312] Key determinants of Food Waste production in a hospital in Germany. A quantitative research of patient food waste behavior during hospitalization

17:36-17:39 Hongo T., Shimamura Y., Yamaguchi S., Aoyama N.

[64] Study on selective extraction of calcium from blast furnace slag and its effective utilization

17:39-17:42 Kvesitadze G., Tsiklauri N., Kutateladze L., Urushadze T., Khokhashvili I., Sadunishvili T.

[423] Pretreatment of Agro-Industrial Wastes with Basidial Fungi Strains for Effective Delignification of Lignocellulosic Wastes

17:42-17:45 Ramadan B., Rosmalina R., Rachman I., Matsumoto T.

[397] Revealing the Hidden Toxin of the Bottom Ashes from Open Municipal Waste Burning (V)

17:45-17:48 Yadav V., Manjhi A., Vadakedath N.

[426] Mercury bioremediation using a newly discovered strain *Rheinheimera metallidurans* sp. nov. from a waste dumping site

Saturday 2 September

Session 33 Circular economy and bioeconomy (4)

Room Zeus I

Chairs: Soares H., Angelis-Dimakis A.

09:00-09:15 Lachana Z., Zlatinis G., Tsigkou K., Charalabidis Y., Kornaros M., Lekkas D., Klontza E.

[240] PROMETHEUS: Services, systems and methods for HEIs in the domains of Circular Economy, and Sustainable Development

09:15-09:30 Kretschmer F., Prenner F., Ertl T., Pucher B.

[13] Development of indicators for performance assessment of blue- green infrastructures

09:30-09:45 Martelo L., Silva M., Bacelo H., Bastos M., Soares H.

[349] A truly circular process for recycling all main raw materials of waste of LCDs screens of smartphones

09:45-10:00 Kirakosyan A., Kalantaryan M., Sukiasyan A.

[313] Physical and Chemical Analysis of the Irrigation Water Polluted by the Anthropogenic Load of the Region

10:00-10:15 Kotsia D., Anastasiadi Z., Fountoulakis M.S.

[487] Use of recycled construction and demolition waste as substrate in hybrid constructed wetlands for the treatment of Olive Mill Wastewater.

10:15-10:30 Kondili E., Kaldellis J., Entmons A., Petrovits N.

[334] Comparative evaluation between new construction and refurbishment of existing buildings with the exploitation of their Embodied Energy and Carbon Footprint

Session 34 Advanced oxidation processes (1)

Room Athena I

Chairs: Dionysiou D., Falaras P.

09.00-09.30 *Invited speaker* Dionysiou D.

Degradation of Contaminants of Concern on Reactive Surfaces: Kinetics, Mechanisms and Transformation Products

09:30-09:45 Antoniou G.M., Keliri E.

[292] Can Peroxymonosulfate (PMS) be an alternative peroxide treatment for the mitigation of cyanobacteria harmful blooms (cyano- HABs)? (V)

09:45-10:00 Çokay E., Eker S.

[326] Treatment of Leachate Wastewater with Fenton Process

10:00-10:15 Fedorov K., Boczkaj G.

[450] Synergistic effect in hybrid cavitation-based advanced chemical processes for degradation of water pollutants

10:15-10:30 Iliakopoulou S., Triantis T., Antonopoulou M., Edwards C., Linda L., Hiskia A., Kaloudis T.

[12] Transformation products of microcystin-RR with reactive species produced by radiolysis of water

Session 35 Soil and groundwater contamination and remediation

Room Athena II

Chairs: Dermatas D., Panagiotakis I.

09:00-09:15 Acosta Hernández I., Muñoz Morales M., Rodríguez Romero L., Villaseñor Camacho J., Fernandez-Morales F.

[58] Removal of heavy metals from real mine tailings coupling electrokinetic soil flushing and bioleaching (V)

09:15-09:30 Papassiopi N., Xenidis A., Mystrioti C.

[129] Chromium (VI) and nickel removal by resin supported nanomagnetite: column experiments (V)

09:30-09:45 Karaviti T., Kotoula D., Georgiou P., Papazoglou E.

[480] The effects of plant biostimulant and mycorrhiza applications on industrial hemp (*Cannabis sativa* L.) growth and phytoremediation performance

09:45-10:00 Grilla E., Isari E., Kokkinos P., Parthenidis P., Evgenidou E. Lambropoulou D., Kalavrouziotis I.

[513] Safe reuse of landfill leachates for irrigation purposes

10:00-10:15 Djebbari K., Li B., Shor L., Anagnostou E., Bagtzoglou A.

[396] Environmental effects on the fate and co-transport of pesticides and microplastics in soils irrigated with wastewater

Flash presentations

10:15-10:18 Abdeh Keykha H., Mavroulidou M., Mohamadzadeh H.

[361] Using CO₂- induced magnesium carbonate as environmental friendly additives for petroleum decontamination sandy soils

10:18-10:21 Papadimou S., Barbayannis N., Golia E.

[392] Cultivation of milk thistle in Pb-contaminated urban soils

10:21-10:24 Kotoula D., Karaviti T., Georgiou P., Alexopoulou E., Papazoglou E.

[474] Cultivation of fiber crops for sustainable soil remediation and biobased raw material production for industrial uses

10:24-10:27 Duffield-Healy M., Fernaud S.

[215] Novel applications of Molecular Biology to aid in environmental bioremediation

10:27-10:30 Anagnostou E., Stathopoulou E., Heimbürger-Boavida L., Nomikou P.

[241] A first insight of Hg occurrence in the Hellenic volcanic arc (V)

Session 36 Emerging pollutants (1)

Room Hera I

Chairs: **Barcelo D., Thomaidis N.**

09.00-09.30 *Invited speaker* Slobodnik J.

**Next generation environmental monitoring data for chemicals management:
the NORMAN approach**

09:30-09:45 Ng K., Alygizakis N., Thomaidis N., Slobodnik J.

[74] Wide-scope target and suspect screening of antibiotics in effluent wastewater from wastewater treatment plants in Europe

09:45-10:00 Miskelyte D., Zaltauskaite J.

[76] Decreased soil water content effects on the toxicity of triclosan to oilseed rape (*Brassica napus* L.)

10:00-10:15 Gouveia T., Mota I., Silva A., Alves A., Santos M.

[83] Antineoplastic drugs in surface waters: presence, exposure, and risk

Flash presentations

10:15-10:18 Zaltauskaite J., Miskelyte D., Sujetovienė G., Dikšaitytė A., Januškaitienė I., Kzaciene G., Dagiliūtė R.

[80] Growth and biochemical responses of earthworms (*Dendrobaena veneta*) exposed to tetracycline

10:18-10:21 Iliakopoulou S., Zervou S., Triantis T., Hiskia A., Kaloudis T.

[128] Feature-based molecular networking and in silico structure annotation/classification of LC-HRMS data unfold the chemodiversity of cyanobacteria in environmental samples.

10:21-10:24 Mariano S.M., Singh R., Angeles L.G., Aga D., Jaraula C.M.

[253] Lateral and vertical variations of pharmaceutical contaminants in natural aquatic systems

10:24-10:27 Jiang H. L., Wang X., Zhao R. S.

[360] Functionalized covalent organic framework for separation and enrichment of perfluorinated compounds in environmental waters

10:27-10:30 Wang X., Jiang H. L., Zhao R. S.

[364] Determination of trace bisphenols through magnetic solid-phase extraction with MOF-COF composite

Session 37 EU projects showcase (1)

Room Hera II

Chairs: Arampatzis G., Mardikis I.

09:00-09:15 Maggos T., Maggos T., Panagopoulos P., Theodorou C., Nikolakopoulos A., Skliri E., Gagaoudakis E., Kiriakidis G., Binas V.

[559] Real scale application of visible light responsive photocatalytic paints for indoor air quality

09:15-09:30 Papazoglou E., Fendt S., Chiaromonti D., Cocchi M., Alexopoulou E.

[470] Bridging the gap between phytoremediation solutions on growing energy crops on contaminated lands and clean biofuel production – the GOLD project

09:30-09:45 Papazoglou E., Elbersen B., Trindade L., Monti A., Carmona Delgado M., Lewandowski I., Karytsas S., Cocchi M., Alexopoulou E.

[473] Marginal agricultural land and climate-resilient and biodiversity-friendly industrial crops for innovative bio-based value chains – the MIDAS project

09:45-10:00 Pérez E., Osmdan P., Blanes M.

[528] SYMSITES-EcoSites Implementation for Industrial-Urban Symbiosis through Social and Technological Solutions

10:00-10:15 Karamouzi E., Angelis-Dimakis A., Darra N., Fountas S., Gogou E., Krokida M., Lagoniou M., Manganaris G., Oikonomopoulou V., Panopoulos P., Papadaki S., Serifi O., Galea D., Socol C., Spella M., Valanides N., Valdramidis V., Vodnar D.

[529] FRIETS Project: Sustainable optimization of the value chain of added-value fresh and dried berries through the integration of Precision Agriculture management strategies and innovative dehydration and edible coating

10:15-10:30 Spyridonidou A.

[537] Dialogue4Tourism. Institutional dialogue on Sustainable Tourism and Governance in the Euro- Med area

Session 38 Environmental management and policies

Room: Zeus I

Chairs: Vagiona D., Pozoukidou G.

11:30-11:45 Paramana T., Dassenakis M.

[51] Exploring the development of effective measures in order to reduce key pressures under Descriptor 8 of the Marine Strategy Framework Directive (V)

11:45-12:00 Mpakali E., Vagiona D.

[350] Assessing wind farms projects with the use of multicriteria methods and stakeholders analysis

12:00-12:15 Plastara D., Pozoukidou G.

[391] 15-minute Cities: a literature overview exploring international planning strategies

12:15-12:30 Grapsas N., Vlachos G.

[40] Assessing the implications of IMO 2020 on tanker vessels' chartering and employability prospects with a focus on the installation of SOx Scrubbers

12:30-12:45 Grapsas N.

[39] Contemporary assessment of International Maritime Organization's Carbon Intensity Indicator requirement on tanker vessels' chartering and employability prospects (V)

12:45-13:00 Aryblia M., Sarantinoudis N., Tsinarakis G., Arampatzis G.

[568] Enabling sustainability and resilience in industries through the value chains' circularity and digitalization

13:00-13:15 Zervakis V., Tragou E., Krasakopoulou E., Kolovoyiannis V., Mamoutos I., Androulidakis I., Mazioti A.A., Potiris E., Kougioumtzoglou R., Mosiou K., Kalatzis M., Chaniotaki M., Chatzilaou C., Vagi M., Petalas S.

[280] The Development and Implementation of an Environmental Coastal Observatory focused on semi-enclosed Gulfs

Session 39 Advanced oxidation processes (2)

Room Athena I

Chairs: Dionysiou D., Falaras P.

11:30-11:45 Dilsizoglu Akyol N., Ölmez Hancı T.

[188] Applicability of sulfate radical based advanced oxidation processes for drinking water treatment (V)

11:45-12:00 Theodorakopoulos G.V., Arfanis M.K., Agüera A., Cadena-Aponte F.X., Sánchez-Pérez J.A., Markellou E., Romanos G.Em., Falaras P.

[270] Photocatalytic nanofiltration reactor for agricultural wastewater purification and reuse

12:00-12:15 Sarasidis V., Petsi P., Plakas K., Karabelas A.

[322] Pilot scale investigation of an advanced photo-electro-chemical oxidation process for treatment of effluents from pesticides manufacturing plants

12:15-12:30 Xue Y., Kamali M., Dewil R.

[352] Synthesis of iron and nitrogen co-doped biochar for the activation of peroxyomonosulfate to degrade sulfamethoxazole

12:30-12:45 Ren J., Huang Y., Li Z., Yao J., Zheng S., Hou Y., Yang B., Lei L., Dionysiou D., Zhao Y.

[317] The activation of peroxyomonosulfate by phosphate for the abatement of micropollutants: The significant contributions from reactive phosphate species

12:54-13:09 Gao J., Duan X., O'Shea K., Yadav J., Ye J., Dionysiou D.

[348] The potential of an emerging technology of UV/sodium percarbonate for water and wastewater treatment

Flash presentations

12:45-12:48 Kılıç L., Dilsizoğlu-Akyol N., Ölmez-Hancı T.

[184] Applicability of advanced oxidation processes for treatment and recovery of washing machine effluent (V)

12:48-12:51 Konstantinou I., Boti V., Hela D., Albanis T.

[464] Photocatalytic Treatment of Hospital Secondary Wastewater in a Pilot Scale for the Removal of Residual Pharmaceuticals

12:51-12:54 Lykos C., Tsalpatouros K., Fragkos G., Konstantinou I.

[465] Synthesis of $\text{LaCu}_x\text{Ni}_{1-x}\text{O}_3$ perovskite materials for application as heterogeneous photocatalysts and/or catalysts for persulfate activation

Session 40 Environmental health (1)

Room Athena II

Chairs: **Gago Ferrero P., Dobosy P.**

11:30-11:45 Chasiotis A., Piromalis D., Chasiotis S., Feloni E., Papageorgas P., Bousdeki M., Sofianopoulos M., Nikolopoulos P., Kouniniotis D., Mathiou P. and Nastos P.

[296] A smart integrated platform for leakage detection on water supply network in Aigio town

11:45-12:00 Raptis D., Takos I.

[460] A height-diameter model for urban tree species management in the city of Drama, Northern Greece

12:00-12:15 Gutiérrez-Martín D., Sánchez-Resino E., Restrepo E., Golovko O., López-Serna R., Marquès M., Aalizadeh R., Thomaidis N., Gago-Ferrero P., Gil-Solsona R.

[53] Development and application of a LC-HRMS method for the identification and quantification of CECs concern in urine (V)

12:15-12:30 Gil-Solsona R., Pons-Escoda A., Díez S., Gutiérrez-Martín D., Vidal-Sarró N., Bruna J., Dadvand P., Majós C., Gago-Ferrero P.

[52] The chemical exposome in brain cancer: an exploratory study

12:30-12:45 Gil-Solsona R., Nika M.C., Alygizakis N., Bustamante M., Villanueva C.M., Gutiérrez- Martín D., Restrepo E., Foraster M., Gómez-Roig M.D., Llurba-Olive E., Sunyer J., Dadvand P., Thomaidis N., Gago-Ferrero P.

[45] The chemical exposome in maternal blood and placenta and the potential use of sewage sludge to prioritize hazardous substances

Flash presentations

12:45-12:48 Bali N., Voultsidis D., Gialelis Y.

[119] Computational Fluid Dynamics (CFD) Analysis Assisted by Portable

Sensing Devices for Precise Assessment of Indoor Environmental Conditions

12:48-12:51 Sadunishvili T., Amashukeli N., Gaganidze D., Kharadze S., Sturua N., Rezzonico F.

[224] Antibiotic susceptibility of *Erwinia amylovora* Isolates from fire blight diseased pomaceous fruit trees in Georgia

12:51-12:54 Afonso A., Gomes I., Saavedra M.J., Simões L., Simões M.

[205] Coaggregating *Delftia acidovorans* facilitates the metabolic activity of partner bacteria in drinking water biofilms

12:54-12:57 Rañada M.V., Jaraula C.M.

[211] End-phase rehabilitation assessment of Boracay Island using microbial parameters as indicator of water quality

Session 41 Emerging pollutants (2)

Room Hera I

Chairs: **Slobodnik J., Thomaidis N.**

11:30-11:45 Kor-Bicakci G., Johnson T., Eskicioglu C.

[169] Assessing the effect of an innovative radio frequency sludge pretreatment on removal of pharmaceuticals of ibuprofen and diclofenac in advanced anaerobic digestion

11:45-12:00 Pereira A.R., Gomes I., Simões M.

[209] Effects of parabens exposure on drinking water bacteria

12:00-12:15 Barka E., Nika M.C., Galani A., Mamais D., Thomaidis N., Malamis S., Noutsopoulos C.

[243] Assessing the performance of an integrated column system containing zero valent iron nanoparticles and sodium persulfate solution for the removal of emerging contaminants from different wastewater matrices – Identification of transformation products

12:15-12:30 Eker S., Çokay E.

[324] Potential contaminants and risk assessment in the Meriç-Ergene Basin under the EU Water Framework Directive

12:30-12:45 Efthymiou C., Boti V., Konstantinou I., Albanis T.

[340] Fate of nitrofurans: photochemistry, transformation products and toxicity evaluation in surface water systems

Flash presentations

12:45-12:48 Carneiro R., Gomes G., Zaiat M., Santos-Neto Á.

[373] Cometabolic removal of ibuprofen, diclofenac and ciprofloxacin driven by glycerol fermentation in an acidogenic biofilm reactor

12:48-12:51 Panagopoulou E.I., Damalas D.E., Aleiferi E., Tzepkinli V.A., Schweizer M., Heid C., Köhler H.-R., Von Der Ohe P., Triebeskorn R., Thomaidis N.S.

[518] Determination of the effect of environmentally relevant pH values on the toxicity, uptake & biotransformation of Propranolol in zebrafish embryos by LC-HRMS

12:51-12:54 Aleiferi E., Tsakanika M., Damalas D., Kritikou A., Sakellariou G., Thomaidis N.

[520] Novel polymer-based MALDI matrices: exploring their potential for low molecular weight compound detection, utilizing MALDI-HRMS analytical platforms

Session 42 EU projects showcase (2)

Room Hera II

Chairs: Arampatzis G., Mardikis I.

11:30-11:45 Tsami N.

[538] Community4Innovation: Innovative Sustainable Economy Thematic Community Project

11:45-12:00 Mardikis I.

[539] BLUE-GREENWAY: Innovative solutions for improving the environmental status of eutrophic and anoxic coastal ecosystems

12:00-12:15 Maniadakis M.

[421] AI-powered Robotic Material Recovery in a Box

12:15-12:30 Mwandira W., Mavroulidou M., Gunn M., Gray C.

[336] Use of food waste as culture media in biocementation for ground improvement applications (V)

12:30-12:45 Arampatzis G.

[588] “AquaSPICE – Advancing Sustainability of Process Industries through Digital and Circular Water Use Innovations”

Session 43 Agroforestry, forest and agricultural sustainability

Room Zeus I

Chairs: Pantera A.

15:00-15:15 Boumenjel A., Papadopoulos A., Pantera A.

[315] Tolerance mechanisms and adaptive strategies of *Moringa oleifera* (L) during growth and vegetative development under water stress in hydroponics

15:15-15:30 Du Hamel A., Papadopoulos A., Pantera A.

[316] Solar parks effect on soil properties: Initial results

15:30-15:45 Bakogiorgos G., Lappa V., Tasios A., Papadopoulos A., Pantera A.

[335] Assessment of sustainability of extensive livestock farming in Central Greece (Evrytania prefecture) using S.W.O.T Analysis

15:45-16:00 Gounari S., Botonakis S., Papadopoulos A., Pantera A., Tassios A., Fotiadis G.

[420] Preliminary results of climate effect on phenology of honeydew producing insects of fir trees and the production of fir honey in Evritania - Greece

16:00-16:15 Kavasilis S., Doula M., Zorpas A., Cambanis L.

[531] Composting Animal Mortalities: An effective method for agro- silvo-pastoral systems utilizing natural zeolite (V)

16:15-16:30 Luo Y., Sechi V., Heijne A., Bezemer T.M., Buisman C.J.

[369] Understanding the dynamics of soil microbiomes for the implementation of sustainable agricultural practices

Session 44 Water and wastewater treatment and reuse (5)

Room Athena I

Chairs: **Almashaqbeh O., Rollon A.P.**

15:00-15:15 Abuhasheesh Y., Hegab H., Wadi V., Naddeo V., AlMarzooqi F., Banat F., Aljundi I., Hasan S.

[97] Hydrophobic Phase Inverted Polyethersulfone Mixed Matrix Membrane for Water-in-Oil Emulsion Separation (V)

15:15-15:30 Abuhantash F., Hegab H., Naddeo V., AlMarzooqi F., Banat F., Aljundi I., Hasan S.

[105] Polylactic Acid/Functionalized CNTs Mixed Matrix Membrane for Oil Water Separation

15:30-15:45 Şimşek İ., Bahadır T., Çelebi H., Tulun Ş.

[19] Selective adsorption of multi-dye ions by Citrus Peel: Characterization, Performance, Regeneration (V)

15:45-16:00 Corpuz M., Buonerba A., Napodano P., Hasan S. W., Choo K., Zarra T., Belgiorno V., Naddeo V.

[553] Technologies for the Removal of Microplastics from Wastewater: A Short Review

16:00-16:15 Jaraula C.M., Limen M.A., Otero M.C., Miguel R., Kobayashi V., Baja E., del Mundo D.M., Murao L.A.

[229] Evaluation of physico-chemical factors affecting Wastewater- Based Epidemiology of SARS-CoV-2 in a southern Philippine sewershed

16:15-16:30 Gao X., Peng Y.

[383] Development and Application of a novel anaerobic/aerobic/anoxic process in municipal wastewater treatment utilizing intracellular carbon sources

16:30-16:45 Dolgen D., Alpaslan M.

[242] Management of Table Olive Wastewater (TOWW) in Turkey

16:45-17:00 Leovac Maćerak A., Duduković N., Slijepčević N., Volarić A., Tomašević Pilipović D., Bečelić-Tomin M., Kerkez Đ.

[493] Purification of municipal wastewater by electrocoagulation process

Flash presentations

17:00-17:03 Asselah A., Africano Cani Z., Abraão Manuel Buzi N.

[449] Mass-transfer processes of toxic hexavalent chromium adsorption onto food waste adsorbent

17:03-17:06 Schiza S., Petsis K., Tsiara Z., Petousi I., Fountoulakis M.S.

[503] Rainwater collection and treatment on green roofs using aromatic plants in a Mediterranean region

Session 45 Environmental health (2)

Room Athena II

Chairs: **Gago-Ferrero P., Dobosy P.**

15:00-15:15 Tsaligopoulos A., Kyvelou S., Klontza E., Matsinos Y., Lekkas D.

[49] Noise footprint of tourist accommodations: a novel approach towards soundscape quality assessment

15:15-15:30 Hoang N., Fodor F., Záray G., Endrédi A., Streli C., Ingerle D., Buzanich A., Radtke M., Ziegler P., Dobosy P.

[170] Iodine biofortification of cabbage plants cultivating in hydroponic system

15:30-15:45 Schröder W., Nickel S., Dreyer A., Völksen B.

[56] Mapping Atmospheric Nitrogen Deposition Accumulated in Mosses Collected 2005, 2015 and 2020 in Germany (V)

15:45-16:00 Corpus R.M., Bayani M., Almacha A., Tana K.B.

[200] Mitigating the Environmental Impact of Construction Projects through Effective Pollution Management Strategies

16:00-16:15 Rousis N., Li Z., Bade R., McLachlan M., Mueller J., O'Brien J., Tscharke B., Thomaidis N., Thomas K.

[516] Socioeconomic status and public health in Australia: A wastewater-based study

Flash presentations

16:15-16:18 Sujetovienė G., Miskelyte D., Dikšaitytė A., Januškaitienė I., Kzaciene G., Zaltauskaite J.

[342] Response of the lichen Evernia prunastri to exposure of antibiotic

16:18-16:21 Soubasakou G., Evgenoglou L., Cavoura O.

[351] A presumptive and interactive map of PFAS contamination in Greece: a tool for the identification of possible exposure sources

16:21-16:24 Golia E., Koropouli A., Papadimou S., Kantzou O.D., Androudi M., Xagoraris C.

[393] Spatial and temporal variability of Cadmium and Lead in Urban Soils of Thessaloniki (northern Greece)

16:24-16:27 Oliveira M.Y., Guerrero C., Panagopoulos T.

[401] A literature review on the benefits of healing gardens

16:27-16:30 Alygizakis N., Ng K., Bijlsma L., Cerqueira F., Čirka L., Deviller G., Fortunato G., Kampouris I., Lai F., Lundy L., Marano R., Paulus G., Radu E., Šlipko K., Tadić Đ., Thomaidis N., Slobodnik J., Fatta-Kassinos D.

[459] The NORMAN Antibiotic Resistance Bacteria and Genes Database (NORMAN ARB&ARG): let's collaborate to manage risk of Antibiotic Resistance

Session 46 Emerging pollutants (3)

Room Hera I

Chairs: Carneiro R.B., Alygizakis N.

15:00-15:15 AbuZaid M., Pandey R., Naddeo V., Banat F., Yousef A., Hasan S.

[101] Synthesis of Two-Dimensional Nanomaterial Based Hybrid Membrane for Antibiotic Removal from Wastewater

15:15-15:30 Konomi A., Gkotsis G., Nika M.C., Chadwick E., O'Rourke E., Farrington C., Potter E., Thomaidis N.

[527] Investigating the occurrence of >2,400 organic micropollutants in different tissues of Eurasian otters leveraging LC- and GC-HRMS techniques

15:30-15:45 Gouveia T., Cristóvão B., Pereira V., Crespo J., Alves A., Ribeiro A., Silva A., Santos M.

[99] Mitigating the impact of antineoplastic drugs on aquatic environment: nanofiltration as a promising tertiary wastewater treatment

15:45-16:00 Xu H., Xia M., Wang F.

[404] Rapid adsorption of diclofenac by polyaniline-coated carbon nanofiber

16:00-16:15 Rivadulla M., Suarez S., Garrido J., Omil F.

[86] Occurrence and fate of OMPs and ARGs in innovative full-scale WWTPs

Flash presentations

16:15-16:18 Boinis N., Diamanti K. S., Panagopoulou E. I., Gkotsis G., Maragou N., Nika M. C., Vasilatos K., Höpker K. A., Schäfer H., Wieczorek M., Osteraurer R., Thomaidis N. S.

[524] Unveiling the occurrence of organic micropollutants in different species of terrestrial mesocarnivores utilizing HRMS techniques

16:18-16:21 Bauta D., Alygizakis N., Gkotsis G., Nika M.C., Orfanioti A., Bizani E., Badry A., Chadwick E., Cincinelli A., Claßen D., Danielsson S., Dekker R., Duke G., Glowacka N., Jansman H., Knopf B., Koschorreck J., Krone O., Martellini T., Movalli P., Persson S., O'Rourke E., Siebert U., Treu G., Van den Brink N., Walker L., Slobodnik J., Thomaidis N.

[543] Targeted and untargeted trend analysis in historic samples of top predators and their preys

16:21-16:24 Kostopoulou N., Alygizakis N., Gkotsis G., Nika M.C., Orfanioti A., Bizani E., Badry A., Chadwick E., Cincinelli A., Claßen D., Danielsson S., Dekker R., Duke G., Glowacka N., Jansman H., Knopf B., Koschorreck J., Krone O., Martellini T., Movalli P., Persson S., Roos A., O'Rourke E., Siebert U., Treu G., Van den Brink N., Walker L., Slobodnik J., Thomaidis N.

[544] Predominant chemical mixtures in top predators and their prey in Europe

Session 47 Energy recovery from waste

Room Hera II

Chairs: **Tsangas M., Vakalis S.**

15:00-15:15 Tsangas M., Loizia P., Voukkali I., Zorpas A.

[190] Life Cycle Assessment of Tyre Pyrolysis Oil, a case for Cyprus

15:15-15:30 Koumpakis D., Vlachokostas C.

[445] Utilization of agricultural and urban plastic waste review: introduction to pyrolysis and hydrocarbon reformation

15:30-15:45 Mertzanakis C., Vlachokostas C.

[36] Comparative analysis of WtE technologies based on multiple criteria analysis and life cycle considerations

15:45-16:00 Gkoumas F., Tzivelou E., Gravanis Z., Mamaïs D., Malamis S., Noutsopoulos C.

[216] Investigating the performance of anaerobic co-digestion of primary sludge and acid whey using a twin pilot scale system

16:00-16:15 Ghosh U., Gautam R.

[476] Agro-Industry Waste Fed Microbial Electrolysis Cell for Biohydrogen Production

16:15-16:30 Duran J., Victoriano J., Lunag Jr. M., Diccion Jr. A., Putiyon P.J., Solijon J.M.

[533] Plastic waste utilization: Challenges and opportunities for waste- to-energy in Baguio City, Philippines (V)

Flash presentations

16:30-16:33 Umiejewska K., Retman M., Lech P.

[155] Impact of Fatty Waste on Anaerobic Digestion of Sewage Sludge at a Municipal Wastewater Treatment Plant - A Case Study

Poster presentations

Thursday 31 August 2023

	Topic
	Demirel B., Talha A., Turgut O., Elif U., Asu Y., Berivan V.
A1	[38] Evaluation of Biomethane Potential of Petrochemical Sludge After Pretreatment Waste-to-energy
	Martinez-Hernando M., Bolonio D., Garcia-Martinez M., Ortega F.M., Llamas J.F.
A2	[67] Environmentally-Extended Multi-Regional Input-Output Analysis of neodymium, cobalt and lithium used in electric vehicles (V) Life cycle analysis (LCA)
	Liotta I., Avolio R., Castaldo R., Gentile G., Errico M.E., Cocca M.
A3	[108] Recycling approaches of marine plastic litter (V) Recycling of materials to new products
	Langousi I., Markou G., Arapoglou D.
A4	[113] Valorization of poultry manure extract enriched with sodium acetate in mixotrophic cultivation of Auxenochlorella protothecoides Recycling of materials to new products
	Castro A., Gomes A., Correia A., Ribeiro H., Queirós A.
A5	[116] Reimbursement of aluminum and PET packaging project at a University Campus: a case study Recycling of materials to new products
	Gkaras S., Triantafyllou E., Dougali A., Diamantopoulos C., Tolis E., Triantafyllou A.
A6	[123] Source profile of PM10 emission sources in Western Macedonia, Greece, during 2022 Air pollution
	Empliouk I., Pliakas F.K., Kallioras A., Kaliampakos D., Tzevelekis T.
A7	[132] Hydrogeological research on water supply conditions in a mountainous region of NE Greece (Poster) Water policy, Management and Society
	Hansen H., Gutierrez C., Alarcon J., Lazo A., Hansen M., Lazo P., Ortiz R.
A8	[153] Use of residues from Eucalyptus Globulus as biosorbents for cadmium removal Wastewater treatment

	Antoniou T., Galanis G., Chantzi P., Giortsou M., Polytaksis P., Karyotis K., Zalidis G.	
A9	[160] Boosting climate resilience and reducing agricultural carbon footprint using LCA methodology	Life cycle analysis (LCA)
	Corpus R.M., Bayani M., Ado R.	
A10	[173] Exploring the Potential of Renewable Energy Sources in the Philippines: Challenges and Opportunities	Renewable energy sources
	Corpus Robert Michael B. Bayani Meldanette S. Almacha, Aldion J., Austria, Arvin Jay.	
A11	[191] Optimizing Raw Water Sustainability through Innovative Supply Chain Management	Sustainable supply of raw materials
	Butu A., Rodino S., Butu M.	
A12	[218] Microbial inoculum production for bioleaching of critical metals from tailings	Recycling of materials to new products
	Hansen M., Hansen H., Gutierrez C., Lazo A., Lazo P.	
A13	[271] Application of electrochemical peroxidation with nanoscale zero-valent iron particles (nZVI) for selenium removal from oil refinery wastewater	Wastewater treatment
	Vasios G., Koufos G., Gialeli M., Zaragkali F., Tapazidou P., Kakaroglou I., Antoniadis I., Troumbis A.	
A14	[281] Estimating the population of wild rabbits by analyzing their impact on agricultural crops of Lemnos island (V)	Ecological effects of environmental change
	Vasios G., Gialeli M., Zaragkali F., Roumelioti A., Tsiofa G., Koufos G., Tapazidou P., Kakaroglou I., Antoniadis I., Troumbis A.	
A15	[288] Transforming wild rabbits' overpopulation problem into a local biotic resource of Lemnos island (V)	Agroforestry, Forest and Agricultural Sustainability
	Monioudi I., Andreadis O., Chatzistratis D., Chalazas T., Hasiotis T., Velegrakis A., Monioudis E., Mettas C., Koutsantonaki C.	
A16	[299] An Example of a Detailed Beach Inventory at an Island Scale: The Case of Chios, Greece	Beach erosion of island beaches In Eastern Mediterranean (Greece and Cyprus): assessment, monitoring and Management
	Chaski C., Batziou E., Giannoulis K., Petropoulos S.	
A17	[301] The effects of biostimulant application on lavandula angustifolia cultivation under deficit irrigation	Sustainable water resources management with nature-based solutions

	Polyzos N., Paschoalinotto B., Compocholi M., Prieto M., Dias M., Barros L., Petropoulos S.	Sustainable water resources management with nature-based solutions
A18	[307] Drought stress effect on crop development and chemical composition of field grown <i>Scolymus hispanicus</i> L. Plants	
	Stylianou M., Papamichael I., Voukkali I., Tsangas M., Omirou M., Ioannides I., Zorpas A.	
A19	[332] Life Cycle Assessment of fertilization practices on greenhouse gas emissions in Cyprus	Life cycle analysis (LCA)
	Sujetovienė G., Dabašinskas G.	
A20	[343] Changes in the value of ecosystem services due to land use dynamics in Lithuania	Ecological effects of Environmental change
	Kiouranakis G., Ioannou Z., Gkatzionis K., Papanikolaou S., Sarris D.	
A21	[345] Treatment of three agro-industrial wastewaters by dried bio-absorbent orange peels and brewery spent grains (V)	Circular economy and industrial symbiosis
	Merchán-Fernández Y., García Ontiyuelo M., Acuña Alonso C., Álvarez X.	
A22	[359] Study of fragmentation and land use changes in the Natural Parks of Galicia	Agroforestry, Forest and Agricultural Sustainability
	Balestra V., Drudi L., Bellopede R.	
A23	[377] The invisible environmental impact of tourism in show caves: microplastic pollution in three Italian show caves	Environmental impacts of tourism and Sustainable tourism development
	Mori De Olivera C., Sammito A., Boano M., Fischetti M., Toso L., Pizio R., Bellopede R., Marini P.	
A24	[379] Evaluation of a new technology for increasing the quality of a compost	Sustainable production and management of biomass
	Xhanari K., Farruku M., Xhaxhiu K., Kokalari E.	
A25	[408] <i>Cornus Sanguinea</i> Leaves Alcoholic Extract as Corrosion Inhibitor for Carbon Steel in Acidic Solutions	Sustainable supply of raw materials
	Christofidou M., Rossidou E., Kozakou S., Michael N., Poulli K., Kokkinofta R.	
A26	[414] Monitoring Air Quality in Cyprus	Air pollution
	Stamatiadou V., Katsanevakis S., Mazaris A.	
A27	[454] Uncovering the Hidden Treasures: A Meta-Analysis and Map of the Monetary Value of Mediterranean Seagrass Ecosystem Services	Marine environment and coastal management

	Alajlan M., Alsalem K.	
A28	[463] Solar attenuation due to particulate matter in arid environments	Renewable energy sources
	Vagi M., Leventelli M., Petsas A.	
A29	[467] Adsorption-desorption of methylene blue dye onto marine sediments: Kinetics and equilibrium studies	Environmental Pollution
	Tsaousis P., Andrikopoulos K., Mathioudakis G., Soto A., Voyatzis G., Nteze E., Sideri S.	
A30	[495] PLA based nanocomposites with Cellulosic and Lignocellulosic nanofibers as a biodegradable solution for green food packaging	Bioplastics
	Schiza S., Petsis K., Tsiora Z., Petousi I., Fountoulakis M.S.	
A31	[503] Rainwater collection and treatment on green roofs using aromatic plants in a Mediterranean region	Water and wastewater treatment and reuse
	D'Elia L., Cicalese F., Grimaldi M., Fasolino I., Troisi E., Dello Ilio T., Zarra T., Belgiorno V., Naddeo V	
A32	[509] Strategies for the implementation of the sustainable development in protected areas: the case study of the Regional Park of Monti Lattari (Italy)	Biodiversity conservation
	Tripathi S., Kiritsi A., Patinotis I.	
A33	[519] Collective Action for Sustainable Water Resource Management: Analytical Framework and Company Initiatives	ESG (Environmental, Social and Governance) and circular economy
	Koumenidi E., Nikolaou A., Golfinopoulos S.	
A34	[545] Can disinfection by products occur in fish?	Marine environment and coastal management
	Manoli P., Tzakou C., Rapti I., Rontou A., Patakioutas G., Hela D.	
A35	[558] Physicochemical and spectroscopic characteristics of compost from vineyard waste and wine lees valorization	Sustainable production and management of biomass
	Vasileiadou M., Spilanis I., Lekkas D., Vakalis S.	
A36	[571] Green energy transition of Serifos – presentation of the key analysis scenarios	Renewable energy sources
	Tsiarta N., Keliri E., Fotidis I., Mazur-Marzec H., Neofytou G., Chrysargyris A., Tzortakis N., Antoniou G. M.	
A37	[574] CYANOTECH: A sustainable and innovative management system for toxic cyanobacteria blooming of surface waters with combined energy production, sustainable agriculture, and food safety	Water and wastewater treatment and reuse

	Eleni Keliri Panayiota Adamou Nektarios Efstathiou Despoina Kokkinidou Konstantinos Kapnisis Andreas S. Anayiotos Hanna Mazur-Marzec and Maria G. Antoniou	
A38	[575] Calcium peroxide (CaO₂) granules enclosed in textile materials as H₂O₂ delivery systems to mitigate Microcystis sp. Blooms	Recycling of materials to new products
A39	Kaikiti C., Stylianou M., Agapiou A. [584] Indoor air pollutants in various workplaces	Air pollution and health
A40	Dreger M. Celary P., Szymura K., Więcek K., Kocela-Jagiełko A. [407] The innovative method of testing solid fuels as an answer to safe and sustainable supply of raw materials –the example of coking coal parameters	Sustainable supply of raw materials
A41	Wern B., Porzig M., Clemens W., Pieper A. [367] Renewable energies and energy efficiency in the Indonesian textile sector – opportunities and challenges	Renewable energy sources
A42	Vespasiano G., Cianflone G., Taussi M., Apollaro C., Dominici R., Bloise A., De Rosa R. [260] Preliminary evaluation of the Shallow Geothermal Potential for Heating and Cooling and study of its economic impact: A Case Study in the Sant' Eufemia Plain, Calabria (South Italy)	Renewable energy sources
A43	Cernica G., Constantin M.A., Dumitrescu I., Codreanu A.M. [593] Research on the possibilities of evaluation and recovery of sludge from sewage treatment plants from the perspective of circular economy	Circular economy and bioeconomy
A44	Kaewkannetra P., Lorwanishpaisarn N. [510] Valorisation of biomass waste into bioproduct: Potential use of cannabis extracts for bacterial inhibition activity	Sustainable production and management of biomass
A45	Ibrahim Abdulhamid [526] An Assessment of Metal Scraps Recycling and its Environmental Impact In Kano- Nigeria.	Recycling of materials to new products

Friday 1 September 2023

	Topic
	Almashhour R., Kolo J., Beheiry S.
B1	[10] Integrating Urban Heat Island Mitigation into Green Building Rating Systems (V) Šilha D., Syrová P., Syrová L., Janečková J. [15] Smoothie Drinks as a Possible Source of Resistant and Biofilm-forming Bacteria Vandarakis D., Malliouri D., Petrakis S., Kapsimalis V., Moraitis V., Hatiris G-A, Panagiotopoulos I.
B2	[44] Carrying Capacity Assessment of The South Aegean Region, Greece Loizia, P. Zorpas A.A. Voukkali, I. Papamichael, I. Economou F. Navarro-Pedreño J. Rodríguez-Espinosa T. Belén Almendro Candel M.
B3	[50] Toward a circular agriculture approach, though industrial symbiosis Hongo T., Shimamura Y., Yamaguchi S., Aoyama N. [64] Study on selective extraction of calcium from blast furnace slag and its effective utilization
B4	[65] Domestic water consumption determinants in urban neighborhoods: A case study of Vijayawada, India (V) Bandari A., Puttapparthi P.V., Sadhukhan S.
B5	[104] Recent developments in solar powered membrane distillation (V) Jawed A., Nassar L., Hegab H., AlMarzooqi F., Banat F., Merwe R., Hasan S.
B6	[127] Acclimation of microbial consortia on acidogenic effluents for enhanced production of polyhydroxyalkanoates Rokizas S., Kora E., Kalogirou T., Antonopoulou G., Ntaikou I., Lyberatos G.
B7	[133] Capability of high-resolution satellite images to characterize urban surfaces: spectra comparison and correlation within field/lab measurements (V) Despini F., Costanzini S., Parmeggiani D., Ferrari C., Teggi S., Muscio A., Silvestri M., Rabuffi F., Musacchio M.
B8	[133] Capability of high-resolution satellite images to characterize urban surfaces: spectra comparison and correlation within field/lab measurements (V) Environmental data analysis and modelling
B9	[133] Capability of high-resolution satellite images to characterize urban surfaces: spectra comparison and correlation within field/lab measurements (V) Bioplastics

	Galanis G., Antoniou T., Chantzi P., Giortsiou M., Polytsakis P., Karyotis K., Zalidis G.	
B10	[159] Improving farming practices to reduce carbon footprint towards climate change mitigation	Carbon market
B11	Corpus Robert Michael B. Bayani Meldanette S. Ado, Remedios [175] Exploring the Potential and Challenges of a Developing Carbon Market in the Philippines	Carbon market
B12	Corpus R.M., Bayani M., Ado R. [176] Assessing the Effects and Dangers of Climate Change on the Environment and Society of the Philippines	Climate change impacts, vulnerability and risks
B13	Kakouri A., Ramacher M., Kuenen J., Speyer O., Gerasopoulos E., Athanasopoulou E. [219] UrbEm: a method and tool to refine regional emission inventories for urban atmospheric studies	Environmental data analysis and modelling
B14	Yohai L., Garrido Molina C., Resina Gallego M., López Mesas M., Valiente M. [257] Heavy metal assessment in vineyard sludge. Copper lixiviation and recovery studies	Hazardous waste management
B15	Butu M., Rodino S., Butu A. [275] The benefits of introducing digitization in agricultural sectors	IoT-based environmental monitoring
B16	Ernsteins R., Skute A., Konkovs K., Lagzdina E., Ozolins M. [304] Sustainable water resources governance developments: cross-sectorial policies and societal practice	Water policy, Management and Society
B17	Zarkaliou A., Prifti E., Kokkas T., Papadopoulou K., Lyberatos G. [309] Development of an innovative scheme for the simultaneous treatment of wastewater and the condensate from drying food waste	Environmental biotechnology and bioenergy
B18	Firfiri M., Chatziantoniou M. [312] Key determinants of Food Waste production in a hospital in Germany. A quantitative research of patient food waste behavior during hospitalization	Food waste and food loss
B19	Chrysanthopoulos E., Floros E., Pouliaris C., Tsirogiannis I., Kofakis P., Kallioras A. [320] Monitoring soil water content using IoT Time and Frequency Domain Reflectometry Sensors	IoT-based environmental monitoring

	Vázquez-Méndez M., Alvarez-Vázquez L., García-Chan N., Martínez A., Rodríguez C.	
B20	[380] Mathematics for Optimal Design of Sustainable Infrastructures	Sustainability & the SDGs
	Tarawneh Z.	Prediction in ungauged basins and prediction under uncertainty
B21	[386] Simulating the 1-hr Unit Hydrograph for the Ungauged Watershed of Swaqa	
	Chen L., Yu Z.	
B22	[388] Understanding Urban Expansion in the Yangtze River Delta Region: Insights for Urban Agglomeration Development	Estimation and prediction under past and future conditions (climate, population, land use change)
	Zhang T., Chen L.	
B23	[389] Spatiotemporal Characteristics of Industrial Carbon Emissions in Anhui Province, China: A Multiscale Analysis	Climate change impacts, vulnerability and risks
	Ramadan B., Rosmalina R., Rachman I., Matsumoto T.	
B24	[397] Revealing the Hidden Toxin of the Bottom Ashes from Open Municipal Waste Burning (V)	Heavy metals in the environment
	Chiotti D., Sepp H., Nyberg M.	
B25	[405] Experiential learning as a strategy for reducing household food waste among young Greeks (Poster)	Sustainability & the SDGs
	Kvesitadze G.	
B26	[423] Effective pretreatment of agro-industrial wastes with basidial fungi isolated from diverse ecosystems of Georgia	Biomass
	Yadav V., Manjhi A., Vadakedath N.	
B27	[426] Mercury bioremediation using a newly discovered strain <i>Rheinheimera metallidurans</i> sp. nov. from a waste dumping site	Heavy metals in the environment
	Athanassiou M., Shanmugham J., Zavras A..	
B28	[434] Bidirectional effects between the dental industry and climate change	Climate and health
	Vgenopoulou E., Evgenoglou L., Damikouka I.	
B29	[457] The education approach to sustainable water management (V)	Sustainability & the SDGs
	Delgado Y., Lopez E., Martin M., Llanos J., Fernandez-Morales F.J.	Environmental data analysis and modelling

[462] Modelling metal and energy recovery from Acid Mine Drainage by means of Bioelectrochemical Technology (V)

Sanchez, D., López-Bellido, F.J., Acosta, I., Rodríguez, L., Villaseñor, J., Fernandez-Morales F.J.

[468] Evaluation of industrial wastes as active materials in permeable reactive barrier for acid mine drainage remediation (V)

Hazardous waste management

B31

Panagopoulou G.1, Paraskevopoulou V.1, *, Yfanti A.1, Anagnostou E.1, Vrettou E.1, Filippi G.1, Botsou F.1, Xarlis P.1, Andreopoulos E.1, Moratis D.1, Chatziathanasiou C. C.1, Damianou R.K.1, Dalianis A.1, Tsiparis I.1, Dassenakis M.1

[469] Anthropogenic metal pollution in Saronikos gulf: historical evolution and risk assessment based on selected sediment cores (V)

Heavy metals in the environment

B32

Polemis D., Mamalis V.

[504] The geopolitical risk index effect on the energy market, emissions and climate change

Transportation and the environment

B33

Tzempelikou E., Parinos C., Zeri C., Iliakis S., Pavlidou A., Abualnaja Y.

B34

[567] Trace Metals in the water column of the coastal zone in the Red Sea and the Gulf of Aqaba

Heavy metals in the environment

Tenea A., Dinu C., Vasile G., Iancu V., Niculescu M.

[576] Speciation of inorganic and organic arsenic forms using HPLC-ICP-MS technique in aqueous matrices

Heavy metals in the environment

B35

Cristea I., Cojocaru V., Petre V., Tenea A., Chiriac F., Vasile G.

[580] Study of iodo-haloacetic acids using SPME-GC-MS/MS in chlorinated water

Drinking water and health

B36

Lymperopoulou T., Zarkaliou A., Papadopoulou K., Lyberatos G.

[581] Year-round assessment of water pollutants in five Greek rivers

River systems in diverse climates and environments

B37

Papadopoulou K., Pavlopoulos C., Zarkaliou A., Lyberatos G.

[582] Anaerobic Co-Digestion of olive oil wastewater with municipal solid and liquid waste: An Urban-Industrial symbiosis concept

Environmental Biotechnology and Bioenergy

B38

Markoulatou E., Fountoulakis M.S.

[500] Effect of plant species on the performance of vegetated buffer strips to treat agricultural runoffs

Water treatment

B39

	Zafeiriadou A., Kaltsis L., Kostakis M., Kapes V., Thomaidis N., Markou A.	
B40	[517] Wastewater surveillance of the most common circulating respiratory viruses in the city of Attica	Wastewater-Based Epidemiology
	Rud O., Laktionov M., Nova L.	
B41	[488] Water desalination using polyelectrolyte hydrogel. Gibbs ensemble modeling.	Desalination
	Onay T., Vardar S.	
B42	[156] Review of Common Bioplastics' Degradation Potentials in Biogas Plants	Bioplastics
	Conteduca F., Francardo C., Paradiso G., Turdo R., Balestra V., Bellopede R., Comino E.	Microplastics in water treatment: fate, toxicity assessment and removal technologies
B43	[75] AKANoah Student Team experience: microplastics analysis technics on the Po River environment	
	Licht K., Lončar G., Posavcic H., Halkijevic I.	
B44	[436] Short-time numerical simulation of ultrasonically assisted electrochemical removal of strontium from water	Water treatment
	Simonre Gregorio Sabrina Sorlini Tran Thi Kim Hoan	
B45	[437] Evaluation of the impact of climate change on the supply of drinking water from the spring of mompiano, brescia, Italy	Climate change

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	Topic
Zaltauskaite J., Miskelyte D., Sujetovienė G., Dikšaitytė A., Januškaitienė I., Kzaciene G., Dagiliūtė R.	
C1 [80] Growth and biochemical responses of earthworms (<i>Dendrobaena veneta</i>) exposed to tetracycline	Emerging pollutants
Bali N., Voultidis D., Gialelis Y.	
C2 [119] Computational Fluid Dynamics (CFD) Analysis Assisted by Portable Sensing Devices for Precise Assessment of Indoor Environmental Conditions	Environmental health and well-being
Iliakopoulou S., Zervou S., Triantis T., Hiskia A., Kaloudis T.	
C3 [128] Feature-based molecular networking and in silico structure annotation/classification of LC-HRMS data unfold the chemodiversity of cyanobacteria in environmental samples.	Emerging pollutants
Umiejewska K., Retman M., Lech P.	
C4 [155] Impact of Fatty Waste on Anaerobic Digestion of Sewage Sludge at a Municipal Wastewater Treatment Plant - A Case Study	Waste-to-energy
Kılıç L., Dilsizoglu-Akyol N., Ölmez-Hancı T.	
C5 [184] Applicability of Advanced Oxidation Processes for Treatment and Recovery of Washing Machine Effluent (V)	Advanced oxidation processes
Afonso A., Gomes I., Saavedra M.J., Simões L., Simões M.	
C6 [205] Coaggregating <i>Delftia acidovorans</i> facilitates the metabolic activity of partner bacteria in drinking water biofilms	Drinking water and health
Rañada M.V., Jaraula C.M.	
C7 [211] End-phase Rehabilitation Assessment of Boracay Island Using Microbial Parameters as Indicator of Water Quality	Pollution control and contaminated sites
Sadunishvili T., Amashukeli N., Gaganidze D., Kharadze S., Sturua N., Rezzonico F.	
C8 [224] Antibiotic Susceptibility of <i>Erwinia amylovora</i> Isolates from Fire Blight Diseased Pomaceous Fruit Trees in Georgia	Antibiotic resistance
Anagnostou E., Stathopoulou E., Heimbürger-Boavida L., Nomikou P.	
C9 [241] A first insight of Hg occurrence in the Hellenic Volcanic Arc (V)	Heavy metals in the environment
C10 Rodino S., Butu M., Butu A.	Agroforestry, Forest and

	[269] Improve the post-harvest quality of fruits based on edible natural resources	Agricultural Sustainability
	Vasios G., Gialeli M., Kostopoulos M., Koufos G., Zaragkali F., Tapazidou P., Kakaroglou I., Antoniadis I., Troumbis A.	Agroforestry, Forest and Agricultural Sustainability
C11	[282] Wild rabbits impact on the agricultural ecosystems of Lemnos island by analyzing ELGA's compensations (V)	Agroforestry, Forest and Agricultural Sustainability
	Gkountouras D., Mpartziopoulou M., Boti V., Albanis T.	
C12	[341] Occurrence of Pesticide Residues in Surface Waters and Related Cultivated Food Products from NW Greece	Emerging pollutants
	Sujetovienė G., Miskelyte D., Dikšaitytė A., Januškaitienė I., Kzaciene G., Zaltauskaite J.	
C13	[342] Response of the lichen Evernia prunastri to exposure of antibiotic	Biomonitoring
	Soubasakou G., Evgenoglou L., Cavoura O.	
C14	[351] A presumptive and interactive map of PFAS contamination in Greece: a tool for the identification of possible exposure sources	Pollution control and contaminated sites
	Carneiro R., Gomes G., Zaiat M., Santos-Neto Á.	
C15	[373] Cometabolic removal of ibuprofen, diclofenac and ciprofloxacin driven by glycerol fermentation in an acidogenic biofilm reactor	Emerging pollutants
	Vagi M., Ntatsi N., Petsas A.	
C16	[390] Ecotoxicological impacts of pharmaceuticals on marine biota: A Systematic Review	Emerging pollutants
	Papadimou S., Barbayannis N., Golia E.	
C17	[392] Cultivation of milk thistle in Pb-contaminated urban soils	Soil and groundwater contamination and remediation
	Golia E., Koropouli A., Papadimou S., Kantzou O.D., Androudi M., Xagoraris C.	
C18	[393] Spatial and temporal variability of Cadmium and Lead in Urban Soils of Thessaloniki (northern Greece)	Urban environment and health
	Oliveira M.Y., Guerrero C., Panagopoulos T.	
C19	[401] A Literature Review on the Benefits of Healing Gardens	Urban environment and health
	Alygizakis N., Ng K., Bijlsma L., Cerqueira F., Čirka L., Deviller G., Fortunato G., Kampouris I., Lai F., Lundy L., Marano R., Paulus G., Radu E., Šlipko K., Tadić Đ., Thomaidis N., Slobodnik J., Fatta-Kassinos D.	
C20		Antibiotic resistance

[459] The NORMAN Antibiotic Resistance Bacteria and Genes Database (NORMAN ARB & ARG): let's collaborate to manage risk of Antibiotic Resistance

Konstantinou I., Boti V., Hela D., Albanis T.

C21 [464] Photocatalytic Treatment of Hospital Secondary Wastewater in a Pilot Scale for the Removal of Residual Pharmaceuticals

Wastewater treatment

Lykos C., Tsalpatouros K., Frakos G., Konstantinou I.

C22 [465] Synthesis of LaCuXNi_{1-X}O₃ perovskite materials for application as heterogeneous photocatalysts and/or catalysts for persulfate activation

Advanced oxidation processes

Kotoula D., Karaviti T., Georgiou P., Alexopoulou E., Papazoglou E.

C23 [474] Cultivation of fiber crops for sustainable soil remediation and biobased raw material production for industrial uses

Soil and groundwater contamination and remediation

Selem B., Alkarbi A., Alhosani A., Ahmad F., Elemam M., Iftikhar S., Mourad A., Thiemann T.

C24 [485] Plastic to microplastic in the United Arab Emirates – plastic bottle caps in a hot, arid environment

Soil and groundwater contamination and remediation

Panagopoulou E.I., Damalas D.E., Aleiferi E., Tzepkinli V.A., Schweizer M., Heid C., Köhler H.-R., Von Der Ohe P., Triebeskorn R., Thomaidis N.S.

C25 [518] Determination of the effect of environmentally relevant pH values on the toxicity, uptake & biotransformation of Propranolol in zebrafish embryos by LC-HRMS

Emerging pollutants

Aleiferi E., Tsakanika M., Damalas D., Kritikou A., Sakellariou G., Thomaidis N.

C26 [520] Novel polymer-based MALDI matrices: exploring their potential for low molecular weight compound detection, utilizing MALDI-HRMS analytical platforms

Emerging pollutants

Boinis N., Diamanti K. S., Panagopoulou E. I., Gkotsis G., Maragou N., Nika M. C., Vasilatos K., Höpker K. A., Schäfer H., Wieczorek M., Osteraurer R., Thomaidis N. S.

C27 [524] Unveiling the occurrence of organic micropollutants in different species of terrestrial mesocarnivores utilizing HRMS techniques

Emerging pollutants

Bouta D., Alygizakis N., Gkotsis G., Nika M.C., Orfanioti A., Bizani E., Badry A., Chadwick E., Cincinelli A., Claßen D., Danielsson S., Dekker R., Duke G., Glowacka N., Jansman H., Knopf B., Koschorreck J., Krone O., Martellini T., Movalli P., Persson S.,

Emerging pollutants

O'Rourke E., Siebert U., Treu G., Van den Brink N., Walker L., Slobodnik J., Thomaidis N.

[543] Targeted and untargeted trend analysis in historic samples of top predators and their preys

Kostopoulou N., Alygizakis N., Gkotsis G., Nika M.C., Orfanioti A., Bizani E., Badry A., Chadwick E., Cincinelli A., Claßen D., Danielsson S., Dekker R., Duke G., Glowacka N., Jansman H., Knopf B., Koschorreck J., Krone O., Martellini T., Movalli P., Persson S., Roos A., O'Rourke E., Siebert U., Treu G., Van den Brink N., Walker L., Slobodnik J., Thomaidis N.

C29	[544] Predominant chemical mixtures in top predators and their prey in Europe	Emerging pollutants
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Iancu V., Tenea A., Chiriac F., Pirvu F., Serban G., Cojocaru V., Vasile G.

C30	[577] Sensitive method for the simultaneous detection of ten azole contaminants in water samples by SPE-LC-MS/MS	Emerging pollutants
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Cojocaru V., Cristea I.

C31	[579] Identification and quantification of organochlorine pesticides by GC-ECD in environmental matrices	Emerging pollutants
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Jiang H.L. Wang X., Zhao R.S.

C32	[360] Functionalized covalent organic framework for separation and enrichment of perfluorinated compounds in environmental waters	Emerging pollutants
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Abdeh Keykha H., Mavroulidou M., Mohamadzadeh H.

C33	[361] Using CO₂- induced magnesium carbonate as environmental friendly additives for petroleum decontamination sandy soil	Soil and groundwater contamination and remediation
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Wang X., Jiang H. L., Zhao R. S.

C34	[364] Determination of trace bisphenols through magnetic solid-phase extraction with MOF-COF composite	Emerging pollutants
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Asselah A., Africano Cani Z., Abraão Manuel Buzi N.

C35	[449] Mass-transfer processes of toxic hexavalent chromium adsorption onto food waste adsorbent	Water and wastewater treatment and reuse
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De Marco E., Mancuso E., Sbaffoni S.

C36	[278] ETV in support of the specific objectives defined by the Italian National Strategy on the Circular Economy	Circular economy and bioeconomy
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Mariano S.M., Singh R., Angeles L.G., Aga D., Jaraula C.M.

C37	[253] Lateral and vertical variations of pharmaceutical	Emerging pollutants
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contaminants in natural aquatic systems

	Duffield-Healy M., Fernaud S.	
C38	[215] Novel applications of Molecular Biology to aid in environmental bioremediation	Heavy metals in the environment
	Alirai S., Gill-Solsona R., Alygizakis N., Thomaidis N.S., Marquès M., Gago-Ferrero P.	
C39	[590] Holistic investigation of PFAS in pregnant women biological samples	Emerging pollutants
	Zorpas A.A., Navarro-Pedreño J.	
C40	[594] The art of possible in the Nexus of Planetary Engineering	Circular Economy and Bioeconomy
	Kupczyk T.	
C41	[587] Competencies of the young generation regarding the circular economy	Circular Economy and Bioeconomy
	Kalampokidis A., Klontza E., Lekkas D.F.	
C42	[595] Effect of cycle duration and sludge retention time (SRT) in the enrichment and accumulation of PHAs in synthetic medium	Bioplastics
	Tzivelou E., Klontza E., Lekkas D.	
C43	[596] Cheese whey valorization for the production of Arthrospira (Spirulina) platensis growth in the context of circular economy	Sustainable production and management of biomass
	Manolia M.A., Klontza E.E., Orfanou A., Hatziantoniou M., Lekkas D.F.	
C44	[418] Insights from empirical data and prevention techniques for food wastage in the hotel industry	Food waste and food loss
	Elboughdiri N., Ferkous H., Rouibah K., Delimi A., Boublia A., Algethami J., Alqahtani M., Yadav K., Jeon B., Benguerba Y.	
C45	[566] Removal of copper (II) from aqueous solution using biopolymer-based materials: Theoretical and statistical physics investigation for wastewater treatment	Wastewater treatment

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