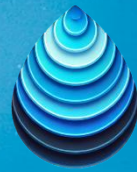




Institute of
Sustainable Water
Management and
Water Law



CSRW26

**2ND INTERNATIONAL
CONFERENCE ON
CIRCULARITY, SUSTAINABILITY
AND RESILIENCE IN WATER,
WASTEWATER AND SLUDGE
MANAGEMENT**

CONFERENCE PROGRAMME

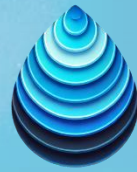
THESSALONIKI

MARCH 29 – APRIL 1, 2026





Institute of
Sustainable Water
Management and
Water Law



CSRW26

2ND INTERNATIONAL CONFERENCE
ON CIRCULARITY, SUSTAINABILITY AND
RESILIENCE IN WATER, WASTEWATER AND
SLUDGE MANAGEMENT

THESSALONIKI

MARCH 29, 2026

Venue: Hall of Waters, City Hall of Thessaloniki

Address: Vasileos Georgiou Avenue, A1, Thessaloniki 546 36, Greece

MARCH 30 – APRIL 1, 2026

Venue: Aristotle University Research Dissemination Center (KEDEA)

Address: 3rd September Street, University Campus, Thessaloniki 546 36,
Greece

UNDER THE AUSPICES OF:



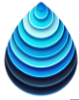
SCHOOL OF CHEMISTRY
ARISTOTLE UNIVERSITY OF THESSALONIKI

1943-2025



DEMOCRITUS
UNIVERSITY
OF THRACE





2nd International Conference on Circularity, Sustainability and Resilience in Water, Wastewater and Sludge Management

SUNDAY, 29/03/2026

Hall of Waters, City Hall of Thessaloniki

Opening ceremony programme

19:00-19:30

Registration

19:30-20:30

Opening Ceremony - Classical music concert (cello & piano duet)

20:30

Welcome reception & buffet

CONFERENCE AGENDA

MONDAY, 30/03/2026

KEDEA HALL 2

08:30-09:30

Registration

9:30-11:30

SESSION 1: WASTEWATER (I)

**Chairs: Prof. Anastasios Zouboulis,
Asst. Prof. Athanasia Tolkou**



09:30-10:00	KN-1	<p>"Advances in Membrane and Redox Processes for Sustainable Water and Wastewater Treatment: Insights from Research for Development Projects"</p> <p><u>Konstantinos V. Plakas*</u>, Sotiris I. Patsios, Dimitris C. Sioutopoulos, Vasilis Ch. Sarasidis, Panagiota Petsi, Anthoula Karanasiou, Anastasios J. Karabelas</p> <p>*Natural Resources and Renewable Energies Laboratory, Chemical Process and Energy Resources Institute, Centre for Research and Technology – Hellas, Greece</p>
10:00-10:15	OP-1	<p>"Adsorptive behavior of tin-based novel coagulants for hexavalent chromium removal"</p> <p><u>Athanasia K. Tolkou*</u>, Sanjay Kay Sagar, Eirini Moschou, Dimitris Koulos, Ioannis A. Katsoyiannis, Sabrina Sorlini, George Z. Kyzas</p> <p>*Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece</p>
10:15-10:30	OP-2	<p>"A Comparative Assessment of Duckweed Grown in Different Types of Agricultural Wastewater for Mineral Phytoextraction"</p> <p><u>Rifat Bugra Bildiri*</u>, Kubra Tutkun Akdeniz, Umit Baris Kutman, Bahar Yildiz Kutman</p> <p>*Institute of Biotechnology, Gebze Technical University, Kocaeli/Turkiye</p>
10:30-10:45	OP-3	<p>"UVB mediated photolysis of gliclazide: Evaluation of degradation kinetics in different aquatic systems"</p> <p><u>Marina Anastasiou*</u>, Vasilios Sakkas, Mohamad Sleiman</p> <p>*Université Clermont Auvergne, Clermont Auvergne INP, CNRS, ICCF, Clermont-Ferrand, France</p>
10:45-11:00	OP-4	<p>"Tracing Pharmaceuticals from Wastewater to Food Crops"</p> <p><u>Filip Takács*</u>, Igor Bodík, Jakub Jurík</p> <p>*Department of Environmental Engineering, Faculty of Food and Chemical Technology, Slovak University of Technology in Bratislava, Slovakia</p>



11:00-11:15	OP-5	<p>"Sustainable Water Reuse from Steel Wastewater through Direct Contact Membrane Distillation (DCMD) Supported by Thermodynamic and Scale-Up Modeling"</p> <p><u>Hussein Fairousha Sulaiman*</u>, Simon Díaz-Quezada, Imen Bousrih, Aamer Ali, Cejna Anna Quist-Jensen *Center for Membrane Technology, Department of Chemistry and Bioscience, Aalborg University, Fredrik Bajers Vej 7H, 9220 Aalborg East, Denmark</p>
11:15-11:30	OP-6	<p>"Anaerobic Digestion of Fermentation Waste Biomass"</p> <p><u>Livia Švorcová*</u>, Barbora Jankovičová, Tomáš Lukáč, Miroslav Hutňan *Department of Environmental Engineering, Faculty of Chemical and Food Technology STU in Bratislava, Slovakia</p>
11:30-12:00	Coffee Break / Poster Session 1	
12:00-14:00	SESSION 2: WASTEWATER (II) Chairs: Asst. Prof. Athanasia Tolkou, Prof. Ivana Ivancev-Tumbas	
12:00-12:30	KN-2	<p>"Role of matrix components during oxidative water treatment"</p> <p><u>Urs von Gunten*</u> *Eawag, Swiss Federal Institute for Aquatic Science and Technology, Dübendorf, Switzerland</p>
12:30-12:45	OP-7	<p>"Lemon Peel- based Carbon Quantum Dots Combined with Graphitic Carbon Nitride (g-C₃N₄-CQD) as Photocatalytic Material for the Degradation of Emerging Contaminants"</p> <p><u>Augusto Misolas*</u>, Vassilis Stathopoulos, Mohamad Sleiman, Vasilios Sakkas *Department of Chemistry, University of Ioannina, Ioannina, Greece</p>



12:45-13:00	OP-8	<p>"Sustainable orange peels/aluminum@graphene oxide composites for efficient removal of synthetic dyes from textile wastewater"</p> <p><u>Sofia Fykari*</u>, George Z. Kyzas, Athanasia K. Tolkou *Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece</p>
13:00-13:15	OP-9	<p>"Diclofenac and amoxicillin removal from wastewater using fruit peels as natural adsorbents"</p> <p><u>Xanthi Sventzouri*</u>, George Z. Kyzas, Athanasia K. Tolkou *Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece</p>
13:15-13:30	OP-10	<p>"Removal of triclosan from aqueous solution using activated carbon derived from chestnut derived waste biomass"</p> <p><u>Konstantina-Sevasti Komnou*</u>, George Z. Kyzas, Athanasia K. Tolkou *Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece</p>
13:30-13:45	OP-11	<p>"Growth Performance and Nutrient Removal of Microalgae Cultivated under Suspension, Immobilized and Encapsulated Systems in Synthetic Wastewater"</p> <p><u>Christos Manolis*</u>, Nikoletta Solomakou, Anastasia Stergiou, Petros Samaras *Department of Food Science and Technology, International Hellenic University, Greece</p>
13:45-14:00	OP-12	<p>"Hydrodynamic Cavitation-Based Treatment of Saline Wastewater Containing Reactive Red 120 and Congo Red"</p> <p><u>Giorgos Ioannou*</u>, Saman Mofstakhari Anasori Mohaved, Loris Calgaro, Ioannis Katsoyiannis, Antonio Marcomini *Aristotle University of Thessaloniki, Department of Chemistry, Laboratory of Chemical and Environmental Technology, P.O. Box 116, Thessaloniki, Greece</p>
14:00-15:00	Conference family photo	
	Lunch break / Poster session 2	
15:00-17:00	SESSION 3: WASTEWATER (III)	



		Chairs: Dr. Maria Petala, Prof. Dimitroula Lambropoulou
15:00-15:30	KN-3	"LC-HRMS strategy for suspect and untargeted discovery of emerging contaminants in wastewaters" <u>Dimitroula A. Lambropoulou*</u> *Department of Chemistry, Environmental Pollution Control Laboratory, Aristotle University of Thessaloniki, Thessaloniki, Greece
15:30-16:00	KN-4	"From Crisis to Policy: advancements of Wastewater Epidemiological Surveillance in EU under the Revised Urban Wastewater Treatment Directive" <u>M. Petala*</u> , E. Moutou, T. Chassalevris, M. Ziagova, V. Tsiridis, O. Oikonomidou, S. Evgenidis, M. Kostoglou, Ch. Dovas, A. Koutsolioutsou, Th. Karapantsios *Laboratory of Environmental Engineering & Planning, Department of Civil Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece
16:00-16:15	OP-13	"Dechlorination, Heavy Metal Removal, and Calcium Preservation Technology for Municipal Solid Waste Incineration Fly Ash" <u>Weihua Li*</u> , Xuyang He, Dingyuan Zhang, Yingjie Sun *Qingdao Solid Waste Pollution Control and Resource Engineering Research Center, Qingdao University of Technology, School of Environmental and Municipal Engineering, Qingdao, China
16:15-16:30	SP-1	"Holistic Water and wastewater management in mining activities - The example of new Thrace mine project" <u>N. Bozikis*</u> , E. Gazea *Technical Lead & Permit Writer, Thracian Mines S.A., Alexandroupoli, Greece
16:30-16:45	SP-2	"Mining waste management - The current situation and the next-day perspective in the mining industry in Greece" <u>E. Gazea*</u> , N. Bozikis *Environmental Manager Greece of Eldorado Gold Corp., Halkidiki, Greece



16:45-17:00	OP-14	<p>"Anti-Scaling Membrane Distillation Crystallization for Gypsum and Water Recovery from Industrial Wastewater"</p> <p><u>I. Bousrih*</u>, S Diaz-Quezada, C. A. Quist-Jensen, A. Ali *Center for Membrane Technology, Department of Chemistry and Bioscience, Aalborg University, Fredrik Bajers Vej 7H, 9220 Aalborg East, Denmark</p>
17:00-17:15	OP-15	<p>"Enhanced Boron Rejection in Reverse Osmosis for Boron-Rich Wastewaters: Insights from Zeta Potential and Particle Size Analysis under Polyol and Salinity Effects"</p> <p><u>Ipek Moutafis*</u>, Evangelos P. Kouvelos, Andreas A. Sapalidis *Institute of Nanoscience and Nanotechnology, National Centre for Scientific Research "Demokritos", Greece</p>
17:15-17:30	SP-3	<p>"Comprehensive SCIEX LC-MS/MS Solution to Meet EU Drinking Water Directive Requirements"</p> <p><u>Carlos Bueno*</u> *ANTISEL</p>
19:30	Conference Dinner	

CONFERENCE AGENDA	
MONDAY, 30/03/2026	
KEDEA HALL 3	
08:30-09:30	Registration



9:30-11:30		SESSION 4: ANALYTICAL CHEMISTRY OF EMERGING CONTAMINANTS (I) Chairs: Prof. Victoria Samanidou, Dr. Ioannis Sitaras
09:30-10:00	KN-5	"Groundwaters as environmental archive of PFAS contamination: Vicenza Province (IT) as study case" <u>Antonio Marcomini*</u> *Department of Environmental Sciences, Informatics and Statistics, Ca' Foscari University of Venice, via Torino 155, Mestre-Venezia, Italy
10:00-10:30	KN-6	"Green(er) sample preparation methods for the monitoring of pesticides in environmental water samples" <u>Natalia Manousi*</u> , Abuzar Kabir, Antonio Ferracane, Apostolia Tsiasioti, Luigi Mondello, Erwin Rosenberg *Institute of Chemical Technologies and Analytics, TU Wien, Austria
10:30-10:45	OP-16	"Development and Validation of a UHPLC-MS/MS Method for the Determination of EU Watch List Emerging Contaminants in Wastewater and Sludge" <u>Riccardo Comazzi*</u> , Nicole Canfora, Michele Protti, Laura Mercolini, Francesco Stante, Roberto Mandrioli *Department for Life Quality Studies (QuVi), Alma Mater Studiorum - University of Bologna, Italy
10:45-11:00	SP-4	"Development of an SPE-LC-MS/MS analytical method for the simultaneous determination of TFA and Sum of PFAs" Nikoletta Xanthopoulou, <u>Eleftheria Iakovidou*</u> , Christos Takidis, Chrysa Gkementzoglou, Georgia Seretoudi, Victoria Samanidou *EYATH S.A., Thessaloniki Water Supply & Sewerage Company, Thessaloniki Water Treatment Plant Laboratory, Greece



11:00-11:15	OP-17	"Chemical Fingerprinting of Urban Water Runoff: An Integrated HRMS Non-Target Workflow and Machine Learning Framework for Source Tracking" <u>Lelouda-Athanasia Koronaïou*</u> , Vasileios Alampanos, Dimitra A. Labropoulou *Department of Chemistry, Environmental Pollution Control Laboratory, Aristotle University of Thessaloniki, Greece
11:30-12:00		Coffee Break / Poster Session 1
12:00-14:00		SESSION 5: ANALYTICAL CHEMISTRY OF EMERGING CONTAMINANTS (II) Chairs: Prof. Antonio Marcomini, Dr. Natalia Manousi
12:00-12:30	KN-7	"Incorporating automated systems for the determination of PAHs in environmental waters. The green and blue analytical perspectives" <u>Natasa P. Kalogiouri*</u> *School of Chemistry, Laboratory of Analytical Chemistry, Aristotle University of Thessaloniki, Greece
12:30-13:00	KN-8	"Taking decisions on sustainability based on measurements: Interpretation of uncertainty and associated risk" <u>Ioannis Sitaras*</u> *Hellenic Accreditation System-ESYD, 7 Thisseos Str
13:00-13:15	SP-5	"Determination of per- and polyfluoroalkyl substances (PFAS) in aqueous matrices using UHPLC Q-TOF" <u>Neda Malesic Eleftheriadou*</u> , Panagiotis Pantazis, Ioanna Dalla, Themistoklis Sfetsas *QLAB Private Company. Research & Development, Quality Control and Testing Services, Thessaloniki, Greece



13:15-13:30	SP-6	"Determination of Haloacetic acids in drinking water by SPE–UPLC–MS/MS using manual and automated sample preparation" Nikoletta Xanthopoulou, Christos Takidis* , Chrysa Gkementzoglou, Vasileios Alampanos, Georgia Seretoudi, Dimitra A. Lambropoulou *EYATH S.A., Thessaloniki Water Supply & Sewerage Company, Thessaloniki Water Treatment Plant Laboratory, Greece
13:30-13:45	OP-18	"Microfluidic devices for fast detection of viruses and bacteria" Crescenzo Ianniello, Zhoulng Yu, Barbara Kasprzyk-Hordern, Nuno M. Reis* *Department of Chemical Engineering, University of Bath, UK
13:45-14:00	OP-19	"Source-Control Circular Mitigation of Gadolinium Pollution: Direct Magnetic Nanomaterial Removal from Urine after MRI Examinations" Eduarda Pereira* , Daniela Tavares, Rosa Freitas, Raquel Fernandes, Thiago Silva, Bruno Henriques, Tito Trindade *Department of Chemistry, LAQV-REQUIMTE – University of Aveiro, Aveiro, Portugal
14:00-15:00	Conference family photo	
	Lunch break / Poster Session 2	
15:00-17:00	SESSION 6: PROPLA (RESEARCH PROJECT DEDICATED SESSION) Chairs: Prof. Loredano Pollegioni, Dr. Silvia Galafassi	
15:00-15:30	KN-9	"Turning waterborne plastic into the building blocks of life: the ProPla project" Loredano Pollegioni* , Elena Rosini, Gianluca Molla *The Protein Factory 2.0 lab, Department of Biotechnology and Life Sciences, University of Insubria, via J. H. Dunant 3, Varese, Italy



15:30-15:45	OP-20	<p>"Improving insect-mediated bioconversion of polyethylene terephthalate by stable gut colonization of recombinant <i>Escherichia coli</i>"</p> <p>Davis Roma, Monica Vaghi, Alex Pessina, Luca Brambilla, Mouna Attafi, Marco Vanoni, Daniele Bruno, Gianluca Tettamanti, Loredano Pollegioni, Morena Casartelli, <u>Silvia Caccia*</u></p> <p>*Department of Biosciences, University of Milan, Italy</p>
15:45-16:00	OP-21	<p>"Proteins from (Micro)Plastics: a Circular Bioeconomy Perspective"</p> <p>Castelnovo Paolo, Maggi Elena, Pesaro Giulia, Pontivi Elisa, Seri Raffaello, <u>Vezzulli Andrea*</u></p> <p>*Department of Economics, University of Insubria, Italy</p>
16:00-16:15	OP-22	<p>"Environmental sustainability of a new chain for micro-PET recovery from urban wastewater and bioconversion into amino acids"</p> <p><u>Marco Carnevale Miino*</u>, Vincenzo Torretta</p> <p>*Department of Theoretical and Applied Sciences, University of Insubria, Via O. Rossi 9, Varese, Italy</p>
16:15-16:30	OP-23	<p>"From emission to resource: microfibre release and recovery potential across domestic laundry appliances"</p> <p>Rosa Zullo, Beatrice Luzi, Marcelo Pedro Pozzo, <u>Silvia Galafassi*</u></p> <p>*Water Research Institute National Research Council of Italy, Corso Tonolli, 50 28922 Pallanza (VB), Italy</p>
19:30		Conference Dinner



CONFERENCE AGENDA		
TUESDAY, 31/03/2026		
KEDEA HALL 2		
08:30-09:30		Registration
9:30-11:30		SESSION 7: DRINKING WATER (I) Chairs: Prof. Vincenzo Torretta, Prof. Ioannis Katsoyiannis
09:30-10:00	KN-10	"Advances in scaling reduction for antiscalant-free inland desalination with high recoveries" Martin Futterlieb, <u>Stefan Panglisch*</u> *University of Duisburg-Essen, Lotharstr. 1, Duisburg, Germany
10:00-10:15	SP-7	"Rapid Online Microbiological Monitoring of Water Using an Automated Cell-Counting System" <u>Anna Whittaker*</u> , Vasilios Koulos *Novate, Switzerland
10:15-10:30	OP-24	"Sustainable groundwater remediation of Cr (VI) and As (III) using rice husk–iron oxide modified adsorptive membranes coupled with Advanced Oxidation Processes" <u>Stella Chatzimichailidou*</u> , Ioanna Kazara, Maria Gatopoulou, Asterios Laskaridis, Maria Xanthopoulou, Andromachi Charizani, Apostolos Fotopoulos, Victoria Samanidou, Margaritis Kostoglou, Ioannis A. Katsoyiannis *Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece



10:30-10:45	OP-25	<p>"A pilot scale investigation of nitrate removal from groundwater by electro dialysis: insights of batch and different feed and bleed modes of operation" <u>Alexia Voutetaki</u>*, Panos Seferlis, Athanasios I. Papadopoulos, Dimitrios Sioutopoulos, Konstantinos Plakas</p> <p>*Chemical Process and Energy Resources Institute, Centre for Research and Technology Hellas, Thessaloniki, Greece</p>
10:45-11:00	OP-26	<p>"Competitive Adsorption of Chromium(VI) and Arsenic(V) onto Polyethylenimine-Modified Silica membranes in Natural Water Matrices" <u>Maria Xanthopoulou</u>*, Natalia Malouchi, Charikleia Prochaska, Dimitrios Gkiliopoulos, Konstantinos S. Triantafyllidis, Margaritis Kostoglou, Victoria Samanidou, Apostolos Fotopoulos, Asterios Laskaridis, Charikleia Prohaska, Maria Gatopoulou, Ioanna Kazara, Stella Chatzimichailidou, Ioannis A. Katsoyiannis</p> <p>*Department of Chemistry, Aristotle University of Thessaloniki</p>
11:00-11:15	OP-27	<p>"Layer-by-Layer Functionalized Ultrafiltration Membranes as a Sustainable Solution for Cr(VI) Contaminated Waters" <u>Natalia Malouchi</u>*, Veroniki Bakola, Olympia Kotrotsiou, Andromachi Charizani, Giorgos Ioannou, Asterios Laskaridis, Ioanna Kazara, Margaritis Kostoglou, George Litas, Vasilis Sarasidis, Anastasios Zouboulis, Maria Xanthopoulou, Stella Chatzimichailidou, Maria Gatopoulou, Charikleia Prochaska, Apostolos Fotopoulos, Victoria Samanidou, Asterios Lekkas, Konstantinos V. Plakas, Ioannis A. Katsoyiannis</p> <p>*Laboratory of Chemical and Environmental Technology, School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece</p>
11:15-11:30	OP-28	<p>"Investigation of the Adsorption of Caffeine and In-Situ Regeneration of Granular Activated Carbon Materials for Sustainable Drinking Water Treatment" <u>Andromachi Charizani</u>*, Natalia Malouchi, Stella Chatzimichailidou, Konstantinos Plakas, Victoria Samanidou, Anastasios Zouboulis, Ioannis Katsoyiannis</p> <p>*School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece</p>



11:30-12:00		Coffee Break / Poster Session 3
12:00-14:00		SESSION 8: INNOVATIVE MATERIALS FOR WATER AND WASTEWATER TREATMENT (I) Chairs: Prof. George Kyzas, Prof. Stefan Panglisch
12:00-12:30	KN-11	"Characterization and catalytic potential of novel biofunctionalized composites for the removal of phenolic compounds from wastewater" <u>Slavica Ražić*</u> , Sanja Panić, Mirjana Petronijević, Jelena Tanasić *Faculty of Pharmacy, University of Belgrade, Serbia
12:30-12:45	OP-29	"La₂O₃-MgO functionalized activated carbon /chitosan beads from olive stones for Cr(VI) removal from water" <u>Konstantinos N. Maroulas*</u> , Anastasia Meretoudi, Pavlos Efthymiopoulos, Evangelos P. Favvas, Alexandros Tsoupras, Nikolaos Kokkinos, Petros Kokkinos, Ioannis K. Kalavrouziotis, Ioannis A. Katsoyiannis, George Z. Kyzas *Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece
12:45-13:00	OP-30	"Fabrication of 3D-printed membranes for wastewater treatment" <u>Evgenios Kokkinos*</u> , Emmanouil Paterakis, Konstantinos Simeonidis, Effrosyni Peleka, Costas Tsiopstias, Petros Samaras, Andreana Assimopoulou, Dimitris Christofilos, Konstantinos Theodoridis, Anastasios Zouboulis *School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece
13:00-13:15	OP-31	"Multifunctional Porous Carbon Textiles decorated with Bimetallic MOFs for Air & Water Decontamination via Adsorption-Catalysis Synergy" Fivos Florides, Kyriacos Ioannou, Marlena Bytniewska, Nikolaos Kostoglou, Anna Michalicha, Claus Rebholz, Mariusz Barczak, <u>Dimitrios A. Giannakoudakis*</u> *Faculty of Chemistry, Maria Curie-Skłodowska University, Lublin, Poland



13:15-13:30	SP-8	"Hach: Integrated Water Analysis Solutions for Reliable, Compliant, and Efficient Water Management" <u>Filippos Koutsfetsoulis*</u> *Hach Lange
13:30-13:45	OP-32	"SMWCNT-mediated Bi₂MoO₆/N-rich carbon nitride indirect S-scheme heterojunctions: 3D conductive network-built-in electric field synergy drives charge transfer for enhanced photocatalytic performance" <u>Xu Xing*</u> , Tao Zhou *State Key Laboratory of Water Pollution Control and Green Resource Recycling, School of Environmental Science and Engineering, Tongji University
13:45-14:00	OP-33	"Enhanced removal of hexavalent chromium using chitosan/activated carbon derived from pine needles and modified with AlCl₃·6H₂O" <u>Sofia L. Kouvalakidou*</u> , Eleftheria Arvaniti, Ioanna Koumentakou, Athanasios Varoutoglou, Ioannis Georgiou, Georgios Maliaris, Ioannis A. Katsoyiannis, Ioannis Konstantinou, Dimitrios Gournis, Spyridon Ntougias, Hrisi K. Karapanagioti, Athanasia K. Tolkou, George Z. Kyzas *Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece
14:00-15:00	Lunch break / Poster Session 4	
15:00-17:00	SESSION 9: INNOVATIVE MATERIALS FOR WATER AND WASTEWATER TREATMENT (II)	
	Chairs: Dr. Dimitrios Giannakoudakis, Prof. Slavica Ražić	
15:00-15:30	KN-12	"Screening Significant Operational Parameters for Coagulation-Flocculation Treatment of POME Using Hybrid Coagulant of Copperas-Sodium Aluminate" Noryushaina Adlina Yusmaini, Nur Diyana Suzaimi, Faidzul Hakim Adnan, Nazaitulshila Rasit, Ismail Almanassra, Roslaini Abdul Ghani, <u>Sofiah Hamzah*</u> *Sustainable Energy and Environmental Technology Special Interest Group, Universiti Malaysia Terengganu, Kuala Nerus, Terengganu, Malaysia



15:30-15:45	SP-9	<p>"Bioaugmentation for odor and corrosion control in sewage networks: long-term performance evaluation of a full-scale application"</p> <p><u>Anastasios Kapagiannidis*</u>, Konstantinos Gantzidis, Marios Atziaras, Konstantina Davididou, Georgios Sergiannidis, Dimitris Gkelezis, Georgios Lionis *Alphabio Ltd, Industrial Area of Thermi, Thessaloniki, Greece</p>
15:45-16:00	OP-34	<p>"Membrane Distillation: An Innovative Solution for High-Salinity Mining Effluent Treatment"</p> <p>Evangelos Kouvelos, Evangelos Favvas, Enrica Fontananova, Gianluca Di Profio, <u>Andreas Sapalidis*</u> *Institute of Nanoscience and Nanotechnology, National Centre for Scientific Research Demokritos, Athens, Greece</p>
16:00-16:15	OP-35	<p>"Recovery of nitrates from contaminated effluents: green ammonia production over N-doped transition metal catalysts"</p> <p><u>João Restivo*</u>, Juliana Patrícia Silva Sousa *International Iberian Nanotechnology Laboratory, Av. Mestre José Veiga s/n, Braga, Portugal</p>
16:15-16:30	OP-36	<p>"MXene Photocatalysts for Emerging Water Pollutants Abatement"</p> <p><u>Fhebe Lagaac Angus*</u>, Maria Cristina Paganini *Department of Chemistry, University of Turin, Italy</p>
16:30-16:45	SP-10	<p>"Redefining Targeted Environmental Analysis with Integrated DART – Triple Quadrupole Technology"</p> <p><u>George Gourgouletis*</u> *Target Analysis S.A., Thessaloniki, Greece</p>
16:45-17:00	OP-37	<p>"Industrial wastes utilization for CO2 capture and accelerated carbonation in a hollow-fiber membrane contactor"</p> <p><u>Nikoleta Lazaridou*</u>, Evdokia Gagari, Ioannis Evgeniadis, Triantafyllia Grekou, Dimitris Koutsonikolas, Panagiota Petsi, Vasileios Sarasidis, Konstantinos Plakas, Akrivi Asimakopoulou *Laboratory of Advanced Renewable Technologies & Environmental Materials in Integrated Systems (ARTEMIS), Chemical Process and Energy Resources Institute, Centre for Research and Technology Hellas, Thermi, Thessaloniki, Greece</p>
17:00-17:30	Coffee Break	



17:30-19:30		SESSION 10: SPECTRA stakeholders' Oriented Event "Sustainable Marine Waters and Aquaculture under Pressure: Monitoring, Treatment, Climate and Policy Challenges & Pathways to Future Solutions"
CONFERENCE AGENDA		
TUESDAY, 31/03/2026		
KEDEA HALL 3		
08:30-09:30		Registration
9:30-11:30		SESSION 11: MICROPLASTICS
		Chairs: Prof. Elia Psillakis, Prof. Javier Hernandez Borges
09:30-10:00	KN-13	"Tracing microplastic pathways in wastewater treatment" Adrián M. Afonso-Álvarez, Sergio J. Álvarez-Méndez, Luisa M. Vera, Javier Hernández-Borges* *Department of Chemistry, University of La Laguna, Canary Islands, Spain
10:00-10:30	KN-14	"Microplastics Pollution: A growing threat – Health Risks, Environmental Concerns & a Call for Solutions" Dimitrios N. Bikiaris* , Nina Maria Ainali, Dimitrios Kalaronis, Dimitra A. Lambropoulou *Laboratory of Polymer Chemistry and Technology, Dept. of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece
10:30-11:00	KN-15	"Sustainable bio-strategies for addressing wastewater treatment for the removal of organic contaminants and microplastics" Maria Touraki* *Department of Biology, Aristotle University of Thessaloniki, Greece



11:00-11:15	OP-38	"Microplastic Pollution in Greek Seas: Study of post-storm effects, spatio-temporal analysis and abundance in Greek Seas" <u>Nikolaos Doumpas*</u> , Chrysafenia Batsoura, Charles V. K. Boot, Dimitrios N. Bikiaris, Anastasia Charitou, Elias Fakiris, Dimitrios Kalaronis, Hrisi K. Karapanagioti, Nefeli Konidari, Dimitra A. Lambropoulou, Iris Loughman, Ioanna Tzioga, Peggy Xirotagarou, Ioannis Giovos <i>*iSea, Environmental Organisation for the Preservation of the Aquatic Ecosystems, Thessaloniki</i>
11:15-11:30	OP-39	"Mass-Based Semi-Quantitative Assessment of Microplastics/Nanoplastics in Aquatic Environmental Matrices" <u>Nina Maria Ainali*</u> , Dimitrios N. Bikiaris, Dimitra A. Lambropoulou <i>*Laboratory of Polymer Chemistry and Technology, School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece</i>
11:30-12:00	Coffee Break / Poster Session 3	
12:00-14:00	SESSION 12: SUSTAINABILITY AND LIFE CYCLE THINKING Chairs: Assoc. Prof. Maria Touraki, Asst. Prof. Natasa Kalogiouri	
12:00-12:30	KN-16	"Greenness and Sustainability in Analytical Chemistry: From Concepts to Practice" <u>Elia Psillakis*</u> <i>*School of Chemical and Environmental Engineering, Technical University of Crete, Chania-Crete, Greece</i>
12:30-12:45	OP-40	"Adsorption-Based Metal Recovery: One Step Closer to Effective Lithium-ion Batteries Recycling" <u>João Filipe Gonçalves da Silva Braga*</u> , Juliana Patrícia Silva Sousa <i>*INL - International Iberian Nanotechnology Laboratory</i>



12:45-13:00	OP-41	<p>"Ensuring safe irrigation water for agricultural use via quaternary wastewater treatment" <u>Jakub Jurik*</u>, Igor Bodík *Department of Environmental Engineering, Faculty of Chemical and Food Technology, Slovak University of Technology, Radlinského 9, Bratislava, Slovakia</p>
13:00-13:15	OP-42	<p>"Fostering sustainability with innovative solutions: A knowledge-driven tool for circularity" <u>Zois Gravanis*</u>, Taxiarchis Seintos, Evridiki Barka, Ilias N. Giannakeas, Alexandra Spyropoulou, Vasileia Vasilaki, Constantinos Noutsopoulos, Evina Katsou, Vassiliki Missa, Simos Malamis *Sanitary Engineering Laboratory, Department of Water Resources and Environmental Engineering, School of Civil Engineering, National Technical University of Athens, 9 Iroon Polytechniou St., Zographou Campus, Athens, Greece</p>
13:15-13:30	OP-43	<p>"Assessment of Novel Circularity Indicators for Biobased Feedstocks Valorization: A Biofertilizer Production Case Study in Central Macedonia, Greece" <u>A.C. Karanasiou*</u>, S.A. Skoutida, M.D. Batsioulas, E. Nika, E. Katsou, G.F. Baniyas, S.I. Patsios *Chemical Process and Energy Resources Institute, Centre for Research and Technology Hellas, Greece</p>
13:30-13:45	SP-11	<p>"Thermal Desorption Unit (TDU) – Antipollution Ritsona Facility" <u>Stavros Kontogeorgakis*</u> *Antipollution, Athens, Greece</p>
13:45-14:00	OP-44	<p>"Surface Water Quality Response to Dam Construction: The Pchelina Dam, Bulgaria Study" Veronika Mihaylova, Galina Yotova, Martin Tsvetkov, Tony Venelinov, <u>Stefan Tsakovski*</u> *Faculty of Chemistry and Pharmacy, Sofia University "St. Kliment Ohridski", Bulgaria</p>
14:00-15:00		Lunch break / Poster Session 4
15:00-17:00		SESSION 13: SUSTAINABILITY IN AQUACULTURE



		Chairs: Prof. Ioannis Giantsis, Asst. Prof. Inci Tuney
15:00-15:30	KN-17	"When a species disappears: Ancient and modern DNA insights into the evolutionary history of <i>Pinna nobilis</i>, its mass mortality, and the expansion of <i>Pinna rudis</i>" <u>Daria Sanna*</u> , Ilenia Azzena, Chiara Locci, Noemi Pascale, Ilaria Deplano, Riccardo Senigaglia, Fabio Scarpa, Marco Casu, Daria Sanna* *Department of Biomedical Sciences, University of Sassari, Italy
15:30-16:00	KN-18	"Reframing Invasive Alien Species: Use-Based Management as a Strategy for Ecosystem Restoration" <u>Inci Tuney*</u> *Ege University, Faculty of Science, Department of Biology, Izmir, Türkiye
16:00-16:15	KN-19	"Circular Biovalorization of Dairy Wastewater through Microalgae: A Sustainable Route for Novel Dairy Products" <u>Antonia Terpou*</u> , Loulouda Bosnea, Georgos Markou *Department of Agricultural Development, Agri-Food, and Natural Resources Management, School of Agricultural Development, Nutrition & Sustainability, National and Kapodistrian University of Athens, Evripos campus, Evia, Greece
16:15-16:30	OP-45	"Prevention and mitigation of the plastic litter produced from mussel farm activities in Thermaikos Gulf: Solutions and obstacles" <u>Nikolaos Doumpas*</u> , Anastasia Charitou, Ioanna Tzioga, Ioannis Giovos *iSea, Environmental Organisation for the Preservation of the Aquatic Ecosystems, Thessaloniki



16:30-16:45	OP-46	"Sustainable aquaponic production of common carp (<i>Cyprinus carpio</i>) and lettuce (<i>Lactuca sativa</i>) using insect-based feeds and hydroponic by-products within a circular economy framework" Papakiriakidis Petros, Vlachos Nikolaos, Karapanagiotidis Ioannis, <u>Katsoulis Stefanos*</u> , Vasilakis Marios, Polygerou Eirini, Oikonomou Georgios, Kekridou Eirini, Karagiannis Dimitrios, Angelidis Panagiotis, Mente Elena *Department of Veterinary Medicine, School of Health Sciences, Laboratory of Aquaculture and Aquatic Animal Diseases, Aristotle University of Thessaloniki, Thessaloniki, Greece
16:45-17:00	OP-47	"From Freshwater Pollution to the Food Web: Pollutants and Toxins in Freshwater Crayfish" <u>Autumn J. Talman*</u> , Anna-Maria Anastasiou, Ioannis A. Giantsis, Maria V. Alvanou *School of Applied Sciences, University of the West of England, Bristol, United Kingdom
17:00-17:30	Coffee Break	
17:30-19:30	SESSION 14: RESOURCES AND ENERGY RECOVERY Chairs: Dr. Marco Carnevale Miino, Dr. Sofiah Hamzah	
17:30-18:00	KN-20	"The importance of assessing environmental sustainability in circular economy projects" <u>Marco Carnevale Miino*</u> *Department of Theoretical and Applied Sciences, University of Insubria, Via O. Rossi 9, Varese, Italy
18:00-18:30	KN-21	"Nitrogen recovery from organic waste fermentation liquid for a novel waste-recycled chelating agent preparation" <u>Tao Zhou*</u> , Youcai Zhao State Key Laboratory of Water *Pollution Control and Green Resource Recycling, School of Environmental Science and Engineering, Tongji University



18:30-18:45	OP-48	<p>"From Regulations to Practice: Evaluating Barriers to Effective Nitrogen Management in Wastewater-Irrigated Olive Orchards in Cyprus" <u>Niovi Christodoulou*</u>, Natalia Anastasopoulou, Ioannis Sofokleous, Hakan Djuma, Andreas Savvides, Christos Zoumides, Adriana Bruggeman *Energy, Environment & Water Research Center (EEWRC), The Cyprus Institute, Cyprus</p>
18:45-19:00	OP-49	<p>"Alternative strategy for multi-pathway synergistic nitrogen and phosphorus removal" <u>Xiaoli Chai*</u> *State Key Laboratory of Water Pollution Control and Green Resource Recycling, School of Environmental Science and Engineering, Tongji University</p>
19:00-19:15	OP-50	<p>"The Current Situation and Challenges of Waste Incineration Fly Ash Treatment and Utilization in China" <u>Yingjie Sun*</u> *Qingdao Solid Waste Pollution Control and Resource Engineering Research Center, Qingdao University of Technology, China</p>
19:15-19:30	OP-51	<p>"Carbon Emission Reduction Performance Evaluation Under the Construction of "Zero-Waste City" in China: A Case Study" <u>Bian Rongxing*</u>, Han Haoran, Sun Yingjie *College of Environmental and Municipal Engineering, Qingdao University of technology, Qingdao, China</p>



CONFERENCE AGENDA	
WEDNESDAY, 31/03/2026	
KEDEA HALL 3	
08:30-09:30	Registration
9:30-10:30	SESSION 15: DRINKING WATER (II) Chairs: Prof. Ioannis Katsoyiannis, Prof. Victoria Samanidou
09:30-10:00	KN-22 "Membrane Adsorbers for selective Removal of Natural Organic Matter (NOM) and their Electrochemical Regeneration" Mathias Ernst* , Jon Wullenweber, Shahrokh. Vahedi, Julia Bennert *DVGW Research Centre TUHH, Am Schwarzenberg-Campus 3, Hamburg, Germany
10:00-10:30	KN-23 "Assessing Removals of Pharmaceuticals in Algae Containing Water: Different Approaches in Two Lab Case Studies" I. Ivančev-Tumbas* , M. Bogunović Koljaja, N. Khakimova, L. Landwehrkamp, G. Hoffmann, J. Simeunović, S. Panglich *University of Novi Sad, Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Serbia
10:30-12:30	Closing Ceremony / Oral & Poster Awards / Presentation of the CSRW28



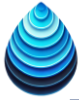
POSTER SESSION 1 (MONDAY, 09:00-13:00)

ANALYTICAL CHEMISTRY OF EMERGING CONTAMINANTS

P-1	<p>"Toxicity Mixtures: A Paradigm Shift in the 2025 Update of the Water Framework Directive" <u>Stefan Tsakovski*</u>, Parashkev Katerski, Ivanka Tsakovska *Institute of Biophysics and Biomedical Engineering, Bulgarian Academy of Sciences, Bulgaria</p>
P-2	<p>"Integrating QSAR Models into a Web-based Platform for Aquatic Toxicity Prediction" <u>Ivanka Tsakovska*</u>, Parashkev Katerski, Petko Alov, Radostina Nikolova-Kejova, Maria Angelova, Iglia Lessigiarska *Department of QSAR and Molecular Modelling, Institute of Biophysics and Biomedical Engineering, Bulgarian Academy of Sciences, Bulgaria</p>
P-3	<p>"Electrochemical Lead Detection in Water Using Graphene–Nafion– Ionic Liquid Modified Carbon Electrodes" <u>Slavica Mitrović*</u>, Jelena Tomić, Jasmina Anojić, Zoran Pavlović 1 *BioSense Institute, University of Novi Sad, Dr Zorana Đinđića 1, Novi Sad, Serbia</p>
P-4	<p>"Development of a fabric phase sorptive extraction method for the monitoring of monomers released from dental resin composites in dental wastewater analyzed by HPLC-DAD" <u>Ifigeneia Tragianni*</u>, Pavlos Voutsas, Abuzar Kabir, Petros Mourouzis, Natasa Kalogiouri, Victoria Samanidou *School of Chemistry, Laboratory of Analytical Chemistry, Aristotle University of Thessaloniki, Greece</p>
P-5	<p>"Exploring the Potential of Biochar-based Fabric Phase Sorptive Extraction for the Extraction of Emerging Contaminants" <u>Augusto Misolas*</u>, Marina Anastasiou, Vassilis Stathopoulos, Mohamad Sleiman, Vasilios Sakkas *Department of Chemistry, University of Ioannina, Ioannina, Greece</p>
P-6	<p>"LC-HRMS-based environmental monitoring of emerging contaminants in river water using suspect and non-target analysis" Lelouda-Athanasia Koronaiou, Ilektra Feida, <u>Vasileios Alampanos*</u>, Dimitra A. Lambropoulou *School of Chemistry, Environmental Pollution Control Laboratory, Aristotle University of Thessaloniki, Greece</p>



P-7	<p>"Development of a molecularly imprinted polymer-based fabric phase sorptive extraction (MIP-FPSE) for the highly selective isolation of BPA from environmental waters prior to HPLC-DAD analysis" <u>Anna Constantinou*</u>, Abuzar Kabir, Natasa P. Kalogiouri, Victoria F. Samanidou *School of Chemistry, Laboratory of Analytical Chemistry, Aristotle University of Thessaloniki, Greece</p>
P-8	<p>"Determination of perfluoroalkyl carboxylic acids in wastewater samples using fabric phase sorptive extraction and benzyl bromide derivatization" <u>Anastasia Korpeti*</u>, Natalia Manousi, Abuzar Kabir, Erwin Rosenberg *Institute of Chemical Technologies and Analytics, TU Wien, Vienna, Austria</p>
P-9	<p>"Determination of 16 fluorobenzoic acids in reservoir water samples as tracers for petrochemical exploration: Combination of derivatization and microextraction with GC-MS" <u>Anastasia Korpeti*</u>, Natalia Manousi, Abuzar Kabir, Erwin Rosenberg *Institute of Chemical Technologies and Analytics, TU Wien, Vienna, Austria</p>
WASTEWATER	
P-10	<p>"Fe-zeolite for the Removal of Arsenic from Waters" <u>Miroslava Vaclavikova*</u>, Katarina Hreus, Lucia Ivanicova, Anton Zubrik, Silvia Dolinska, Marek Matik *Institute of Geotechnics, Slovak Academy of Sciences, Watsonova 45, Kosice, Slovakia</p>
P-11	<p>"Circular agro-waste derived biochar solutions for urea-based herbicides removal in agricultural runoff and landfill leachate" <u>Ivana Mihajlović*</u>, Mladenka Novaković Bežanović, Ali Hgeig, Maja Petrović *University of Novi Sad, Faculty of Technical Sciences, Department of Environmental Engineering and Occupational Safety and Health, Serbia</p>
P-12	<p>"Phosphates removal from wastewater by novel coagulant materials" <u>Paraskevi Chalkidi*</u>, George Z. Kyzas, Athanasia K. Tolkou *Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece</p>
P-13	<p>"Separate contributions of injection pressure and dissolved gas supersaturation on the efficiency of Dissolved Air Flotation process" <u>Ourania Oikonomidou*</u>, Konstantinos Zacharias, Sotiris Evgenidis, Margaritis Kostoglou, Thodoris Karapantsios *School of Chemistry, Aristotle University of Thessaloniki, Greece</p>



P-14

"Vitivinicultural Waste Valorization: Biochar Modified with Distillation Residues for Enhanced Sorption Properties"

Paraskevi Chalatsi-Diamanti*, Ekavi A. Isari, Eleni Grilla, Petros Kokkinos, Hrisi K. Karapanagioti, Ioannis K. Kalavrouziotis

*Laboratory of Sustainable Waste Management Technologies, School of Science and Technology, Hellenic Open University, Patras, Greece



POSTER SESSION 2 (MONDAY, 13:00-17:30)

WASTEWATER

P-15	<p>"Enriched chitosan-based films with olive mill wastewater phenolics for olive oil stability improvement"</p> <p>Anastasia Kyriakoudi, Anastasia Loukri*, Stamatia Christaki, Vassileios Pappas, Ioannis Mourtzinou</p> <p>*Department of Food Science and Technology, School of Agriculture, Aristotle University of Thessaloniki, Greece</p>
P-16	<p>"Feasibility study on the application of nanofiltration membranes for treating wastewater from the steel and pulp and paper industries"</p> <p>Vasilis Sarasidis, Anastasia Kirtatze, Dimitris Sioutopoulos*, Panagiota Petsi, Michalis Lekkas, Sotiris Patsios, Konstantinos Plakas</p> <p>*Chemical Process and Energy Resources Institute, Centre for Research and Technology - Hellas, Thessaloniki, Greece</p>
P-17	<p>"Treatment of dairy industry wastewater employing in-series an anaerobic and an aerobic membrane bioreactor"</p> <p>Angeliki Athanasiadi*, Vasilis Sarasidis, Dimitris Sioutopoulos, Michalis Lekkas, Sotiris I. Patsios, Konstantinos Plakas</p> <p>*Chemical Process and Energy Resources Institute, Centre for Research and Technology - Hellas, Thessaloniki, Greece</p>
P-18	<p>"Integrated crop protection approach regarding pesticide biodegradation study in the rhizosphere of wetland plant and its distribution in the artificial wetland substrate"</p> <p>Papadopoulos Nikolaos*, Mamalis Spyridon</p> <p>*Viticulture and Oenology Department - Democritus University of Thrace, Greece</p>
P-19	<p>"Monitoring, Control and Assessment of Urban Wastewater Management"</p> <p>Ero Rossidou*, Maria Christofidou, Sofia Kozakou, Nikos Michael, Konstantina Poulli, Elpida Vraka, Andromachi Katsonouri</p> <p>*General State Laboratory, Environmental Chemistry and Treated Wastewater Laboratory 44 Kimonos Street, Acropolis, Nicosia, Cyprus</p>



P-20	<p>"Production of NaOH and HCl from saline industrial wastewaters by bipolar electro dialysis" <u>Panagiota Petsi</u>*, Dimitris Sioutopoulos, Vasilis Sarasidis, Konstantinos V. Plakas *Chemical Process and Energy Resources Institute, Centre for Research and Technology - Hellas, Themi, Thessaloniki, Greece</p>
P-21	<p>"Filtration of Oil-in-Water Emulsions Using Ceramic Membranes" <u>Kleopatra Pateraki</u>*, Natalia Malouchi, Michalis Lekkas, Vasilis Sarasidis, A. Dimitriadis, S. Bezergianni, Konstantinos V. Plakas, Ioannis A. Katsoyiannis *Laboratory of Chemical and Environmental Technology, School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece</p>
P-22	<p>"Biochar-supported green nZVI for Nitrate Removal from Groundwater" Christiana Mystrioti, Nymphodora Papassiopi, <u>Anthimos Xenidis</u>* *School of Mining and Metallurgical Engineering, National Technical University of Athens, Athens</p>
ProPla	
P-23	<p>"When Waste Becomes Worth: a Biocatalytic Route from PET Bottles to Amino Acids" <u>Elena Rosini</u>*, Gianluca Molla, Loredano Pollegioni *The Protein Factory 2.0 lab, Department of Biotechnology and Life Sciences, University of Insubria, via J. H. Dunant 3, Varese, Italy</p>
SLUDGE MANAGEMENT	
P-24	<p>"Enhancing Digestate Dewaterability from Anaerobic Co-Digestion of Food, Livestock, and Agricultural Wastes" Fotini Sakavelli, Vasilios Tsiridis, <u>Maria G. Ziagova</u>*, Efthymios Darakas, Maria Petala *School of Civil Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece</p>
P-25	<p>"Enhancing Digestate Dewaterability from Anaerobic Co-Digestion of Food, Livestock, and Agricultural Wastes" <u>Karolos Koen</u>*, Vasilios Tsiridis, Maria Petala *School of Civil Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece</p>



P-26	<p>"Assessment of the instrument-related sensitivity and non-spectral matrix effects in the combination of cloud point extraction with GC-MS/MS: perspectives for analysis of Benzo(a)pyrene and Indeno(1,2,3-cd)pyrene in sewage sludge"</p> <p>Ani Ivancheva, Kiril Simitchiev, <u>Asya Hristozova*</u> *University of Plovdiv "Paisii Hilendarski", Department of Analytical Chemistry and Computational Chemistry, 24 Tsar Asen Str., Plovdiv, Bulgaria</p>
P-27	<p>"Valorization of Sewage Sludge Biochar as UV Stabilizer in Recycled PET Composites"</p> <p><u>Nikolaos Pardalis*</u>, Lazaros Karagiannidis, Dimitrios N. Bikiaris *School of Chemistry, Aristotle University of Thessaloniki, Greece</p>
P-28	<p>"Nutrient Recovery from Anaerobic Digestate via Chlorella sorokiniana: Towards Sustainable Biostimulant Products"</p> <p><u>Eftychia Karageorgou*</u>, Nikoletta Solomakou, Christos Manolis, Thomas Palikrousis, Costas Tsiptsias, Sotirios Kalamaras, Athanasios Goulas, Petros Samaras *Department of Food Science and Technology, International Hellenic University, Thessaloniki, Greece</p>
MANAGEMENT OF WATER AND ENERGY PLANTS	
P-29	<p>"Towards Zero Pollution Across the Urban Water Cycle"</p> <p>Emmanuel Raptis, <u>Aggelos Gkiokas*</u> *Information Technologies Institute, The Centre for Research & Technology Hellas, Thessaloniki, Greece</p>

**POSTER SESSION 3 (TUESDAY, 09:00-14:00)****DRINKING WATER**

P-30	<p>"Surface-flow interplay shapes biofilm structure: Implications for resilient drinking water systems" <u>Dimitrios I. Avgoulas*</u>, Maria Petala, Margaritis Kostoglou, Thodoris D. Karapantsios *School of Chemistry, Aristotle University of Thessaloniki, Greece</p>
P-31	<p>"Monitoring of polycyclic aromatic hydrocarbons for drinking and surface water of Cyprus" <u>Maria Christou*</u>, Maria Tiggiridou, Petri Efstathiou, Christalla Charalambous, Spyros Nikolaou, Christoforos Papachrysostomou *State General Laboratory, Nicosia, Cyprus</p>
P-32	<p>"Variations of Organic Carbon and Inorganic Ions in Water Resources: Impacts of Prolonged Drought" <u>Andri Angeli*</u>, Katerina Roti, Ioannis Louca, Georgia Kyriacou, Despo Louca Christodoulou *General Water Analysis Laboratory, State General Laboratory, Cyprus</p>
P-33	<p>"Establishing In-House Illumina MiSeq Capacity for Antimicrobial Resistance Monitoring in Drinking Water and Wastewater" <u>Manthos Panou*</u>, Christina Miskaki, Vasiliki Tsioni, Themistoklis Sfetsas *QLAB Private Company, K.Karamanli 122, Thessaloniki, Greece</p>
INNOVATIVE MATERIALS FOR WATER AND WASTEWATER TREATMENT	
P-34	<p>"Assessment of residual crude oil in water samples by Gas Chromatography–Mass Spectrometry after removal and bioremediation using biochar-immobilized microorganisms" Ignjat Despotović, Nikoleta Lugođa, Ondrej Mašek, Vladimir Bešković, Branimir Jovančičević, <u>Gordana Gajica*</u> *University of Belgrade, Faculty of Chemistry, Studentski trg 12-16, Belgrade, Serbia</p>
P-35	<p>"Mesoporous organic carbon materials as a sorbent for pharmaceutical removal from water" <u>Aleksandar Krstić*</u>, Ivan Bracanović, Miloš Simić, Miljana Mirković, Ana Kalijadis *University of Belgrade, Vinča Institute of Nuclear Sciences – National Institute of the Republic of Serbia, Mike Petrovića Alasa 12-14, Belgrade, Serbia</p>



P-36	<p>"Hexavalent chromium in water: Sustainable adsorbents and regulatory compliance"</p> <p><u>Anna A. Thysiadou*</u>, Konstantinos N. Maroulas, Sofia L. Kouvalakidou, Asimina Papadi-Psillou, Nikolaos Stasinopoulos, Vasilios Kondylis, Maria Emmanouilidou, Sotiria Kordatou, Asterios Salamos, <u>Athanasia K. Tolkou*</u>, George Z. Kyzas</p> <p>*Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece</p>
P-37	<p>"Plasma-derived Few-Layer Graphene for Water Remediation and Hydrogen Storage"</p> <p><u>Kyriacos Ioannou*</u>, Nikolaos Kostoglou, Batuhan Mulla, Dimitrios A. Giannakoudakis, Ioannis Pashalidis, Claus Rebholz</p> <p>*Department of Mechanical and Manufacturing Engineering, University of Cyprus, Nicosia, Cyprus</p>
P-38	<p>"Manganese Removal Using Novel Biofunctionalized Geopolymer Composite: Synthesis, Characterization, and Adsorption Performance"</p> <p><u>Svetlana Đogo Mračević*</u>, Jelena Tanasić, Sanja Panić, Nenad Grba, Mirjana Petronijević, Jelena Arsenijević, Slavica Ražić</p> <p>*Faculty of Pharmacy, University of Belgrade, Serbia</p>
P-39	<p>"Adsorption of Congo Red onto Cetylpyridinium-Modified Phillipsite: Kinetic Behavior and Effect of Adsorbent Dose"</p> <p><u>Danijela Smiljanić*</u>, Katarina Stanković, Ksenija Kumrić, Đorđe Petrović, Milena Obradović, Bruno de Gennaro</p> <p>**"Vinča" Institute of Nuclear Sciences - National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia</p>
P-40	<p>"Utilization of Immobilized Peroxidase for Phenolic Compounds Removal from Water"</p> <p><u>Jelena Arsenijević*</u>, Mirjana Petronijević, Sanja Panić, Jelena Tanasić, Aleksandra Cvetanović Kljakić, Svetlana Đogo Mračević, Slaviča Ražić</p> <p>*University of Belgrade - Faculty of Pharmacy, Belgrade, Serbia</p>
P-41	<p>"Fixed-Bed Removal of Crystal Violet Dye Using Activated Carbon Fibers: Experimental and Numerical Investigation"</p> <p>Batuhan Mulla, Kyriacos Ioannou, Ioannis Ioannidis, Dimitrios A. Giannakoudakis, Ioannis Pashalidis, Nikolaos Kostoglou, <u>Claus Rebholz*</u></p> <p>*Department of Mechanical and Manufacturing Engineering, University of Cyprus, 2109 Nicosia, Cyprus</p>
P-42	<p>"MXene Photocatalysts for Emerging Water Pollutants Abatement"</p> <p><u>Hebe Lagaac Angus*</u>, Maria Cristina Paganini</p> <p>*Department of Chemistry, University of Turin, Italy</p>



P-43	<p>"Synthesis of chitosan-carboxymethyl cellulose reinforced with activated carbon aerogel for efficient Cr(VI) removal" <u>Sotiria Eginoglou*</u>, Konstantinos N. Maroulas, Ioanna Koumentakou, George Z. Kyzas *Hephaestus Laboratory, School of Chemistry, Faculty of Sciences, Democritus University of Thrace, Kavala, Greece</p>
MICROPLASTICS IN THE ENVIRONMENT	
P-44	<p>"From Pollution to Solution: Transforming Nylon Microplastics into Magnetic Sorbents for Radionuclide Removal and Antibacterial Activity" <u>Dimitrios A. Giannakoudakis*</u>, Ioannis Ioannidis, Ioannis Anastopoulos, Mariusz Barczak, Wanlu Li, Vasiliki Kinigopoulou, Konstantinos Triantafyllidis, Ioannis Pashalidis, Paul T. Anastas *Faculty of Chemistry, Maria Curie-Skłodowska University, Lublin, Poland</p>

**POSTER SESSION 4 (TUESDAY, 14:00-19:00)****SUSTAINABILITY AND LIFE CYCLE THINKING**

P-45

"Callinectes sapidus waste valorization: Extraction and quantification of carotenoids and total phenolics from blue crab shell"

Anna Maria M. Anastasiou*, Stamatia Christaki, Anastasios Vetsos, Maria V. Alvanou, Ioannis Mourtzinis, Ioannis A. Giantsis

*Laboratory of Ichthyology and Fisheries, Faculty of Agriculture, Forestry and Natural Environment, Aristotle University of Thessaloniki, Greece

SUSTAINABILITY IN AQUACULTURE

P-46

"Genetic Markers of Thermal Resilience in Mussels of the Genus Mytilus: Implications for Sustainable Aquaculture"

Dimitrios K. Papadopoulos*, Natali Delorme, Sophie Jensen, Ioannis A. Giantsis

*Department of Animal Science, School of Agriculture, Aristotle University of Thessaloniki, Greece

P-47

"Microbiological indicators as preventive mechanisms of food safety in aquaculture and fisheries, a case model in Thermaikos Gulf, Greece"

Athanasios Lattos*, Anna Maria Anastasiou, Stamatia Christaki, Maria Giannakourou, Ioannis Mourtzinis, Ioannis A. Giantsis

*School of Agriculture, Aristotle University of Thessaloniki, Greece

P-48

"Genetic Insights into the Endemic Ohrid Trout (Salmo letnica) in Lake Ohrid"

Chiara Locci*, Anila Hoda, Ilenia Azzena, Noemi Pascale, Ilaria Deplano, Roland Kristo, Arian Demiri, Fabio Scarpa, Marco Casu, Daria Sanna

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