

16th International Conference on Environmental Science & Technology



CEST 2019

4-7 September 2019
Rhodes, Greece

empowering science to deliver change

PROGRAMME





Prince Sultan Bin Abdulaziz
International Prize for Water

Recognizing Innovation

Invitation for Nominations

**9th Award
(2020)**

**Nominations open online
until 31 December 2019**



www.psipw.org e-mail: info@psipw.org

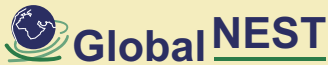
16th International Conference on Environmental Science & Technology

4-7 September 2019, Rhodes, Greece



CEST 2019

HOSTS



CO-ORGANIZERS



UNIVERSITÀ DEGLI STUDI DI SALERNO



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Prince Sultan Bin Abdulaziz
International Prize for Water



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Clean drinking water is essential to life. Governments, contract testing labs, state-run utilities, and bottled water manufacturers are increasingly tasked with testing higher volumes of samples, performing time-sensitive assays, and even handling unexpected emergencies – all while adhering to strict and often-changing regulations.

Challenges like these can hold labs back. That's why, when it comes to detecting trace elements, volatiles and semivolatiles, microplastics, and other contaminants in drinking and bottled water, we offer a portfolio of pioneering, innovative ICP-MS, GC/MS, UV/Vis, FT-IR, LC/MS/MS, LSC, and other systems. Plus, our automation, consumables, and world-class service and support offers an end-to-end solution your lab needs to succeed.

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WELCOME

On behalf of the Organizing and Scientific Committees, it is our great pleasure to welcome you in Rhodes at the 16th International Conference on Environmental Science and Technology. This year marks the 30th anniversary of CEST series and we really try to make it a memorable event!

The conference will host 55 sessions and over 550 oral and poster presentations from all the fields of environmental science. Scientific and social side events have also been organized. Apart from the speeches in the Opening Session, 4 plenary presentations and 3 networking / technical events have been scheduled. A welcome cocktail reception will be held on 4th of September after the Opening Ceremony and a dinner on 7th of September after the closing session.

We continue our efforts to reduce our environmental footprint, so the book of abstracts and the proceedings of the conference can only be found online. In this way, over 200.000 paper pages are not printed & transported resulting in saving energy and natural resources in a great extent. Conference bags are made of 100% natural cotton and are reusable. This year, we put more effort and managed to organize a single-use plastic-free event! Our goal was achieved with the great help of Athanasios Laskaridis Charitable Foundation who supported CEST2019 and Rodos Palace staff who managed to eliminate the use plastic in the conference venue.

Personally, I would like to thank the conference committees for the excellent and fruitful collaboration, CEST staff, participants, session chairs, 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 the magnificent island of Rhodes!



Demetris Lekkas
CEST2019 chairman

CEST2019

Environmental engineering and science have provided solutions for nearly all the problems earth has faced. Most cities in developed countries on the planet have now wastewater treatment plants, drinking water treatment facilities and solid waste management systems to avoid further environmental damage. Still, about 20% of the earth's population has no access to clean water, and 40% suffer from the consequences of unacceptable hygiene conditions. Pathogenic micro-organisms are responsible for over 2 million deaths per year, with the highest percentage being reported to children under 5 years of age. On the other hand, the population growth leads to an increasing need for food production, which increases the pressures to natural resources which are by no means infinite. It seems now that our future depends on innovation and technological advances to significantly reduce the pressures and the energy input as well as to align production with the concept of circular economy. Academic research should work together with the industry and the society. Through research, we are discovering new ways to implement advanced technologies, to address emerging environmental challenges as well as use research findings to influence policymakers and promote socially responsible policies.

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. CEST is thus a platform where academia and business converge; where academic research, innovative ideas and solutions serve as the basis for a cleaner, healthier and more sustainable environment.

The conference is organised bi-annually by the Global Network on Environmental Science and Technology together with the University of the Aegean (Greece). CEST2019 is academically supported by the University of Salerno (Italy) and the Imperial College London (UK) as well as a group of distinguished scientists – the members of the Conference Scientific Committee. CEST2019 is under the patronage of UNESCO's Water Assessment Programme, European Water Association (EWA), A.C. Laskaridis Charitable Foundation and the Ministry of Environment and Energy (Greece).

All the papers that are selected for either oral or poster presentation undergo a review process. As a result of the improving quality of the papers in previous conferences, their proceedings have been included in databases, such as Science Citation Index (ISI) and SRCosmos. Since 2015, the papers that are presented in CEST, are submitted to cooperating journals for review and publication in special issues.

CEST2019, coincides with the celebration of the 30 years anniversary (1989–2019) of CEST series and we aim making it a memorable event.

DURING CEST2019 YOU WILL HAVE THE OPPORTUNITY TO:

- present and discuss your research with scientists from around the world
- expand your network
- attend presentations covering all the latest trends and innovations in the field of environmental science and technology
- meet with our prestigious invited speakers
- enjoy the island of Rhodes, one of the most famous Greek touristic attractions!

GUIDE FOR DELEGATES

VENUE

The Conference will take place in Rhodes, Greece, at Rodos Palace International Convention Centre, between 4 to 7 September 2019.

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

CEST2019 Scientific Programme includes 55 sessions, running in 6 parallel rooms, with 318 Oral, 187 Flash, 66 Poster presentations. The conference sessions cover 28 unique scientific topics.

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

INTERNET -WIFI

Free WLAN Access is provided in all Conference Rooms

SOCIAL MEDIA

 Global NEST  @CEST2019_RODOS

REFRESHMENTS, LUNCH & OFFICIAL DINNER

- **Coffee Breaks** are scheduled daily at the Lobby of Rodos Palace International Convention Centre.
- **Lunch Breaks** are scheduled for Thursday 5/9 (13:30) and Friday 6/9 (13:30).

CONFERENCE HOURS

- **Registration** at the Lobby of Rodos Palace International Convention Centre.
Wednesday 4/9, 10:00-18:00.
Thursday 5/9 – Saturday 7/9, 8:00 – 20:00
- **Oral presentations (rooms A, B, C, D, E, F)**
Thursday 5/9 – Saturday 7/9, 9:00 – 19:30
Detailed information can be found in the sessions' programme.
- **Poster presentations (Lobby of Rodos Palace International Convention Center)**
SESSION A: Thursday: 17:00-18:00
SESSION B: Friday: 17:00-18:00
SESSION C: Saturday: 17:00-18:00

Ground Floor Plan



LEVEL

Ground floor:
Rodos Palace International Convention Center

FACILITIES

CEST Secretariat
Poster area
Coffee & lunch break area
WiFi

ROOMS

- (A) Delphi Amphitheater
- (B) Nafsika A
- (C) Nafsika B
- (D) Nefeli Hall A
- (E) Nefeli Hall B
- (F) Salon des Roses

GUIDELINES FOR PRESENTATIONS

CEST2019 programme includes oral, flash and poster presentations

ORAL AND FLASH PRESENTATIONS

All authors are expected to arrive to the Conference Rooms at least 30 minutes before the beginning of the session in order to upload and check their presentations. An assistant will be available to support the speakers before and during the sessions.

Duration for oral presentations: 15 minutes
Includes 12 minutes presentation and 3 minutes Q&A from the audience.

Duration for flash presentations: 3 minutes
No Q&A are foreseen from the audience.
A printed poster should also be prepared and displayed during the poster session that will run at the same day.

Projection means
Each room will be equipped with:
- An LCD projector and a laptop.
The computers are equipped with Windows 8 or later version and Microsoft Office 2010 (Word, Excel, Power Point).
Only USB flash drive can be used.

POSTER PRESENTATIONS

Posters will be displayed at the Lobby of Rodos Palace International Convention Centre

The posters' size should be 65 cm wide and 80 cm high - (approx. 8 A4 pages).

Authors will be provided with a poster board area and mounting pins. The poster number and title will be indicated on the board. Authors are responsible for mounting their posters the morning of their presentation and removing them at the end of the day.

Authors are expected to be present at their display for presentation and discuss their research with the conference participants at the time indicated by the conference programme.

CONFERENCE SECRETARIAT

16th International Conference on Environmental Science and Technology (CEST2019)

E-MAIL cest@gnest.org
WEB <http://cest.gnest.org>
FACEBOOK Global NEST
TWITTER @CEST2019_RODOS

CONFERENCE CHAIRS



Assoc. Prof. LEKKAS D.F.
University of the Aegean
Greece



Prof. BELGIORNO V.
University of Salerno
Italy



Prof. VOULVOULIS N.
Imperial College London
UK

INVITED SPEAKERS



Professor IRENE ANGELIDAKI
Bioenergy Group, Technical
University of Denmark, *Denmark*



Professor DERMOT DIAMOND
INSIGHT Centre of Data Analysis,
Dublin, *Ireland*



Professor HASSAN ARAFAT
Director of the Center for
Membrane and Advanced Water
Technology (CMAT) and Professor
of chemical engineering, Khalifa
University, *United Arab Emirates*



Professor DIONYSIOS DIONYSIOU
Department of Chemical and
Environmental Engineering
(ChEE), University of Cincinnati,
USA



Professor DAMIÀ BARCELÓ,
Director of Catalan Institute
for Water Research (ICRA)
and Research Professor
of Institute of Environmental
Assessment and Water Research,
Spain



Professor KERSTIN KUCHTA
Institute for Environmental
Technology and Energy
Economics, Hamburg University
of Technology TUHH, *Germany*



Professor VINCENZO BELGIORNO
Laboratory of Environmental
Engineering, University of Salerno,
Italy



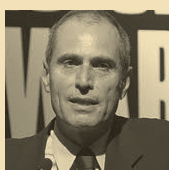
Professor PIET LENS
UNESCO-IHE Delft Institute
for Water Education,
The Netherlands



Dr. DARIO BRDARIĆ
International Federation of
Environmental Health, *Croatia*



Dr. PIERO LERCHER
Medical University of Vienna,
Austria



Dr. DIMITRIS DERMATAS,
Associate Professor, National
Technical University of Athens,
Greece and Chair of European Union
Network for the Implementation and
Enforcement of Environmental Law



Mr. JOHANNES LOHAUS
Secretary General of the
European Water Association
(EWA), *Germany*



Professor MARIA LOIZIDOU
National Technical University of Athens, Greece



Dr RICK PARKMAN
Leader of the Remediation and Industrials Practice for AECOM Environment in Europe, Middle East and Africa (EMEA), AECOM



Professor DIONISSIOS MANTZAVINOS
Department of Chemical Engineering, University of Patras, Greece



Professor THEODORA PETANIDOU
Department of Geography University of the Aegean, Greece



Dr THEODORE METSIS
Mechanical, Electrical, Environmental Engineer
Member of the European Bioelectromagnetics Association, Greece



Professor MARIA- HELENA RAMOS
National Research Institute of Science and Technology for Environment and Agriculture, Irstea, UR HBAN, France



Dr. STELLA MICHAELIDOU
President of the National Committee on Environment and Children's Health, Cyprus



Dr JEAN VENABLES
CBE FREng CEng CEnv FICE MCIWEM FCGI, Venables Consultancy, UK



Mr PAVEL MISIGA
Head of the Circular Economy and Bio-based Systems Unit of the Healthy Planet Directorate (EU)



Dr. NABIL KHELIFI
Senior Editor, Springer



Ms ARIANA NASTASEANU,
Project Advisor, H2020 SME Unit, European Commission



Dr ANTONIS ZORPAS
Assistant Professor, Open University, Cyprus



Dr MARIA NEIRA
Director of the Department of Public Health and Environment, World Health Organisation

SHOW ME SOME STATS!

CEST2019 is for everyone involved
with environmental science and technology



4
days



5+
events



400+
attendees



10
sponsors



25
invited
speakers



550+
oral/poster
presentations



28
thematic
areas



12+
collaborating
scientific journals



70+
participating
countries

CEST2017 Metrics

459

number of
participants

15

invited
speakers

75

participating
countries

668

number of
presentations
(oral and poster)

CEST Series Metrics

4420

papers
presented
(1989- 2017)

27

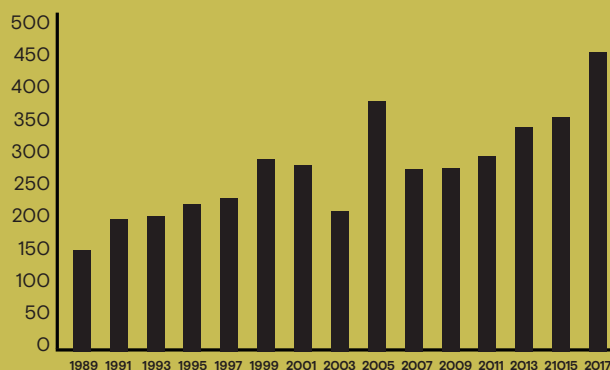
h-index

3139

CEST citations*

*refers to CEST papers
published in special
issues of the collaborating
journals after 2007)

Number of participants in CEST conferences (1989-2017)



Main thematic areas

- Water and wastewater treatment and reuse
- Hydrology and Water Resources
- Waste Management
- Environmental Management and Policies
- Environmental Pollution
- Ecology and ecosystem management
- Analysis of Environmental Systems
- Environmental Health
- Innovative Environmental Solutions
- Special session on “Environmental Impact of Maritime Transport”

Celebrating Excellence in Science and Technology

TESTIMONIALS

ANDREAS ANDREADAKIS

Professor, National Technical University of Athens, *Greece*



The International Conference on Environmental Science and Technology (CEST) is organised biannually by the Global Network of Environmental Science and Technology and the Department of Environment of the University of the Aegean. This year's 16th Conference marks the 30th anniversary of the series of CEST. It was in 1989 when on the initiative of Themis Lekkas, a number of young, then, scholars and practitioners realised the need for a Greek conference on environmental issues and organised the first event in Lesvos, the home island of the University of the Aegean. In many respects, this has been a new challenge. The

specifications of this first conference and of those that followed the next ten or so years reflected the needs, priorities and capabilities of the time. They were largely a Greek affair and the language and proceedings were Greek. The conferences were not specialised, covering a wide spectrum of environmental issues, albeit with emphasis on waste management and water quality deterioration caused by point and diffuse pollution sources. One of the aims was to bring together various research groups working in Universities and Research Institutions in Greece to exchange views and opinions and promote collaboration. Another ambition was to attract not only the producers of knowledge but also the users of this knowledge, scientists, administrators, practitioners, and the public. Last but not least was to have a good time.

What has been achieved? A lot, including acknowledgment by dignitaries, even by the President of the Republic. Understandably, expectations and ambitions grew over time. Since then the nature of the conferences underwent significant changes. Participation increased from about 150 to more than 450, but most importantly during the last 20 years, the conference became an international event attracting researchers from more than 70 countries. Thematic workshops run parallel to the main conference. Special sessions for young researchers are organised. Selected papers are published in a number of journals. Yet some things persist. The conference still covers a wide and enlarged range of environmental issues. The focal point remains the Aegean Sea. And the friendly spirit developed during the formative years is still strong. A friendly spirit that in a way 'compels' all the veterans, every two years, to pay homage to CEST.



ANASTASIOS STAMOU

Professor, National Technical University of Athens, Greece

Thirty years ago (in 1989), a small number of scientists, mainly academics, organized the 1st Conference on Environmental Science and Technology (CEST) in Lesbos Island. The 1st CEST was practically the first conference in Greece that attracted scientists and people from industry, mainly from Greece, who “were given the floor” to present their scientific work in various interdisciplinary areas of Environmental Science and Technology. The success of the 1st CEST encouraged us to continue organizing CEST every 2 years in Molyvos until 1997. During these 8 years, we were not only benefited by our scientific discussions. The loose and idyllic environment of Molyvos in September gave us also the chance for some relaxing moments a few days before the start of the intensive obligations of the academic year; during CESTs we enjoyed social, political and philosophical discussions and created friendships that are still active and strong. This combination of scientific with social activities in a friendly environment was probably the most important advantage of CEST in Molyvos, in spite of the noise that was occasionally heard in one of the conference halls by the nearby kitchen during the presentations, which was usually faced with a smile by the participants. One of the main activities of CEST was the meetings of the Strategic Committee that were held near the end of every CEST. Themis (Prof. Themistocles Lekkas), the “father” of CEST, was coordinating these meetings; in 1997 we concluded that the facilities of Molyvos were not any more sufficient for the continuously growing CEST that was expected to be 10-years old in 1999. The 6th CEST in Pythagorion in Samos Island in 1999 marked the beginning of the 2nd period that in the next 14 years left its place of birth to “mature” in a series of other locations (mainly Greek islands) that included Syros (2001), Lemnos (2003), Rhodes (2005 and 2011), Kos (2007), Chania (2009) and Athens (2013). During these years, the internationalization and fame of CEST have been continuously growing and the quality of the papers has constantly been improving due to the required peer review process and their prospect to be published in journals. In 2013, the members of the Strategic Committee realized that it was time for CEST to find its “permanent home”. The 14th CEST in Rhodes (2015) denoted the entrance of the 26-old CEST in its 3rd period; in September 2019, we celebrate the 30-years of CEST that we experienced growing from its infancy as an international (Greek dominated) small conference to a successful worldwide leading environmental conference. Happy birthday CEST!



KIMON HADJIBIROS

Professor, National Technical University of Athens, Greece

I have attended all the conferences since 1989 except the conference held in 2017. I remember the first conference which was held in Mytilene. Back then, the environmental science was a new research field in Greece and the conference made a great sense for that reason. We had the opportunity to exchange our viewson the field, but also an opportunity for environmental scientists to get to know each other and to present their work. Everyone seemed to be very enthusiastic, since it was quite new for Greece. The main reason that made me continue attending the conference was its high scientific level, even from the first organized event (1989). Distinguished scientists participated, but it was also a chance for young scientists to present their work. If there is something, I can recollect from CEST, is the long discussions with other scientists and how the conference has helped to create a community of environmental scientists in Greece. In the beginning, the official conference language was Greek, so it was mainly a chance for the Greek scientists to meet together. During the years, the conference has gained an international reputation through the participation of foreign scientists. It seems that now, most of the participants are coming from abroad and the Greek participants are mainly PhD students, grabbing the opportunity to present their work.



NIKOS THOMAIDIS

Professor, National and Kapodistrian University of Athens, Greece

30 years ago, in 1989, a significant conference in environmental science and technology (CEST) was inspired by Professor Themistoklis Lekkas and started in Molyvos, Lesvos, the birthplace of the University of the Aegean, but also my homeland. I was just 21 years old, a student in Chemistry, just starting my environmental chemistry journey working on the determination of PAHs in sludge. I was spending summertime in Lesvos and stayed always few days more to attend the conference in Molyvos, present my first steps in environmental science and be together with prominent scientists back those days. I enjoyed both the friendly scientific spirit in the morning and the vivid summer nights of Molyvos with all the attendees in a “wannabe” endless party. I remember those conferences with nostalgia. CEST grew up fast, and in 1999 it went global. New facilities were needed and CEST started its Aegean journey from Samos. I was a postdoctoral researcher in the University of the Aegean and I was asked to organize the first workshop on elemental speciation with famous guests and a special issue. Then CEST grew further with participants from all over the world, covering all the aspects of environmental science and technology, with excellent keynote speakers, special sessions and prominent journals covering with special issues the conference. I continue attending CEST for all these 30 years, contributing and supporting it as a Professor and as a convener of the “Emerging Pollutants” session and guest editor of special issues of Journal of Hazardous Materials and Chemosphere. CEST has found its home in Rhodes after a long journey through Aegean Sea and strong and mature as it is, it is attending the future with confidence. Happy anniversary!

SCIENTIFIC AND SOCIAL EVENTS

1. OPENING CEREMONY

Wednesday 4 September,
Room A, Delphi Amphitheater, 15:00,
Cocktail reception at 20.00 at La Terrace bar

CEST celebrates its 30th anniversary and an Opening Ceremony with the participation of special guests has been organized. The agenda comprises of:

- Welcome speeches from university and local authorities
- A presentation by Mr Pavel Misiga, Head of the Circular Economy and Bio-based Systems Unit of the Healthy Planet Directorate (EU)
- Challenges for a Sustainable Water Environment in Europe, Plenary speech by Johannes Lohaus (European Water Association – EWA)
- Dr Dimitris Dermatas (Chair of European Union Network for the Implementation and Enforcement of Environmental Law)
- Emerging Contaminants: Risk and Challenges for Water Quality, Water Reuse and Plant Uptake. Solutions using advanced treatment technologies in Europe, Plenary speech by Professor Damia Barcelo
- Recognizing Innovation, Dr David Solomon Jalajel, Prince Sultan Bin Abdulaziz International Prize for Water
- 30 years CEST, Demetris F. Lekkas

A welcome cocktail will be offered at 20.00

2. CONFERENCE DINNER

The conference dinner will be held on Saturday 7/9 at 21.00 at the University of the Aegean in Rhodes town. More details will be provided to you during the conference. The entrance is free for the registered delegates, while the accompanying persons can buy tickets at the secretariat.

3. NETWORKING EVENT: POLICIES AND OPPORTUNITIES FOR SMES

Thursday 5 September 2019,
Room A, Delphi Amphitheater, 18:00

A networking event addressed to academics who wish to collaborate with SME's and attract funding from H2020 as well as to research-oriented SME's will be held. The event is co-organized with Praxi Network, which supports Technology Transfer and innovation. PRAXI Network is an established technology transfer organization with long-standing experience in assisting SMEs and research organisations throughout Greece to achieve cross-border technological cooperation. It is a distinct administrative unit operating within the Foundation for Research and Technology – Hellas (FORTH), the most active research organisation of Greece. It started out in 1991 as a partnership between FORTH and SEV Hellenic Federation of Enterprises with the mission to link industry with academia. This strategic alliance of the research and industrial world of Greece was reinforced four years later, when the Federation of Industries of Northern Greece (FING) joined the partnership.

Between 1995 and 2008, PRAXI Network was nominated by the European Commission as one of Europe's Innovation Relay Centers (IRC) acting therefore as one of the main Greek stakeholders in the field of technological innovation and cross-border technological cooperation. In parallel and since 1999, the General Secretariat for Research & Technology in Greece appoints PRAXI Network as the National Contact Point (NCP) for the 5th, 6th and 7th Framework Programmes for Research and Technological Development and currently Horizon 2020, rendering it an official entity for information and advisory support for EU-funded research programmes.

Since 2008, PRAXI Network provides innovation and technology transfer services, initially as a member and currently as coordinator of the Greek consortium of the Enterprise Europe Network, the largest network of integrated business support to Small and Medium Enterprises (SMEs).

Speaker: Mrs Ariana Nastaseanu, Project Advisor, H2020 SME Unit

Facilitator: Mr Panagiotis Karniouras, Director of Praxi Network, Coordinator of the Enterprise Europe Network – Hellas National Contact Point for Horizon 2020

4. AN EDITOR PERSPECTIVE ON THE PUBLISHING PROCESS

Friday 6 September 2019,
Room A, Delphi Amphitheater, 18:00

Knowing the best way to identify the most appropriate journal to send your paper to can be difficult but really helps to get your paper accepted. This talk aims to give participants a clear idea of the publishing landscape and provides detailed insights into identifying the right journal before starting to write a paper. Authors are also made aware of what aspects of their papers Editors look at critically, and to ensure that in taking care of these areas, their papers are much more likely to be accepted.

A presentation will be given by Professor Dionysiou, providing insights on important points to consider when submitting manuscripts to high impact journals. He is a Professor of Environmental Engineering at the University of Cincinnati and one of the Editors in "Chemical Engineering Journal (Elsevier Journal, Impact Factor: 6.735).

The presentation will focus with the Chemical Engineering Journal which includes a main section focused on environmental topics, as an example but discussion will include points based on the experience of Dr Dionysiou in publication in and reviewing for various journals. The presentation will include aspects of understanding the scope of the journal, 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.

A panel discussion will follow chaired by Professor Damia Barcelo (Editor, Science of the Total Environment), and Professor Gerasimos Lyberatos (Editor, Journal of Hazardous Materials). ELSEVIER will award 3 prizes for poster presentations in the topics covered by the journals. The certificates will be signed by the Editors.

5. SPRINGER AUTHOR ACADEMY: A GUIDE ON WRITING AND PUBLISHING YOUR JOURNAL MANUSCRIPT

Saturday 7 September
Room A, Delphi Amphitheater, 14.00

DR. NABIL KHELIFI

Senior Editor, Manager of Springer MENA program
Springer, a part of Springer Nature, *Germany*

Publication must be seen as an important, if not the most important, part of the research process. However, writing research papers for academic journals is not easy and is very competitive. After producing data and generating ideas from your research, how do you write a clear and concise paper that attracts the attention of journal editors and readers? How should you prepare a cover letter to make a first good impression about your research paper? How should you respond to reviewer reports? Here, we share advice during 2 hours on how to effectively write and structure your paper, prepare a cover page and respond to reviewers' comments following this plan:

1. Why publishing in academia is important
2. What are the motivations that can inspire you to accomplish a successful publication
3. What to do before you start writing your manuscript
4. How to efficiently prepare the needed literature
5. Which kind of writing style you should learn/use before you start writing
6. How to logically link your ideas throughout the manuscript
7. Which structure you should follow when preparing your manuscript
8. How to present figures and tables
9. How to shape appealing title and abstract after you finish writing
10. Which journal you should choose and how you select the most appropriate journal
10. How to prepare a cover letter to attract the attention of editors
11. How to answer reviewers' comments
12. How to disseminate your work worldwide after publication

PUBLICATION OF PAPERS

All papers presented in CEST2019 will be published on e-proceedings (ISSN classification) and will be open and available for instant download through CEST2019 webpage.

Additionally, all the authors will receive an invitation to submit their papers to international renowned journals. The normal peer review process of each journal will be followed. Publishing agreements for special issues have been made with the journals reported below.

The authors will be notified on the submission process after the conference.



GLOBAL NEST JOURNAL



BULLETIN OF ENVIRONMENTAL
CONTAMINATION
AND TOXICOLOGY



SUSTAINABLE CHEMISTRY
AND PHARMACY



CHEMOSPHERE



ENVIRONMENTAL POLLUTION



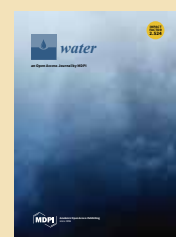
DESALINATION
AND WATER TREATMENT



WASTE AND BIOMASS
VALORIZATION



JOURNAL OF HAZARDOUS
MATERIALS



WATER



JOURNAL OF ENVIRONMENTAL
ENGINEERING



ENERGIES



EUROPEAN JOURNAL OF
ENVIRONMENTAL INTEGRATION

CEST SERIES

1st Conference on Environmental Science and Technology, CEST1989

September 1989, Mytilene, Lesvos, Greece

2nd Conference on Environmental Science and Technology, CEST1991

2-5 September 1991, Molyvos, Lesvos, Greece

3rd Conference on Environmental Science and Technology, CEST1993

6-9 September 1993, Molyvos Lesvos, Greece

4th Conference on Environmental Science and Technology, CEST1995

4-7 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-2 September 1999, Pythagorion, Samos, Greece

7th Conference on Environmental Science and Technology, CEST2001

3-6 September 2001, Hermoupolis, Syros

8th Conference on Environmental Science and Technology, CEST2003

8-10 September 2003, Lemnos Island Greece

9th Conference on Environmental Science and Technology, CEST2005

1-3 September 2005, Rhodes Island, Greece

10th Conference on Environmental Science and Technology, CEST2007

5-7 September 2007, Cos Island, Greece

11th Conference on Environmental Science and Technology, CEST2009

3-5 September 2009, Chania, Crete, Greece

12th Conference on Environmental Science and Technology, CEST2011

8-10 September 2011, Rhodes Island, Greece

13th Conference on Environmental Science and Technology, CEST2013

5-7 September 2013, Athens, Greece

14th Conference on Environmental Science and Technology, CEST2015

3-5 September 2015, Rhodes Island, Greece

15th Conference on Environmental Science and Technology, CEST2017

31 August – September 2017, Rhodes Island, Greece

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AECOM

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CONFERENCE PROGRAMME

DAILY TIMETABLE
Thursday 5 September 2019

	Room A	Room B	Room C	Room D	Room E	Room F
09:00	SESSION 1 Wastewater treatment (1)	SESSION 2 Life Cycle Analysis (1)	SESSION 3 Soil and groundwater contamination and remediation (1)	SESSION 4 Microplastics in the Marine Environment	SESSION 5 Advanced Oxidation Processes (1)	SESSION 6 Solid Waste Management (1)
10:30-11:00	Plenary speech					
11:30	SESSION 7 Wastewater treatment (2)	SESSION 8 Life Cycle Analysis (2)	SESSION 9 Soil and groundwater contamination and remediation (2)	SESSION 10 Heavy metals in the environment	SESSION 11 Advanced Oxidation Processes (2)	SESSION 12 Solid Waste Management (2)
15:00	SESSION 13 Wastewater treatment (3)	SESSION 14 Efficient water resources management in Cr(VI) impacted water bodies	SESSION 15 Environmental impact of maritime transport	SESSION 16 The Non Ionizing radiation from Wireless technology: A 21 Century Revolution or a Global pollution and Health hazard	SESSION 17 Advanced Oxidation Processes (3)	SESSION 18 Solid Waste Management (3)
17:00-18:00	Poster session					
18:00	Networking event/ Policies and Opportunities for SME's					

Poster session 1 – Topics: Water and Wastewater Treatment - Life Cycle Analysis - Soil and groundwater contamination and remediation - Microplastics in the Marine Environment - Advanced Oxidation Processes - Solid Waste Management - Heavy metals in the environment

Friday 5 September 2019

	Room A	Room B	Room C	Room D	Room E	Room F
09:00	SESSION 19 Wastewater treatment (4)	SESSION 20 Marine environment and coastal management	SESSION 21 Hydrology and water resources management (1)	SESSION 22 Emerging pollutants (1)	SESSION 23 Energy technologies and sustainability (1)	SESSION 24 Climate change mitigation and adaptation
10:30-11:00	Plenary speech					
11:00-11:30	Plenary speech					
	Room A	Room B	Room C	Room D	Room E	Room F
12:00	SESSION 25 Wastewater treatment (5)	SESSION 26 Environmental biotechnology and bioenergy (1)	SESSION 27 Hydrology and water resources management (2)	SESSION 28 Emerging pollutants (2)	SESSION 29 Energy technologies and sustainability (2)	SESSION 30 Environmental Data Analysis and Modeling (1)
	Room A	Room B	Room C	Room D	Room E	Room F
15:00	SESSION 31 Wastewater treatment (6)	SESSION 32 Environmental biotechnology and bioenergy (2)	SESSION 33 Hydrology and water resources management (3)	SESSION 34 Emerging pollutants (3)	SESSION 35 Circular economy and industrial symbiosis	SESSION 36 Environmental Data Analysis and Modeling (2)
17:00-18:00	Poster session					
18:00	An Editor's perspective on the publishing process – Panel Discussion					

Poster session 2 – Topics: Wastewater treatment - Marine environment and coastal management - Hydrology and water resources management - Emerging pollutants - Energy technologies and sustainability - Climate change mitigation and adaptation - Environmental biotechnology and bioenergy - Environmental Data Analysis and Modeling - Circular economy and industrial symbiosis

Saturday 7 September 2019

	Room A	Room B	Room C	Room D	Room E	Room F
09:00	SESSION 37 Water treatment (1)	SESSION 38 Electric and Electronic Waste (1)	SESSION 39 Environmental Health (1)	SESSION 40 Water-Energy Nexus	SESSION 41 Agroforestry, Forest and Agricultural Sustainability (1)	SESSION 42 Environmental Planning, Management and Policies (1)
10:30-11:00	Plenary speech					
	Room A	Room B	Room C	Room D	Room E	Room F
11:30	SESSION 43 Water treatment (2)	SESSION 44 Electric and Electronic Waste (2)	SESSION 45 Environmental Health (2)	SESSION 46 Nanomaterials in the environment: applications and effects	SESSION 47 Agroforestry, Forest and Agricultural Sustainability (2)	SESSION 48 Environmental Planning, Management and Policies (2)
14:00	Springer Author Academy: A guide on writing and publishing your journal's manuscript					
	Room A	Room B	Room C	Room D	Room E	Room F
15:00	SESSION 49 Water and wastewater reuse	SESSION 50 Air pollution	SESSION 51 Environmental Health (3)	SESSION 52 Biowaste	SESSION 53 Lakes, rivers, estuaries and ecosystem health	SESSION 54 Environmental Planning, Management and Policies (3)
17:00-18:00	Poster session					
18:30	Closing ceremony (Room A)					

PLENARY LECTURES

Wednesday 4 September 2019 (17:15)

- Emerging contaminants risk and challenges for water quality, water reuse and plant uptake. Solutions using advanced treatment technologies in Europe

by Barcelo D., Director of Catalan Institute for Water Research (ICRA), Spain

Thursday 5 September 2019, (10:30)

- Biogas: An important process of the Bioeconomy

by Angelidaki I., Bioenergy Group, Technical University of Denmark, Denmark

Friday 6 September 2019, (10:30)

- Water and Climate Services for Hydropower

by Ramos M.H., National Research Institute of Science and Technology for Environment and Agriculture, Irstea, UR HBAN, France

- Effects of climate change in the Mediterranean: the case of bees and other pollinators

by Petanidou T., Department of Geography University of the Aegean, Greece

Saturday 7 September, 10:30

- Don't pollute my health

by Neira M., Director of the Department of Public Health and Environment, World Health Organisation

KEYNOTE LECTURES

Thursday 5 September 2019

- | | |
|---|--|
| <ul style="list-style-type: none">▪ Past, present and future of MBRs for wastewater treatment
<i>by Belgiorno V., University of Salerno, Italy</i> | Session 1 – WASTEWATER TREATMENT
Room A, 09:00-09:30 |
| <ul style="list-style-type: none">▪ A brief overview of regulatory developments for PFAS in Europe, the remediation options and a new treatment technology for destroying PFAS (DE-FLUORO™)
<i>by Parkman R., AECOM</i> | Session 3-SOIL AND GROUNDWATER CONTAMINATION AND REMEDIATION
Room C, 09:00-09:30 |
| <ul style="list-style-type: none">▪ Micro-pollutants, Oxidants, Catalysts and the Water Matrix: A Harmonic Quartet or the War of the Roses?
<i>by Mantzavinos D., University of Patras, Greece</i> | Session 5 –ADVANCED OXIDATION PROCESSES
Room E, 09:00-09:30 |
| <ul style="list-style-type: none">▪ The role of End of Waste Criteria in the Framework of Circular Economy Strategy
<i>by Zorpas A., Open University, Cyprus</i> | Session 6-SOLID WASTE MANAGEMENT
Room, 09:00-09:30 |
| <ul style="list-style-type: none">▪ The adverse health effects of non-ionizing radiation on foetus and child: Is it a mythos or a scientifically evident global public health challenge
<i>by Canna-Michaelidou St. National Committee on Environment and Children's Health, Cyprus</i> | Session 16- THE NON-IONIZING RADIATION FROM WIRELESS TECHNOLOGY
Room D, 15:05-15:35 |
| <ul style="list-style-type: none">▪ Wireless technology, the dangers beyond the sparkle
<i>by Metsis T., European Bioelectromagnetics Association, Greece</i> | Session 16- THE NON-IONIZING RADIATION FROM WIRELESS TECHNOLOGY
Room D, 15:35-16:05 |
| <ul style="list-style-type: none">▪ New aspects on prevention, international policies and actions for public health of electromagnetic field (EMF) related health problems
<i>by Lercher P., Medical University of Vienna, Austria</i> | Session 16- THE NON-IONIZING RADIATION FROM WIRELESS TECHNOLOGY
Room D, 18:00-18:30 |

Friday 6 September 2019

- Flood Risk Management: past and future

Venables J., CBE FREng CEng CEnv FICE MCIWEM FCGI, UK

Session 21-HYDROLOGY AND
WATER RESOURCES
MANAGEMENT

Room C, 09:00- 09:30

- MALDI-TOF Imaging and LC-HRMS: New tools for degradation studies of polymer probes exposed to different wastewater environments: Linking chemical transformations and potential microbial consumers (DNA + Proteomic analysis)

by Barcelo D. Catalan Institute for Water Research, Spain

Session 22-EMERGING
POLLUTANTS

Room D: 09:00- 09:30

- New anaerobic bioprocess for resource recovery from organic and inorganic solid waste

by Piet Lens, UNESCO-IHE Delft Institute for Water Education, the Netherlands

Session 26-ENVIRONMENTAL
BIOTECHNOLOGY AND
BIOENERGY

Room B 12:00-12:30

- Applications of TPMS architectures in water technology: Amazing potential for cost and energy savings and reduced environmental impacts

by Arafat H., Khalifa University, UAE

Session 31-WATER TREATMENT

Room A, 15:00-15:30

- Reliable in-situ sensing of water quality parameters using low cost autonomous analysers

by Diamond D., INSIGHT Centre of Data Analysis, Ireland

Session 33-HYDROLOGY AND
WATER RESOURCES

Room C 15:00-15:30

Saturday 7 September 2019

- Susceptibility of Algal Toxins to Advanced Oxidation Processes

by Dionysiou D., University of Cincinnati, USA

Session 37-WATER TREATMENT

Room A, 09:00-09:30

- Recovery of critical raw materials from WEEE - Status and Perspectives

by Kuchta K., Hamburg University of Technology, Germany

Session 38-ELECTRIC AND
ELECTRONIC WASTE

Room B, 09:00-09:30

- The challenges of West Nile virus infections in Europe and mosquito control

by Brdaric D. Int. Federation of Environmental Health

Session 39-ENVIRONMENTAL
HEALTH

Room C, 09:00-09:30

- Current trends and future potential of biowaste and biomass

by Loizidou M., National Technical University of Athens, Greece

Session 52-BIOWASTE

Room D, 15:00-15:15

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ORAL PRESENTATIONS

Day 1

Wednesday 4 September 2019

OPENING CEREMONY

Room A – Delphi Ampitheater

Chairs: Belgiorno V., Lekkas D.F.

- 15:00-15:30 Welcome speeches
- 15:30-16:00 **Mr Pavel Misiga**, Head of the Circular Economy and Bio-based Systems Unit of the Healthy Planet Directorate (EU)
- 16:00-16:15 Challenges for a sustainable water environment in Europe
Johannes Lohaus (European Water Association-EWA)
- 16:15-16:45 **Dr Dimitris Dermatas**
- 16:45-17:15 *Coffee break*
- Invited speaker, Professor Damia Barcelo**
- 17:15-18:00 Emerging contaminants risk and challenges for water quality, water reuse and plant uptake. Solutions using advanced treatment technologies in Europe
- 18:00-18:30 **Dr David Solomon Jalajel**
Prince Sultan Bin Abdulaziz International Prize for Water – Recognizing Innovation)
- 18:30-18:45 **Dr Demetris F. Lekkas**
30 years CEST
- 20:00 *Welcome cocktail*

Day 2**Thursday 5 September 2019****SESSION 1 – WASTEWATER TREATMENT (1)****Room A – Delfi Amphitheater****Chairs: Belgiorno V., Vayenas D.**

- 09:00-09:30 **Invited speaker, Belgiorno V.**
Past, present and future of MBRs for wastewater treatment
- 09:30- 09:45 [169] **Primikyris G., Siahos K., Vavouraki A., Putnis C.V., Natsi P.D., Koutsoukos P.G.**
Phosphorus and nitrogen recovery from wastewater in the form of struvite: alternative magnesium sources
- 09:45-10:00 [251] **Theofanidis S.A., Samiotis G., Bellos D., Pekridis G., Tsiptsias C., Amanatidou E.**
Challenges in biological treatment plants: the approach of zero sludge waste
- 10:00-10:15 [273] **Žgajnar Gotvajn A., Carvalho A.P., Marinsek M., Kalcikova G.**
The use of biochar from waste wooden biomass for removal of emerging pollutants
- 10:15-10:30 [302] **Papadopoulos K.P., Argyriou R., Ekonomou C.N., Tatoulis T.I., Tekerlekopoulou A.G., Vayenas D.V.**
Printing ink wastewater treatment using electrocoagulation

SESSION 2-LIFE CYCLE ANALYSIS (1)**Room B- Nafsika A****Chairs: San Miguel G., Corona B.**

- 09:00-09:15 [83] **Bacenetti J., Orsi L., Parolini M., Cavaliere A.**
Conventional and organic rice production in Northern Italy: What is the (environmentally) best?
- 09:15-09:30 [109] **Belyanovskaya A., Laratte B., Perry N., Baranovskaya N.**
Improvement of calculations of the total characterization factor in the usetox model including a regional approach
- 09:30-09:45 [152] **Corona B., Shen L.**
The role of life cycle assessment to measure progress towards the circular economy
- 09:45-10:00 [156] **Moretti C., Ruhlin V.C., Corona B.**
Early-stage LCA of a novel fuel flexible CHP technology based on biomass gasification and a SOFC

- 10:00-10:15 **[364] Curry R., Cromie T., Somerville G.**
 Life Cycle evaluation of production and utilisation pathways of coupled Anaerobic Digestion (AD) and Gasification/Pyrolysis systems using the Anaerobic Biorefinery concept
- 10:15-10:30 **[413] Arena A.**
 Energy and environmental aspects of distributed generation and electric-vehicle integration from a LCA perspective. A case study in Mendoza, Argentina

SESSION 3-SOIL AND GROUNDWATER CONTAMINATION AND REMEDIATION (1)

Room C – Nafsika B

Chairs: Dermatas D., Papassiopi N., Panagiotakis I.

- 09:00-09:30 **Invited speaker-Parkman R.**
 A brief overview of regulatory developments for PFAS in Europe, the remediation options and a new treatment technology for destroying PFAS (DE-FLUORO™)
- 09:30- 09:45 **[113] Huang Y., Guo X., Rao Z., Yang Z., Liu C., Shi Z.**
 Screening of polar pesticides in groundwater in Hebei Province, China
- 09:45-10:00 **[155] Stockenhuber S., Weber N., Dixon L., Lucas J., Grimison C., Bennett M., Stockenhuber M., Mackie J., Kennedy E.,**
 Thermal degradation of perfluorooctanoic acid (PFOA)
- 10:00-10:15 **[159] Weber N., Stockenhuber S., Dixon L., Lucas J., Grimison C., Stockenhuber M., Mackie J., Benhelal E., Kennedy E.**
 Thermal decomposition of chlorpyrifos - an experimental investigation
- 10:15-10:30 **[572] Apollaro C., Fuoco I.**
 Geochemical modelling as a tool to investigate chromium contamination in groundwater

[530] Rachwał M., Jabłońska-Czapla M., Grygoyć K., Fornalczyk A., Willner J.

Technology critical elements in industrial wastes as the source of soil contamination

Flash presentations

[481] Richa A., Touil S., Djezzar M., Douaoui A

Origin of the salinity in the groundwater of the El Attaf alluvial aquifer

[500] Punia A., Siddah N.S., Bharti R.

Groundwater quality and hydrogeochemical characterization of Khetri copper mining region, India

SESSION 4-MICROPLASTICS IN THE MARINE ENVIRONMENT
Room D-Nefeli Hall A
Chairs: Papatheodorou G., Topouzelis K.

- 09:00-09:15 **Kosmopoulou A.**
 "Aboard the "Typhoon": Surveying marine litter in the Saronic Gulf. A funder's perspective"
- 09:15-09:30 **[984]Mafina K., Robertson I.**
 A Small Overview of the current, Natural & Affected Environments by Microplastics
- 09:30- 09:45 **[233] Altmann K., Goedecke C., Bannick C.G., Abusafia A., Scheid C., Steinmetz H., Braun U.**
 Identification and quantification of microplastic in sewage systems by TED-GC-MS
- 09:45-10:00 **[292] Wander L., Vianello A., Vollertsen J., Braun U., Paul A.**
 Multivariate analysis of large μ -FTIR Data sets in search of microplastics
- 10:00-10:15 **[782] Nguyen T.H., Tang H.M.F., Maggi F.**
 OMCEC: A novel method for simultaneous detection of composition, geometry and motion of suspended particles
- 10:15-10:30 **[502] Nguyen L., Brouwer R., Beukering P.**
 A model of marine litter in sustainable fisheries

[289] Kalcikova G., Jemec Kokali A., Marolt G., Žganjnar Gotvajn A.
 Adsorption of silver on virgin and aged microplastics

Flash presentations

[805] Gies S., Schömann E.-M., Radiev Y., Prume J., Koch M.
 Investigating the potential of UV-excited photoluminescence spectroscopy for the identification of plastics

[898] Scopetani C., Pflugmcher S., Pellinen J.
 A method for the extraction of microplastics from solid samples using olive oil

SESSION 5 –ADVANCED OXIDATION PROCESSES (1)
Room E: Nefeli Hall B
Chairs: Xekoukoulotakis N., Mantzavinos D.

- 09:00-09:30 **Invited speaker [766] Mantzavinos D.**
 Micro-pollutants, Oxidants, Catalysts and the Water Matrix: A Harmonic Quartet or the War of the Roses?
- 09:30-09:45 **[15] Villota N., Lomas J.M.**
 US/H₂O₂ combined technology applied to the paracetamol oxidation

- 09:45-10:00 **[206] Brüninghoff R., Van Duijne A., Braakhuis L., Saha P., Jeremiase A., Mei B., Mul G.**
Comparative analysis of chlorinated intermediates formed during electrochemical and photo(electro)catalytic degradation of 4-ethylphenol in saline media
- 10:00-10:15 **[227] Ortega A.C., Alvarez C.F., Cardona L., Arroyave C., Aristizábal A.**
UV/H₂O₂ coupled with adsorption for decolorization of dye mixtures in water and phytotoxic effects
- 10:15-10:30 **[259] Ambauen N., Hallé C., Meyn T.**
Electrochemical treatment of landfill leachate under cold climate conditions

SESSION 6-SOLID WASTE MANAGEMENT (1)**Room F: Salon des Roses****Chairs: Loizidou M., Vakalis S.**

- 09:00-09:30 **Invited speaker [980] Zorpas A.**
The role of End of Waste Criteria in the Framework of Circular Economy Strategy
- 09:30- 09:45 **[264] Mathioudakis D., Papadopoulou K., Lytras G., Pavlopoulos C., Dimopoulos N., Niakas S., Melanitou E., Lekkas D., Lyberatos G.**
A detailed characterization of household municipal solid waste
- 09:45-10:00 **[670] Hahladakis J.N.**
An overview of the plastic waste and recycling status in Qatar
- 10:00-10:15 **[694] Pyra K., Tarach K., Majda D., Janiszewska E., Melian-Cabrera I., Gora-Marek K.**
On the positive influence of Pd species on low-density polyethylene cracking
- 10:15-10:30 **[695] Pyra K., Janiszewska E., Tarach K., Majda D., Góra-Marek K.**
Bottom-up synthesized hierarchical Beta zeolites as the catalysts for low-density polyethylene cracking
- 10:30-10:45 **[146] Radwan S.M.A., Ashour E.H.**
Compost quality assessment of various agricultural wastes and organic manures

PLENARY SESSION (1)**Room A: Delphi Amphitheater****Chairs: Lyberatos G., Belgiorno V.**

- 10:30-11:00 **Invited speaker Angelidaki I.**
Biogas: An important process of the Bioeconomy

11:00-11:30 Coffee break

SESSION 7-WASTEWATER TREATMENT (2)**Room A: Delphi Amphitheater****Chairs: Stoller M., Vayenas D.**

- 11:30-11:45 **[337] Innocenzi V., De Michelis I., Ippolito N.M., Mazziotti Di Celso G., Prisciandaro M., Veglio F.**
Aerobic degradation of tetramethyl ammonium hydroxide (TMAH) from effluents of semiconductor industries: kinetic studies of laboratory and pilot experiments
- 11:45-12:00 **[356] Marchetti A., Stoller M.**
Tuning of an advanced control system on a membrane process for tannery wastewater purification and chromium recovery purposes
- 12:00-12:15 **[483] Carucci A., Cappai G., Camedda C., Erby G., Puggioni G., Milia S., Tocco G.**
Unbiodegradable soluble COD removal from industrial wastewater by a hybrid moving bed biofilm reactor
- 12:15-12:30 **[539] Karagianni E., Chatzitheodoridis E., Papassiopi N.**
Characterization of activated carbon prepared from Aegina pistachio shells for Hg removal
-
- [235] Poulli K., Rossidou E., Kozakou S., Michael N., Demetriou E., Christofidou M., Aletrari M.**
Monitoring of treated domestic wastewater quality
- [245] Zawierucha I., Nowik-Zajac A., Kozlowski C.**
Impregnated resins as novel sorbents for removal of toxic metal ions from aqueous solutions
- [254] Nowik-Zajac A., Zawierucha I., Kozlowski C.**
Removal of toxic metal ions through polymer inclusion membranes containing macrocyclic ligands as carriers
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Flash presentations

SESSION 8-LIFE CYCLE ANALYSIS (2)**Room B: Nafsika A****Chairs: San Miguel G., Corona B.**

- 11:30-11:45 [479] **Wu Z., Wang C., Wolfram P., Sun X., Sun F., Hertwich E.**
Regional Variability and Future Trends in Carbon Footprints of Electric Vehicles in China based on THEMIS Model
- 11:45-12:00 [812] **San Miguel G., Ruiz D.**
Sustainability analysis of a bean stew using environmental LCA and life cycle cost assessment
- 12:00-12:15 [813] **Cerrato M., San Miguel G.**
Environmental, economic and socio-economic life cycle assessment of the spanish electricity system

[199] **Zakuciová K., Štefanica J., Kočí V., Šerešová M., Vlček Z., Vitvarová M., Opatřil J.**

Methodology development for implementing Life Cycle Analysis of energy production in the Czech Republic

[704] **Bacenetti J., Haaland Gaeta F., Facchinetti D., Parolini M.**

Approaches to tackle emerging challenges in European aquaculture

Flash presentations

[837] **Rubio-Sanchez M., San Miguel G.**

Environmental and economic life cycle inventory of Brussels sprouts

[690] **Baric M., De Folly D'Auris A., Tonziello J.**

Life cycle assessment analysis for remediation technology choice: a case study

[931] **Abad D., San Miguel G., Domínguez C., Jost N., Gutiérrez F.**

Environmental and economic LCI of a micro-CPV module

SESSION 9 -SOIL AND GROUNDWATER CONTAMINATION AND REMEDIATION (2)**Room C: Nafsika B****Chairs: Dermatas D., Papassiopi N., Panagiotakis I.**

- 11:30-11:45 [628] **Alexandrino D.A.M., Mucha A.P., Almeida C.R.M., Carvalho M.F.**
Isolation and optimization of microbial consortia for the biodegradation of two persistent fluorinated fungicides
- 11:45-12:00 [463] **Toskos T., Panagiotakis I., Dermatas D.**
Per-and polyfluoroalkyl substances (PFAS): an emerging contaminant

- 12:00-12:15 [577] Siebielec G., Siebielec S., Stuczynski T., Sugier P.
Lessons from long-term field phytostabilisation studies
- 12:15-12:30 [116] Kolarec B., Žeravica A.
Analysis of hydrochemical time series
- 12:30-12:45 [603] Aggelopoulos C., Hatzisymeon M., Tataraki D., Rassias G.
In-situ removal of antibiotics in soil by cold plasma
- 12:45-13:00 [208] Ferraro A., Massini G., Mazzurco Miritana V., Panico A., Pontoni L., Race M., Rosa S., Signorini A., Fabbicino M., Pirozzi F.
Bioaugmentation process for PAHs contaminated soil remediation through microbial inocula from anaerobic treatment of lignocellulosic substrate

[815] Vrchotová B., Danda M., Lovecká P.

Cooperation of bacteria and fungus on polycyclic aromatic hydrocarbons degradation

[817] Moraetis D., Al-Suhai A.S., Pyrgaki K., Argyraki A., Dermatas D.

Origin of Cr in alluvial sediments and ultramafic rocks in Sultanate of Oman. Magnetic fractionation and sunlight effect.

[818] Macurkova A., Drobnikova T., Maryska L., Jindrichova B., Burketova L., Siegel J., Valentova O., Lovecka P.

Flash presentations

Quantitative PCR as a tool for analysis of diversity in soil microbiome

[819] Macurkova A., Drobnikova T., Maryska L., Jindrichova B., Burketova L., Siegel J., Valentova O., Lovecka P.

Complex approach for analysis of changes in soil microbiome

[918] Silvestri D., Waclawek S., Stejskal V., Vlkova D., Kvapil P., Kohout P., Hrabak P., Černík M.

A pilot test in Eastern Bohemia for chlorinated aliphatic hydrocarbons groundwater remediation

SESSION 10- HEAVY METALS IN THE ENVIRONMENT

Room D: Nefeli Hall A

Chairs: Lydakis N., Albanis T.

- 11:30-11:45 [106] Sauliutė G., Stankevičiūtė M., Makaras T.
Biomarkers responses in *Salmo salar* exposed to multicomponent metal mixtures

- 11:45-12:00 **[168] Natsi P., Moystaki E., Koutsoukos P.**
The effect of the presence of zinc on the precipitation of CaCO₃ from supersaturated solutions
- 12:00-12:15 **[334] Vilardi G., Verdone N., Di Palma L.**
Nano-iron based coated biomass as packing material in fixed-bed reactors for Lead removal from wastewater: experimental and mathematical modeling
- 12:15-12:30 **[494] Vordoglou M., Samara T., Tsitsoni T.**
Research on the ability of urban trees to retain heavy metals.
- 12:30-12:45 **[584] Bayon L., Ballesteros F., Segura-Garcia S., Lu M.-C.**
Cobalt and phosphorous recovery from semiconductor wastewater through homogeneous crystallization of cobalt phosphate in a fluidized-bed reactor
- 12:45-13:00 **[964] Lydakis-Simantiris N., Patrolea E., Nikoli T., Loupasaki S., Grigorakis S.**
Effect of heavy metals accumulation on the growth and essential oils content of Rose Geranium (*Pelargonium graveolens L.*)
-
- [24] Januskaitiene I., Diksaityte A.**
Elevated CO₂ in air changes photosynthetic response of *Hordeum vulgare* and *Bromus secalinus* to cadmium pollution in soil
- [89] Butrimavičienė L., Kalciene V., Stankevičiūtė M., Jokšas K.**
Neuro-, geno- and cytotoxicity responses in mussels *Anodonta cygnea* after six metals mixture treatment
- [328] Sotiropoulou R.E.P., Serafidou M., Skodras G.**
Effect of oxygen functional groups on mercury retention in activated carbons
- Flash presentations** **[428] Kampouroglou E., Kollias K., Stouraiti C., Papassiopi N.**
Acid generation and heavy metal leachability from waste lignite disposal sites, Oropos basin, North Attica. An assessment on preliminary data.
- [476] Prevendar Crnić A., Zgorelec Ž., Srebočan E., Kisić I.**
Mercury in *eisenia fetida* and soil in the vicinity of a natural gas treatment plant in northern Croatia during the last ten years
- [583] Gluhcheva Y., Petrova E., Pavlova E., Tinkov AA. Ajusakova O.P., Rahsev P., Vladov I., Skalny A.V.**
Tissue-specific TfR Expression in organs of immature mice after chronic exposure to CoCl₂
-

[588] Pavlova E., Kamenova K., Gluehcheva Y., Petrova E., Ivanova J. Atanassova N.

Comparative effects of salinomycin and meso-2,3-dimercaptosuccinic acid (DMSA) on lead-induced impairment of reproductive function in male mice

[816] Sandil S., Dobosy P., Kröpfel K., Füzi A., Óvári M., Zárny G.

Flash presentations

Arsenic uptake in bean and cabbage grown in silty and sandy soil and irrigated with arsenic containing water

[720] Chouvelon T., Araujo F.D., Bouchoucha M., Briant N., Bruzac S., Crochet S., Knoery J., Ponzevera E., Rozuel E., Sireau T., Thomas B., Amouroux D., Berail S., Brach-Papa C.

Sources and transfer of Cu, Hg and Pb into marine food webs using innovative tracers (metal stable isotopes, trophic markers): results of a pilot study in a French coastal area

SESSION 11-ADVANCED OXIDATION PROCESSES (2)

Room E: Nefeli Hall B

Chairs: Xekoukoulotakis N., Mantzavinos D.

11:30-11:45 **[350] Čehovin M., Žgajnar Gotvajn A.**

Ozonation, advanced oxidation and hydrodynamic cavitation for removal of persistent pollutants

11:45-12:00 **[497] Boczkaj G., Gałol M., Fedorov K., Cako E.**

Cavitation based advanced oxidation processes for wastewater treatment – comparison of hydrodynamic and sonocavitation systems

12:00-12:15 **[518] Schneider M., Rataj R., Kolb J.F., Bláha L.**

Degradation of Cylindrospermopsin using Advanced Non-Thermal Plasma Technologies

12:15-12:30 **[71] Villota N., Coralli I., Lomas J.M.**

Changes of dissolved oxygen during the caffeine oxidation by photo-Fenton

Flash presentations

[14] Villota N., Lomas J.M.

Fenton reagent in combination with UV light and ultrasound waves applied for caffeine oxidation

**Flash
presentations**

[228] Quiceno L.I., Hernández M., Cardona L., Arroyave C., Aristizábal A.

Evaluation of phytotoxic effects and decolorization of simulated and real textile wastewaters by UV/H₂O₂

[64] Villota N., Sardón L., Ferreiro C., Lomas J.M., Camarero L.M.

Effect of iron catalyst on caffeine oxidation by sono-Fenton technology

[70] Villota N., Sardón L., Ferreiro C., Lomas J.M., Camarero L.M.

Effect of hydrogen peroxide on caffeine oxidation by sono-Fenton technology

[79] Villota N., Qullatein H., Lomas J.M.

Colour changes during the carbamazepine oxidation by photo-Fenton

SESSION 12-SOLID WASTE MANAGEMENT (2)

Room F: Salon des Roses

Chairs: Lekkas D.F., Zorpas A., Soares H.

11:30-11:45 **[734] Vaccari M., Gibellini S., Arnaboldi G.**

Application of risk analysis to landfills: the experience of Brescia (Italy)

11:45-12:00 **[750] Olalo J., Reyes J., Rollon A.**

Pyrolysis of waste plastic laminates and coconut husk: optimization of fuel oil yield, higher heating value and energy value

12:00-12:15 **[775] Özçakir G., Karaduman A.**

Co-Pyrolysis of plastic wastes: effects of temperature and feedstock ratio on chemical composition of liquid product

12:15-12:30 **[821] Jalilov A., Albaiz A., Alsaidan M.**

Development of porous carbon nanomaterials from petroleum waste for CO₂ capture and mineralization

12:30-12:45 **[197] Maragkaki A.E., Papadaki A., Sabathianakis G., Poda A., Naskova L., Misseris T., Zlatkovski V., Zapounidis K., Manios T.**

Utilising pay as you throw systems and autonomous composting units in balkan med countries

12:45-13:00 **[521] Hangyási K., Varga Cs., Nagy R., Simon-Stóger L.**

A novel type of compound for surface treatment of carbon nanotubes for more effective application in polymers

- 13:00-13:15 **[526] Nagy B., Varga Cs.**
 Remarkable role of experimental olefin-maleic-anhydride copolymer based compatibilizing additives in PET bottle recycling
- 13:15-13:30 **[508] Bonifazi G., Gasbarrone R., Serranti S.**
 Hyperspectral imaging-based cascade detection applied to paper, cardboard, plastics and multilayer packaging sorting
-
- 13:30-13:45 **[701] Voukali I., Loizia P., Chatziparaskeva G., Navarro Pedreno J., Zorpas A.A.**
 Urban strategies for waste management in coastal areas
-
- 13:45-14:00 **[702] Loizia P., Inglezakis V., Pedreno N.J., Lasaridi K., Zorpas A.A.**
 Benchmarking indicators to assess the level of circular economy strategy in local level
-
- [498] Sadeghi S.M., Jesus J., Pinto E., Almeida A., Soares H.**
 A simple and flexible flowsheet process for efficient and selective metal recycling from spent fluid cracking catalysts
- [536] Retka J., Uhrynowski W., Yang Z., Karczewska-Golec J., Bajda T., Debiec-Andrzejewska K., Drewniak L.**
 Biorecovery of metal sulfides from leachates obtained through zinc-carbon battery recycling
- [838] Karalis J., Arapogloy D., Choriananopoylos N., Iliopoylos C.**
 Contribution to the exploitation of oil by-products for use in the production of quality feed through the fermentation with the fungal strain LGAM P123 of basidiomycetes Pleurotus ostreatus
- [882] Buachidze N., Dvalishvili N.,**
 Determining a probability of the uncontrolled landfills emergence in Georgia's rural areas using integrated methodology
- [883] Kutchava G., Buachidze N., Chikviladze N., Shubladze E.**
 Negative role of uncontrolled landfills in Georgia in environmental pollution processes
- [858] Mumladze T., Šleiniute A., Denafas G.**
 The possibility of recycling of multilayer packaging waste: Reducing environmental impacts

Flash presentations

13:30-15:00 *Lunch break*

SESSION 13- WASTEWATER TREATMENT (3)

Room A: Delphi Amphitheater

Chairs: Fountoulakis M., Ballesteros F.

15:00-15:15 **[658] Shamaei L., Khorshidi B., Ayranci C., Sadrzadeh M.**

Fouling-resistant membranes prepared via fully biobased layer-by-layer self-assembly

15:15-15:30

[659] Mohammadtabar F., Khorshidi B., Sadrzadeh M.

Hybrid zero liquid discharge (ZLD) membrane/chemical process for the treatment of oil sands produced water

- 15:30-15:45 **[679] Flores R., Adil J.**
Treatment of slaughterhouse wastewater utilizing cogon grass (*imperata cylindrica*) in a subsurface flow system constructed wetland in Zamboanga City, Philippines
- 15:45-16:00 **[761] Plevri A., Mamais D., Noutsopoulos C.**
Anaerobic MBR technology for treating municipal wastewater at ambient temperatures
- 16:00-16:15 **[763] Alghamdi A.A.**
Wastewater treatment with agricultural by-products: An investigation with date pit powder
-
- [304] Papadopoulos K.P., Argyriou R., Ekonomou C.N., Tatoulis T.I., Tekerlekopoulou A.G., Vayenas D.V.**
Printing ink wastewater treatment using electrocoagulation
- [307] Benekos A., Papadopoulos K., Triantaphyllidou I.-E., Tekerlekopoulou A.G., Vayenas D.V.**
Treatment of various agro-industrial wastewaters using electrocoagulation
- [417] Kotoula D., Iliopoulou A., Irakleous-Palaiologou E., Gatidou G., Aloupi M., Fountoulakis M.S., Stasinakis A.S.**
Use of the microalgae *Chlorella Sorokiniana* for municipal wastewater treatment: batch experiments
- Flash presentations** **[434] Venzke C.D., Giacobbo A., Rodrigues M.A.S., Bernades A.M.**
Membrane distillation treating a petrochemical reverse osmosis concentrate
- [450] Gkogkaki V., Karageorgis A., Pantazis K.**
Method Development for the Determination of Heavy Metals such as Copper, Iron, Manganese and Zinc in Aluminum Alloys by ICP-OES, based on wastewater analysis method
- [560] Boycheva S., Miteva S., Trendafilova I., Zgureva D., Václavíková M., Popova M.**
Magnetite nanoparticles activated coal fly ash zeolites with application in wastewater remediation
-

SESSION 14-EFFICIENT WATER RESOURCES MANAGEMENT IN CR(VI) IMPACTED WATER BODIES
Room B: Nafsika A
Chairs: Dermatas D., Di Palma L., Argyraki A.

- 15:00-15:15 **[449] Hatipoglu-Bagci Z., Bayari C.S., Canakci A.**
 CrVI contaminated groundwater in the mediterranean: case study from Mersin, Turkey
- 15:15-15:30 **[538] Shammout M.W., Shatanawi M.**
 Stakeholder participation in prioritization of water supply and demand in Jordan
- 15:30-15:45 **[581] Toli A., Mystrioti C., Della A., Thymi S., Papassiopi N.**
 Synthesis of kaolin supported nZVI and evaluation for the removal of Cr(VI) and Ni from waste streams
- 15:45-16:00 **[622] Pyrgaki K., Argyraki A., Kelepertzis S., Botsou F. Megremi I., Karavoltos S., Mpouras T., Dassenakis E., Hatzaki M., Dermatas D.**
 A DPSIR approach to selected Cr(VI) impacted groundwater bodies within Attica and Eastern Sterea Ellada River Basin Districts
- 16:00-16:15 **[640] Argyraki A., Kelepertzis E., Pyrgaki K., Botsou F., Megremi I., Dermatas D.**
 Harmonization of sampling and chemical analysis for the study of Cr(VI) water contamination in aquifers of eastern Mediterranean and Oman- the CrITERIA project experience
- 16:15-16:30 **[726] Mpouras T., Papassiopi N., Lagkouvardos K., Mystrioti C., Dermatas D.**
 Evaluation of calcium polysulfide as a reducing agent for the restoration of a Cr(VI)-contaminated aquifer

- [469] Zissimos A., Christofi C., Christoforou I., Rigas M.**
 Occurrence and distribution of hexavalent chromium in ground and surface waters in Cyprus under the CrITERIA project
- [576] Fuoco I., Figoli A., Brozzo G., De Rosa R., Bloise A., Criscuoli A., Apollaro C.**
 Preliminary study on Cr-rich groundwater treatment by membrane processes
- [594] Paternoster M., Rizzo G., Sinisi R., Vilardi G., Di Palma L., Mongelli G.**
 Geogenic Cr(VI) in groundwater of the Pollino Massif (southern Apennines): occurrence and remediation.

SESSION 15- ENVIRONMENTAL IMPACT OF MARITIME TRANSPORT**Room C: Nafsika B****Chairs: Kotrikla A., Klontza E.**

- 15:00-15:15 **[933] Boviatsis M., Alexopoulos A.B., Polemis D.**
Problems related to Ship Recycling IMO Regulations
- 15:15-15:30 **[915] Ntente P., Manoglou S., Tselentis V.**
European and IMO framework on the disposal of ship waste - greek legal interventions
- 15:30-15:45 **[921] Kotrikla A.M., Andrea V., Nikitakos N., Stylios C.**
European environmental compulsory framework on shipping and ports
- 15:45-16:00 **[926] Boviatsis M., Alexopoulos A.B., Theodosiou M.**
A proactive international regulation system based on technological innovations against emerging environmental threats
- 16:00-16:15 **[736] Puig M., Raptis S., Wooldridge C., Darbra RM.**
European port trends in environmental issues
- 16:15-16:30 **[945] Parinos C., Hatzianestis I., Chourdaki S., Plakidi E., Gogou A.**
The Agia Zoni II oil spill: short-term fate and imprint on the marine ecosystem of the Saronikos Gulf, Greece
- 16:30-16:45 **[178] Athanassopoulou V.**
The New Port Reception Facilities Directive - Changes and Challenges
- 16:45-17:00 **[467] Tseliou F.**
The importance of the Ecosystem Approach in management of the marine environment
- [925] Boviatsis M., Tselentis B.**
A comparative analysis between EU MRV and IMO DCS – the need to adopt a harmonised regulatory system.
- Flash presentations** **[934] Boviatsis M., Alexopoulos A.B., Vlachos G.P., Samiotis G.**
Chemical tanker accidents and the 2010 HNS convention
- [946] Hatzianestis I., Parinos C., Gogou A.**
Polycyclic aromatic hydrocarbons in surface sediments of the open Aegean Sea: contribution of maritime traffic

SESSION 16- THE NON-IONIZING RADIATION FROM WIRELESS TECHNOLOGY: A 21 CENTURY REVOLUTION OR A GLOBAL POLLUTION AND HEALTH HAZARD
Room D: Nefeli Hall A
Chairs: Canna-Michaelidou S., Lercher P., Metsis T.

15:00-17:15	Part one – The EVIDENCE Welcome
15:05-15:35	Invited speaker [78] Canna-Michaelidou St. The adverse health effects of non-ionizing radiation on foetus and child: Is it a mythos or a scientifically evident global public health challenge
15:35-16:05	Invited speaker [48] Metsis T. Wireless technology, the dangers beyond the sparkle
16:05-16:25	[345] Mosgoeller W., Kundi M. On the mechanism of RF-EMF-Exposure associated DNA damage and long-term risks
16:25-16:45	[209] Margaritis L.H. Telecommunication signals can cause biological effects: our 20 years' studies in living systems
16:45-17:15	[57] Belpoggi F., Vornoli A. Brain and heart tumors in Sprague-Dawley rats exposed to mobile phone radio frequencies
17:15-18:00	<i>Coffee break</i>
18:00-19:30	Part two: Policies and Practical Measures for Prevention
18:00-18:30	Invited speaker [331] Lercher P. New aspects on prevention, international policies and actions for public health of electro magnetic field (EMF) related health problems
18:30-18:50	[338] Mosgoeller W., Lercher P. What can we do about smartphone-addiction or the dream of a wireless- free digital detox Island
18:50-19:10	[970] Stein Y. Electromagnetic radiation including G5 frequencies, health effects summary and policy recommendations
19:10-19:30	Discussion - videos and training on practical measures for everyday life Moderators: Lercher P., Metsis Th. and Canna-Michaelidou S.

SESSION 17-ADVANCED OXIDATION PROCESSES (3)**Room E: Nefeli Hall B****Chairs: Xekoukoulotakis N., Torres-Palma R.**

- 15:00-15:15 **[533] Taylor C.M., Mattia D., Wenk J.H.**
Fluoride-free anodization of titanium and the photocatalytic behaviour of the produced TiO₂ nanostructures
- 15:15-15:30 **[596] Záray Gy., Dóbe S., Gombos E., Krakkó D., Mihucz V.G.**
Laboratory scale study of photolytic and photooxidative treatment for removal of pharmaceutical residues from water matrices
- 15:30-15:45 **[652] Favier L., Laslau A., Simion A.I., Sescu A.M., Harja M., Rusu L.**
New evidence of accelerated elimination of an emergent water pollutant by TiO₂ assisted photo-oxidation
- 15:45-16:00 **[900] Torres-Palma R., Serna-Galvis E., Silva-Agreto J.**
Elimination of relevant pharmaceuticals in hospital wastewater from Colombia by combination of a biological system with a sonochemical process

[335] Innocenzi V., Prisciandaro M., Veglio F.

Wastewater treatment processes utilizing hydrodynamic cavitation

[637] Xiangwei, Y., Graells M., Perez-Moya M.

A practical time discretization methodology for adjusting the dosage profile in photo-Fenton processes

Flash presentations**[639] Nasr Esfahani K., Zandi M.D., Travieso-Rodriguez J.A., Graells M., Pérez-Moya M.**

3D printed lab-scale raceway ponds reactors applied to photo-Fenton processes

[665] Gounaki I., Lironi M.A., Venieri D.

Bacterial inactivation & study of damages in subcellular level during disinfection of aqueous samples

SESSION 18-SOLID WASTE MANAGEMENT (3)**Room F: Salon des Roses****Chairs: Weigand H., Abeliotis K.**

- 15:00-15:15 **[841] Lim David JR., Ballesteros Florencio JR., De Sales Louanne G.**
Waste to energy initiatives at the local level
- 15:15-15:30 **[63] Schnabel K., Brück F., Mansfeldt T., Weigand H.**
Putting accelerated carbonation of bottom ash into practice: operation

of a continuous-feed pilot scale reactor

- 15:30-15:45 **[484] Walk S., Wardle D., Deegener S., Körner I.**
Improving the quality and quantity of source-separated household food waste in areas of different socio-economic characteristics: A case study from Lübeck, Germany
- 15:45-16:00 **[548] Zgureva D., Boycheva S.**
Conversion of coal fly ash by-products into high-grade zeolites by a quasi natural crystallization process
- 16:00-16:15 **[895] Amatong E.C., Palenzuela Rollon A.**
Methane production and waste stabilization in anaerobic co-digestion of food waste, biosolids and used cooking oil
- 16:15-16:30 **[965] Lasaridi K., Manios T., Abeliotis K., Terzis E., Chroni C., Galliou F., Panteli V.**
Quantitative and qualitative assessment of food waste of the hospitality sector in Greece
- 16:30-16:45 **[325] Simon-Stöger L., Varga Cs.**
Valorisation of waste polyethylene by blending with ethylene-vinyl acetate and incorporation of a new type of compatibilizer
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[25] Abud A.K.S., Silva A.S.

Biosynthesis of xanthan gum from fermenting potato peels extract: Influence of sucrose supplementation on yield and apparent viscosity

[141] Petsas A.S., Vagi M.C.

The use of recycled human food waste and leftovers in the aquaculture industry for the partial replacement of commercial manufactured feed as a more sustainable and environmentally friendly practice: Recent research and findings

[287] Cubas A.L.V., Machado M.M., Hermmann K., Bianchet R.T., Moecke E.H.S.

Extraction of oil from spent grounds coffee using ultrasound as pre-extraction method

[523] Fornalczyk A., Willner J., Jablonska-Czapla M., Gryrouc K., Rachwal M.

Analysis of the content of germanium, tellurium and thallium in the grounded waste of electronic equipment

[617] Junak J., Sicakova A.

Reducing the environmental impact of construction wastes by their use in the preparation of construction mixtures

Flash presentations

Flash

[787] Halldorsdottir S.

Health care waste management: challenges and solutions



presentations [730] Varier J., Kuttamassery N., Chenichery S.

Microbial Biodiversity of Municipal Solid Waste (MSW) dumpsites of Cochin, Kerala, India.

[909] Hutton B., Norrish M., Horan E.

Challenging the belief that landfill has higher net CO₂ emissions than waste-to-energy incineration or composting

17:00-18:00

Poster session – Coffee break

18:00-19:30

Networking event /Policies and opportunities for SMEs

Facilitator: **Panagiotis Karniouras**, Coordinator of the Enterprise Europe Network – Hellas National Contact Point for Horizon 2020

Speaker: **Mrs Ariana Nastaseanu** Project Advisor, H2020 SMI Unit

Day 3**Friday 6 September 2019****SESSION 19-WASTEWATER TREATMENT (4)****Room A: Delphi Amphitheater****Chairs: Hasan S., El Sergany M.**

- 09:00- 09:15 **[806] Antonio H., Ballesteros F., Esguerra G.**
Treatment of high strength industrial wastewater utilizing canna x generalis in a simulated vertical flow constructed wetland set-up
- 09:15-09:30 **[405] Kollias P.S., Kollias V.P., Kollias S.**
Quality Improvement of collected rainwater by elimination of micropollutants to sea site settlements with the use of new technologies
- 09:30-09:45 **[904] Maceda Ma., Cleofas O.**
Systems improvement and energy savings program for the existing conventional extended aerobic treatment of domestic wastewater in compliance of DAO 2016-08 new general effluent regulations
- 09:45-10:00 **[937] Abdulkarim E., Ibrahim Y., Hasan S., Naddeo V., Banat F.**
Novel olyethersulfone (PES) Alpha-Zirconium Phosphate (α -ZrP) ion exchange mixed matrix membranes for effective removal of heavy metals from wastewater
- 10:00-10:15 **[938] Millanar-Marfa J.M.J., Borea L., Castrogiovanni F., Napodano P., Hasan S.W., De Luna M.D.G., Belgiornov., Naddeo V.**
Performance evaluation of a flat sheet self-forming dynamic membrane (SFDM) for municipal wastewater treatment containing organic micropollutants
- 10:15-10:30 **[712] Chhetri R.K., Kokkoli A., Karvelas S., Andersen H.R.**
Nitrification inhibition test of salty wastewater containing Tetrakis(hydroxymethyl) phosphonium sulphate (THPS), formaldehyde and methanol using salt-adapted nitrifying bacteria, an alternative test method to ISO method

SESSION 20-MARINE ENVIRONMENT AND COASTAL MANAGEMENT**Room B: Nafsika A****Chairs: Papatheodorou G., Topouzelis K.**

- 09:00-09:15 **[490] Topouzelis K., Papakonstantinou A., Garaba S.P., Doukari M., Chatziantoniou A., Spondilidis S.**
Plastic Litter Project 2018: exploring the detection of floating plastic litter using drones and satellite images

- 09:15-09:30 **[527] Mengasini L., Mavroulidou M., Gunn M.J.**
 A study of alkali-activated concrete mixes in seawater environments
- 09:30-09:45 **[756] Savvidis Y., Galinou-Mitsoudi S.**
 Sustainable mussel culture activity in terms of hydrodynamics. The case study of Chalastra basin (NW Gulf of Thessaloniki)
- 09:45-10:00 **[781] Tzouvaras N.P.**
 Development of continuous, linear models for marine benthic macrophytes description
- 10:00-10:15 **[892] Papakonstantinou M., Papatheodorou G., Christodoulou D., Papastergiadou E.**
 Seasonal variations of water quality and aquatic macrophytes survey based on side scan sonar, in a shallow coastal lagoon (Gialova, SW Peloponnesus, Greece)
- 10:15-10:30 **[893] Fakiris E., Christodoulou D., Kordella S., Geraga M., Papatheodorou G.**
 Benthic litter density maps through low-cost underwater towed video camera surveys. An integrated approach.

- [263] Metaxatos A., Gazouli M.**
 Genetic population structure of scallops going through a rapid population decline in the Eastern Mediterranean
- Flash presentations* **[713] Kalantzi G., Kotsopoulos S., Panitsidis K., Partozis A., Karystinakis K.**
 SeaLoc: A pilot forecasting system providing sea characteristics and other support services on high local resolution

SESSION 21-HYDROLOGY AND WATER RESOURCES MANAGEMENT (1)
Room C: Nafsika B
Chairs: Lekkas D.F., Venables J., Lohaus J.

- 09:00- 09:30 **Invited speaker [459] Venables J.**
 Flood Risk Management: past and future
- 09:30-09:45 **[188] Mavrommatis A., Christodoulou G.C.**
 Comparative study of flow through vegetation stems with and without foliage
- 09:45-10:00 **[237] Romas E., Ziogas A., Pechlivanidis I., Tzimas A.**
 Climate change impact on river assimilative capacity: a case study application of water related climatic indicators
- 10:00-10:15 **[298] Daniil E.I., Michas S.N.**
 Trends in hydrologic prediction for the design of hydraulic projects

- 10:15-10:30 **[327] Krommyda M., Tsiakos V., Rigos A., Tsertou A., Amditis A., Georgiou H., Jonoski A., Popescu I., Assumpcao T.**
Innovative sensors for crowdsourced river measurements collection

SESSION 22-EMERGING POLLUTANTS (1)**Room D: Nefeli Hall A****Chairs: Thomaidis N., Gago-Ferrero P.**

- 09:00-09:30 **Invited speaker Barcelo D.**
MALDI-TOF Imaging and LC-HRMS: New tools for degradation studies of polymer probes exposed to different wastewater environments: Linking chemical transformations and potential microbial consumers (DNA + Proteomic analysis)
- 09:30-09:45 **[375] Lopez-Serna R., Garcia D., Bolado S., Jimenez J.J., Lai F.Y., Golovko O., Ahrens L., Wiberg K., Gago-Ferrero P., Munoz R.**
Identification of biotransformation products of veterinary drugs present in piggery wastewater during treatment with photobioreactors based on microalgae-bacteria and purple phototrophic bacteria consortia
- 09:45-10:00 **[130] Ghirardini A., Verlicchi P., Zoboli O., Zessner M.**
Mass balance of selected pharmaceuticals in an Austrian river catchment area: estimation of the different source contributions
- 10:00-10:15 **[143] Vagi M.C., Petsas A.S.**
Adsorption technology in wastewater treatment processes utilizing activated carbons as adsorbent materials prepared from waste vehicular tires: Recent research and trends in the removal of various toxic and persistent organic and inorganic pollutants
- 10:15-10:30 **[157] Dixon L., Weber N., Stockenhuber S., Molloy S., Lucas J., Grimison C., Stockenhuber M., Mackie J., Kennedy E.**
The pyrolysis of perfluorocarboxylic acids - effect of chain length

SESSION 23-ENERGY TECHNOLOGIES AND SUSTAINABILITY**Room E: Nefeli Hall B****Chairs: Kvesitadze G., San Miguel G., Vakalis S.**

- 09:00- 09:15 **[22] Sołowski G., Konkol I., Shalaby M., Cenian A.**
Hydrogen production from cotton wastes by mean of dark fermentation
- 09:15-09:30 **[34] Ramalingam K., Fillos J., Katehis D.**
Long term solids handling alternatives for New York City water resource recovery facilities (WRRFs)

- 09:30-09:45 **[200] Štefanica J., Zakuciová K., Kočí V., Šerešová M., Vlček Z., Vitvarová M., Opatřil J.**
 Life cycle assessment of electricity production in the czech republic – case-study of lignite combustion and hydropower
- 09:45-10:00 **[224] Alvarez-Villanueva D.M., Rincon Prat S.L.**
 Production of activated carbon from oil palm shells via physical activation with H₂O and its characterization for use in aqueous phase
- 10:00-10:15 **[857] Mendoza L., Gómez A., Rincón S.**
 Mass and energy balances of sewage sludge pyrolysis in a lab rotary kiln
- 10:15-10:30 **[353] Lilas T., Antoniou E., Kotrikla A., Vatistas A., Dagkinis I.**
 Improving aquaculture environmental footprint utilizing offshore renewable energy

SESSION 24-CLIMATE CHANGE MITIGATION AND ADAPTATION
Room F: Salon des Roses
Chairs: Petanidou T., Boycheva S., Flocas H.

- 09:00- 09:15 **[53] Bradford M.**
 Assessment of concrete footpath upheavals in heatwaves
- 09:15-09:30 **[120] Simperler L., Glanzer M., Ertl T., Kretschmer F.**
 Reactivation of former watercourses to support urban stormwater management
- 09:30-09:45 **[296] Venables R.K.**
 The role of sustainability rating systems in delivering infrastructure and building engineering's contribution to climate change mitigation and adaptation
- 09:45-10:00 **[568] Zgureva D., Boycheva S., Marinov I., Miteva S., Asenov A.**
 Heat of adsorption in the fly ash zeolite – CO₂ system at dynamic conditions
- 10:00-10:15 **[888] Hupková D.**
 Soil erosion as a consequence of climate change

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- [94] Rusu L.**
 An Analysis of the Expected Climate Change Effects in the Vicinity of the Main Harbors from the Black Sea
- Flash presentations** **[478] Hliaoutakis A., Papadopoulos S.N., Kydonakis A., Doula M.K., Papadopoulos N., Sarris A.**
 A web-based GIS tool for environmental footprint estimation of agribusinesses
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Flash presentations

[529] Chioveanu M.C., Simionov I.A. Patriche N., Tenciu M., Dragomir E., Cristea V., Minzala D.N.

The influence of Danube river hydrographic and thermic factors on fish stocks dynamics in Razim-Sinoe lagoon system

[573] Zgureva D., Boycheva S., Miteva S., Lazarova H., Marinov I., Popova M.

Thermal Swing Adsorption in a Carbon Capture System

[590] Boycheva S., Marinov I., Miteva S., Zgureva D.

Comparative studies of the equilibrium adsorption of CO₂ onto coal ash zeolites Na-X and Na-Ca-X

[605] Boycheva S., Zgureva D.

Coal ash zeolite as a self-catalytic-chemisorption system for conversion of carbon dioxide to hydrocarbons

[785] Potamianou N., Papadopoulou C.-A., Papadopoulou M.P., Charchousi D.

Sustainable Development Goals (SDGs) & Indicators: Managing Drylands under Climate Change Conditions

PLENARY SESSION (2)**Room A: Delphi Amphitheater****Chairs: Pechlivanidis I., Lekkas D.F.**

10:30-11:00 **Invited speaker Ramos M.H.**
Water and Climate Services for Hydropower

11:00-11:30 **Invited speaker Petanidou T.**
Effects of climate change in the Mediterranean: the case of bees and other pollinators

11:30-12:00 *Coffee break*

SESSION 25- WASTEWATER TREATMENT (5)**Room A: Delphi Amphitheater****Chairs: El Sergany M., Shalaby M.**

12:00-12:15 **[552] Zgureva D., Boycheva S., Behunová D., Václavíková M.**
Coal fly ash zeolites as adsorbents for effective removal of heavy metals and dyes from contaminated waters

12:15-12:30 **[426] Gadow S.I., Li Y.-Y.**
Feasibility of combined anaerobic-aerobic system for textile wastewater contained C. I. acid red 88 dye treatment: HRT effects and functional resilience

12:30-12:45 [800] Karkain R., El Sergany M., Diamadopoulos E., Moussa M.

An investigation into impact of heavy metals in soil

[598] Wijaya I.M.W., Ribeiro H., Soedjono E.S., Slamet A., Teixeira C., Bordalo A.A.

Start-up of the Nitrogen Removal Process in an Anaerobic Up-Flow Reactor Inoculated with Aeration Tank Sludge

[810] Antwnopoulou P., Vyrides I., Stasinakhs A.

Isolation and identification of microorganisms that can biodegrade organic compounds which are present in olive mill waste.

[903] Dailianis S., Charalambous N., Foiniris S., Komodromou A., Cocilovo C., Dormousoglou M., Lyberatos G., Ntaikou I.

An integrated approach for the assessment of constructed wetlands operational efficiency, using both chemical and biological data.

[262] Jiříček T., Havelka J., Doleček P., Cakl J., Kroupa J., Křivčík J.

Electrodialysis in zero liquid discharge systems for sustainable brine management

Flash presentations

[294] Bosevski I., Kalčíkova G., Derco J., Žgajnar Gotvajn A.

Pretreatment of antibiotics-contaminated waste biological sludge by ozonation

[585] Przywara L.

Anaerobic ammonium nitrogen oxidation and sulphate reduction in psychrophilic conditions

[591] Ribeiro H., Soares-Santos V., Machado A., Costa-Dias S., Wijaya I.M.W., Salgado P., Bordalo A.A., Teixeira C.

UN(K)NOWN project: development of anammox microbial inocula to improve nitrogen removal efficiency in wastewater treatment

[488] Thais G., Juan Pablo M., Vidal G.

Influence of microbial fuel cell integration on organic matter and nutrient removal in a vertical constructed wetland for wastewater treatment

SESSION 26-ENVIRONMENTAL BIOTECHNOLOGY AND BIOENERGY (1)

Room B: Nafsika A

Chairs: Angelidaki I., Fountoulakis M., Lekkas D.F.

12:00-12:30 **Invited speaker Piet Lens**

New anaerobic bioprocess for resource recovery from organic and inorganic solid waste



- 12:30-12:45 **[222] Escolà G., Zapata D., Aristizábal A., Arroyave C., Poschenrieder C., Llugany M.**
Dairy wastewater as growth substrate for biomass and biocompound production by *Spirulina platensis*
- 12:45-13:00 **[278] Dazea D., Antonopoulou G., Alexandropoulou M., Ben Atitallah I., Mechichi T., Ntaikou I., Lyberatos G.**
Second generation bioethanol production from household food wastes via a newly isolated yeast strain of *wickerhamomyces anomalus*
- 13:00-13:15 **[368] Cercado A.P., Ballesteros F., Capareda S.**
Fuel performance of biodiesel from microalgae
- 13:15-13:30 **[593] Riggio V.A., Occhipinti A., Grinic D., Zanetti M.**
LED light tailoring in a planar photobioreactor for optimization of microalgae growth.

[373] Suzuki Y., Nakamura M., Otsuka Y., Sato-Izawa K., Hishiyama S., Kameyama K., Kameyama T., Takahashi A., Katayama Y.

Cloning and sequencing of the gene encoding the enzyme for the reductive cleavage of diaryl ether bonds of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in *Geobacillus thermodenitrificans* UZO 3

[512] Papanikolaou S., Diamantopoulou P., Sarris D., Aggelis G.

Biotechnological conversions of crude glycerol, residue deriving from biodiesel production facilities, by strains of the yeast *Yarrowia lipolytica*

Flash presentations

[607] Michou S., Vastaroucha E.-S., Sarris D., Kalantzi O., Papanikolaou S.

Lipid production by *Rhodospiridium toruloides* growing on media presenting composition similarities with the spent sulfite liquor in batch and fed-batch cultures

[718] Kumar P., Subbarao P.M.V., Kala L.D., Vijay V.K.

Thermal and kinetic analysis of biomass fuel (powders) by differential thermal gravimetric analysis (TGA/DTG/DTA)

[610] Vastaroucha E.-S., Michou S., Kalantzi O., Papanikolaou S.

Biotechnological production of polyols through conversions of crude glycerol by newly isolated strains of the yeast *Yarrowia lipolytica*

SESSION 27-HYDROLOGY AND WATER RESOURCES MANAGEMENT (2)

Room C: Nafsika B

Chairs: Ramos M.H., Pechlivanidis I., Kapellos G.

- 12:00-12:15 **[362] Gomba F.**
Water security of rural water supply systems in super typhoon Haiyan affected areas

- 12:15-12:30 **[398] Tsesmetzis G., Kondili E.M., Kaldellis J.K.**
Water sustainability: evaluation of alternative water supply methods in greek and european islands
- 12:30-12:45 **[510] Koutiva I., Makropoulos C.**
An agent-based modelling tool exploring decision-making processes for flood risk management
- 12:45-13:00 **[544] Sasi V.**
Overrated credence to the outdated sand mining legislations: a hydrologically challenged measure
- 13:00-13:15 **[641] Kapellos G.E., Nagarajan M.B., Kalogerakis N., Doyle P.S.**
Evaluation of a new millifluidic device for the consistent determination of oil droplet biodegradation kinetics

[293] Hutanu E., Urzica A., Paveluc L.E., Stoleriu C.C., Grozavu A.

The role of hydro-technical works in diminishing flooded areas. Case study: the June 1985 flood on the Miletin River

[299] Urzica A., Hutanu E., Mihaela Pintilie A., Stoleriou C.C.

Dam break analysis using HEC-RAS techniques. Case study: Cal Alb dam (NE Romania)

Flash presentations**[308] Paveluc L.E., Grozavu A., Cojoc G.M., Hutanu E.**

Exceptional flood events in the summer of 2018 in the Trebes-Negel Representative Basin (Romania)

[105] Stergiadi M., Avesani D., Righetti M., Borga M., Zaramella M.

The role of catchment properties on the importance of initial hydrologic conditions for seasonal hydrological forecasting in alpine areas

[491] Feloni E., Baltas E.

The Intensity – Duration (I-D) curves towards to a spatially distributed flood early warning tool (F-EWT)

SESSION 28-EMERGING POLLUTANTS (2)**Room D: Nefeli Hall A****Chairs: Thomaidis N., Gago-Ferrero P.**

- 12:00-12:15 **[376] Gago-Ferrero P., Alygizakis N.A., Velo-Gala I., Sbardella L., Gernjak W., Petrovic M.**
Evaluation of innovative water treatments at molecular level based on high resolution mass spectrometry and advanced statistical analysis tools

- 12:15-12:30 **[416] Kora E., Theodorelou D., Herpich A., Gatidou G., Fountoulakis M.S., Stasinakis A.**
Combined use of anaerobic and aerobic moving bed biofilm reactors for micropollutants' removal from wastewater
- 12:30-12:45 **[631] Fernandes J.P., Duarte P., Almeida C.M.R., Carvalho M.F., Mucha A.P.**
Biodegradation of pharmaceuticals by bacteria isolated from estuarine environment - cleanup technologies through nature-based processes
- 12:45-13:00 **[542] Kapsi M., Sakkas V., Albanis T.**
Magnetic solid-phase extraction of pesticides in environmental water samples using Fe₃O₄@SiO₂@C₁₈ nanoparticles coupled to GC-MS determination
- 13:00-13:15 **[218] Bavasso I., Bracciale M.P., Sbardella F., Scarsella M., Di Palma L.**
Removal of PFAS from wastewater by bio-waste adsorbent: material characterization and adsorption kinetic study.
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[97] Čelic M., Jaen-Gil A., Briceno-Guevara S., Rodriguez-Mozaz S., Gros M., Petrovic M.

Extended suspect screening to identify organic micropollutants and their transformation products as potential markers of wastewater contamination in riverine and coastal ecosystems

[379] Hoehne L., Vettorello G., Ethur E.M., Kuhn D., De Freitas E.M., Steffens C.

Analysis of degradation of the micro pollutant amoxicillin by photolysis and evaluation of the degradation products.

[418] Vazaiou N., Gatidou G., Arvaniti O.S., Stasinakis A.S.

Investigation of food additives readily biodegradability in respirometric tests

Flash presentations

[522] Kifokeri D., Nannou C., Boti V., Albanis T.

Determination of pharmaceutical residues in natural waters using high performance liquid chromatography coupled to quadrupole-orbitrap mass spectrometry

[214] Postigo C., Andersson A., Harir M., Bastviken D., Gonsior M., Schmitt-Kopplin P., Gago-Ferrero P., Ahrens L., Ahrens L., Wiberg K.

Characterization of natural organic matter and disinfection by-products formed after chemical disinfection of water

[682] Galani K., Alygizakis N.A., Borova V., Thomaidis N.S.

A nine-year study on the temporal changes of licit and illicit drug use patterns as revealed from the chemical analysis of influent wastewater from the wastewater treatment plant of Athens

Flash presentations
[922] Kapsi M., Sakkas V., Albanis T.

Development and application of methods for the determination of pesticide residues in natural waters and sediments, coupled to GC-MS

[550] Trantopoulos E., Kosma C., Karkabounas A., Boti V., Albanis T.

Liquid chromatography coupled to high-resolution-Orbitrap mass spectrometry for the determination of nitrofurans metabolites in fish samples

SESSION 29-ENERGY TECHNOLOGIES AND SUSTAINABILITY (2)
Room E: Nefeli Hall B
Chairs: Kvesitadze G., San Miguel G., Vakalis S.

- 12:00-12:15 **[421] Pehlivan E.**
Catalytic pyrolysis of plum seed
- 12:15-12:30 **[513] Kaldellis J.K., Spyropoulos G., Kondili E.M., Triantafyllou A.G.**
Clean electro-mobility solutions only using green energy input
- 12:30-12:45 **[716] Kumar P., Subbarao P.M.V., Kala L.D., Vijay V.K.**
Thermal-physical properties of agricultural residues for syn gas production using thermo-gravimetric analysis
- 12:45-13:00 **[205] El Morabet R., Khan R.A., Khan A.R., Almesfer M.**
Saltwater a viable source of Energy for Sustainable Rural Development
- 13:00-13:15 **[609] Musico Y.L.F., Labata M.F.M., Chuang P.-Y. A., Ocon J.D**
Nitrogen co-doped with fluorine on reduced graphene oxide for enhanced electrocatalytic activity and stability for ORR in alkaline fuel cells

[170] Kvesitadze G., Khvedelidze R., Urushadze T., Kutateladze L., Zakariashvili N., Jobava M., Sadunishvili T.

One step industrial enzymatic technology of starch hydrolysis to glucose

Flash presentations
[655] Ondrejka Harbulakova V., Estokova A., Smolakova M., Luptakova A.

Durability of cement mortars and concretes exposed to biological attack as one of the sustainability parameters – a correlation analysis

[721] Liu B., Li Z., Fu X., Lv Y.

Numerical simulation of CO₂-brine-rock interactions on CO₂ sequestration in shihezi formation of Ordos Basin in China

SESSION 30-ENVIRONMENTAL DATA ANALYSIS AND MODELLING (1)**Room F: Salon des Roses****Chairs: Proutsos N., Rusu E.**

- 12:00-12:15 **[238] Kandris K., Romas E., Tzimas A., Gavalakis E.**
Employing data-driven models in the optimization of chemical usage in water treatment plants
- 12:15-12:30 **[239] Kandris K., Romas E., Tzimas A., Pechlivanidis I., Giardino C., Bresciani M., Schenk K., Bernert H.**
A computationally efficient metamodeling-based approach for the automatic calibration of coupled hydrodynamic and water quality models
- 12:30-12:45 **[485] Ivanov M., Mijorski S.**
Indoor and outdoor environment impact over the generic conditions for thermal bridge appearance
- 12:45-13:00 **[604] Karamitros G., Giantsis I.A., Martsikalis P., Kavouras M., Exadactylos A.**
Design-based and model-based estimations of distribution and abundance of dolphin populations in Gulf of Corinth, Hellas
-

[92] Rusu E.

A comparison between the past and future expected wind conditions in the european coastal environment of the mediterranean sea

[104] Sulich A., Rutkowska M.

Green jobs as an unemployment solution

Flash presentations**[213] Koletsis I., Tseliou A., Lykoudis S., Pantavou K., Tsiros I.X.**

Testing and validation of ENVI-met simulation based on in-situ micrometeorological measurements: the case of Syntagma Square, Athens, Greece

[91] De Noni I., Ganzaroli A., Orsi L.

Do Environment-related technologies strengthen the competitiveness of local systems?

13:30-15:00 Lunch break

SESSION 31-WATER TREATMENT**Room A: Delphi Amphitheater****Chairs: Arafat H., Dionysiou D.**

- 15:00-15:30 **Invited speaker [897] Arafat H.**
Applications of TPMS architectures in water technology: Amazing potential for cost and energy savings and reduced environmental impacts
- 15:30-15:45 **[171] Gyparakis S., Diamadopoulos E.**
Water quality control of Aposelemis Dam Reservoir
- 15:45-16:00 **[62] Zhenyu Y., Durdevic P., Jespersen S., Hansen D.S.**
Potential of using real-time OiW monitoring for control of produced water treatment in offshore oil & gas production
- 16:00-16:15 **[162] Abdallah H., Shalaby M.S., Alanezi A.A., Shaban A.M.**
Polyethersulfone/Polyamide11 Cost Effective, Antifouling- Nanofiltration Blend Membrane
- 16:15-16:30 **[504] Asad A., Sameoto D., Sadrzadeh M.**
New generation of patterned membranes for water treatment
- 16:30-16:45 **[936] Abdullah H., Alshahri A., Fortunato L., Leiknes T.**
Application of dissolved air flotation (DAF) and liquid ferrate on mitigation of algal organic matter (AOM) during algal blooms
- 16:45-17:00 **[175] Gyparakis S., Diamadopoulos E.**
Monitoring of the main operational parameters of Aposelemis Water Treatment Plant (WTP)

SESSION 32-ENVIRONMENTAL BIOTECHNOLOGY AND BIOENERGY (2)**Room B: Nafsika A****Chairs: Zanetti M., Fountoulakis M.**

- 15:00-15:15 **[634] Ferreira C., Lopez-Rayó S., Lucena J., Soares E., Soares H.**
An innovative green iron-fertilizer, produced biotechnologically, for correcting iron chlorosis of soybean plants grown in calcareous soils
- 15:15-15:30 **[709] Eftaxias A., Michailidis C., Stamatelatos K., Diamantis V., Aivasidis A.**
Anaerobic digestion of long-chain fatty acids (oleic, palmitic, stearic) with whey protein as the emulsifier
- 15:30-15:45 **[715] Eftaxias A., Georgiou D., Diamantis V., Koumara A., Koskinari M.D., Aivasidis A.**
High-rate anaerobic co-digestion of agro-industrial wastes combined with ammonia recovery and biogas purification

- 15:45-16:00 **[935] Senatore V., Oliva G., Zarra T., Belgiorno V., Naddeo V.**
Bio-scrubber coupled with ozonation for enhanced VOCs abatement
- 16:00-16:15 **[774] Özçakir G., Karaduman A.**
Pyrolysis of Spirulina sp. Microalgae: Effect of Temperature on Chemical Compositions of Bio-Oil and Aqueous Phase

- [843] Gougoulis N., Metsoviti M.N., Grigoriou M., Lamprakopoulos S., Mpesios A., Papapolymerou G.**
Heterotrophic growth of Chlorella vulgaris on crude glycerol
- [346] Mina M.T.M., Tumolva T.P.**
Characterization of Xylanase-Treated Karagumoy Fiber Reinforced Composite (KFRC)
- Flash presentations** **[920] Tarach K.A., Valencia S., Góra-Marek K., Rey F.**
Hierarchization of pure silica LTA zeolite
- [541] Diamantopoulou P., Melanouri E.-M., Papanikolaou S.**
Screening strains of genus Pleurotus for biomass production in solid state fermentation of agricultural residues
- [916] Salvilla J., De Luna M., Rollon A.**
Co-Pyrolysis of Corn Stover With Plastic: Optimization based on synergy

SESSION 33-HYDROLOGY AND WATER RESOURCES (3)
Room C: Nafsika B
Chairs: Diamond D., Pechlivanidis I.

- 15:00-15:30 **Invited speaker [380] Donohoe A., Hazel C., McCluskey P., McCaul M., Diamond D.**
Reliable in-situ sensing of water quality parameters using low cost autonomous analysers
- 15:30-15:45 **[707] Uyar A., Ozturk D.**
Investigation of Shoreline Morphometry of Kizilirmak Delta's Lagoons Using Fractal Dimension and Shoreline Development Index
- 15:45-16:00 **[453] Pechlivanidis I.G., Gupta H., Bosshard T.**
How to identify a representative subset of hydro-climatic simulations for impact modelling studies?
- 16:00-16:15 **[846] Papadopoulos Ch., Gkiougkis I., Spiliotis M., Pliakas F., Papadopoulos B.**
Fuzzy relation between the RD1st index and the water table of a coastal aquifer of Nestos Delta, Greece

- 16:15-16:30 **[884] Ezer A., Guven B.**
An assessment of soil erosion using rusle model: a case study from the marmara region
- 16:30-16:45 **[73] Sušnik J., Masia S., Houry M., Vamvakeridou-Lyroudia L., Brouwer F., Riegels N., Domingo X., Echeverria L., Evans B., Savić D.**
From system concept to serious game: the SIM4NEXUS approach to policy-relevant nexus research
- 16:45-17:00 **[729] Pinaras V., Kamidis N., Koutrakis E.T., Hatzigiannakis E., Panagopoulos A.**
Simulating nutrient loads in an intensively cultivated Mediterranean watershed under current and projected climate conditions

- [808] Mosaferi M., Shakerkhardtibi M., Jahanimoghaddam H., Esmat Saatloo M.**
Water salinization In Iran: spatial variation of salinity in groundwater resources of North West (Urmia Lake)
- [827] Palop-Donat C., Paredes-Arquiola J., Andreu J.**
Revision of the scarcity state indicator in the spanish drought management plans
- Flash presentations** **[923] Antoniou M.G., Brient L., Tsiarta N., Keliri E., Christofi M., Hadjiouraniou G., Sukenik A.**
Monitoring and treatment of cyanobacterial contaminated surface waters in France and Cyprus
- [525] Bournas A., Feloni E., Bertsiouy M., Baltas E.**
Hydrological and hydraulic modelling for a severe flood event in Sperchios River Basin

SESSION 34-EMERGING POLLUTANTS (3)

Room D: Nefeli Hall A

Chairs: Albanis T., Thomaidis N.

- 15:00-15:15 **[683] Alygizakis N., Dulio V., Von der Ohe P., Slobodnik J., Thomaidis N.**
NORMAN Non-target screening (NTS) prioritisation scheme for ranking thousands of contaminants of emerging concern in effluent wastewater collected from Europe
- 15:15-15:30 **[803] Aleksandryan A., Khachatryan A., Bunyatyan Y.**
Dioxin-Like Polychlorinated Biphenyls at Dilijan Landfills (Republic of Armenia)
- 15:30-15:45 **[807] Liang M., Liu L., Rao Z., Gong J., Zhu T.**
Screening of 102 organic pollutants in groundwater along the Beijing-Hangzhou Grand Canal in China by GC×GC-TOFMS

- 15:45-16:00 **[971] Panagopoulou E.I., Nika M.C., Damalas D., Koulis G., Thomaidis N.S.**
Development of a novel GC-APCI-QTOFMS methodology for the determination of more than 300 organic compounds in Asopos river water samples
- 16:00-16:15 **[972] Nikolopoulou V.I., Nika M.C., Aalizadeh R., Alygizakis N., Thomaidis N.S.**
Screening thousands of emerging contaminants in Asopos river basin by UPLC-QToF-MS
- 16:15-16:30 **[973] Thomaidis N., Gkotsis G., Alygizakis N., Cincinelli A., Dekker R., Duke G., Glowacka N., Knopf B., Koschorreck J., Martellini T., Movalli P., Nika M., Nikolopoulou V., Rüdell H., Shore R., Treu G., Slobodnik J.**
Determination of more than 2,400 emerging contaminants in apex predators and their prey from European Specimen Banks and Natural History Museums by novel and complementary High-Resolution Mass Spectrometry Techniques
- 16:30-16:45 **[975] Thomaidis N., Nika M., Ntaiou K., Elytis K., Stasinakis A., Thomaidi V., Gatidou G.**
Wide-scope target analysis of >2,100 emerging contaminants in landfill leachates by LC-QTOFMS and investigation of their potential ecological threat
- 16:45-17:00 **[977] Thomaidis N., Aalizadeh R.**
AUTONONTARGET: An R package to perform automatic non-target screening
- 17:00-17:15 **[939] Castrogiovanni F., Borea L., Millanar-Marfa J.M.J., Napodano P., Balakrishnan M., Ballesteros F.C.J., Hasan S.W., Belgiorno V., Naddeo V.**
Wastewater treatment and emerging contaminants removal in electro membrane bioreactor using self-forming dynamic membranes
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- [551] Martinaiou P., Trantopoulos E., Kosma C., Albanis T.**
Pharmaceutical residues in hospital and urban wastewaters: Occurrence, removal and potential risk assessment
- Flash presentations** **[537] Jimenez Holgado C., Vourdas N., Stathopoulos V., Sakkas V.**
Optimization of fabric phase sorptive extraction for the determination of selected pharmaceuticals in environmental waters
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SESSION 35 CIRCULAR ECONOMY AND INDUSTRIAL SYMBIOSIS**Room E: Nefeli Hall B****Chairs: Angelis-Dimakis A., Arampatzis G.**

- 15:00-15:15 **[103] Baur F., Porzig M., Lekkas D.**
SusNisia: Circular economy for biogenic residues for the North Aegean: case studies for Islands of Chios and Lesbos
- 15:15-15:30 **[578] Solomou K., Arampatzis G., Dedousis P., Angelis-Dimakis A.**
A database of existing solid industrial waste reuse schemes as the basis for an industry matching algorithm
- 15:30-15:45 **[580] Angelis-Dimakis A., Arampatzis G., Dedousis P., Apostolopoulos G.**
SWAN Platform - A web-based tool to support the development of industrial solid waste reuse business models
- 15:45-16:00
- 16:00-16:15 **[742] Vaccari M., Chebbi A., Franzetti A., Scaffoni S.**
A methodology for boosting circular economy in olive oil and wine sectors: opportunities for the Italian competitiveness through eco-innovation strategies
- 16:15-16:30 **[953] Kappa S., Mamais D., Noutsopoulos C., Kisser J., Stanchev P., Katsou E., Malamis S.**
Implementing nature-based and other engineering solutions to recover water from non-conventional water sources
- 16:30-16:45 **[165] Christensen O.W.**
Turning waste into new resources in small and medium sized enterprises
- 16:45-17:00 **[797] Alansaari A., Elsergany M.**
Assessment of public purchase behavior towards household green products in United Arab Emirates (UAE).

SESSION 36- ENVIRONMENTAL DATA ANALYSIS AND MODELLING (2)**Room F: Salon des Roses****Chairs: Proutsos N., Rusu E.**

- 15:00-15:15 **[828] Gikas A., Maragkoudakis M.**
Meteorological Data Science: exploiting causality discovery in time-series for knowledge discovery and improved forecasting

- 15:15-15:30 **[322] Pažusienė J., Valskienė R., Stankevičiūtė M., Butrimavičienė L., Baršienė J.**
Environmental genotoxicity and risk assessment in herring (*Clupea harengus*), Atlantic cod (*Gadus morhua*) and flounder (*Platichthys flesus*) caught in the Gotland Basins from the Baltic Sea (2010-2017)
- 15:30-15:45 **[708] Islam S., Abdullah R.A.B., Hirol H., Javed M., Roohul Abad K.,**
Performance evaluation of mass transfer-based method using global performance index in semi-arid Region Saudi Arabia
- 15:45-16:00 **[956] Jensen M., Nickel S., Schröder W.**
Spatial explicit evaluation of potential future developments of forests due to climatic change and nitrogen deposition
- 16:00-16:15 **[221] Alvarado-Solano D. P., Otero J.T., Šarapatka B.**
Species prioritization for recovery potential estimation. Case of study: Seasonally dry tropical forest at an inter Andean valley of Cauca River, South America

[269] Morosanu G.A., Zaharia L., Ioanna-Toroimac G.

An integrated methodology to estimate the contribution of environmental factors controlling the spatial variation of total dissolved solids. Application on Jiu River Basin (Romania)

Flash presentations**[486] Mijorski S., Ivanov M.**

Thermal bridge modelling, based on conjugated heat transfer and CFD methods

[820] Proutsos N., Korakaki E., Bourletsikas A., Karetsos G., Tsagari K., Georgiadis C.

50-year precipitation trends in Nestos Delta-Natura 2000 site

17:00-18:00**Poster session- Coffee break****An editor's perspective on the publishing process****Room A., Delphi Ampitheater****Chairs: Barcelo D., Dionysiou D., Lyberatos G.**

Day 4**Saturday 7 September 2019****SESSION 37-WATER TREATMENT****Room A: Delphi Amphitheater****Chairs: Dionysiou D., Falaras P.**

- 09:00-09:30 **Invited speaker [437] Dionysiou D., Duan X., Kong M.**
Susceptibility of Algal Toxins to Advanced Oxidation Processes
- 09:30-09:45 **[516] Romanos G., Falaras P., Athanasekou C., Katsaros F., Markellou E., Georgaki E., Kizis D., Karanasios E., Anagnostopoulos C.**
Pollutant photo-nf remediation of agro-water
- 09:45-10:00 **[517] Ibrahim I., Falaras P.**
TiO₂/CoFe₂O₄/Ag nanocomposites for photocatalytic reduction of water pollutants under UV and solar light
- 10:00-10:15 **[520] Triantis T.M., Kaloudis T., Hiskia A.**
Evaluation of photocatalytic materials for water purification: overview of the new CEN standard test
- 10:15-10:30 **[532] Avagianos C., Antonopoulou M., Dimotikali D., Hiskia A., Kaloudis T.**
Treatment of drinking water by UV/Cl₂: a study of β -cyclocitral, a cyanobacterial taste & odor compound.

SESSION 38-ELECTRIC AND ELECTRONIC WASTE (1)**Room B: Nafsika A****Chairs: Kuchta K., Cesaro A.**

- 09:00-09:30 **Invited Kuchta K.**
Recovery of critical raw materials from WEEE - Status and Perspectives
- 09:30-09:45 **[681] Ippolito N.M., Birloaga I., Ferella F., Innocenzi V., De Michelis I., Veglio F.**
Recovery of critical and precious metals from E-Waste
- 09:45-10:00 **[425] Horta Arduin R., Grimaud G., Charbuillet C., Laratte B., Perry N.**
Plastics in WEEE screens: difficulties and opportunities to improve the recycling rate
- 10:00-10:15 **[185] Vlachou A.K., Kondili M.E., Kaldellis J.K.**
Novel technologies & methods for Lithium batteries expansion of life cycle

- 10:15-10:30 **[623] Baniasadi M., Graves J.E., Renshaw D., Morris S., Farnaud S.**
Bioleaching for metal recovery from telecoms switchboard

SESSION 39-ENVIRONMENTAL HEALTH (1)**Room C: Nafsika B****Chairs: Ezhova E., Pavlova E.**

- 09:00-09:30 **Invited speaker Brdaric D.**
The challenges of West Nile virus infections in Europe and mosquito control
- 09:30-09:45 **[207] El Morabet R., Khan R.A., Alasiri M.**
Microbial concrete: A step towards mitigating the climate change and global warming at micro level
- 09:45-10:00 **[266] Kalkavouras P., Zampas P., Bougiatioti A., Mihalopoulos N.**
Effect of anthropogenic sources on total particles and cloud condensation nuclei levels in the Eastern Mediterranean
- 10:00-10:15 **[306] Ntarladima A.M., Vaartjes I., Grobbee D.E., Dijst M., Schmitz O., Uiterwaal C., Dalmeijer G., Van Der Ent C., Hoek G., Karsenberg D.**
Air pollution exposures and respiratory health in 5-year-old children
- 10:15-10:30 **[339] Pyzik A., Dyda M., Wiłkojć E., Winiewicz-Wolska J.**
Microbiological diversity and microbial related risks at Wawel Royal Castle in Krakow, Poland

SESSION 40-WATER, ENERGY AND/OR FOOD NEXUS**Room D: Nefeli Hall A****Chairs: Ballesteros F., Naddeo V.**

- 09:00- 09:15 **[477] Etxebarria S., Gutierrez M., Ramos S., Ciriza A., Sancho L., Zufia J.**
The mitigation of environmental impacts of high polluted effluents from tuna canning industry through eco-efficiency strategies
- 09:15-09:30 **[555] Symeonidou S., Vagiona D.**
Evapotranspiration of crops and mechanical soil composition in Rhodes island
- 09:30-09:45 **[854] Tsantrizos P., Curry N.**
Enabling the Total Resource Utilization (TRU) Habitat
- 09:45-10:00 **[472] Pani A., Mishra P.**
Changing cropping patterns and irrigation practices: implications for promoting sustainable growth of agriculture in West Bengal, India

Flash presentations	<p>[74] Masia S., Sušnik J., Indriksone D., Bremere I., Vamvakeridou-Lyroudia LS., Brouwer F. A system dynamics model to explore the water-land-energy-food-climate nexus in Latvia</p> <p>[495] Sedlacek P., Lancosova E. Prediction of electricity prices</p>
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SESSION 41-AGROFORESTRY, FOREST AND AGRICULTURAL SUSTAINABILITY (1)

Room E: Nefeli Hall B

Chairs: Pantera A., Mosquera-Losada M.

09:00-09:15	<p>[93] Boumenjel A., Pantera A., Ammari Y. Tolerance of moringa oleifera to water stress</p>
09:15-09:30	<p>[136] Tsakmakis I.D., Panagopoulos S.G., Gikas G.D., Sylaios G.K. Aerial spectral index analysis for differential management zone delineation in a maize field</p>
09:30-09:45	<p>[547] David N., Gao H.O., Kumah K.K., Hoedjes J.C.B., Su Z., Liu Y. Microwave communication networks as a sustainable tool of rainfall monitoring for agriculture needs in Africa</p>
09:45-10:00	<p>[722] Singh S., Kasana Singara S. Quantification of soil properties from hyperspectral data for sustainable agriculture using Deep Learning</p>
10:00-10:15	<p>[723] Singh S., Kasana Singara S. Estimation of soil organic carbon for sustainable agriculture using deep learning</p>
10:15-10:30	<p>[833] Pantera A., Papadopoulos A., Fotiadis G., Kapsalis D., Papaporfyriou P., Papaspyropoulos K. The effect of intercrop on soil properties of an agroforestry system in Kea – Greece</p>
Flash presentations	<p>[811] Sikora S., Abrilic J, Rajnovic I., Kajic S. Impact of nitrogen fertilization on nodulation and symbiotic efficiency of indigenous Bradyrhizobium japonicum strains</p>

SESSION 42-ENVIRONMENTAL PLANNING, MANAGEMENT AND POLICIES (1)

Room F: Salon des Roses

Chairs: Vagiona D., Pozoukidou G.

09:00- 09:15	<p>[54] Spyridonidou S., Vagiona D. Offshore windfarm siting in Greece using GIS and TOPSIS</p>
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- 09:15-09:30 **[223] Alvarado-Solano D.P., Otero J.T.**
Sustainable landscapes: restoration and land use planning in an adaptive approach to climate change and desertification. Case study of Inter-Andean Valley of Cauca River in Colombia
- 09:30-09:45 **[244] Panagopoulos J., Karayannis A., Karayannis P., Gouvalias G.**
Risk analysis for gas pipelines: A sustainability assessment approach using bow-tie analysis
- 09:45-10:00 **[229] Moico C., Florece L., Ancog R., Cereno R.**
Waste management system and its effects on the water quality of an ecotourism destination in Caramoan, Camarines Sur, Philippines
- 10:00-10:15 **[99] Saltagianni E., Katsaounou S., Gousis CH.**
Fortified settlements between the Ambracian Gulf and Acherontas River in Preveza

- [100] Saltagianni E.**
Fortified settlements during the Ottoman conquest in Thesprotia
- [119] Vandarakis D., Kyriakou K., Loukaidi V., Kyriakidou Ch., Gad F-K., Sourianos E., Kapsimalis V., Drakopoulou P., Kikaki A., Hatiris G.-A., Panagiotopoulos I.P., Chatzinaki M., Morfis I., Sioulas A., Kanellopoulos Th., Livanos I.**
Deciphering Coastal Vulnerability Index (CVI) for the coastal areas of Rhodes Island and the possible impact on tourism

PLENARY SESSION (3)

Room A, Delphi Amphitheater

Chairs: Petreas M., Kalantzi O.

- 10:30-11:00 **Invited speaker Neira M.**
Don't pollute my health

10:30-11:00 *Coffee break*

SESSION 43-WATER TREATMENT (3)

Room A: Delphi Amphitheater

Chairs: Hiskia A., Kaloudis T.

- 11:00-11:15 **[660] Kaekooti A., Rastgar M., Sadrzadeh M.**
Highly efficient anti-fouling electro-conductive membranes fabricated by reduced Graphene Oxide-Polyaniline (rGO-PANI) laminates
- 11:15-11:30 **[751] Esterhuizen-Londt M., Behnam Sani S., Wang L., Pflugmacher S.**
Improving mycoremediation of acetaminophen: Effect of pH, nitrogen limitation, and co-cultivation

- 11:30-11:45 **[809] Shee A., Kopinke F.-D., Mackenzie K.**
Reduction of halogenated organic compounds in water: comparison of available reduction systems based on Cu, Pd and ZVI
- 11:45-12:00 **[952] Koumenides K., Chan M.**
LafargeHolcim's Greece (Heracles Group) journey to a Water Secure Future
- 12:00-12:15 **[963] Kapsalaki K., Psychogiou M., Mitrogiannis D., Sgoubopoulou A.**
Adsorption isotherm study of copper removal from aqueous solutions onto agricultural by-product.
- 12:15-12:30 **[663] Rud O., Košovan P.**
Thermodynamic model for a reversible desalination cycle using polyelectrolyte hydrogels
- 12:30-12:45 **[771] Shalaby M. S., Abdallah H., Shaban A.M., Chetty R., Kumar M.**
Mixed Nanostructures / PES / RO Membrane for Water Desalination

[601] Christophoridis C., Pestana C.J., Kaloudis T., Lawton L., Hiskia A.
Radiation-induced degradation products of 2-methyl isoborneol and geosmin: the role of different reactive species

[840] Cubas A.L.V., Machado M.M., Santos J.R., Moecke E.H.S
Microbiological treatment of water by cold plasma at atmospheric pressure

Flash presentations

[773] Mazari L., Abdessemed D.
Feasibility of reuse filter backwash water as primary/aid coagulant in coagulation-sedimentation process for synthetic effluent

[908] Mondal S., Majumder S.
Bio-Based phosphate functionalized activated carbon from Indian gooseberry seed shells for the efficient Copper (II) Adsorption

SESSION 44-ELECTRIC AND ELECTRONIC WASTE (2)

Room B: Nafsika A

Chairs: Kuchta K., Cesaro A.

- 11:30-11:45 **[204] Charitopoulou T., Vogiatzidaki E.E., Gkitzeni I., Malliaris M.**
Development and promotion of the WEEE prevention culture in Greece
- 11:45-12:00 **[444] Batinić B., Berežni I., Marinković T., Stanisavljević N.**
Current state and challenges in WEEE recycling industry in Serbia
- 12:00-12:15 **[869] Latina H.N., Medina R.**
From Refuse to Resource: E-Plastic as Building Material

- 12:15-12:30 [958] Abeliotis K., Boikou K., Kalafata K., Terzis E., Chroni C., Angelakopoulos Ch., Lasaridi K.
WEEE preparing for reuse in Greece: potential and initiatives
- Flash presentation** [464] Čížková M., Bišová K., Zachleder V., Mezrický D., Rucki M., Vítová M.
Recovery of rare earth elements from luminophores using the red alga *galdieria*

SESSION 45-ENVIRONMENTAL HEALTH (2)

Room C: Nafsika B

Chairs: Petreas M., Kalantzi O.

- 11:30-11:45 [443] Dobosy P., Vetési V., Kröpfl K., Sandil S., Óvári M., Rékási M., Záray Gy.
Effect of iodine containing irrigation water on plant physiological processes of bean and potato cultivated in different soils
- 11:45-12:00 [496] Bienias K., Kowalska-Pyzalska A., Ramsey D.
An initial study of the opinions of car purchasers in Poland: do they choose electric vehicles?
- 12:00-12:15 [579] Henigman U., Biasizzo M., Vadnjal S., Knific T., Kirbiš A.
Influence of the environmental factors on contamination of mediterranean mussels (*mytilus galloprovincialis*)
- 12:15-12:30 [586] Angelopoulou M., Petrou P.S., Misiakos K., Raptis I., Kakabakos S.E.
On-chip mach-zehnder interferometers for rapid detection of bacteria in drinking water
-
- [295] Thomaidi V.S., Tsaouridou A., Stasinakis A.S., Kalantzi O.I.
Human exposure to PFCs by drinking water
- [543] Sidlovska M., Hlisnikova H., Petrovicova I., Kolena B., Wimmerova B., Paelmke C., Koch H.M.
Biomonitoring of 21 phthalate metabolites in Slovak pre-school and school age children related to their consumer practices
- Flash presentations** [528] Gotsi E., Boti V., Albanis T.
QuEChERS methodology combined with high performance liquid chromatography-UV/DAD for the determination of common pesticides in honey
- [445] Pintaric S.I., Pintaric R., Henigman U., Jankovic L.
Environmentally friendly disinfection of air and surfaces in medicine
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SESSION 46-NANOMATERIALS IN THE ENVIRONMENTS APPLICATIONS AND EFFECTS**Room D: Nefeli Hall A****Chairs: Papassiopi N., Xekoukoulotakis N., Mistrioti C.**

- 11:30-11:45 **[458] Mpouras T., Papadaki S., Dermatas D., Papassiopi N.**
Adsorption of heavy metals (hexavalent chromium, lead, manganese and cadmium) on multiwall carbon nanotubes
- 11:45-12:00 **[565] Toli A., Mysteriote C., Xenidis A., Papassiopi N.**
Removal of Cr(VI) under flow conditions using a green nano-iron loaded resin
- 12:00-12:15 **[772] Chalastara K., Demopoulos G.P.**
Aqueous synthesized mixed-phase nano-TiO₂ photocatalysts for water treatment of both organic and inorganic pollutants
- 12:15-12:30 **[501] Zhang Z. Y.**
Interactions between plants and rare earth oxide nanoparticles
- 12:30-12:45 **[732] Chen J.-J., Wang L.-J., Xu G.-J., Wang X., Zhao R.-S.**
Adsorption of gatifloxacin from aqueous solution with highly stable Zr(IV)-based porphyrinic metal-organic frameworks
- 12:45-13:00 **[148] Fadillah G., Hidayat R., Wahyuningsih S.**
One-step synthesis of TiO₂/ZnO nanocomposites by refluxing methods for photochemical degradation of humic acid
-
- [261] Harja M., Duduman Nutescu C., Apostolescu G.A., Gómez De Salazar J.M., Gómez De Castro C., Sescu A.M., Favier L., Ciobanu G.**
Enhanced of TiO₂-Ag photocatalysis performance for removal of methylene blue in the presence of acetone
- [505] Kumar I., Bhattacharya J.**
Evaluation of risk and the beneficial effects of synthesized nano silver-based disinfectant on poultry mortality and health
- Flash presentations** **[563] Boycheva S., Marinov I., Lazarova H., Zgureva D., Václavíková M., Popova M.**
Cobalt- and copper-modified fly ash nanozeolites for environmental protection systems
- [627] Theodorakopoulos G., Romanos G., Katsaros F., Papageorgiou S., Falaras P., Kontos A., Bezi-Katsioti M.**
Structuring efficient photocatalysts into bespoke fiber shaped systems for applied water treatment
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[645] Fryczkowska B.

The influence of graphene addition on the properties of composite membranes RG / PAN and their potential application

[724] Mystrioti C., Mpouras T., Papassiopi N., Dermatas D.

Evaluation of soil loaded with green iron nanoparticles for hexavalent chromium reduction

[885] Todorova N., Giannakopouloy T., Lekakou C., Arabatzis I., Trapalis C.

Electrochemical properties of SnO₂/rGO nanocomposites

Flash presentations**[886] Gorak- Marek K., Srebowata A., Kowalewiskie E., Tarach K.A., Pyra K.**

Application of Ni loaded FAU zeolites in catalytic conversion of 1,2-dichloroethane towards value-added products

[899] Giannakopoulou T., Papailias I., Todorova N., Trapalis A., Bahnemann D.

TiO₂/Graphene oxide heterostructures for photocatalytic applications

[928] Giannakis I., Panagiotaras D., Papoulis D., Gianni E., Stathatos E., Bekiari V., Kalarakis A.N., Panagopoulos G.

Photocatalytic Degradation of Tebuconazole Fungicide using Palygorskite-TiO₂ nanocomposites.

SESSION 47-AGROFORESTRY, FOREST AND AGRICULTURAL SUSTAINABILITY (2)**Room E: Nefeli Hall B****Chairs: Pantera A., Mosquera-Losada M.**

11:30-11:45 **[836] Papadopoulos A., Pantera A., Burriel C., Nouallet G., Herdon M., Tamas J., Lamaison M., Musquar C., Seeman M., Atanassova S., Grozeva N., Escural J.M., Fico F., Devernay S., Levasseur E., Lavoyer S., Balaguer F., Papanastasis V., Mantzanas K., Fotiadis G.**

The AGROF-MM ERASMUS+ Educational Project

11:45-12:00 **[863] Mosquera-Losada M.R., Rodríguez-Rigueiro F.J., Ferreira-Dominquez N., Pantera A., Santiago-Freijanes J.J**

Agroforestry Innovations Networks in Europe

12:00-12:15 **[864] Mosquera-Losada M.R., Rodriguez-Rigueiro F.J., Santiago-Freijanes J.J., Riguero- Rodriguez A., Ferreira-Dominguez N.**

Understory evolution related to organic fertilization in a silvopastoral system established under *Pinus radiata* D. Don. in an acidic soil

12:15-12:30 **[865] Arias-Martínez D., Mosquera-Losada M.R., Rigueiro-Rodríguez A., Ferreiro-Domínguez N.**

Pasture biodiversity after five years of establishment of a walnut silvopastoral system fertilized with different types of sewage sludge

[612] Diksaityte A., Virsile A., Januskaitiene I., Žaltauskaite J.

Photosynthetic response of spring oilseed rape to heat, drought, nutrient deficiency and combined stress

Flash presentations

[794] Papadopoulos A., Pantera A., Fotiadis G.

Effect of summer drought in the natural regeneration of valonia oak

SESSION 48-ENVIRONMENTAL PLANNING, MANAGEMENT AND POLICIES (2)

Room F: Salon des Roses

Chairs: Vagiona D., Pozoukidou G., Venables R.

11:30-11:45 **[297] Venables R.K.**

The need for setting optimal geographical and temporal boundaries for infrastructure project design and EIA, and how science and technology can help

11:45-12:00 **[317] Fragkou D., Sinou M.**

The environmental impact of tourism and their effect on cultural heritage

12:00-12:15 **[336] Mavroulidou M., Safdar Mu., Gunn Mj., Gray C., Payne I., Garelick J., Purchase D.**

Innovative methods of ground improvement for two problematic UK railway earthwork materials

12:15-12:30 **[348] Pozoukidou G., Sagovits V.**

Strategic spatial planning for green infrastructure. the case of the metropolitan area of Thessaloniki

12:30-12:45 **[386] Gültekin P., Gültekin Y.S., Dogan T.G.**

Assessing the ecological footprint of natural science students: a case study of Düzce University

12:45-13:00 **[387] Gültekin P.**

Assesment of green campuses for sustainable cities and society with ui green metric: a case study of Düzce University

13:00-13:15 **[696] Dimos S., Evangelatou E., Fotakis D., Mantis A, Mathioudaki A.**

Market and trade network analysis of the EU emission trading system

13:15-13:30 **[82] Wern B., Noll F.**

Dynamic heat map as a part of the regional energy transition

Springer author academy: A guide on writing and publishing your journal manuscript
Room A: Delphi Amphitheater
Invited speaker Khelifi N.
SESSION 49-WATER AND WASTEWATER REUSE
Room A: Delphi Amphitheater
Chairs: Dionysiou D., Stoller M.

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| 15:00-15:30 | [436] Invited Speaker _Dionysiou D.
Advanced approaches to treat contaminants of emerging concern for water reuse |
| 15:30-15:45 | [801] Beler Baykal B., Gursoy O., Aksoy Y., Samsunlu A.
Grey Water and Rainwater as Alternative Sources of Flush Water and Irrigational Water in and around Households: A Case Study from Istanbul Atakoy District |
| 15:45-16:00 | [355] Stoller M., Bravi M., Russo P., Bubbico R., Mazzarotta B., Sed G., Moroni M.
Technical optimization of a treatment process on ABE effluent by membrane technologies |
| 16:00-16:15 | [633] Almeida D., Sousa Z., Magalhães C., Silva E., Blanquet I., Mucha A.P.
Water microbiota in a recirculating aquaculture system for environmental sustainability and fish welfare |
| 16:15-16:30 | [657] Adin A.
Water reuse integration in the holistic water cycle |
| 16:30-16:45 | [318] Boano F., Caruso A., Costamagna E., Fiore S., Demichelis F., Ridolfi L., Galvao A., Piseiro J., Rizzo A., Masi F.
Greening walls for treatment and reuse of domestic greywater |
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| | [226] Klimonda A., Kowalska I.
Membrane technology for the purification of solutions containing cationic surfactant |
| Flash presentations | [320] Vecino X., Reig M., Lopez J., Valderrama C., Gibert O., Cortina J.L.
Recovery and separation of valuable metals (copper and zinc) from acidic mine waters by ion-exchange resins |
| | [321] Lopez J., Reig J., Vecino X., Valderrama C., Gibert O., Cortina J.L.
Recovery of sulphuric acid and valuable metals (Zn, Cu and REE) from acidic mine waters using nanofiltration |
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Flash presentations

[760] Plevri A., Samios S., Lytras E., Papadopoulos K., Lioumis C., Lazari A., Tazes N., Monokrousou K., Makropoulos C.

Installation of a sewer mining unit in the Athens Urban Tree Nursery

[792] Loredo J.

Mine water management in abandoned mine sites: from waste to resource

SESSION 50-AIR POLLUTION**Room B: Nafsika A****Chairs: Mihalopoulos N., Flocas H., Zarra T.**

- 15:00-15:15 **[211] Dreger M.**
The influence of methane emission and hard coal production on air quality and greenhouse effect in 1994-2017 in the Upper Silesian Coal Basin (Poland)
- 15:15-15:30 **[391] Galang M.G.K., Zarra T., Naddeo V., Ballesteros Jr. F., Belgiorno V.**
Statistical prediction models for the odour quantification in terms of odour concentration: analysis and comparison
- 15:30-15:45 **[394] Zarra T., Meloni M., Naddeo V., Pittoni G., Belgiorno V.**
Advanced instrumental odour monitoring system for the continuous management and control of environmental odour in complex industrial plants
- 15:45-16:00 **[438] Silveira C., Ferreira J., Lopes D., Miranda A.I.**
Impact of traffic management strategies on air quality and health in a Portuguese urban area
- 16:00-16:15 **[608] Ben Daoud A., Caron A., Akiki R., Aflalo S.S., Laplagne J.**
Odorous gases monitoring on industrial sites and algae decomposition using Cairsens smart sensors
- 16:15-16:30 **[611] Deligiorgi D., Philippopoulos K., Granakis K.**
Daily wind gusts in relation to mean daily wind speed and atmospheric circulation
- 16:30-16:45 **[651] Teixeira S., Pereira P., Ferreira F.**
Co-creating data based on human nose perceptions to study odour nuisance from an oilseed industry

- 16:45-17:00 **[677] Cernuschi S., Lonati G., Ozgen S., Tardivo R., Signorini S.**
 Ultrafine and nanoparticles emissions from clinical waste incineration: characterization and chemical speciation
- 17:00-17:15 **[686] Badilla D.B.**
 Influence of varying concentration of toluene in a soil biofilter
- 17:15-17:30 **[688] Maggos T., Flocas H., Soulos T., Lenarcic M., Panagopoulos P., Gotti A., Karakitsios S., Arigiannis D.**
 The effect of boundary layer meteorology in GHGs concentrations –The case study over 3 european cities using an aerial platform
- 17:30-17:45 **[955] Nickel S., Schröder W.**
 Moss-specific accumulation of atmospheric element deposition?

[184] Czaplicka M., Janoszka K.

Biomass burning tracers in urban and rural particles in Silesia – Poland

[613] Deligiorgi D., Philippopoulos K., Diamanti A.

Statistical modeling of meteorological conditions and air pollution over Athens, Greece

Flash presentations

[850] Triantafyllou A.G., Garas S., Diamantopoulos Ch., Kaldellis J.K., Ouleiridis L., Konstantinidis E.

Remote sensing measurements and investigation of the ABL temperature profile over large and broad mountain basin

[887] Dyda M., Pyzik A., Drabik P., Istel L., Wiłkojć E., Buchwald-Zięcina O., Bogdanowicz-Prus A., Skłodowska A.

Monitoring of bio-aerosols, gaseous and Particulate Matter (PM) pollution of Wawel Royal Castle in Krakow, Poland.

SESSION 51-ENVIRONMENTAL HEALTH (3)

Room C: Nafsika B

Chairs: Petreas M., Kalanztzi O.

- 15:00-15:15 **[826] Ezhova E., Orlov D., Malkhazova S., Drozdov D., Gennadinik V., Kaverin D., Zilitinkevich S., Kerminen V.-M., Petäjä T., Kulmala M.**
 Potential links between precipitation and anthrax outbreak at North-West Siberia
- 15:15-15:30 **[871] Brown F.R., Tarrant D.H., Gill R., Dhaliwal J., Sarala R., Patton S., Park J.S., Petreas M.**
 Flame retardants (polybrominated diphenyl ethers, pbdes) and organophosphates, OPFRs) in dust from canadian fire stations

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- [570] Vahur K., Udras H., Keir K.**
Bottled water microbiological quality in Estonia
- [571] Pavlova E., Lakova E., Vladov I., Zapryanova S., Gluecheva Y., Ivanov I., Svechnikov K., Atanassova N.**
Flash presentations Experimental approach for metabolic disorders as a tool to investigate impact of environment on human health
- [919] Savic B., Tanovic P., Janjic N.**
Emissions of volatile organic compounds from flex printing facility
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SESSION 52-BIOWASTE**Room D: Nefeli Hall A****Chairs: Lyberatos G., Cesaro A., Lekkas D.F.**

- 15:00-15:15 **Invited speaker Loizidou M.**
Current trends and future potential of biowaste and biomass
- 15:30-15:45 **[470] Alexandropoulou M., Papadopoulou K., Antonopoulou G., Lyberatos G.**
Hydrothermal pretreatment optimization for enhanced anaerobic digestion of willow sawdust
- 15:45-16:00 **[129] Cesaro A., Cieri V., Belgiorio V.**
Organic solid waste mechanical pretreatment for the optimization of anaerobic digestion processes
- 16:00-16:15 **[145] Spyridonidis A., Zhurka M., Vasiliadou I.A, Lytra V., Stamatelatou K.**
Biogas production from sunflower residues: effect of pretreatment
- 16:15-16:30 **[714] Asunis F., Brundu A.P., Carucci A., Cocco F.G., De Gioannis G., Isipato M., Muntoni A., Spiga D.**
Valorisation of ovine cheese whey through PHA production
- 16:30-16:45 **[913] Mosquera-Losada M.R., Ferreira-Dominquez N., Arias-Martinez D., Rodriguez-Rigueiro F.J., Santiago-Freijanes J.J., Rigueiro-Rodriguez A.**
Sewage sludge agricultural use
- 16:45-17:00 **[966] Vakalis S., Moustakas K., Malamis D., Loizidou M.**
Expansion of the 3T method for the assessment of various Energy-from-Waste technologies

Flash presentation**[493] Venegas M., Fernández G., Vidal G.**

Biosolids as soil-amendment: evaluation of nutrient leaching in loamy-silty soil

SESSION 53-LAKES, RIVERS, ESTUARIES AND ECOSYSTEM HEALTH**Room E: Nefeli Hall B****Chairs: Evangelou E., Amanatidou E.**

- 15:00-15:15 **[135] Gikas G.D., Lergios D., Psomakelis E., Petalas C.**
Evaluation of water quality of Kosynthos river in North Greece, using water quality indices
- 15:15-15:30 **[315] Antoniou M. G., Kagalou I., Hadjiouraniou G., Daskalakis E., Tsiarta N., Chamoglou M., Polykarpou P.**
Managing the risk of cyanobacteria through water quality characteristics analysis: A case study of two warm Mediterranean reservoirs
- 15:30-15:45 **[769] Tsiptsias C., Samiotis G., Kaklidis N., Pekridis G., Amanatidou E.**
Greenhouse gas emissions from natural and artificial lakes in Western Macedonia, Greece
- 15:45-16:00 **[927] Esguerra G., Ballesteros F.**
Prediction of algal bloom occurrence in Laguna Lake, Philippines using artificial neural networks (ANN)
- 16:00-16:15 **[330] Tsiakos C., Krommyda M., Kopsinis Y., Tsertou A., Amditis A., Jonoski A., Popescu I., Assumpcao T.**
Improved LC/LU maps and flood models through crowdsourced information
- 16:15-16:30 **[382] Pournara A., Mirli A., Latinopoulos D., Kagkalou I.**
The DPSIR framework for integrating the ecosystem services in River Nestos Lagoons-Greece

Flash presentations**[349] Tsadilas C., Tziouvalekas M., Evangelou E., Papadopoulos S., Papadoulis A., Petsoulas C., Tsitouras A., Grypari P., Smyrnis T., Peppas A.**

Assessment of water quality of Asopos River in central Greece using multivariate analysis

[553] Junakova N., Junak J.

The effect of alkaline activated reservoir sediments used as a binder in concrete on its compressive strength

SESSION 54-ENVIRONMENTAL PLANNING, MANAGEMENT AND POLICIES (3)**Room F: Salon des Roses****Chairs: Vagiona D., Pozoukidou G.**



- 15:00-15:15 **[697] Drepaniotis I., Vagiona D.**
Onshore wind farm siting and energy carrying capacity in the municipality of Aristotle in Chalkidiki – Greece
- 15:15-15:30 **[735] Bili A., Vagiona D.**
Site selection of hybrid solar/wind renewable energy systems: A case study from Andros, Greece
- 15:30-15:45 **[758] David N., Gao H.O.**
Can cell-phone tower signals help fight Malaria in Africa?
- 15:45-16:00 **[954] Beriatos E., Papageorgiou M., Sakellariou S., Christopoulou O., Duquenne M.N., Kallioras D., Kostopoulou Th., Sfougaris A., Karapanagiotidis I., Mente E., Kyvelou S., Tzannatos E., Kanellopoulou K., Papachatzi A.**
Maritime Spatial Planning (MSP) in Greece: lessons learnt from the case of the Inner Ionian Sea – Corinthian Gulf
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[187] Xofis P., Tsiourlis G., Konstantinidis P.
An Ignition Probability Index for the early detection of wildfires in the Eastern Mediterranean region

[602] Vordoglou M., Samara T., Tsitsoni T.
The contribution of the cadaster to the protection of urban forests. The case study of Seich Sou.

Flash presentations

[703] Angeli A., Zorpas A.A.
Quantifying the impact of volunteerism in the framework of waste management strategies in Cyprus

[725] Karystinakis K., Partozis T., Grigoriadis D., Mantzavelas A., Diamantopoulos S.
Ofire+: a pioneer solution on wildfire incident planning and response for enhancing the resilience of individual infrastructures



**Flash
presentations**

[802] Mganga K.Z., Amollo K.O., Bosma L., Kioko T., Kadenyi N., Musyoki G., Ndathi A.J.N., Wambua S., van Steernbergen F., Musimba N.K.R.

Rainwater harvesting from roads enhanced indigenous pasture establishment in a typical African dryland environment

17:00-18:00 Poster session- Coffe break

Closing Ceremony

Room A: Delphi Amphitheater, 18:30

Chairs: Belgiorno V., Lekkas D.F.

21:00 *Conference dinner*

POSTER PRESENTATIONS

Thursday 5 September 2019

WASTEWATER TREATMENT - LIFE CYCLE ANALYSIS - SOIL AND GROUNDWATER CONTAMINATION AND REMEDIATION- MICROPLASTICS IN THE MARINE ENVIRONMENT - ADVANCED OXIDATION PROCESSES - SOLID WASTE MANAGEMENT - HEAVY METALS IN THE ENVIRONMENT - EFFICIENT WATER RESOURCES MANAGEMENT IN Cr(VI) IMPACTED WATER BODIES – ENVIRONMENTAL IMPACT OF MARITIME TRANSPORT

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| A1 | [235] Poulli K., Rossidou E., Kozakou S., Michael N., Demetriou E., Christofidou M., Aletrari M.
Monitoring of treated domestic wastewater quality | WST ¹ |
| A2 | [245] Zawierucha I., Nowik-Zajac A., Kozlowski C.
Impregnated Resins as Novel Sorbents for Removal of Toxic Metal Ions from Aqueous Solutions | WST |
| A3 | [254] Nowik-Zajac A., Zawierucha I., Kozlowski C.
Removal of Toxic Metal Ions Through Polymer Inclusion Membranes Containing Macrocyclic Ligands as Carriers | WST |
| A4 | [304] Papadopoulos K.P., Argyriou R., Ekonomou C.N., Tatoulis T.I., Tekerlekopoulou A.G., Vayenas D.V.
Printing ink wastewater treatment using electrocoagulation | WST |
| A5 | [307] Benekos A., Papadopoulos K., Triantaphyllidou I.-E., Tekerlekopoulou A.G., Vayenas D.V.
Treatment of various agro-industrial wastewaters using electrocoagulation | WST |
| A6 | [417] Kotoula D., Iliopoulou A., Irakleous-Palaiologou E., Gatidou G., Aloupi M., Fountoulakis M.S., Stasinakis A.S.
Use of the microalgae chlorella sorokiniana for municipal wastewater treatment: batch experiments | WST |
| A7 | [434] Venzke C.D., Giacobbo A., Rodrigues M.A.S., Bernades A.M.
Membrane distillation treating a petrochemical reverse osmosis concentrate | WST |
| A8 | [450] Gkogkaki V., Karageorgis A., Pantazis K.
Method development for the determination of heavy metals such as copper, iron, manganese and zinc in aluminum alloys by ICP-OES, based on wastewater analysis method | WST |

¹ Wastewater treatment

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| A9 | [560] Boycheva S., Miteva S., Trendafilova I., Zgureva D., Václavíková M., Popova M. | WST |
| | Magnetite nanoparticles activated coal fly ash zeolites with application in wastewater remediation | |
| A10 | [452] Klontza E. | LCA |
| | Life cycle assessment of the use of biomass as energy source in Northern Greece | |
| A11 | [468] Ntaikou I., Antonopoulou G., Drakopoulos V., Dailianis S., Lyberatos G. | WST |
| | Optimization of decentralized treatment and sanitation of domestic wastewaters via constructed wetlands: The DOMUS_CW project | |
| A12 | [475] Zkeri E., Vourdoubas I., Katsivela E. | WST |
| | Wastewater disinfection applying solar energy | |
| A13 | [409] Amabogha O. | SOIL |
| | Combining phytoremediation with bioenergy production: developing a multi-criteria decision matrix for plant species selection | |
| A14 | [981] Ochando-Pulido, Javier M., Rubén González-H., Martínez-Férez, A. | WST |
| | Modeling and optimization of two-phase olive-oil washing wastewater phenolic compounds recovery and treatment by novel weak-base ion exchange resins | |
| A15 | [199] Zakuciová K., Štefanica J., Kočí V., Šerešová M., Vlček Z., Vitvarová M., Opatřil J. | LCA ² |
| | Methodology development for implementing Life Cycle Analysis of energy production in the Czech Republic | |
| A16 | [690] Baric M., De Folly d'Auris A., Tonziello J. | LCA |
| | Life cycle assessment analysis for remediation technology choice: a case study | |
| A17 | [704] Bacenetti J., Haaland Gaeta F., Facchinetti D., Parolini M. | LCA |
| | Approaches to tackle emerging challenges in European aquaculture | |
| A18 | [837] Rubio-Sanchez M., San Miguel G. | LCA |
| | Environmental and Economic Life Cycle Inventory of Brussels sprouts | |
| A19 | [931] Abad D., San Miguel G., Domínguez C., Jost N., Gutiérrez F. | LCA |
| | Environmental and economic LCI of a micro-CPV module | |
| A20 | [481] Richa A., Touil S., Djezzar M., Douaoui A | SOIL ³ |
| | Origin of the salinity in the groundwater of the El Attaf alluvial aquifer | |

² Life Cycle Analysis

³ Soil and groundwater contamination and remediation

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| A21 | [500] Punia A., Siddah N.S., Bharti R.
Groundwater quality and hydrogeochemical characterization of Khetri copper mining region, India | SOIL |
| A22 | [530] Rachwał M., Jabłońska-Czapla M., Grygoyć K., Fornalczyk A., Willner J.
Technology critical elements in industrial wastes as the source of soil contamination | SOIL |
| A23 | [815] Vrchotová B., Danda M., Lovecká P.
Cooperation of bacteria and fungus on polycyclic aromatic hydrocarbons degradation | SOIL |
| A24 | [817] Moraetis D., Al-Suhai A.S., Pyrgaki K., Argyraki A., Dermatas D.
Origin of Cr in alluvial sediments and ultramafic rocks in Sultanate of Oman. Magnetic fractionation and sunlight effect. | SOIL |
| A25 | [818] Macurkova A., Drobnikova T., Maryska L., Jindrichova B., Burketova L., Siegel J., Valentova O., Lovecka P.
Quantitative PCR as a tool for analysis of diversity in soil microbiome | SOIL |
| A26 | [819] Macurkova A., Drobnikova T., Maryska L., Jindrichova B., Burketova L., Siegel J., Valentova O., Lovecka P.
Complex approach for analysis of changes in soil microbiome | SOIL |
| A27 | [918] Silvestri D., Waclawek S., Stejskal V., Vlkova D., Kvapil P., Kohout P., Hrabak P., Černík M.
A pilot test in Eastern Bohemia for chlorinated aliphatic hydrocarbons groundwater remediation | SOIL |
| A28 | [182] Hyo-Jeong Lee, Jeong-Ho Choi, Won-Wook Kwun, Sang-Yeop Lee, Gwan-Ju Jung
The Characteristics of Soil Contamination in Industrial Complex in Korea | SOIL |
| A29 | [480] Richa A., Touil S., Djezzar M., Douaoui A
Modeling the spatial evolution of nitrogen pollution in groundwater and the amount of nitrogen leached under potato crops in the Khemis Miliana Plain | SOIL |
| A30 | [646] Siebielec S., Siebielec G., Sugier P., Stuczynski T.
Interactions between rhizosphere microorganisms and spontaneous plant species inhabiting smelter wastelands | SOIL |
| A31 | [930] Butu M., Rodino S.
Applications of Remote Sensing in Remediation of Contaminated Water and Soil | SOIL |

A32 **[289] Kalcikova G., Jemec Kokali A., Marolt G., Žganjnar Gotvajn A.**

⁴MPLASTICS

Adsorption of silver on virgin and aged microplastics

⁴ Microplastics in the marine environment

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| A33 | [805] Gies S., Schömann E.-M., Radiev Y., Prume J., Koch M.
Investigating the potential of UV-excited photoluminescence spectroscopy for the identification of plastics | MPLASTICS |
| A34 | [898] Scopetani C., Pflugmcher S., Pellinen J.
A method for the extraction of microplastics from solid samples using olive oil | MPLASTICS |
| A35 | [487] Prume J., Schömann E.-M., Chiffard P., Koch M.
A methodological protocol to extract microplastics from river sediments (bed, bank and floodplain) | MPLASTICS |
| A36 | [110] Parolini M., Bacenetti J., Cavaliere A., De Felice B., Sugni M., Orsi L., Ortenzi M.A.
Do polyethylene terephthalate microparticles (PET- μ Ps) affect the oxidative status of the clam <i>Ruditapes philippinarum</i> ? | MPLASTICS |
| A37 | [14] Villota N., Lomas J.M.
Fenton reagent in combination with UV light and ultrasound waves applied for caffeine oxidation | AOPs ⁵ |
| A38 | [39] Kurt A., Yonar T.
Fenton oxidation of pharmaceutical wastewaters containing antibiotics with Taguchi's orthogonal array design | AOPs |
| A39 | [64] Villota N., Sardón L., Ferreira C., Lomas J.M., Camarero L.M.
Effect of iron catalyst on caffeine oxidation by sono-Fenton technology | AOPs |
| A40 | [70] Villota N., Sardón L., Ferreira C., Lomas J.M., Camarero L.M.
Effect of hydrogen peroxide on caffeine oxidation by sono-Fenton technology | AOPs |
| A41 | [79] Villota N., Qullatein H., Lomas J.M.
Colour changes during the carbamazepine oxidation by photo-Fenton | AOPs |
| A42 | [228] Quiceno L.I., Hernández M., Cardona L., Arroyave C., Aristizábal A.
Evaluation of phytotoxic effects and decolorization of simulated and real textile wastewaters by UV/H ₂ O ₂ | AOPs |
| A43 | [335] Innocenzi V., Prisciandaro M., Veglio F.
Wastewater treatment processes utilizing hydrodynamic cavitation | AOPs |
| A44 | [384] Kurt A., Yonar T., Helvacioğlu H., Shakir F., Neşelen E.
The effect of different parameters on electrochemical removal of ampicillin using new generation Sn/Sb/Ni-Ti anodes | AOPs |

⁵ Advanced Oxidation Processes

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| A45 | [637] Xiangwei, Y., Graells M., Perez-Moya M.
A practical time discretization methodology for adjusting the dosage profile in photo-Fenton processes | AOPs |
| A46 | [639] Nasr Esfahani K., Zandi M.D., Travieso-Rodriguez J.A., Graells M., Pérez-Moya M.
3D printed lab-scale raceway ponds reactors applied to photo-Fenton processes | AOPs |
| A47 | [665] Gounaki I., Lironi M.A., Venieri D.
Bacterial inactivation & study of damages in subcellular level during disinfection of aqueous samples | AOPs |
| A49 | [978] Zouzelka R., Brabec L., Remzova M., Rathousky J.
Immobilized rGO/TiO ₂ photocatalyst for water purification | AOPs |
| A50 | [498] Sadeghi S.M., Jesus J., Pinto E., Almeida A., Soares H.
A simple and flexible flowsheet process for efficient and selective metal recycling from spent fluid cracking catalysts | SWM ⁶ |
| A51 | [201] Gonzalez Baez A., Pantoja Munoz L., Garelick H., Purchase D.
Characterisation of Rare Earth Elements in Waste Printed Circuit Boards (WPCBs) and their bioleaching potential | SWM |
| A52 | [536] Retka J., Uhrynowski W., Yang Z., Karczewska-Golec J., Bajda T., Debiec-Andrzejewska K., Drewniak L.
Biorecovery of metal sulfides from leachates obtained through zinc-carbon battery recycling | SWM |
| A53 | [838] Karalis J., Arapogloy D., Choriananopoylos N., Iliopoylos C.
Contribution to the exploitation of oil by-products for use in the production of quality feed through the fermentation with the fungal strain LGAM P123 of basidiomycetes Pleurotus ostreatus | SWM |
| A54 | [856] Amadou O., De Gaudenzi G.P., Marcheselli G.C., Piredda M., Serpe A.
A new sustainable approach in recovering Cobalt from “hard metal” production by-products | SWM |
| A55 | [858] Mumladze T., Šleiniute A., Denafas G.
The possibility of recycling of multilayer packaging waste: Reducing environmental impacts | SWM |

⁶ Solid waste management

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| A56 | [882] Buachidze N., Dvalishvili N.,
Determining a probability of the uncontrolled landfills emergence in Georgia's rural areas using integrated methodology | SWM |
| A57 | [883] Kutchava G., Buachidze N., Chikviladze N., Shubladze E.
Negative role of uncontrolled landfills in Georgia in environmental pollution processes | SWM |
| A58 | [909] Hutton B., Norrish M., Horan E.
Challenging the belief that landfill has higher net CO ₂ emissions than waste-to-energy incineration or composting | SWM |
| A59 | [25] Abud A.K.S., Silva A.S.
Biosynthesis of xanthan gum from fermenting potato peels extract: Influence of sucrose supplementation on yield and apparent viscosity | SWM |
| A60 | [141] Petsas A.S., Vagi M.C.
The use of recycled human food waste and leftovers in the aquaculture industry for the partial replacement of commercial manufactured feed as a more sustainable and environmentally friendly practice: Recent research and findings | SWM |
| A61 | [287] Cubas A.L.V., Machado M.M., Hermmann K., Bianchet R.T., Moecke E.H.S.
Extraction of oil from spent grounds coffee using ultrasound as pre-extraction method | SWM |
| A62 | [523] Fornalczyk A., Willner J., Jablonska- Czaplą M., Gryrouc K., Rachwal M.
Analysis of the content of germanium, tellurium and thallium in the grounded waste of electronic equipment | SWM |
| A63 | [617] Junak J., Sicakova A.
Reducing the environmental impact of construction wastes by their use in the preparation of construction mixtures | SWM |
| A64 | [730] Varier J., Kuttamassery N., Chenichery S.
Microbial Biodiversity of Municipal Solid Waste (MSW) dumpsites of Cochin, Kerala, India. | SWM |
| A65 | [787] Halldorsdottir S.
Health care waste management: challenges and solutions | SWM |

- A67 **[24] Januskaitiene I., Diksaityte A.** ⁷HEAVY
 Elevated CO₂ in air changes photosynthetic response of hordeum vulgare and bromus secalinus to cadmium pollution in soil
- A68 **[89] Butrimavičienė L., Kalciene V., Stankevičiūtė M., Jokšas K.** HEAVY
 Neuro-, geno- and cytotoxicity responses in mussels anodonta cygnea after six metals mixture treatment
- A69 **[328] Sotiropoulou R.E.P., Serafidou M., Skodras G.** HEAVY
 Effect of oxygen functional groups on mercury retention in activated carbons
- A70 **[428] Kampouroglou E., Kollias K., Stouraiti C., Papassiopi N.** HEAVY
 Acid generation and heavy metal leachability from waste lignite disposal sites, Oropos basin, North Attica. An assessment on preliminary data.
- A71 **[476] Prevendar Crnić A., Zgorelec Ž., Srebočan E., Kisić I.** HEAVY
 Mercury in eisenia fetida and soil in the vicinity of a natural gas treatment plant in northern Croatia during the last ten years
- A72 **[583] Gluhcheva Y., Petrova E., Pavlova E., Tinkov AA. Ajusakova O.P., Rahsev P., Vladov I., Skalny A.V.** HEAVY
 Tissue-specific TfR expression in organs of immature mice after chronic exposure to CoCl₂
- A73 **[588] Pavlova E., Kamenova K., Gluehcheva Y., Petrova E., Ivanova J. Atanassova N.** HEAVY
 Comparative effects of salinomycin and meso-2,3-dimercaptosuccinic acid (DMSA) on lead-induced impairment of reproductive function in male mice
- A74 **[720] Chouvelon T., Araujo F.D., Bouchoucha M., Briant N., Bruzac S., Crochet S., Knoery J., Ponzevera E., Rozuel E., Sireau T., Thomas B., Amouroux D., Berail S., Brach- Papa C.** HEAVY
 Sources and transfer of Cu, Hg and Pb into marine food webs using innovative tracers (metal stable isotopes, trophic markers): results of a pilot study in a French coastal area
- A75 **[816] Sandil S., Dobosy P., Kröpfl K., Füzi A., Óvári M., Záray G.** HEAVY
 Arsenic uptake in bean and cabbage grown in silty and sandy soil and irrigated with arsenic containing water
- A76 **[473] Zkeri E., Aloupi M., Gaganis P.** HEAVY
 Seasonal variation and spatial distribution of Arsenic in groundwater in a rhyolitic volcanic area of Lesvos Island, Greece

⁷ Heavy metals in the environment

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| A77 | [474] Zkeri E., Tzoraki O., Lasithiotakis M., Sinioros P.
Trace metals in soils and water in the area of a small - medium waste electrical and electronic equipment recycling plant | HEAVY |
| A78 | [738] Zkeri E., Mavrakis E., Pergantis S., Lydakis-Simantiris N.
Selenium accumulation in unicellular photosynthetic algae <i>Chlamydomonas reinhardtii</i> and <i>Thalassiosira weissflogii</i> grown in Se-contaminated media | HEAVY |
| A79 | [880] Singovszka E., Balintova M.
The comparison of sediment quality in the rivers the Eastern Slovakia by Potential ecological risk index | HEAVY |
| A80 | [976] Zkeri E., Aloupi M., Gaganis P.
Mobilisation of arsenic in groundwater, Lesvos Island, Greece | HEAVY |
| A81 | [469] Zissimos A., Christofi C., Christoforou I., Rigas M.
Occurrence and distribution of hexavalent chromium in ground and surface waters in Cyprus under the CrITERIA project | ⁸ Cr(VI) water |
| A82 | [576] Fuoco I., Figoli A., Brozzo G., De Rosa R., Bloise A., Criscuoli A., Apollaro C.
Preliminary study on Cr-rich groundwater treatment by membrane processes | Cr(VI) water |
| A83 | [594] Paternoster M., Rizzo G., Sinisi R., Vilardi G., Di Palma L., Mongelli G.
Geogenic Cr(VI) in groundwater of the Pollino Massif (southern Apennines): occurrence and remediation. | Cr(VI) water |
| A84 | [829] Georgiadou E.C., Zissimos A., Christoforou I., Christofi C., Fotopoulos V., Christou A.
Effects of Cr(VI)-contaminated irrigation water on growth and development of selected crop species | Cr(VI) water |
| A85 | [768] Amanatidou E., Stamos A., Samiotis G., Pekridis G., Tsiptsias C.
Natural presence of hexavalent chromium in spring waters of South-West Mountain Vermion, Greece | Cr(VI) water |
| A86 | [946] Hatzianestis I., Parinos C., Gogou A.
Polycyclic aromatic hydrocarbons in surface sediments of the open Aegean Sea: contribution of maritime traffic | ⁹ MARITIME |
| A87 | [925] Boviatsis M., Tselentis B.
A comparative analysis between EU MRV and IMO DCS – the need to adopt a harmonised regulatory system | MARITIME |

⁸ Efficient water resources management in Cr(VI) impacted water bodies

⁹ Environmental impact of maritime transport

- A88 **[944] Kotrikla A.M., Androutsopoulos A., Aravanis I., Argyraki F., Balothimas C., Biniakou C., Bourazana S., Chouli K., Dervos S., Drosakis I., Galenteridis C. K., Gotsopoulou S., Karaviti M.M., Katsiakou C., Kouchtas I., Koutropoulos I., Maroudas S., Mastrosavvas G., Metaxas Mariatos D., Mylona E., Papadopoulou K., Papageorgiou A., Papazacharia M., Platara M., Rousaki A.A., Spyropoulou A., Stefanoglou S., Tasiou E., Thomaidou M., Tsagdi I., Tsirigoti A., Tsironis D. N., Tsivelekidou Z., Tzivelou P., Vagianos E., Vathis C., Vraka G., Zerva I., Zouganelis S.** MARITIME
 Participatory Street-Level Noise Monitoring in the City of Chios
- A89 **[934] Boviatsis M., Alexopoulos A.B., Vlachos G.P., Samiotis G.** MARITIME
 Chemical tanker accidents and the 2010 HNS convention
- A90 **[507] Higuchi T., Sekine M., Imai T.** ¹⁰ODOUR
 Comparison of sensory odour intensity scales for inexperienced assessors
- A91 **[700] Voykkali I., Loizia P., Zorpas A.A.** WST
 The adoption of key performance (KPIs) to increase the implementation of EMAS
- A92 **[889] Touil S.** WST
 Impact of reuse of the purified wastewater on some properties of soil. Case study of Ain Defla station (Northwestern Algeria)
- A93 **[985] Lekkas D.F., Daskaloudis I., Vazaiou N., Iliopoulou A., Vourdougiannis L., Krassa E., Xypolias P** SWM
 Composition of municipal solid waste at Kara Tepe refugee camp in Lesvos, Greece

¹⁰ Environmental odour, monitoring and control

Friday 6 September 2019
**WASTEWATER TREATMENT-MARINE ENVIRONMENT AND COASTAL
MANAGEMENT – HYDROLOGY AND WATER RESOURCES
MANAGEMENT- ENERGY TECHNOLOGIES AND SUSTAINABILITY-
CLIMATE CHANGE MITIGATION AND ADAPTATION -
ENVIRONMENTAL BIOTECHNOLOGY AND BIOENERGY-EMERGING
POLLUTANTS-ENVIRONMENTAL DATA ANALYSIS AND MODELLING-
CIRCULAR ECONOMY AND INDUSTRIAL SYMBIOSIS**

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| B1 | <p>[598] Wijaya I.M.W., Ribeiro H., Soedjono E.S., Slamet A., Teixeira C., Bordalo A.A.</p> <p>Start-up of the Nitrogen Removal Process in an Anaerobic Up-Flow Reactor Inoculated with Aeration Tank Sludge</p> | WST |
| B2 | <p>[810] Antwnopoulou P., Vyrides I., Stasinakis A.</p> <p>Isolation and identification of microorganisms that can biodegrade organic compounds which are present in olive mill waste.</p> | WST |
| B3 | <p>[903] Dalianis S., Charalambous N., Foiniris S., Kosmodromou A., Cocilovo C., Dormousoglou M., Lyberatos G., Ntaikou I</p> <p>An integrated approach for the assessment of constructed wetlands operational efficiency, using both chemical and biological data.</p> | WST |
| B4 | <p>[262] Jiříček T., Havelka J., Doleček P., Cakl J., Kroupa J., Křivčík J.</p> <p>Electrodialysis in zero liquid discharge systems for sustainable brine management</p> | WST |
| B5 | <p>[294] Bosevski I., Kalčíkova G., Derco J., Žgajnar Gotvajn A.</p> <p>Pretreatment of antibiotics-contaminated waste biological sludge by ozonation</p> | WST |
| B6 | <p>[585] Przywara L.</p> <p>Anaerobic ammonium nitrogen oxidation and sulphate reduction in psychrophilic conditions</p> | WST |
| B7 | <p>[591] Ribeiro H., Soares-Santos V., Machado A., Costa-Dias S., Wijaya I M.W., Salgado P., Bordalo A.A., Teixeira C.</p> <p>UN(K)NOWN Project: Development of anammox microbial inocula to improve nitrogen removal efficiency in wastewater treatment</p> | WST |
| B8 | <p>[870] Usak S., Muñoz J.</p> <p>Removal of heavy metals from sewage sludge using combined hydrothermal pretreatment and chelate extraction</p> | WST |
| B9 | <p>[488] Thais G., Juan Pablo M., Vidal G.</p> <p>Influence of microbial fuel cell integration on organic matter and nutrient removal in a vertical constructed wetland for wastewater treatment</p> | WST |

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| B10 | [951] Tzaberis N.
The importance of water for life on the planet: Education for Global Citizenship | WST |
| B11 | [122] Gad F.K., Chatzinaki M., Vandarakis D., Kyriakidou C., Hatiris G.A., Kapsimalis V.
Storm identification and assessment of potential impacts in Rhodes Island, Greece | ¹¹ MARINE |
| B12 | [263] Metaxatos A., Gazouli M.
Genetic population structure of scallops going through a rapid population decline in the Eastern Mediterranean | MARINE |
| B13 | [713] Kalantzi G., Kotsopoulos S., Panitsidis K., Partozis A., Karystinakis K.
SeaLoc: A pilot forecasting system providing sea characteristics and other support services on high local resolution | MARINE |
| B14 | [94] Rusu L.
An analysis of the expected climate change effects in the vicinity of the main harbors from the black sea | ¹² CLIMA |
| B15 | [478] Hliaoutakis A., Papadopoulos S.N., Kydonakis A., Doula M.K., Papadopoulos N., Sarris A.
A web-based GIS tool for environmental footprint estimation of agribusinesses | CLIMA |
| B16 | [529] Chioveanu M.C., Simionov I.A., Patriche N., Tenciu M., Dragomir E., Oprea L.
The Influence of Danube River hydrographic and thermic factors on fish stocks dynamics in Razim-Sinoe Lagoon system | CLIMA |
| B17 | [573] Zgureva D., Boycheva S., Miteva S., Lazarova H., Marinov I., Popova M.
Thermal swing adsorption in a carbon capture system | CLIMA |
| B18 | [590] Boycheva S., Marinov I., Miteva S., Zgureva D.
Comparative studies of the equilibrium adsorption of CO ₂ onto coal ash zeolites Na-X and Na-Ca-X | CLIMA |
| B19 | [605] Boycheva S., Zgureva D.
Coal ash zeolite as a self-catalytic-chemisorption system for conversion of carbon dioxide to hydrocarbons | CLIMA |

¹¹ Marine environment and coastal management

¹² Climate change mitigation and adaptation

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| B20 | [785] Potamianou N., Papadopoulou C.-A., Papadopoulou M.P.
Sustainable Development Goals (SDGs) & Indicators: Managing drylands under climate change conditions | CLIMA |
| B21 | [373] Suzuki Y., Nakamura M., Otsuka Y., Sato-Izawa K., Hishiyama S., Kameyama K., Kameyama T., Takahashi A., Katayama Y.
Cloning and sequencing of the gene encoding the enzyme for the reductive cleavage of diaryl ether bonds of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in <i>Geobacillus thermodenitrificans</i> UZO 3 | ¹³ BIOTECH |
| B22 | [512] Papanikolaou S., Diamantopoulou P., Sarris D., Aggelis G.
Biotechnological conversions of crude glycerol, residue deriving from biodiesel production facilities, by strains of the yeast <i>Yarrowia lipolytica</i> | BIOTECH |
| B23 | [607] Michou S., Vastaroucha E.-S., Sarris D., Kalantzi O., Papanikolaou S.
Lipid production by <i>Rhodospiridium toruloides</i> growing on media presenting composition similarities with the spent sulfite liquor in batch and fed-batch cultures | BIOTECH |
| B24 | [718] Kumar P., Subbarao P.M.V., Kala L.D., Vijay V.K.
Thermal and kinetic analysis of biomass fuel (powders) by differential thermal gravimetric analysis (TGA/DTG/DTA) | BIOTECH |
| B25 | [610] Vastaroucha E.-S., Michou S., Kalantzi O., Papanikolaou S.
Biotechnological production of polyols through conversions of crude glycerol by newly isolated strains of the yeast <i>Yarrowia lipolytica</i> | BIOTECH |
| B26 | [105] Stergiadi M., Avesani D., Righetti M., Borga M., Zaramella M.
The role of catchment properties on the importance of initial hydrologic conditions for seasonal hydrological forecasting in alpine areas | ¹⁴ HYDRO |
| B27 | [293] Hutanu E., Urzica A., Paveluc L.E., Stoleriu C.C., Grozavu A.
The role of hydro-technical works in diminishing flooded areas. Case study: the June 1985 flood on the Miletin River | HYDRO |
| B28 | [299] Urzica A., Hutanu E., Miha-Pintilie A., Stoleriou C.C.
Dam break analysis using HEC-RAS techniques. Case study: Cal Alb dam (NE Romania) | HYDRO |
| B29 | [308] Paveluc L.E., Grozavu A., Cojoc G.M., Hutanu E.
Exceptional flood events in the summer of 2018 in the Trebes-Negel Representative Basin (Romania) | HYDRO |

¹³ Environmental biotechnology and bioenergy

¹⁴ Hydrology and water resources management

B30	[491] Feloni E., Baltas E. The Intensity – Duration (I-D) curves towards to a spatially distributed flood early warning tool (F-EWT)	HYDRO
B31	[525] Bournas A., Feloni E., Bertsiouy M., Baltas E. Hydrological and hydraulic modelling for a severe flood event in Sperchios River Basin	HYDRO
B32	[799] Vrouhakis I. Multivariate Statistical Analyses of Groundwater Hydrochemical Data of Tirnavos Sub-basin (Central Greece)	DATA
B33	[808] Mosaferi M., Shakerkhardtibi M., Jahanimoghaddam H., Esmat Saatloo M. Water salinization In Iran: spatial variation of salinity In groundwater resources of North West (Urmia Lake)	HYDRO
B34	[827] Palop-Donat C., Paredes-Arquiola J., Andreu J. Revision of the scarcity state indicator in the spanish drought management plans	HYDRO
B35	[923] Antoniou M.G., Brient L., Tsiarta N., Keliri E., Christofi M., Hadjiouraniou G., Sukenik A. Monitoring and treatment of cyanobacterial contaminated surface waters in France and Cyprus	HYDRO
B36	[88] Astel A., Stec M., Astel K. Occurrence and spatiotemporal variability of sunscreen agents along the polish part of the Baltic Sea coast	¹⁵ EMERG
B37	[97] Čelic M., Jaen-Gil A., Briceno-Guevara S., Rodriguez-Mozaz S., Gros M., Petrovic M. Extended suspect screening to identify organic micropollutants and their transformation products as potential markers of wastewater contamination in riverine and coastal ecosystems	EMERG
B38	[214] Postigo C., Andersson A., Harir M., Bastviken D., Gonsior M., Schmitt-Kopplin P., Gago-Ferrero P., Ahrens L., Ahrens L., Wiberg K. Characterization of natural organic matter and disinfection by-products formed after chemical disinfection of water	EMERG
B39	[290] Thomaidi V.S., Matsoukas C., Stasinakis A.S. Triclosan occurrence in European Sewage Treatment Plants and risk assessment for the European rivers	EMERG

¹⁵ Emerging pollutants

- B40 **[379] Hoehne L., Vettorello G., Ethur E.M., Kuhn D., De Freitas E.M., Steffens C.** EMERG
Analysis of degradation of the micro pollutant amoxicillin by photolysis and evaluation of the degradation products
- B41 **[418] Vazaiou N., Gatidou G., Arvaniti O.S., Stasinakis A.S.** EMERG
Investigation of food additives readily biodegradability in respirometric tests
- B42 **[522] Kifokeri D., Nannou C., Boti V., Albanis T.** EMERG
Determination of pharmaceutical residues in natural waters using high performance liquid chromatography coupled to quadrupole-orbitrap mass spectrometry
- B43 **[524] Kalampoka M., Boti V., Sakkas V., Albanis T.** EMERG
Fast and comprehensive analysis of major use antibiotics by UHPLC-High Resolution and High Mass Accuracy hybrid Linear Ion-Trap-Orbitrap Mass Spectrometry
- B44 **[537] Jimenez Holgado C., Vourdas N., Stathopoulos V., Sakkas V.** EMERG
Optimization of fabric phase sorptive extraction for the determination of selected pharmaceuticals in environmental waters
- B45 **[550] Trantopoulos E., Kosma C., Karkabounas A., Boti V., Albanis T.** EMERG
Liquid chromatography coupled to high-resolution-Orbitrap mass spectrometry for the determination of nitrofurantoin metabolites in fish samples
- B46 **[551] Martinaiou P., Trantopoulos E., Kosma C., Albanis T.** EMERG
Pharmaceutical residues in hospital and urban wastewaters: Occurrence, removal and potential risk assessment
- B47 **[682] Galani K., Alygizakis N.A., Borova V., Thomaidis N.S.** EMERG
A nine-year study on the temporal changes of licit and illicit drug use patterns as revealed from the chemical analysis of influent wastewater from the wastewater treatment plant of Athens
- B48 **[922] Kapsi M., Sakkas V., Albanis T.** EMERG
Development and application of methods for the determination of pesticide residues in natural waters and sediments, coupled to GC-MS
- B49 **[968] Šilha D., Šilarová P., Weidlich T.** EMERG
Biological activity of flufenamic acid and synthesized derivatives (PFCs) that may occur in the environment

- B50 **[170] Kvesitadze G., Khvedelidze R., Urushadze T., Kutateladze L., Zakariashvili N., Jobava M., Sadunishvili T.** ¹⁶ENERGY
 One step industrial enzymatic technology of starch hydrolysis to glucose
- B51 **[655] Ondrejka Harbulakova V., Estokova A., Smolakova M., Luptakova A.** ENERGY
 Durability of cement mortars and concretes exposed to biological attack as one of the sustainability parameters – a correlation analysis
- B52 **[721] Liu B., Li Z., Fu X., Lv Y.** ENERGY
 Numerical simulation of CO₂-brine-rock interactions on CO₂ sequestration in shihezi formation of Ordos Basin in China
- B53 **[974] Nikolopoulou V.I., Nika M.C., Aalizadeh R., Miskaki P., Kaloudis T., Deftereos N.T., Avagianos C., Thomaidis N.S.** EMERG
 Determination of emerging contaminants in surface water resources of EYDAP following wide-scope Target and Non-Target Screening
- B54 **[979] Damalas D.E., Panagopoulou E., Aalizadeh R., Schweizer M., Heid C., Köhler H., Ohë P.V.D., Triebkorn R., Thomaidis N.S.** EMERG
 Influence of pH on the toxicity, uptake and biotransformation potential of citalopram in zebrafish (*Danio rerio*) embryos
- B55 **[202] Silva T.P.B., Souza I.A.V.B., Abud A.K.S., Silva C.E.F.** ¹⁷BIOTECH
 Characterizing activated carbon synthesized from corn straw aiming water treatment
- B56 **[281] Fouskakis G., Stergiopoulou E., Alexandropoulou M., Antonopoulou G., Ntaikou I., Lyberatos G.** BIOTECH
 Production of PHAs with enhanced properties from sugar-based wastewater in a two-stage process
- B57 **[541] Diamantopoulou P., Melanouri E.-M., Papanikolaou S.** BIOTECH
 Screening strains of genus *Pleurotus* for biomass production in solid state fermentation of agricultural residues
- B58 **[916] Salvilla J., De Luna M., Rollon A.** BIOTECH
 Co-Pyrolysis of Corn Stover With Plastic: Optimization Based on Synergy
- B59 **[959] Eftaxias A., Gkalimanis P., Koskinari M.D., Koumara A., Diamantis V., Aivasidis A.** BIOTECH
 Anaerobic co-digestion of poultry manure and used cooking oil for enhanced biogas production

¹⁶ Energy technologies and sustainability

¹⁷ Environmental biotechnology and bioenergy

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| B60 | [920] Tarach K. A., Valencia S., Góra-Marek K., Rey F.
Hierarchization of pure silica LTA zeolite | ¹⁸ GREENCHEM |
| B61 | [91] De Noni I., Ganzaroli A., Orsi L.
Do Environment-related technologies strengthen the competitiveness of local systems? | ¹⁹ DATA |
| B62 | [92] Rusu E.
A comparison between the past and future expected wind conditions in the european coastal environment of the mediterranean sea | DATA |
| B63 | [104] Sulich A., Rutkowska M.
Green jobs as an unemployment solution | DATA |
| B64 | [213] Koletsis I., Tseliou A., Lykoudis S., Pantavou K., Tsiros I.X.
Testing and validation of ENVI-met simulation based on in-situ micrometeorological measurements: the case of Syntagma Square, Athens, Greece | DATA |
| B65 | [216] Pantavou K., Lykoudis S., Delibasis K.K., Tseliou A., Koletsis I., Nikolopoulou M., Tsiros I.X.
The integration of three field survey datasets in Athens, Greece: transformation of five-point to seven-point thermal sensation scale | DATA |
| B66 | [221] Alvarado-Solano D. P., Otero J.T., Šarapatka B.
Species prioritization for recovery potential estimation. Case of study: Seasonally dry tropical forest at an inter Andean valley of Cauca River, South America | DATA |
| B67 | [269] Morosanu G.A., Zaharia L., Ioanna-Toroimac G.
An integrated methodology to estimate the contribution of environmental factors controlling the spatial variation of total dissolved solids. Application on Jiu River Basin (Romania) | DATA |
| B68 | [486] Mijorski S., Ivanov M.
Thermal bridge modelling, based on conjugated heat transfer and CFD methods | DATA |
| B69 | [820] Proutsos N., Korakaki E., Bourletsikas A., Karetos G., Tsagari K., Georgiadis C.
50-year precipitation trends in Nestos Delta-Natura 2000 site | DATA |
| B70 | [466] Sulich A., Grudzinski A.
Challenges for the development of green organizations | ²⁰ CIRCECON |

¹⁸ Green Chemistry

¹⁹ Environmental Data Analysis and Modelling

²⁰ Circular economy

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| B71 | [471] Grudziński A.
The green projects as a source of proecological transformation | CIRCECON |
| B72 | [929] Butu A., Rodino S., Butu M.
Biomining - recovery of high-tech critical metals | CIRCECON |
| B73 | [911] Keliri E.
Detection of cyanobacterial toxins and oligopeptides from the Polemidia Dam in Cyprus | EMERG |
| B74 | [346] Mina T.M.
Effect of Enzyme Treatment on the Properties of Karagumoy Fiber-Reinforced Plastic Composite | BIOTECH |
| B75 | [843] Metsoviti M.
Heterotrophic growth of Chlorella vulgaris on crude glycerol | BIOTECH |

Day 4
Saturday 7 September 2019

**AGROFORESTRY, FOREST AND ENVIRONMENTAL SUSTAINABILITY-
ENVIRONMENTAL HEALTH –WATER /ENERGY/NEXUS AND/OR FOOD
NEXUS – WATER TREATMENT- ENVIRONMENTAL PLANNING,
MANAGEMENT AND POLICIES- AIR POLLUTION - NANOMATERIALS
IN THE ENVIRONMENT: APPLICATIONS AND EFFECTS -LAKES, RIVERS,
ESTUARIES AND ECOSYSTEM HEALTH -BIOWASTE-WATER AND
WASTEWATER REUSE-ELECTRIC AND ELECTRONIC WASTE**

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|----|--|-----------------------|
| C1 | [612] Diksaityte A., Virsile A., Januskaitiene I., Žaltauskaite J.
Photosynthetic response of spring oilseed rape to heat, drought,
nutrient deficiency and combined stress | ²¹ AGROFOR |
| C2 | [794] Papadopoulos A., Pantera A., Fotiadis G.
Effect of summer drought in the natural regeneration of valonia oak | AGROFOR |
| C3 | [811] Sikora S., Abrilic J, Rajnovic I., Kajic S.
Impact of nitrogen fertilization on nodulation and symbiotic efficiency
of indigenous Bradyrhizobium japonicum strains | AGROFOR |
| C4 | [814] Vrchetová B., Škotková M., Vlková V., Kolouchová I.,
Lovecká P.
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²¹ Agroforestry, Forest and Agricultural Sustainability

²² Environmental Health

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²⁴ Water treatment

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- C32 **[100] Saltagianni E.** PLAN
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- C34 **[187] Xofis P., Tsiourlis G., Konstantinidis P.** PLAN
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- C35 **[354] Lekkas D., Klontza E., Galogiannis K., Gkoltsiou K., Alexopoulos C., Cainadas E.** PLAN
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²⁵ Environmental Planning, Management and Policies

²⁶ Lakes, rivers, estuaries and ecosystem health

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²⁷ Air pollution

²⁸ Biowaste

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²⁹ Water and wastewater reuse

³⁰ Electric and electronic waste

³¹ Water, Energy and/or Food NEXUS