

Joint International Conference of

mikrobio kosmos

& CEESME

**Central and Eastern Europe
Symposium on Microbial Ecology**

22-24 September 2025

Concert Hall of Thessaloniki • Greece



Final Programme

SINGLE-CELL MICROBIAL GENOMICS

Uncover microbial dark matter and trace HGT

Encapsulate and analyze 100,000s of single cells in
Semi-Permeable Capsules (SPCs) in just 30 minutes

Sincerely
 Flux



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WELCOME LETTER

Dear Colleagues,

The increasing interest in environmental microbiology and microbial ecology has now surpassed the limits of the scientific community as the importance and roles of microorganisms have come to the forefront, not only for several pressing environmental issues but also for sustainability reasons.

At these exciting times for our science, we are happy to announce and invite all interested parties to share our work progress and future plans at the joint conference of the MikroBioKosmos Society & The Central and East Europe Symposium of Microbial Ecology (#mbkceesme2025), in Thessaloniki, Greece, between 22 and 24 September 2025.

As with all the previous MikroBioKosmos conferences, this one will be a scientific fest on all possible (and impossible!) aspects of microbial life in terrestrial and aquatic habitats, agriculture and food science, biotechnology and bioengineering, climate change, bioeconomy, antimicrobial resistance and host-microbe interactions.

We believe that Thessaloniki will be an easily reachable and irresistible venue for microbial ecologists, especially from the region of Central and East Europe to disseminate their work and strengthen their professional networks.

At **#mbkceesme2025** we will give extra attention to the early-career researchers in the field of environmental microbiology and microbial ecology.

We look forward to seeing you all in Thessaloniki during the **MBK CEESME 2025 conference**.

The Organizing Committee of the Conference

ORGANIZATION

ORGANIZED BY



**Hellenic Scientific Society
MIKROBIOKOSMOS**

Email: info@mikrobiokosmos.org

Website: www.mikrobiokosmos.org



**International Society for
Microbial Ecology (ISME)**

Email: office@isme-microbes.org

Website: www.isme-microbes.org/

AUSPICES



Under the auspices:
ARISTOTLE UNIVERSITY of THESSALONIKI
FACULTY OF AGRICULTURE, FORESTRY
AND NATURAL ENVIRONMENT



the European Union

CONGRESS SECRETARIAT



39 -41 Lykavittou str. 10672 Athens

Tel.: 210 3668888

General email: info@afeacongress.gr

Website: www.afeacongress.gr

Member of:



ORGANIZING COMMITTEE

Members of the Organizing Committee



Agapi Doulgeraki



Savvas Genitsaris



Konstantinos Kormas



Christina Pavludi



Katarzyna Piwosz



Attila Szabó



Chrysoula Tassou



Evangelos Topakas



Elisabeth Vardaka



Danae Venieri

ABOUT



Hellenic Scientific Society MIKROBIOKOSMOS

Mikrobiokosmos (microbial world in Greek) is an Hellenic Scientific Society established in 2007 with mission the research, exploration and exploitation of the microbial national resources. Its primary focus is to be the national forum for new knowledge and advanced research in the areas of environmental microbiology, microbial ecology of terrestrial and aquatic ecosystems, food microbiology, microbial biotechnology, synthetic biology and synthetic microbial ecology, host-microbiome interactions, bioenergy and cell factories for production of novel bioproducts but also addresses fundamental research in microbiology using model microorganisms. Mikrobiokosmos tries to bring together fundamental research on microbiome with applications in agriculture (plant microbiome), food production and safety, environmental clean up and biodepuration of effluents.

The Society of Mikrobiokosmos has more than 150 members and associated members from all Universities, all National Public Research Centers and main Industrial actors from Greece and Cyprus and it aspires to become an international hub for Microbiologists from the Balkan and Eastern Mediterranean Region.

The role of the Society is to facilitate the collaboration and exchange of ideas between its members, to inspire students and young professionals in microbiology, to support them with grants and to promote scientific actions through the organization of seminars, meetings, summer schools, workshops and its biannual international conference in Greece.

The Hellenic Scientific Society of Mikrobiokosmos is a member of the **Federation of European Microbiological Societies (FEMS)** and of the **International Union of Microbiological Societies (IUMS)** and its members act as national ambassadors for the **International Society for Microbial Ecology (ISME)** and the **American Society of Microbiology (ASM)**.



International Society for Microbial Ecology (ISME)

The International Society for Microbial Ecology (ISME) seeks to advance the field of microbial ecology by supporting scientists and practitioners to further develop their knowledge and skills.

As a membership organization dedicated to microbial ecologists, ISME provides opportunities to share knowledge, connect with peers, and build partnerships. Our main activities include our:

- Biennial ISME Symposia – The next ISME Symposium will be held in Auckland, New Zealand in 2026
- Peer-reviewed ISME Publications – The ISME Journal and ISME Communications
- ISME sponsored regional and national events
- Early Career Scientists activities – Make sure to join the discussion on Discord
- Awards and grants program, including the Scholar Mobility Fund and Travel grants

ISME is pleased to sponsor **MBKCEESME 2025**. Make sure to attend the special ISME session.

MAIN TOPICS



Agriculture



Environment



Biotechnology



Food /
Nutrition



One Health



Climate
Change



Conservation/
Restoration



Symbiosis



Antimicrobial
resistance in the
environment

INVITED SPEAKERS



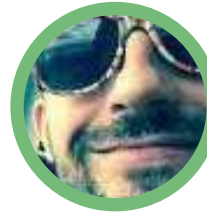
Rudolf Amann
Managing Director
Department of Molecular
Ecology MPI for Marine
Microbiology, Germany



Eleni Zika
Head of Sector
Scientific Impact and
Feedback to Policy at the
European Research Council,
Belgium



Francesca De Filippis
Associate Professor
Department of Agricultural
Sciences, University of
Naples Federico II, Italy



Gábor M. Kovács
Eötvös Loránd University,
Hungary



John Morrissey
Senior Lecturer
University College Cork,
Ireland



Lene Lange
Professor
DTU Bioengineering, Denmark



Maria Moustaka
Professor
Aristotle University of
Thessaloniki, Greece



Michael Sauer
Head of Department
Department of Biotechnology,
OMV, Austria



Christa Schleper
Professor
Genetics and Microbiology
University of Vienna,
Austria



Mary Allen
Professor
Hartwick College, NY, USA



Kyriaki Kalaitzidou
Associate Chair for
Faculty Development
Georgia Institute of
Technology, GA, USA



Michalis Omirou
Agricultural Research Officer
Agricultural Research
Institute, Agrobiotechnology
Section, Nicosia, CY



Kalliopi Chalkou
Head of Quality, Safety
and Environment
Governance Coca Cola
HBC



Svetlana Ugarcina Perovic
Microbiome Scientist
Laboratory of Computational
Metagenomics, Department
of Cellular, Computational
and Integrative Biology -
CIBIO, University of Trento, Italy



Danny Haelewaters
Mycologist
Head of the Laboratory
of Fungal Ecology and
Evolution, Institute of
Entomology, Czechia
Visiting Professor, Ghent
University, Belgium



Davide Faggionato
Research Associate
Science Policy and Access &
Benefit-Sharing Compliance,
Leibniz Institute DSMZ,
Germany



Silvio Francesco Mariani
Legal Officer
European Molecular
Biology Laboratory

08:30

REGISTRATIONS

09:30-11:45

SESSION SS: ECR SESSION ON CAREER DEVELOPMENT/FUNDING ACQUISITION

Sponsored & Organized By TwInn4MicroUp & ISME

Chairs: Kostas Kormas, Evangelos Topakas



Lab Culture-do you know yours?

09:30-10:15

Kyriaki Kalaitzidou



Exploration and Discovery in Teaching: Engaging Students, Shaping Curriculum, and Contributing to the Scholarship of Learning

10:15-11:00

Mary Allen



Unlocking Excellence: ERC Grants and Their Transformative Impact

11:00-11:45

Eleni Zika

11:45-12:15

COFFEE BREAK

12:15-13:45

SESSION SS: ECR SESSION ON CAREER DEVELOPMENT/FUNDING ACQUISITION

Sponsored & Organized By TwInn4MicroUp & ISME

Chairs: Kostas Kormas, Evangelos Topakas



About transitions: from Young to Old, from Academia to Industry, from Petroleum to Sustainability

12:15-13:00

Michael Sauer



Ctrl+Alt+Research: Rebooting Science in Industry

13:00-13:45

Kalliopi Chalkou

14:30-15:00

OPENING OF CONFERENCE

15:00-17:00

SESSION 1: ENVIRONMENT

Chairs: Alexandra Meziti, Konstantinos Kormas

15:00-15:30

PLENARY LECTURE - Phytoplankton-bacterioplankton interactions at Helgoland Roads
Rudolf Amann

15:30-15:45

S1_OP01

Phytoplankton and particle attachment drive seasonal abundance and photoheterotrophy of aerobic anoxygenic phototrophs

Cristian Villena-Aleman

15:45-16:00

S1_OP02

Delving into Benthic Bacterial Community Shifts under Contrasting C, N, P, and S Pollution Conditions in Villarrica Lake Sediments

Marco Campos

16:00-16:15

S1_OP03

The analysis of bacterial communities in floating treatment wetlands (FTW) with integrated microbial fuel cells (MFCs)

Slawomir Ciesielski

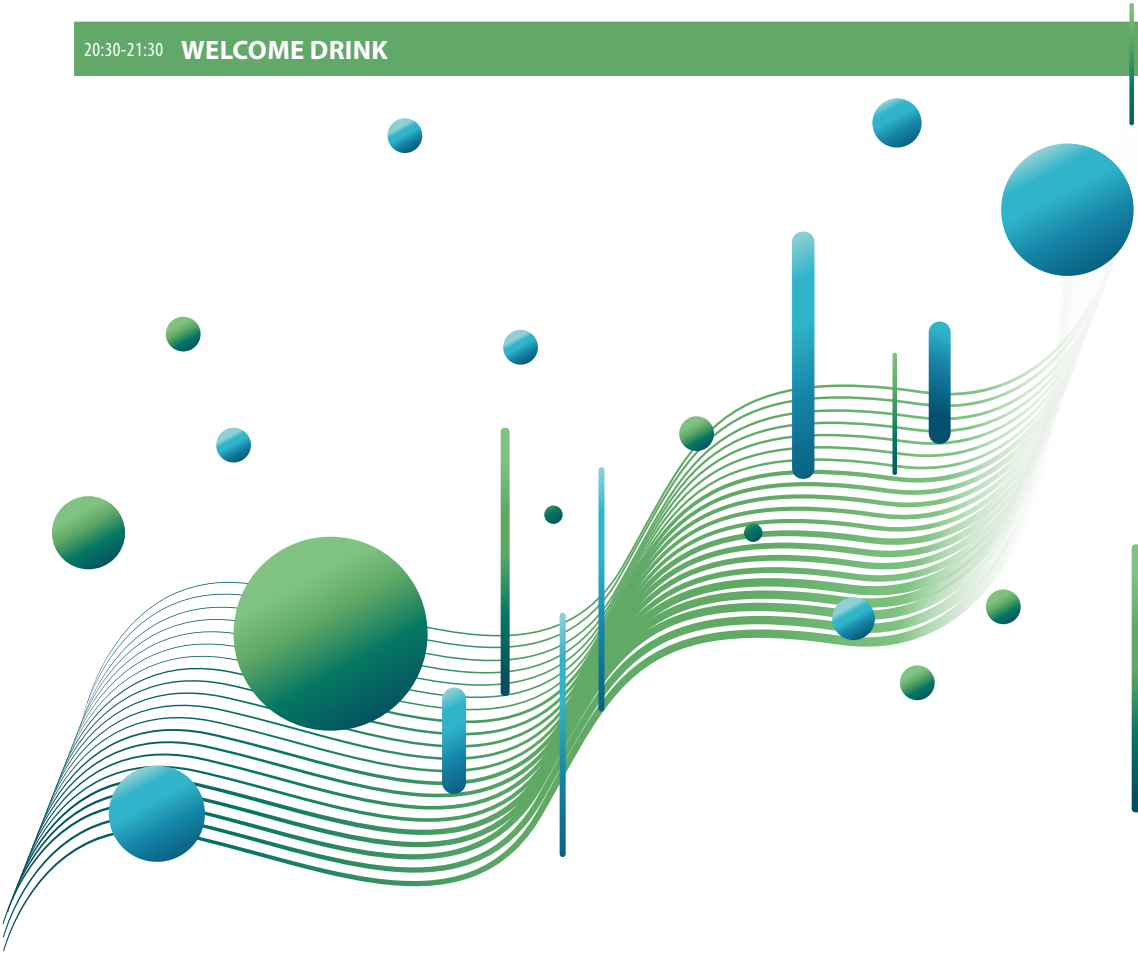
16.15-16.30 S1_OP04	WhereDoGGo (Where Does my Genome Go?): Placing prokaryotic lineages on the tree of life Panagiotis Adam
16.30-16.45 S1_OP05	Genomic structural variants in adaptive evolution of soil cyanobacteria Aleksandar Stanojković
16.45-16.50 S1_OP06 (FT)	Seasonal dynamics of bacterial communities in deep karstic lakes across contrasting climatic regions in Croatia Iva Vojtkuf
16.50-16.55 S1_OP07 (FT)	Disrupting Soil Nitrification: Ammonia-Oxidizer Physiological Responses to Synthetic and Biological Nitrification Inhibitors Dimitrios Dalkidis
16.55-17.00 S1_OP08 (FT)	Plant Survival in Serpentine soils: The Role of Rhizospheric Microbial Communities in Heavy Metal Tolerance Dimitra Stathopoulou

17:00-17:30 COFFEE BREAK - POSTER SESSION

17:30-19:30	SESSION 2: AGRICULTURE Chairs: Kalliopi Papadopoulou, Myrto Tsiknia
17.30-18.00	PLENARY LECTURE - Can we shed some light on the enigmatic lifestyle and biology of the widely distributed, common root colonizing dark septate endophytic (DSE) fungi?" Gábor M. Kovács
18.00-18.15 S2_OP09	Deciphering the biological role of oxidative Chitin-active CAZymes in the life cycle of the plant pathogen Ustilago maydis Roseline Assiah Yao
18.15-18.30 S2_OP10	Synergistic interactions between introduced and native plant-beneficial microorganisms in the rhizosphere improve maize performance and resilience under drought conditions Ioannis Kampouris
18.30-18.45 S2_OP11	When traditional culturing met with modern MALDI-TOF MS to uncover the so-called rumen 'unculturables' Theano Stoikidou
18.45-19.00 S2_OP12	Unveiling the genomic and functional arsenal of Bacillales endophytes from halophytes and olive trees Nikolaos P. Arapitsas
19.00-19.15 S2_OP13	Let the inhibitor out of the flask: Culture–soil disparities in bni efficacy Chrysovalantou Moutzourelli
19.15-19.20 S2_OP14 (FT)	SYNONIM: Synthetic community design based on functional representation Benjamin L. Coltman
19.20-19.25 S2_OP15 (FT)	Digestate as a Fertilizer: Effects on Soil Microbial and Nematode Communities Magkdi Mola

19.25-19.30 S2_OP16 (FT)	How Ruminant Manure Origin and Regimes Affect the Microbial Ecology During Early Composting Panayiota Pissaridou
19.30-20.30	ROUND TABLE – ETHICS/ACCESS AND BENEFIT SHARING IN MICROBIOLOGY SCIENCE Moderator: Christina Pavloudi
	Ethics is an important, but often neglected part of access and benefit sharing Lene Lange
	How to “do” the Nagoya Protocol: common misconceptions, challenges, and best practices for access and benefitsharing compliance Davide Faggionato
	Sharing science, respecting sovereignty: the Nagoya Protocol in the EMBL TREC Expedition Silvio Francesco Mariani
	Open discussion

20.30-21.30 **WELCOME DRINK**



SESSION 3: FOOD-NUTRITION	
Chairs: Agapi Doulgeraki, Natasa Kapetanakou	
09:00-09:30	PLENARY LECTURE - Mapping the microbiome across the food chain to improve food quality and fight spoilage Francesca de Filippis
09:30 - 09:45 S3_OP17	Assessing the possession of Stress Survival Islet 1 in <i>Listeria monocytogenes</i> strains isolated from smoked salmon production Michela Berta
09:45-10:00 S3_OP18	Spoilage-informed Quantitative Microbiological Risk Assessment Constantine Richard Stefanou
10:00-10:15 S3_OP19	Growth dynamics and ochratoxin A production of four <i>Aspergillus carbonarius</i> strains: A case study in maize-model medium George Froudis
10:15-10:30 S3_OP20	A comparative study of radio frequency and conventional thermal inactivation mechanisms of <i>Salmonella Typhimurium</i> and <i>Listeria monocytogenes</i> in broth Maria Tonti
10:30-10:45 S3_OP21	Mycological Fermentation of Plant-Based Substrates for Blue Cheese Analogue Production Eleni Kollia
10:45-10:50 S3_OP22 (FT)	Omics applications for studying food microbes and microbiomes: From data analysis to technological properties Konstantinos Papadimitriou
10:50-10:55 S3_OP23 (FT)	A Clean-Label Approach: Combining HHP and Nisin to Control <i>Listeria monocytogenes</i> in Plant-Based Milk Alternatives Karatzas Kimon-Andreas
10:55-11:00 S3_OP24 (FT)	In vitro characterization of adhesive capability of potentially probiotic strains to HT-29MTX intestinal epithelium cell line Agapi Doulgeraki
11:00-11:30 <i>COFFEE BREAK - POSTER SESSION</i>	
SESSION 4: BIOTECHNOLOGY	
Chairs: Evangelos Topakas, Anthi Karnaouri	
11:30-12:00	PLENARY LECTURE - Evolutionary adaption of yeast to anthropogenic environments John Morrissey
12:00-12:15 S4_OP25	Selective Oxidation of 5-Hydroxymethylfurfural by a Novel Fungal Glyoxal Oxidase for Biopolymer Precursor Synthesis Maria Konstantina Karonidi

12.15-12.30 S4_OP26	Production of Exopolysaccharides by Halophiles Isolated from Armenian Saline Environments Using Cost-Effective Waste Substrates Hovik Panosyan
12.30-12.45 S4_OP27	Biochemical and computational tools for the study and valorization of Xyloglucan-degrading Enzyme Systems of White-Rot Fungi Anastasia Zerva
12.45-13.00 S4_OP28	Biocatalytic Depolymerization and Upcycling of Plastics Using Engineered <i>Yarrowia lipolytica</i> Gennaro Agrimi
13.00-13.15 S4_OP29	Stimulation of soil bacteria to emit garlic volatile organic compounds Christina Papazlatani
13.15-13.20 S4_OP30 (FT)	Basidiomycetes and their enzymatic potential for synthetic polymer degradation Evangelia Giouroukou
13.20-13.25 S4_OP31 (FT)	Novel Insights into the Interplay of Fungal Redox Enzymes: towards an understanding of microbial Lignin Degradation Elina Raad
13.25-13.30 S4_OP32 (FT)	Activated sludge as a valuable source of hydrolytic substances and nutrients Eirini Keisidou

13:30-14:30 **LUNCH BREAK**
Professional Development Lunch Session

14:30-16:30	SESSION 5: ENVIRONMENT Chairs: Attila Szabó, Dimitris Karpouzas
14.30-15.00	PLENARY LECTURE - What Asgard Archaea can tell us about early eukaryotic evolution Christa Schleper
15.00-15.15 S5_OP34	Genomic and Ecological Characterization of Novel Cultivated Bacteriophages infecting abundant bacterial freshwater lineages Paweł Markwitz
15.15-15.30 S5_OP35	Novel insights in the diversity of Tuber species in Greece: two new species for science, 22 well-defined taxa and 19 undescribed phylopecies are revealed Vassileios Daskalopoulos
15.30-15.45 S5_OP36	Exploring Novel Microbial Lineages in Anoxic Lagoon Sediments Ioannis Galiatsatos
15.45-16.00 S5_OP37	A Thousand Meters Deep: Vertical Profiling of the Subterranean Microbiome of Gourgouthakas Cave Savvas Paragkamian
16.00-16.05 S5_OP38 (FT)	Molecular tinkering and functional conservation of Replication Protein A in Archaea Anna Papageorgiou

16.05-16.10 S5_OP39 (FT)	Bacterial diversity changes after diesel oil addition to seawater microcosms Michaela Karagkiozi
16.10-16.15 S5_OP40 (FT)	The patchwork of nucleoid-associated proteins in archaea Deniz Akbulut
16.15-16.20 S9_OP73 (FT)	Long-term adaptation of an abundant marine diatom to global change drivers Bogdan Druga
16.20-16.30	ISME Publications Sandi Orlic

16:30-17:00 *COFFEE BREAK - POSTER SESSION*

17:00-19:00	SESSION 6: CLIMATE CHANGE / CONSERVATION / SYMBIOSIS Chairs: Chrysoula Tassou, Savvas Genitsaris
17.00-17.30	PLENARY LECTURE - Redefining Agricultural Emissions: microbial drivers, mitigation tools, and longterm research insights from Cyprus Michalis Omirou
17.30-17.45 S6_OP41	Climate Change Metagenomic Record Index (CCMRI) and Sample Matcher: Leveraging Metagenomic Data for Climate Change Research Evangelos Pafilis
17.45-18.00 S6_OP42	Aerobic Respiration Kinetics in the Oxygen Minimum Zones of the Tropical Pacific Ocean Irene Ramirez Hernandez
18.00-18.15 S6_OP43	Prioritization of Microbiological Hazards in Fresh Produce Under Climate Change Leonardos Stathas
18.15-18.20 S6_OP44 (FT)	Prevalence of Escherichia coli on Fresh Produce Across Europe: A Meta-Analysis with Implications for Climate-Related Risk Factors Christina Kamarinou
18.20-18.25 S6_OP45 (FT)	Effects of daily temperature fluctuations and heatwaves on the benthic metabolism of intertidal mudflats in the south of Spain Marika Mecca
18.25-18.30 S6_OP46 (FT)	Indigenous and plant specific microbial community consortia derived from phryganic biomes improve plant fitness and soil functions in ecosystem restoration of quarry deposits in Milos (Greece) Georgios Leventis

18.30-18.45 56_OP47	Cross-kingdom RNAi induced by a beneficial fungus to its host requires transitivity and amplification of silencing signals Loukia Maria Kellari
18.45-19.00 56_OP48	Bacterial microbiota of the invasive red swamp crayfish <i>Procambarus clarkii</i> under experimental conditions Alexandra Meziti
19.00-20.00	ROUND TABLE – SCIENCE COMMUNICATION Moderator: Christina Pavloudi
	Global Reach, Local Impact: Remote Conferencing’s Role in Science Communication Svetlana Ugarcina Perovic
	Exploration and Discovery in Teaching: Engaging Students, Shaping Curriculum, and Contributing to the Scholarship of Learning Mary Allen
	Data points, emotion, and telling stories Danny Haelewaters
	Open discussion

CR 2 (PARALLEL HALL) 11:30 – 13:00 (90 min)

WORKSHOP

NUMERICAL ECOLOGY

József Baranyi
Constantin Richard Stefanou
Leonardos Stathas

 **foodigit** Computational Food Science Centre

- Quantifications in ecology - Variables and parameters. Scaling and re-parameterization. Quantification of dissimilarity. Frequency histograms
- Quantifying richness and diversity. Shannon and alpha diversity. Computation and Visualization.
- Temporal evolution of ecological patterns. Bray - Curtis measure of dissimilarity. Gower’s transformation for visualisation.

09:00-11:00	SESSION 7: BIOTECHNOLOGY/ BIOECONOMY Chairs: Danai Venieri, Giorgos Markou
09:00-09:30	PLENARY LECTURE - Microbial valorization of crop residues & food processing side-streams -for climate & biodiversity, nutrition & health Lene Lange
09:30 - 09:45 S7_OP49	Novel Thermobaculum Strains from High-Altitude Geothermal Springs in Tajikistan Munavvara Dzhuraeva
09:45-10:00 S7_OP50	Distinguishing Suberinases from Cutinases: A structure-based classification of cutinase-like enzymes and their substrate specificity validated in silico, in vitro and in planta Efstratios Nikolaivits
10:00-10:15 S7_OP52	Optimization of cultivation conditions and the recovery of high-added value terpenes from genetically engineered yeast strains Sotiris Patsios
10:15-10:30 S7_OP53	Innovative Solutions for Sustainable Agriculture: Water and Nutrient Recovery from Constructed Wetlands through bionanotechnological approaches Spyridon Ntougias
10:30-10:35 S7_OP54 (FT)	Exploiting a novel non-conventional Zygosaccharomyces bailii strain to enhance wine aroma via commensal interaction with Saccharomyces cerevisiae Maria Dimopoulou
10:35-10:40 S7_OP55 (FT)	Activation of bacterial secondary metabolism by non-targeted competition of strains or targeted engineering of biosynthetic gene clusters predicted to generate antibiotics Dimitra Basdani
10:40-10:45 S7_OP56 (FT)	Effects of biochar on methane yield and microbial dynamics in anaerobic digestion under increasing organic loads Charitini Nikolaidou
10:45-11:00 S7_OP51	Exploring the evolutionary links between microbial xenobiotic and secondary metabolism: the diverse roles of nat genes in bacteria and fungi of environmental and biotechnological relevance Sotiria Boukouvala

11:00-11:30 **COFFEE BREAK - POSTER SESSION**

11:30-13:40	SESSION 8: ONE HEALTH / ANTIMICROBIAL RESISTANCE Chairs: Sotiris Vasileiadis, Hovik Panosyan
11:30-12:00	PLENARY LECTURE - Tiny Life, Global Policy: Bridging Plankton Microbiota Ecology and IMO Marine Environmental Protection Maria Moustaka
12:00-12:15 S8_OP58	Decoding bacterial dynamics in bovine mastitis: a proteomic Exploration of s. Aureus and non-aureus staphylococci and mammalicocci in milk Alicja Krysmann

12.15-12.30 S8_OP59	The fate of manure and recycled water introduced microbiome, resistome and mobilome to soil: the persisting and dissipating ones Marios I. Valmas
12.30-12.45 S8_OP60	Pressure effects on the degradation of hydrocarbons by deep-water microbial communities in the Eastern Mediterranean Sea Evina Gontikaki
12.45-13.00 S8_OP61	RestReco: A metagenomic approach towards land restoration to ensure soil microbial diversity, functionality, and ecosystem resilience Fady Mohareb
13.00-13.15 S8_OP62	Exploring the role of Plastisphere as a hotspot of Microbial Evolution for New Catabolic and Antibiotic Resistance Traits Stathis (Eustathios) Lagos
13.15-13.30 S8_OP63	Antimicrobial activity of equisetum arvense extract against key fish pathogens: A sustainable approach to aquaculture health Panagiota Stathopoulou
13.30-13.35 S8_OP64 (FT)	Intrinsic factors enable recovery from copper-induced dormancy in water-borne <i>Cupriavidus metallidurans</i> Timothej Patocka

13:40-14:30 **LUNCH BREAK**

14:30-16:00	SESSION 9: ENVIRONMENT Chairs: Katarzyna Piwosz, Evina Gontikaki
14.30-14.45 S9_OP65	Bacterial Functional Groups: Classification and Cultivation Challenges in Food Web Research Edina Szekeres
14.45-15.00 S9_OP66	Unique microbial community of a shallow soda lake (Lake Velence, Hungary) revealed through co-occurrence network analysis András Hidas
15.00-15.15 S9_OP67	Forecasting microbial trajectories with deep learning Aristeidis Litos
15.15-15.30 S9_OP68	Forest disturbances and management shape microbial communities across diverse European forests Tijana Martinovic
15.30-15.45 S9_OP69	Prophage Diversity and Metabolite Analysis of Viral Induction in Lysogenic Groundwater Bacteria Antonis Chatzinotas

15.45-15.50 S9_OP70 (FT)	Metagenomic Reconstruction and Functional Analysis of Microbial Genomes from Red Tide Events in a Coastal Ecosystem Konstantina Rizou
15.50-15.55 S9_OP71 (FT)	Seasonal Sediment Water flux Dynamics in Coastal Aquaculture Ponds: implications for primary production Sandra Rizzo Calderon
15.55-16.00 S9_OP72 (FT)	Revealing novel microbial diversity across the Hellenic Volcanic Arc through Metagenome-Assembled genomes (MAGs) Alexandra Zachariadou
16:00-16:30	AWARDS & CLOSING CEREMONY



Poster Presentations

1. AGRICULTURE

PP001 Evaluating the nitrification inhibition potential of *Trigonella foenum-graecum* under varying ammonium sources and concentrations

Paraskevi Amanatidou¹, Hugo Ribeiro¹, Alexandros Kanellopoulos¹, Kalliope K. Papadopoulou¹, Evangelia S. Papadopoulou², Dimitrios G. Karpouzas¹

¹Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, ²Laboratory of Environmental Microbiology and Virology, Department of Environmental Sciences, School of Technology, University of Thessaly

PP002 Exploring *Bacillus*-Based Antifungal Agents for Sustainable Agriculture

Sofija Kostandinovska¹, Dzoko Kungulovski¹, Iskra Cvetkovikj², Natalija Atanasova-Pancevska¹

¹Faculty of natural sciences and mathematics, Ss Cyril and Methodius University, ²Faculty of veterinary medicine, Ss Cyril and Methodius University

PP003 Natural bioformulations mediated shifts in rhizosphere microbiome and crop traits in polyculture strawberry systems

Pramod Kumar, Priya Thakur, Chuni L Sharma, Subhash C Verma

RHRTS-Sharbo & KVK Kinnaur, Dr YS Parmar University of Horticulture and Forestry, 2Department of Fruit Science, Dr YS Parmar University of Horticulture and Forestry, 3Department of Fruit Science, Dr YS Parmar University of Horticulture and Forestry, 4Department of Entomology, Dr YS Parmar University of Horticulture and Forestry

PP004 Dissecting the physiological effect of DCD on representative terrestrial strains of ammonia-oxidizing bacteria and archaea via transcriptomics

Chiara Perruchon¹, Stavroula Makri², Dimitrios G. Karpouzas², Evangelia S. Papadopoulou¹

¹University of Thessaly, Department of Environmental Sciences, ²University of Thessaly, Department of Biochemistry and Biotechnology

PP005 Application of full-scale on-farm pilot biological systems for the mitigation of point source contamination of natural water resources of Greece with pesticides

Panagiotis Karas¹, Paraskeuas Parlakidis², Zisis Vryzas³, Dimitrios Karpouzas¹

¹Department of Biochemistry and Biotechnology, University of Thessaly, ²Department of Agricultural Development, Democritus University of Thrace, ³School of Agriculture, Aristotle University of Thessaloniki

PP006 Grapevine wood microbiome analysis and its potential as a tool for grapevine trunk diseases detection

Fotios Bekris¹, Angelos Floudas², Nikolaos Krasagakis^{3,4}, Stefanos K. Soultatos^{3,4}, Stefanos Testempasis^{2,5}, Emmanouil Markakis^{3,4}, George Karaoglanidis², Dimitrios Karpouzas¹

¹University of Thessaly, Department of Biochemistry and Biotechnology, ²Aristotle University of Thessaloniki, Plant Pathology Laboratory, Faculty of Agriculture, ³Hellenic Mediterranean University, Department of Agriculture, School of Agricultural Sciences, ⁴Hellenic Agricultural Organization DIMITRA, Laboratory of Mycology, Department of Viticulture, Vegetable Crops, Floriculture and Plant Protection, Institute of Olive Tree, Subtropical Crops and Viticulture, ⁵University of Western Macedonia, Department of Agriculture, School of Agricultural Sciences

PP007 Plant triterpenoids as novel biological nitrification inhibitors with archaeal selectivity

Hugo Ribeiro¹, Alexandros Kanellopoulos¹, Kalliope Papadopoulou¹, Dimitrios Karpouzas¹, Evangelia Papadopoulou²

¹Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, ²Laboratory of Environmental Microbiology and Virology, Department of Environmental Sciences, University of Thessaly

PP008 Isolation and characterization of plant growth-promoting microorganisms for developing bioinoculants targeting sustainable agriculture

Io Kefalogianni¹, Ilias Travlos¹, Demetra Petraki¹, Petros Efstathopoulos¹, Despoina Adam¹

¹Agricultural University Of Athens

PP009 Inhibitory effect of lavender microcapsules against soil-borne pathogen *fusarium oxysporum* F. SP. *Radicis-lycopersici*

Aikaterini Gropali¹, Nikolaos Remmas¹, Paraschos Melidis¹, George Tsiamis², Shereen Basiouni³, Awad A. Shehata⁴, Wolfgang Eisenreich⁴, Salma Lasram⁵, Mete Yilmaz⁶, Mevlüt Emekci⁷, Fatma Acheuk⁸, Spyridon Ntougias¹

¹Department of Environmental Engineering, School of Engineering, Democritus University of Thrace, ²Laboratory of Systems Microbiology and Applied Genomics, Department of Sustainable Agriculture, University of Patras, ³Cilia Cell Biology, Institute of Molecular Physiology, Johannes Gutenberg University, ⁴Structural Membrane Biochemistry, Bavarian NMR Center, Technical University of Munich (TUM), ⁵Laboratory of Molecular Physiology of Plants, Center of Biotechnology of Borj Cedria (CBBC), ⁶Department of Bioengineering, Bursa Technical University, ⁷Department of Plant Protection, Faculty of Agriculture, Ankara University, ⁸Laboratory for Valorization and Conservation of Biological Resources, Faculty of Sciences, University M'Hamed Bougara of Boumerdes

Poster Presentations

PP010 The effect of nitrification inhibitor 3,4-dimethylpyrazole phosphate (dmpp) on microbial community abundance and nitrous oxide emissions under varying soil ph conditions in cyprus

Alexandros Phokas¹, Maria Kyriakidou, Maria Panagiotou, Michalis Omirou

¹Agricultural Research Institute

PP011 The effect of simulated summer rainfall on the abundance of microbial communities driving ghg and ammonia emissions from ruminant manure

Michalis Omirou¹, Katerina Philippou¹, Alexandros Phokas¹, Andreas Savvides¹, Dionysis Sparaggis¹, Georgia Hadjipavlou¹

¹Agricultural Research Institute

PP012 Here Today, Gone Tomorrow? Biological Nitrification Inhibitors' persistence and dissipation in a range of agricultural soils

Elena Papadopoulou¹, Chrysovalantou Moutzourelli¹, Panagiotis A. Karas¹, Evangelia S. Papadopoulou², Dimitrios G. Karpouzias¹

¹University of Thessaly, Department of Biochemistry and Biotechnology, Laboratory of Plant and Environmental Biotechnology, Viopolis, 41500,

²University of Thessaly, Department of Environmental Sciences, Laboratory of Environmental Microbiology and Virology, Gaiopolis, 41500

PP013 Biocontrol strategies against tomato and cucumber pathogens: a synergistic approach involving systemin and beneficial fungi

Ioannis-Konstantinos Platis¹, Loukia Kelari³, Dimitrios Natsiopoulos², Panagiotis Karas¹, Panagiotis Eliopoulos², Kalliope Papadopoulou¹

¹Department Of Biochemistry And Biotechnology, Plant And Environmental Biotechnology Laboratory, University Of Thessaly, ²Department of

Agrotechnology, Plant Health Management Laboratory, University of Thessaly, Larissa, Greece, ³Averofoio Agri-Food Technological Park of Thessaly, Larissa Greece

PP014 Application of single and combined inocula of rhizobia and arbuscular mycorrhizal fungi strains, isolated from stressed environments, to improve legume performance and fitness under normal and osmotic stress conditions.

Peter Efstathopoulos¹, Myrto Tsiknia¹, Emmanouil Zoanos^{2,3}, Rodica Efroze², Daniela Tsikou³, Mariangela Fotelli⁴, Giorgos Xanthopoulos⁴, Christos Damianidis⁴, Constantinos Ehaliotis¹, Emmanouil Fletmetakis²

¹Department of Natural Resources Development and Agricultural Engineering, Agricultural University of Athens, Greece, ²Department of Biotechnology, Agricultural University of Athens, Agricultural University of Athens, ³Department of Biochemistry and Biotechnology, University of Thessaly, ⁴Forest Research Institute, Hellenic Agricultural Organization Dimitra

PP015 *Withdrawn by the author.*

PP016 Flooding effects on physical, chemical and microbiological properties of soils from the area of lake Karla in Thessaly, Greece
Eftichia Tatsi¹, Eleftherios Evangelou², Chrisa Orfanidou³, Ioannis Ipsilantis¹

¹Soil Science Laboratory, School of Agriculture, Aristotle University of Thessaloniki,, ²Department of Soil and Water Resources Institute of

Industrial and Forage Crops Hellenic Agricultural Organization –DEMETER,

³Plant Pathology Laboratory, School of Agriculture, Aristotle University of Thessaloniki

2. ENVIRONMENT

PP017 Drivers of the Nodule Microbiome of Wild Legumes in the Geologically Diverse Island of Milos: the effects of Soil Characteristics and Host Identity
Myrto Tsiknia¹, Rodica Efroze², Emmanouil Zoanos^{2,3}, Petros Efstathopoulos¹, Daniela Tsikou³, Mariangela Fotelli⁴, Constantinos Ehaliotis¹, Emmanouil Fletmetakis²

¹Department of Natural Resources Development and Agricultural Engineering, Agricultural University of Athens, ²Department of Biotechnology, Agricultural University of Athens, Agricultural University of Athens, ³Department of Biochemistry and Biotechnology, University of Thessaly, ⁴Forest Research Institute, Hellenic Agricultural Organization Dimitra

PP018 *Withdrawn by the author*

PP019 RESPONSE OF PURPLE NON-SULPHUR PHOTOTROPHIC BACTERIA TO MANGANESE EXPOSURE

Joanna Fiedor¹, Martyna Cholewińska¹, Beata Ostachowicz²

¹AGH University of Krakow, Group of Molecular Biophysics and Bioenergetics,

²AGH University of Krakow, Group of Biomedical and Environmental Research

PP020 *Cancelled*

PP021 Investigating biomineralization of carbon dioxide mediated by cyanobacteria and its possible ecological role

Federica Tiddia¹, Dario Piano², Domenica Farci¹

¹Warsaw University Of Life Sciences, ²University of Cagliari

Poster Presentations

PP022 Using Species Sensitivity Distributions to quantify the toxicity of pesticides to soil ammonia oxidizing microbes, bacterial and fungal communities

Maria Kolovou^{1,2}, Eleftheria Bachtsevani³, Fotis Bekris², Graeme N. Nicol³, Christina Hazard³, Evangelia S. Papadopoulou¹, Dimitrios G. Karpouzas²

¹Laboratory of Environmental Microbiology and Virology, Department of Environmental Sciences, University of Thessaly, ²Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, ³Université Claude Bernard Lyon ¹, CNRS, INRAE, VetAgro Sup, Laboratoire d'Ecologie Microbienne

PP023 Can Bacillus bacteria help in the restoration of aquatic ecosystems?

Łukasz Kubera¹, Tomasz Domowicz¹, Wiktoria Piotrowska¹

¹Kazimierz Wielki University

PP024 Cancelled

PP025 Population genomics of microbial stalactite biofilms formed in the acid mine drainage

Jakub Ridl¹, Katerina Burkartova², Lukas Falteisek²

¹Institute Of Molecular Genetics Of The Czech Academy Of Sciences, ²Faculty of Science, Charles University, Prague

PP026 Microplastics as drivers of community changes in the Baltic Sea

Kasia Piwosz¹, Aleksandar Stanojković^{1,2}, Uroosa Uroosa¹, Sohrab Khan¹, Marcin Białowas¹, Magdalena Jakubowska-Lehrmann¹, Barbara Urban-Malinga¹

¹National Marine Fisheries Research Institute, ²Palacký University Olomouc

PP027 The comparison of the sequencing methods and bioinformatic tools using metagenomic data from natural microbial communities

Miluse Hradilova¹, Jakub Ridl¹, Katerina Burkartova², Lukas Falteisek²

¹Institute Of Molecular Genetics Of The Czech Academy Of Sciences, ²Faculty of Science, Charles University

PP028 Microbial diversity and dominant functions under hydrothermal stressors

Yolanda Stranga^{1,2}, Alexandra Zachariadou¹, Ariadne Argyraki¹, Andreas Gondikas¹, Murat Ardelan³, Dionysios Raitsos¹, Savvas Genitsaris¹

¹National And Kapodistrian University Of Athens, ²University of the Aegean, ³Norwegian University of Science and Technology

PP029 Testing a microbial DNA-based indicator for Greek eutrophic lakes' water quality assessment

Efstathios Alonaris¹, Maria Moustaka-Gouni², Konstantinos Kormas³, Natassa Stefanidou², Fragkiskos Kolisis⁴, Savvas Genitsaris¹

¹National And Kapodistrian University Of Athens, ²Aristotle University of Thessaloniki, ³University of Thessaly, ⁴National Technical University of Athens

PP030 Evaluation of a full-scale wastewater treatment plant as a source for nutrients recovery towards sustainable resource management in wastewater treatment.

Nikolaos Remmas¹, Anastasia Papadopoulou¹, Eirini Keisidou¹, Ioannis Stavrakakis¹, Aikaterini Gropali¹, Dimitra Matziri¹, Paraschos Melidis¹, Spyridon Ntougias¹

¹Democritus University of Thrace

PP031 Unveiling the synergistic effect of microplastics and organic pollutants on soil microbial diversity and functioning

Eleni Rafaila Lamprou¹, Hongfei Liu¹, Stathis Lagos¹, Dimitrios Karpouzas¹, Clemence Mauprivez², Myriell Cooper², Ayme Spor², Fabrice Laurent², Joana MacLean³, Matthias C. Rillig³

¹University Of Thessaly, Department of Biochemistry and Biotechnology, Laboratory of Plant and Environmental Biotechnology, ²Université Bourgogne Europe, Institut Agro, INRAE, ³Institute of Biology, Freie Universität Berlin

PP032 Polaromonas spp. Novel strains isolated from freshwater lake showing phototrophic capacity.

Mohit Kumar Saini¹, Michal Koblizek¹

¹Laboratory of Anoxygenic Phototrophs, Institute of Microbiology CAS

PP033 Colonization of experimental containers by aquatic microbes and investigation of the role of a nearby freshwater system

Maria Pagkoutou¹, Lydia Meggou¹, Stefanos Moschos¹, Savvas Genitsaris², Hera Karayanni¹

¹Department of Biological Applications And Technology, University of Ioannina, ²Section of Ecology and Taxonomy, School of Biology, National and Kapodistrian University of Athens

PP034 Subsurface microbial hydrogen cycling: implications for Underground Hydrogen Storage projects

Elpida Maragkiozoglou², Simon Poirier², Spyros Bellas¹, Ioannis Gentekakis¹, Emmanouel Stamatakis³, Evina Gontikaki¹

¹Institute of Geoenergy, Foundation for Research and Technology-Hellas, ²IFP Energies Nouvelles, ³National Centre for Scientific Research "Demokritos"

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PP035 Microbial drivers of VFAs and hydrogen generation: Linking community composition to fermentation efficiency in mixed waste bioreactors

Andreas Kaliakatsos¹, Iosifina Gounaki¹, Aggeliki Maragkaki², I Choinopoulos³, T. Jafarpour Checkab³, Trassylvoulos Manios², Kelly Velonia³, Danae Venieri¹

¹Technical University Of Crete, ²Hellenic Mediterranean University, ³University of Crete

PP036 Assessment of inactivation of bacterial and fungal pathogens in aquatic matrices

Konstantina Papadopoulou¹, Iosifina Gounaki¹, Danae Venieri¹

¹Technical University Of Crete

PP037 Phage-Bacteria Interactions Drive Phenotypic Diversification in Environmental Escherichia coli Strains

Maria Perra¹, Maria Freri¹, Magda Tseperka¹, Vasiliki Soukou¹, Nikita Zrelavs³, Karina Svanberga³, Andriz Kazaks³, Polyxeni Papazoglou¹, Chrysoula Dioli², Chrysanthi Vogiatzaki², Dimitrios Skliros¹, Emmanouil Fletmetakis¹

¹Department of Biotechnology, Agricultural University Of Athens,

²Department of Biomedical Sciences, University of West Attica, Athens, Greece, ³Latvian Biomedical Research and Study Centre, Riga, Latvia

PP038 Assessing Dose-Dependent Toxicity of Pesticides on Ciliate and Flagellate Protists

Esteban Nieto¹, Maria Kolovou¹, Fotios Bekris¹, Antonis Chatzinotas^{2,3,4}, Evangelia Papadopoulou⁵, Dimitrios Karpouzas¹

¹University of Thessaly, Department of Biochemistry and Biotechnology, Laboratory of Plant and Environmental Biotechnology, Viopolis, 41500, Larissa, Greece., ²Helmholtz Centre for Environmental Research—UFZ, Department of Applied Microbial Ecology, 04318 Leipzig, Germany, ³Institute of Biology, Leipzig University, 04103 Leipzig, Germany, ⁴German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, 04103 Leipzig, Germany, ⁵University of Thessaly, Department of Environmental Sciences, Laboratory of Environmental Microbiology and Virology, Gaiopolis, 41500, Larissa, Greece

PP039 Microbial diversity and community structure shaped by pah-contaminated marine waters and sediments in a eutrophic multi-stressed coastal system

Ester Skylaki^{1,2}, Alexandra Zachariadou³, Savvas Genitsaris³, Constantine Parinos¹, Konstantinos Proios³, Ioannis Hatzianestis¹, Dimitris Velaoras¹, Maria Moustaka-Gouni⁴, Alexandra Gogou¹

¹Hellenic Centre for Marine Research (HCMR), ²University of Crete, ³National and Kapodistrian University of Athens, ⁴Aristotle University of Thessaloniki

PP040 In vitro toxicity screening of veterinary pharmaceuticals on ammonia-oxidizing microorganisms and arbuscular mycorrhizal fungus

Chloen Lhomme¹, Christos Papadopoulos¹, Sotirios Vasileiadis¹, Dimitrios Karpouzas¹

¹Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly

PP041 Exploring bilberry - associated microbiomes in the Armenian highlands

Anna Avetisyan¹, Mane Tadevosyan^{1,2}

¹Armenian National Agrarian University, ²Yerevan State University

PP042 Effect of microplastics on microbial communities from the coastal Baltic Sea

Uroosa Uroosa¹

¹National Marine Fisheries Research Institute

PP043 Toxicity of the fungicides fludioxonil and tebuconazole on natural assemblages of arbuscular mycorrhizal fungi colonizing Triticale

Christos Papadopoulos¹, Maria Kolovou^{1,2}, Evangelia S. Papadopoulou^{1,2}, Kalliope K. Papadopoulou¹, Dimitrios G. Karpouzas¹

¹Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, ²Laboratory of Environmental Microbiology and Virology, Department of Environmental Sciences, University of Thessaly

PP044 High-temporal resolution of microbial food web dynamics and structure during phytoplankton blooms in the Baltic Sea

Sohrab Khan¹, Klaudia Wdówka¹, Anetta Ameryk¹, Aneta Jakubowska¹, Mariusz Zalewski¹, Uroosa Uroosa¹, Bartosz Witalis Witalis¹, Kasia Piwosz¹

¹National Marine Fisheries Research Institute, ul. Kołłątaja 1, 81-332 Gdynia, Poland.

PP045 Cancelled

PP046 Hidden Viral Players: Diversity and Ecological Roles of Viruses in Groundwater Microbiomes

Akbar Adjie Pratama¹, Olga Pérez-Carrascal¹, Matthew B. Sullivan², Kirsten Küsel¹

¹Friedrich Schiller University Jena, ²The Ohio State University

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PP046 A Functional and Taxonomic Insights into Microbial Communities in Brateş Lake in Relation to Local Environmental Stressors

Rodica Efroşe¹, E Zoanos¹, C Kalloniati^{1,2}, IA Simionov^{3,4}, ŞM Petrea^{3,4}, NN Lazăr³, A Antache^{3,4}, C Iticescu^{3,5}, PL Georgescu^{3,5}, Emmanouil Fletmetakis¹

¹Department of Biotechnology, Agricultural University of Athens, 75 Iera Odos 11855, ²Department of Marine Sciences, University of Aegean, 81100, ³Dunărea de Jos University of Galaţi, REXDAN Research Infrastructure, 98 George Coşbuc Street, 800385, ⁴Dunărea de Jos University of Galaţi, Faculty of Food Science and Engineering, 47 Domnească Street, 800008, ⁵Dunărea de Jos University of Galaţi, Faculty of Sciences and Environment, 111 Domnească Street, 800008

3. BIOTECHNOLOGY

PP047 *Cancelled*

PP048 Impact of Bacillus on the growth of radish and beetroot microgreens

Katarzyna Prochoń^{1,2}, Marta Pietrzak^{1,2}, Monika Nowak², Sylwia Różalska²

¹University of Lodz, BioMedChem Doctoral School of the University of Lodz and Lodz Institutes of the Polish Academy of Sciences, ²University of Lodz, Department of Industrial Microbiology and Biotechnology, Faculty of Biology and Environmental Protection

PP049 Evaluation of the pathogenic potential of selected entomopathogenic fungi against Tenebrio molitor larvae

Marta Pietrzak^{1,2}, Katarzyna Prochoń^{1,2}, Monika Nowak², Sylwia Różalska², Aleksandra Wiśniewska³

¹University of Lodz, BioMedChem Doctoral School of the University of Lodz and Lodz Institutes of the Polish Academy of Sciences, ²University of Lodz, Department of Industrial Microbiology and Biotechnology, ³University of Lodz, Biotechnology and Microbiology Student Scientific Association "Bio-Mik"

PP050 Enhancing Metabolite Production in Trigonella foenum-graecum using Microbial Inoculants

Panagiotis Vletos¹, Loukia Kellari¹, Kalliope Papadopolou¹

¹Department of Biochemistry and Biotechnology, University Of Thessaly

PP051 Harnessing synthetic microbial biotechnology for efficient plastic waste upcycling

Christina Ferousi¹, Jasmina Nikodinovic-Runic², Marija Nicevic³, Gennaro Agrimi⁴, Evangelos Topakas¹

¹National Technical University of Athens, ²Institute of Molecular Genetics and Genetic Engineering, ³Technological University of the Shannon: Midlands Midwest, ⁴University of Bari Aldo Moro

PP052 Biotechnological Valorization of PLA Hydrolysates via Microbial PHA Synthesis by Pseudomonas spp.

Aikaterini Foka¹, Efstratios Nikolaivits¹, Christina Ferousi¹, Christina Kountela¹, Stamatina Vouyiouka¹, Evangelos Topakas¹

¹National Technical University Of Athens

PP053 Optimization of Integrated Bioprocesses for Improved Production of Bacterial Nanocellulose from Lignocellulosic Biomass

Kochar-Korin Chorozián^{1,2}, Evdoxia Karpenisioti², Stylianos Stefanidis³, Konstantinos Kalogiannis⁴, Evangelos Topakas², Anthi Karnaouri¹

¹Laboratory of General and Agricultural Microbiology, Department of Crop Science, Agricultural University of Athens, ²IndBioCat Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens, ³Chemical Process and Energy Resources Institute (CPERI), Centre for Research and Technology Hellas (CERTH), ⁴Department of Chemical Engineering, University of Western Macedonia

PP054 Structural insights into the catalytic mechanisms of plastic-degrading enzymes

Christos Kosinas¹, Panagiota Karampa¹, Kostas Makryniotis², Efstratios Nikolaivits², Evangelos Topakas², Maria Dimarogona¹

¹Laboratory of Structural Biology and Biotechnology, Department of Chemical Engineering, University Of Patras, ²IndBioCat Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens

PP055 The first crystal structure of a GH30_12 subfamily member in apo and product bound form

Panagiota Karampa¹, Christina Pentari², Evangelos Topakas², Maria Dimarogona¹

¹Laboratory of Structural Biology and Biotechnology, Department of Chemical Engineering, University Of Patras, ²Industrial Biotechnology & Biocatalysis Group, School of Chemical Engineering

PP056 *Cancelled*

PP057 A xylose assimilating shuttle vector for C5/C6 sugar fermentation

Panagiotis Savranakis¹, Julian Bruck^{1,2}, Prokopios Gerantonis¹, Stamatina Roussou^{1,3}, George Zochios¹, Katherine Pappas¹

¹NKUA, ²Maastricht University, ³Uppsala University

PP058 Engineering the activity of a thermophilic esterase from zhizhongheellacaldifontis for MHET degradation

Konstantinos Grigorakis¹, Christina Ferousi¹, Natalia Kastana¹, Efstratios Nikolaivits¹, Evangelos Topakas^{1*}

¹Industrial Biotechnology & Biocatalysis Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens

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PP059 Extraction of Bioactive Compounds from Rosa canina L. Pseudofruit Using Enzyme Assisted Extraction in Natural Deep Eutectic Solvents

Zafeiria Lemoni¹, Evanthia Seinti¹, Styliani Kalantzi¹, Theopisti Lymperopoulou², Andromachi Tzani³, Georgios Stavropoulos⁴, Anastasia Detsi³, Diomi Mamma¹

¹Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens, ²Processes and Products Quality Control Horizontal Laboratory, School of Chemical Engineering, National Technical University of Athens, ³Laboratory of Organic Chemistry, School of Chemical Engineering, National Technical University of Athens, ⁴KORRES SA-NATURAL PRODUCTS

PP060 FROM WASTE TO RESOURCE: BIOCONTROL POTENTIAL OF WINE LEES IN GRAPEVINE PATHOGEN MANAGEMENT

Aikaterini Tzamourani¹, Artemis Tsioka¹, Angeliki Kasioura¹, Pol Gimenez-Gil^{1,2,3}, George Ntourtoglou¹, Danai Gkizi¹, Alexandra Evangelou¹, Christna Virgiliou^{2,3}, George Theodoridis^{2,3}, Panagiotis Arapitsas¹, Maria Dimopoulou¹

¹University Of West Attica, ²Biomic AUTH, Center for Interdisciplinary Research and Innovation (CIRI-AUTH), Balkan Center B1.4, 10th km Thessaloniki-Thermi Rd., 57001, ³FoodOmicGR Research Infrastructure, AUTH Node, Center for Interdisciplinary Research and Innovation (CIRI-AUTH), 57001

PP061 Bioactive properties of bacteriocins isolated from microorganisms with probiotic potential

Christina Thoda¹, Maria Touraki¹

¹Department of Genetics, Development and Molecular Biology, School of Biology, Aristotle University of Thessaloniki

PP062 WHOLE-GENOME NANOPORE SEQUENCING OF 84 ENVIRONMENTAL BACTERIAL ISOLATES FROM THE ELTE COLLECTION

Sokratis Zekkas¹, Athanasios Kylonis¹, Dimosthenis Tzimotoudis¹, Dimitra Basdani¹, Giannoulis Fakis¹, Tamás Felföldi², Károly Márialigeti², Sotiria Boukouvala¹

¹Democritus University of Thrace, Department of Molecular Biology and Genetics, ²ELTE Eötvös Loránd University, Department of Microbiology

PP063 Biopaper from tea and back: use in teabags

George Zochios¹, Foteinos Kasdaglis², Katherine Pappas¹

¹Department of Genetics and Biotechnology, Faculty of Biology, National & Kapodistrian University of Athens, ²Athens University of Economics and Business

PP064 Novel Lytic Bacteriophages as Tools for Microbiota Modulation in Asthma: From Isolation to Defense System Profiling

Polyxeni Papazoglou¹, Magda Tseperka¹, Elena Lekakou¹, Dimitrios Skliros¹, Stella Taka², Nikolaos G. Papadopoulos², Emmanouil Flemetakis¹

¹Laboratory of Environmental Biotechnology, Department of Biotechnology, School of Applied Biology and Biotechnology, Agricultural University of Athens, ²Allergy Department, 2nd Pediatric Clinic, National and Kapodistrian University of Athens

PP065 Tuning material properties by blending bacterial biopolymers polyhydroxyalkanoates and nanocellulose

Marijana Ponjavic¹, Sanja Skaro Bogojevic¹, Jasmina Nikodinovic-Runic¹, Irena Zivkovic²

¹University of Belgrade, Institute of Molecular Genetics And Genetic Engineering, ²Faculty of Applied Arts, University of Belgrade, Serbia

PP066 Substrate specificity and kinetic characterization of BioH, a pyrethroid-hydrolyzing esterase isolated via functional metagenomics

Konstantina Rousidou¹, Ioanna Gkoni², Sotirios Vasileiadis¹, Chiara Perruchon¹, Serafeim Alexopoulos³, Dimitrios Karpouzias¹

¹Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, ²INRAE, Lyon-Grenoble Auvergne-Rhône-Alpes, ³Laboratory of Structural and Functional Biochemistry, Department of Biochemistry and Biotechnology, University of Thessaly

PP067 Discovery of Bioactive Siderophores in Mediterranean Deep-Sea Actinobacteria Using Advanced Metabolomics Tools and Computational Mass Spectrometry

Nikola Milic¹, Christina Stamatakis¹, Christina Koufali¹, Vera Karveli¹, Fernando de la Calle Verdu², Alexandros Polyzois¹, Nikolas Fokialakis¹

¹National and Kapodistrian University of Athens, Department of Pharmacy, Section of Pharmacognosy and Natural Products Chemistry, ²PharmaMar SA

PP068 Unlocking the Biotechnological Potential of Streptomyces violaceoruber JS520 for Polymer Upcycling

Jelena Milovanovic¹, Konstantinos Makryniotis², Markella Papi², Evangelos Topakas², Jasmina Nikodinovic-Runic¹, Brana Pantelic¹

¹Institute of Molecular Genetics and Genetic Engineering, University of Belgrade, ²Industrial Biotechnology & Biocatalysis Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens

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PP069 Engineering Microbial Platforms for Simultaneous Biodegradation and Upcycling of PCL

Konstantinos Makryniotis¹, Markella Papi, Brana Pantelić², Sandra Vojnović², Efstratios Nikolaivits², Marija Nenadović², Jasmina Nikodinovic-Runic², Evangelos Topakas¹

¹Industrial Biotechnology & Biocatalysis Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens,

²Group for eco-biotechnology and drug development, Laboratory for Microbial Molecular Genetics and Ecology (LMMGE), Institute of Molecular Genetics and Genetic Engineering (IMGGE)

PP070 Enzymatic recycling of poly(3-hydroxybutyrate) and upcycling of the degradation products

Lina Zoghbi¹, Chrysanthi Pateraki¹,

¹Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece

PP071 Unique biochemical features of a bi-functional glucuronoxylase/xylobiohydrolase: the case of TtXyn30A as a key biocatalyst for native hemicellulose biodegradation

Christina Pentari¹, Christos Kosinas², Efstratios Nikolaivits¹, Theodora Tryfona³, Paul Dupree³, Anastasia Zerva⁴, Maria Dimarogona², Evangelos Topakas¹

¹Industrial Biotechnology & Biocatalysis Group, School of Chemical Engineering, National Technical University of Athens, ²Laboratory of Structural Biology and Biotechnology, Department of Chemical Engineering, University of Patras, ³Department of Biochemistry, University of Cambridge, ⁴Laboratory of Enzyme Technology, Department of Biotechnology, School of Applied Biology and Biotechnology, Agricultural University of Athens

PP072 Impact of 16S rRNA Gene Sequencing Strategies on Metataxonomic Profiles in Dairy Products and Implications for Quantitative Microbial Risk Assessment (QMRA)

Joanna Bucka-Kolendo¹, David Baker², Pablo S. Fernández³, Enriqueta García-Gutierrez³

¹Department of Microbiology, Institute Of Agricultural And Food Biotechnology, State Research Institute, ²Quadram Institute Bioscience, Norwich Research Park, ³Agronomic Engineering Department, Technical University of Cartagena (UPCT)

PP073 Cancelled

PP074 From Cell to Community: Unlocking Microbial Diversity with Single-Cell Genomics Justyna Mazul¹, Vaida Kurmauskaite¹, Gabija Laučiute¹, Domas Rupkus¹, Simonas Jocyis¹, Zana Kapustina¹, Rapolas Zilionis¹

¹Atrandi Biosciences

PP075 Acetate co-feeding increases Ethylene Glycol assimilation and Glycolic Acid production in *Yarrowia lipolytica*

Eugenia Messina¹, Zbigniew Lazar², Serena Barile¹, Paweł Moroz², Pasquale Scarcia¹, Luigi Palmieri¹, Isabella Pisano¹, Gennaro Agrimi¹

¹Department of Biosciences, Biotechnologies and Environment, University of Bari Aldo Moro, ²Department of Biotechnology and Food Microbiology, Faculty of Biotechnology and Food Science, Wrocław University of Environmental and Life Sciences

PP076 Novel conserved functional and structural motifs revealed through an evolutionary study of the Glyphosate Oxidoreductase (Gox) based on orthologous proteins.

Marina Giannakara¹, Vassiliki Lila Koumandou¹, Louis Papageorgiou^{1,2}

¹Genetics Laboratory, Department of Biotechnology, Agricultural University of Athens, ²Department of Biomedical Sciences, University of West Attica

PP077 Enzymatic Degradation of PBAT: Toward a Sustainable Strategy for Polyester Waste Recycling

Domenico Zannini, Konstantinos Makryniotis¹, Lucia Conzatti³, Rosa Turco², Efstratios Nikolaivits, Evangelos Topakas

¹Industrial Biotechnology & Biocatalysis Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens, ²Department of Chemical Sciences, Monte Sant'Angelo Campus, University of Naples "Federico II", Via Cinthia 4, 80126, ³Institute of Chemical Sciences and Technologies "G. Natta" (SCITEC), Italian National Research Council (CNR), Via De Marini 6, 16149

PP077_A Protein engineering of a fungal feruloyl esterase enhances both plastic and lignocellulose breakdown

Konstantinos Makryniotis¹, Efstratios Nikolaivits¹, Markella Papi¹, Evangelos Topakas¹

¹Industrial Biotechnology & Biocatalysis Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens

4. FOOD & NUTRITION

PP078 Sustainability Optimization for Secure Food Systems-SOSFood

Chrysoula Tassou^{1,2}, George Taxeidis³, Evangelia Katsouri^{1,4}, Emmanouil Nychas¹, Dimitris Ladikos³, Maria Garcia-Marti⁵, Em. George-John Nychas¹, Jesus Simal-Gandara⁵

¹SmartAgroHub S.A., ²Hellenic Agricultural Organisation DIMITRA, Institute of Technology of Agricultural Products, ³Yiotis Anonimos Emporiki & Viomixaniki Etaireia, ⁴Hellenic Food Safety Authority - EFET, ⁵Universita de Vigo, Dpto. Química analítica y alimentaria

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PP079 Microbial Ecology of Two Traditional Cheeses from Greek Islands: A Study of Ladotyri PDO and Melichloro

Panagiota Bouki¹, Maria Alexia Giorgi¹, Konstantina Karathanasi¹, Persefoni - Pinelopi Vourvoulia¹, Dimitra Kostoglou¹, Efstathios Giaouris¹

¹Laboratory of Food Microbiology and Hygiene, Department of Food Science and Nutrition, School of the Environment, University of the Aegean

PP080 Targeting the invA gene as a potential marker for differentiating Salmonella genotypes

Stella Bozoudi, Christina Kamarinou, Agapi Doulgeraki

¹Laboratory of Food Microbiology and Hygiene, Department of Food Science and Technology, Aristotle University of Thessaloniki

PP081 Characterization of indigenous yeast strains of the genus Saccharomyces as biocontrol agents against phytopathogenic and spoilage fungi

Alexandra Masoura¹, Dimosthenis Kizis², Pantelis Natskoulis³, Efstathios Panagou¹

¹Laboratory of Microbiology and Biotechnology of Foods, School of Food and Nutritional Sciences, Department of Food Science and Human Nutrition, Agricultural University of Athens, ²Laboratory of Mycology, Scientific Directorate of Phytopathology, Benaki Phytopathological Institute, ³Institute of Technology of Agricultural Products, General Directorate of Agricultural Research, Hellenic Agricultural Organization (ELGO) – DIMITRA

PP082 Exploring a Multilayer Perceptron model on dual-species biofilm growth data

Kyriaki Chatzikyriakidou¹, Cristina Kamarinou¹, Agapi Doulgeraki¹

¹Laboratory of Food Microbiology and Hygiene, Department of Food Science and Technology, School of Agriculture, Faculty of Agriculture, Forestry and Natural Environment, Aristotle University of Thessaloniki, 54124, Greece

PP083 Investigating the impact of multi-layer bio-active coatings containing probiotic cultures on the shelf-life of strawberries

Rozi Perndoj², Stamatia Vitsou-Anastasiou¹, Miltiadis Christopoulos¹, Anthoula Argyri¹, Chrysoula Tassou¹, Nikolaos Chorianopoulos², Anastasia Kapetanakou¹

¹Institute of Technology of Agricultural Products, Hellenic Agricultural Organization-DIMITRA, ²Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens

PP084 Antimicrobial Effect of Oregano Essential Oil in Na-alginate Edible Films for Shelf-life Extension of Feta Cheese

Angeliki Doukaki¹, Aikaterini Frantzi¹, Olga S. Papadopoulou², Chrysoula Tassou², Panagiotis Skandamis³, George-John Nychas¹, Nikos Chorianopoulos¹

¹Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, ²Institute of Technology of Agricultural Products, Hellenic Agricultural Organization – DIMITRA, ³Laboratory of Food Quality Control and Hygiene, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens

PP085 Evaluation of the antimicrobial effect of oregano essential oil-enriched edible films on sea bream (Sparus aurata) fillets under aerobic storage using classical and rapid microbiological assessment methods

Stamatina Xenou¹, Fotoula Schoina¹, Symeon Makris¹, Aggeliki Doukaki¹, Olga Papadopoulou², Chrysoula Tassou², Panagiotis Skandamis³, George-John Nychas¹, Nikolaos Chorianopoulos¹

¹Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Iera Odos 75, 11855, ²Institute of Technology of Agricultural Products, Hellenic Agricultural Organization-DEMETER, Lycovrissi, 14123, ³Laboratory of Food Quality Control and Hygiene, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Iera Odos 75, 11855

PP086 Evaluation of quality and safety of un-gutted sea bream (Sparus aurata) using classic and rapid detection methods with optical sensors technology.

Fotoula Schoina¹, Stamatina Xenou¹, Antonia Gounadaki², Panagiotis Skandamis², Maria Vasilopoulou³, George-John Nychas¹, Nikos Chorianopoulos¹

¹Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, ²Laboratory of Food Quality Control and Hygiene, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, ³Institute of Nanoscience and Nanotechnology, National Center of Scientific Research 'Demokritos'

PP087 Development of a predictive model of Listeria monocytogenes growth in xinotyri (soft cheese) from unpasteurized goat milk

Georgios Papoutsakis¹, Myrsini Kakagianni¹

¹Department of Food Science and Nutrition, University of Thessaly

Poster Presentations

PP088 Fungal prevalence and genetic diversity in commercial maize-derived products from the Greek market

George Froutis^{1,2}, Olga Papadopoulou¹, Agapi Doulgeraki³, Dimitra Dourou¹, Pantelis Natskoulis¹, Chrysoula Tassou¹, George-John Nychas², Anthoula Argyri¹

¹Institute of Technology of Agricultural Products, Hellenic Agricultural Organization - DIMITRA, ²Laboratory of Microbiology and Biotechnology of Foods, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, ³Laboratory of Food Microbiology and Hygiene, Department of Food Science and Technology, Faculty of Agriculture, Forestry and Natural Environment, School of Agriculture, Aristotle University of Thessaloniki

PP089 Enumeration of mesophilic aerobes in Greek origin cow's, sheep's and goat's milk.

Dimitrios Arapoglou¹, Christos Eliopoulos¹, Stratos Nikolaou¹, Chrysa Matará¹, Antonia Papadaki¹, Dora Papadimitriou¹, Maria Chondrou¹, Elina Konstantinou¹, Christina Topalidou¹, Kalliopi Peristeri¹, Eythimia Theodoridou¹, Patra Sourri¹

¹Hellenic Agricultural Organization - Dimitra

PP090 Cancelled

PP091 In vitro assessment of the antimicrobial activity of pomegranate residues extracts

Anastasios Kyriazis¹, Nikoleta Ntiantiasi¹, Aikaterini-Marina Markezi¹, George Aggelis¹, Alexandra Lianou¹

¹Department of Biology, University Of Patras

PP092 Impact of Growth Conditions on the Antimicrobial Activity of LAB Strains Against Listeria monocytogenes Scott A and Associated Metabolomic Profiles

Spyros Didos^{1,2}, Orfeas Saitis¹, Konstantina Tsotsouli¹, Konstantinos Koutsoumanis³, Anagnostis Argiriou^{1,2}

¹Institute of Applied Biosciences, Centre for Research and Technology Hellas,

²Department of Food Science and Nutrition, University of the Aegean,

³Department of Food Science and Technology, Aristotle University of Thessaloniki

PP093 The infant microbiota hopscotches between community states toward maturation

Evangelia Intze¹, Monika Schaubek², Mohsen Pourjam³, Klaus Neuhaus³, Thomas C A Hitch⁴, Thomas Clavel⁴, Ilias Lagkouvardos¹

¹Department of Clinical Microbiology, School of Medicine, University of Crete, Heraklion 70013, Greece, ²HiPP GmbH and Co. Vertrieb KG, 85276 Pfaffenhofen, Germany, ³Core Facility Microbiome, ZIEL Institute for Food & Health, Technical University of Munich, 85354 Freising, Germany, ⁴Functional Microbiome Research Group, Institute of Medical Microbiology, RWTH University Hospital, 52074 Aachen, Germany

PP094 Cancelled

PP095 Detection of adulteration in sheep and goat dairy products with Touchdown Polymerase Chain Reaction

Foteini Roumani¹, Maria-Christina Serdari¹, Marilena Dasenaki¹, Athina Markou²

¹Laboratory of Food Chemistry, Department of Chemistry, National and Kapodistrian University of Athens, ²Laboratory of Analytical Chemistry, Department of Chemistry, National and Kapodistrian University of Athens

PP096 Disrupting Foodborne Pathogen Biofilms: The Role of Lactic Acid Bacteria in Modulating AI-2 Quorum Sensing and Microbial Interactions

Dimitra Kostoglou¹, Alexandra Vlachopoulou¹, Georgios Vafeiadis¹, Efstathios (Stathis) Giaouris¹

¹University of the Aegean, Dept. Food Science and Nutrition

PP097 L-Cysteine and its transporter CtaP affect Biofilm Formation, Swimming and Swarming Motility in Listeria monocytogenes

Mahide Muge Yilmaz Topcam¹, Kimon Andreas Karatzas¹

¹University Of Reading

PP098 Arabinoxylans from Zea - A Natural Xylan Source Promoting Stimulation of probiotic bacteria

Phd Candidate Konstantina Karakoula^{1,5}, Anthi Karnaouri², Evangelos Topakas³, Patroklos Vareltsis⁴, Konstantinos Kalogiannis¹

¹Department of Chemical Engineering - University of Western Macedonia,

²Laboratory of General and Agricultural Microbiology, Department of Crop Science, Agricultural University of Athens, ³Industrial Biotechnology & Biocatalysis Group, Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens, ⁴Laboratory of Food and Agricultural Industries Technology, Department of Chemical Engineering - Aristotle University of Thessaloniki, ⁵TUV Austria Labs

PP099 Novel biodegradable, antimicrobial and smart packaging and coatings for increased shelf-life of Mediterranean fish filets (NOVISHPAK Project)

Giorgos Markou¹, Vasilis Valdramidis², Imene Chentir³, Pramod Mahajan⁴, Georgios Klefodimos⁵, Ruben Gatt⁶, Abdeslam Asehraou⁷, Hela Kchaou⁸

¹Institute of Technology of Agricultural Products, Hellenic Agricultural Organization - DIMITRA, ²Department of Chemistry, Laboratory of Food Chemistry, National and Kapodistrian University of Athens, ³Laboratory of Food, Processing, Control and Agri-Resources Valorization, Higher School of Food Science and Agri-Food Industry, ⁴Department of Systems Process Engineering, Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB), ⁵Mediterranean Agronomic Institute of Montpellier (CIHEAM-IAMM), Route de Mende, ⁶Faculty of Science, Department of Metamaterials Unit, University of Malta, ⁷University Mohammed Premier, Faculty of Science, Laboratory of Bioresources, Biotechnology, Ethnopharmacology and Health, Bd. Med VI B.P. 717, ⁸Higher Institute of Applied Biological Sciences of Tunis, University of Tunis El Manar

Poster Presentations

5. ONE HEALTH

PP100 *Cancelled*

PP101 Comparative genomic analysis of *listeria monocytogenes* strains: identification of pathogenicity-related loci and survival mechanisms in food environments

Violeta Pemaj¹, Konstantinos Konandreas¹, Evagelina Korozi¹, Aleksandra Slavko², Konstantinos Panousopoulos², Dimitris Pavlidis², Jonh Kapos², Eleftherios Drosinos¹, Panagiotis Skandamis¹, Konstantinos Papadimitriou¹

¹Laboratory of Food Quality Control and Hygiene, Department of Food Science and Human Nutrition, Agricultural University of Athens, ²School of Agriculture and Foods, Department of Food Science and Technology, University of the Peloponnese

PP102 *Cancelled*

PP103 Challenges in conducting a multicenter clinical study to understand the role of the respiratory microbiome in the pathogenesis of severe community-acquired pneumonia (sCAP).

Ilias Lagkourdos¹, George Hamilos¹, Aristides Eliopoulos²

¹Department of Internal Medicine, School of Medicine, University of Crete, ²Department of Biology, Medical School, National and Kapodistrian University of Athens

PP104 *Cancelled*

PP105 *Cancelled*

PP106 Clostridium Difficile In Carp Farming: Understanding Reservoirs And Transmission Pathways For Effective Control

Ivana Babić¹, Magdalena Hižak², Sabina Mlakar³, Ines Petrić¹, Maja Rupnik³

¹Ruder Bošković Institute, ²Faculty of Agriculture, University of Zagreb, ³National laboratory for Health, Environment and Food

PP107 Genomic analysis of multidrug-resistant, biofilm-forming Staphylococcus haemolyticus isolated from bovine milk

Daniel Ajose¹, Omolola Esther Fayemi¹, Adeyemi Oladapo Aremu¹, Collins Njie Ateba^{1,2}

¹North-West University, ²University of Mpumalanga

6. CLIMATE CHANGE

PP108 Prevalence of Salmonella in fruits and vegetables produced in Europe: A systematic review and meta-analysis

Panagiota Litsa¹, Leonardos Stathas¹, Christina Kamarinou¹, Agapi Doulgeraki¹

¹Laboratory of Food Microbiology and Hygiene, Depart of Food Science and Technology, Aristotle University of Thessaloniki

PP109 Creating an innovative digital platform that combines climate models and food safety data to support risk management in response to climate change, using a multi-stakeholder approach

Anastasia Kapetanakou¹, Chrysoula Tassou¹, Anthoula Argyri¹, Olga Papadopoulou¹, Agapi Doulgeraki², Leonardos Stathas², George Papadopoulos³, Spyros Fountas³, Fady Mohareb⁴, Christopher Brewster⁵

¹Hellenic Agricultural Organization-DIMITRA, ²Aristotle University of Thessaloniki, ³Agricultural University of Athens, ⁴Cranfield University, ⁵Maastricht University

PP110 Microbial communities associated with the sponge Chondrilla nucula under current and expected climate change conditions in the Aegean Sea

Anastasia Gioti¹, Jon Bent Kristoffersen¹, Georgia Tarifa¹, Carmen Rizzo², Bekir Kaşlı³, Elisavet Kaitetzidou^{1,4}, Eva Chatzinikolaou¹, Thanos Dailianis¹

¹Institute of Marine Biology, Biotechnology & Aquaculture, Hellenic Centre For Marine Research, ²Stazione Zoologica Anton Dohrn, Sicily Marine Centre, ³Ludwigshafen University of Applied Sciences, ⁴School of Biology, Aristotle University of Thessaloniki

PP111 Occurrence of Mycotoxins in Plant-Based Meat Products and Assessment of Their Microbiological Quality

Anastasia Lytou¹, Raquel Torrijos³, Christos Zacharopoulos², Anastasia Klempetsani², Aggeliki Stella², Chiara Dall'Asta³, Pantelis Natskoulis¹

¹Elgo Dimitra - Institute of Technology of Agricultural Products, ²University of West Attica - Department of Food Science and Technology, ³University of Parma - Department of Food and Drug

PP112 Microbial responses to climate-driven waterlogging stress: implications for plant-microbe interactions and resilience in white cabbage

Ines Sviličić Petrić¹, Helena Senko, Anastazija Huđ, Sanja Kajić, Ivana Babić, Goran Palijan, Ivana Rajnović

¹Ruder Bošković Institute

PP113 Sample Matcher: A method for comparing and clustering metagenomic samples by taxonomic and functional profiles

Nefeli Kleopatra Venetsianou¹, Konstantinos Kalaentzis¹, Alexios Loukas¹, Christina Damianou¹, Savvas Paragamian^{2,1}, Vincenzo Lagani^{3,4}, Lars Juhl Jensen^{5,6}, Evangelos Pafilis¹

¹Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research, ²Department of Biology, University of Crete, ³Institute of Chemical Biology, Iliia State University, ^{3/P}, Kakuca Cholokashvili Ave, ⁴Biological and Environmental Sciences and Engineering Division (BESE), King Abdullah University of Science and Technology KAUST, ⁵Novo Nordisk Foundation Center for Protein Research, University of Copenhagen, ⁶ZS Discovery, Kongens Lyngby

Poster Presentations

PP114 CCMRI: A classification and curated database of climate change-related metagenomic studies

Alexios Loukas¹, Konstantinos Kalaentzis¹, Nefeli - Kleopatra Venetsianou¹, Christina Damianou¹, Savvas Paragiaman^{1,2}, Vincenzo Lagani^{3,4}, Lars Jensen^{5,6}, Evangelos Pafilis¹

¹Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research, ²Department of Biology, University of Crete, Heraklion, ³Institute of Chemical Biology, Ilia State University, ⁴Biological and Environmental Sciences and Engineering Division (BESE), King Abdullah University of Science and Technology KAUST, ⁵Novo Nordisk Foundation Center for Protein Research, University of Copenhagen, ⁶ZS Discovery

7. CONSERVATION/ RESTORATION

PP115 Distribution, population monitoring, and evaluation of cultivation parameters of Greek wild strains of the endangered edible mushroom species *Pleurotus nebrodensis*

Georgios Koutrotsios¹, Elias Polemis¹, Vasilios Daskalopoulos¹, Savvas Christodoulou¹, Dimitrios Kafkas¹, Georgios I. Zervakis¹

¹Laboratory of General and Agricultural Microbiology, Department of Crop Science, Agricultural University of Athens

PP116 The 'FunDive' Project – Monitoring and mapping fungal diversity for nature conservation through the active involvement of citizen scientists

Elias Polemis¹, Vassileios Daskalopoulos¹, Savvas Christodoulou¹, Georgios Konstantinidis², Dimitrios Sofronis², Vasileios Kaounas², Linos Kottis², Georgios Koutrotsios¹, Georgios Zervakis¹

¹Agricultural University Of Athens, Laboratory Of General And Agricultural Microbiology, ²Greek Mushroom Society

PP117 The diversity of *Agaricus* section *Agaricus* in Greece – First national records and novel taxa

Savvas Christodoulou¹, Elias Polemis¹, Georgios Konstantinidis², Vassiliki Fryssouli¹, Georgios I. Zervakis¹

¹Laboratory of General and Agricultural Microbiology, Department of Crop Science, Agricultural University of Athens, ²Greek Mushroom Society

PP118 *Withdrawn by the author*

PP119 Recovery of soil functions and fertility in a post-quarry rehabilitation chronosequence in Milos island (Greece)

Georgios Leventis¹, Myrto Tsikna¹, Antonios Apostolakis², Dimitra Stathopoulou¹, Cleopatra Garezo³, Georgios Petrakis³, Constantinos Ehaliotis¹

¹Laboratory of Soil Science and Agricultural Chemistry, Agricultural University of Athens, ²Department of Crop Sciences, University of Göttingen, ³Department of Rehabilitation, Imerys Greece SA

8. SYMBIOSIS

PP120 Root-associated fungal and bacterial communities in different oak forest stands

Tina Unuk Nahberger¹, Tanja Mrak¹, Hojka Kraigher¹, Jožica Gričar¹

¹Slovenian Forestry Institute

PP121 FUNCTIONAL DISSECTION OF THE RNAI MACHINERY IN A PLANT-ASSOCIATED BENEFICIAL FUNGUS

Antonia Argyri¹, Loukia-Maria Kellari^{1,2}, Kalliope Papadopoulou¹

¹Department Of Biochemistry and Biotechnology, University Of Thessaly, ²Averofoio Agri-Food Technological Park of Thessaly

PP122 Effect of a beneficial fungal endophyte on the expression of stress-related genes in tomato plants grown under reduced irrigation.

Loukia Maria Kellari¹, Spyros Tsalouchos¹, Athanasios Dalakouras², Kalliope Papadopoulou¹

¹Department of Biochemistry and Biotechnology, University Of Thessaly, ²Hellenic Agricultural Organization Demeter, Institute of Industrial and Forage Crops

PP123 Investigating the role of *Lotus japonicus* b-amylin synthase in nodulation

Jenny Koukara¹, Ioannis Moschopoulos¹, Panagiotis Vletsos¹, Michaela Kafida¹, Kalliope K. Papadopoulou¹

¹Department of Biochemistry and Biotechnology, University Of Thessaly

PP124 Enhancing legume resilience to abiotic stress using native rhizobia: in planta validation and genomic insights

Emmanouil Zoanos^{1,2}, Rodica Efroze¹, Peter Efstathopoulos³, Myrto Tsikna³, Daniela Tsikou², Fotteli Mariangela⁴, Xystrakis Fotios⁴, Ilias Karmiris⁴, Damianidis Christos⁴, Athina Papatheodoulou⁵, Costas Ehaliotis³, Emmanouil Fletmetakis¹

¹Department of Biotechnology, Agricultural University of Athens, ²Department of Biochemistry and Biotechnology, University of Thessaly,, ³Department of Natural Resources Development and Agricultural Engineering, Agricultural University of Athens, ⁴Forest Research Institute, Hellenic Agricultural Organization Dimitra, ⁵Nature Conservation Unit, Frederick University

9.ANTIMICROBIAL RESISTANCE IN THE ENVIRONMENT

PP125 Evaluation of the antibacterial activity of supernatants from submerged cultures of Basidiomycetes against foodborne pathogens

Anthi Karnaouri¹, Georgios Bekiaris², Efstathios Panagou², Georgios Zervakis¹

¹Laboratory of General and Agricultural Microbiology, Department of Crop Science, Agricultural University of Athens, ²Laboratory of Food Microbiology and Biotechnology, Department of Food Science & Human Nutrition, Agricultural University of Athens

Poster Presentations

PP126 Single-Cell analysis of Salmonella enterica reveals heterogeneous responses to antibiotics and food-related stresses

Styliani Dimitra Papagianeli¹, Eirini Karaoglanidou¹, Valentini Santarmaki², Zafeiro Aspidou³, Anastasia Tampakaki², Konstantinos Koutsoumanis¹

¹Aristotle University Of Thessaloniki, ²Hellenic Mediterranean University, ³University of Peloponnese

PP127 EVALUATION OF ANTIMICROBIAL AND ANTIBIOFILM PROPERTIES OF A NEW SCHIFF BASE COMPOUND Cu (II) COMPLEX

Ayşe Seher Birteksöz Tan¹, Aydın Tavman, Mayram Hacıoglu, Fatma Nur Olcay, Ebru Haciosmanoglu-Aldogan

¹Istanbul University, ²Istanbul University-Cerrahpasa, ³Istanbul University, ⁴Istanbul University, ⁵Istanbul University-Cerrahpasa,

PP128 Cancelled

PP129 Standardized One Health surveillance of antibiotic residues and antibiotic and heavy metal resistance in Baltic water environments and wild birds (BALTIC-AMR) - project introduction and preliminary results from Poland

Ewa Kotlarska¹, Grzegorz Siedlewicz², Elias Eger³, Sebastian Guenther⁴, Karsten Becker⁵, Evgeny A. Idelevich⁵, Tanel Tenson⁶, Jonas Bonnedahl⁷, Jonas Waldenström⁸, Katharina Schaufler^{3,9}

¹Institute of Oceanology Polish Academy of Sciences, Genetics and Marine Biotechnology Department, ²Institute of Oceanology Polish Academy of Sciences, Marine Chemistry and Biochemistry Department, ³Helmholtz Institute for One Health, Helmholtz Centre for Infection Research HZI, Epidemiology and Ecology of Antimicrobial Resistance, ⁴University of Greifswald, Pharmaceutical Biology, Institute of Pharmacy, ⁵University Medicine Greifswald, Friedrich Loeffler-Institute of Medical Microbiology, ⁶University of Tartu, Institute of Technology, ⁷Linköping University, Department of Biomedical and Clinical Sciences, ⁸Linnaeus University, Department of Biology and Environmental Science, ⁹University Medicine Greifswald

PP130 Public health risk assessment of the presence of ESKAPE pathogens in environmental samples

Anna Georgiou¹, Nafsika Petraki¹, Iosifina Gounaki¹, Danae Venieri¹

¹Technical University Of Crete

PP131 A new whole genome sequencing analysis tool for risk assessment of microbial pesticides

Stavroula Makri¹, Joao Pedro Saraiva², Sotirios Vasileiadis¹, Alexandre Bartholomäus⁶, Francisco Cerqueira⁴, Valérian Lupo⁷, Antonis Chatzinotas^{2,9}, Kostas Papagiannitsis³, Brader Gunter⁴, Stephan Declerck⁵, Luc Cornet⁸, Kwnstantina Rousidou¹, Dimitrios Karpouzas¹

¹University of Thessaly, Department of Biochemistry and Biotechnology,

²Department of Applied Microbial Ecology, Helmholtz Center for Environmental Research - UFZ, ³University of Thessaly, Department of Medicine, ⁴Austrian Institute of Technology, ⁵UCLouvain, Earth and Life Institute, Applied Microbiology, Mycology, ⁶GFZ German Research Centre for Geosciences, Section Geomicrobiology, ⁷UCLouvain, Earth and Life Institute, Applied Microbiology, Mycology, BCCM/MUCL, ⁸University of Liège, BCCM/ULC, InBioS—Molecular Diversity and Ecology of Cyanobacteria, ⁹Leipzig University, Institute of Biology

PP132 Direct cold atmospheric plasma treatment reduces Escherichia coli and Listeria monocytogenes biofilm viability on catheter surfaces via stress responses

Styliani Roufou¹, Konstantina Avdala¹, Oleksandr Galmiz², Konstantinos-Panagiotis Masouras^{1,3}, George Katsaros³, Zdenko Machala², Vasilis P. Valdramidis¹

¹University of Athens, Faculty of Science, Department of Chemistry, 15772, Athens, Greece, ²Division of Environmental Physics, Faculty of Mathematics, Physics and Informatics, Comenius University in Bratislava, Mlynská dolina, 84248 Bratislava, Slovakia, ³Institute of Technology of Agricultural Products, Hellenic Agricultural Organization—DEMETER, Lykovrissi, 14123, Attica, Greece

PP133 N-chlorotaurine as a Microbicidal Agent Against Mono and Multispecies Biofilms of Staphylococcus aureus and Pseudomonas aeruginosa

Mayram Hacıoglu¹, Fatima Nur Olcay¹, Muzeyyen Aydin¹, Markus Nagl²

¹Istanbul University, Department of Pharmaceutical Microbiology, ²Institute of Hygiene and Medical Microbiology, Medical University of Innsbruck

PP134 Cancelled

PP135 From the Dead to the Soil: Exploring Antibiotic Resistance in Burial Grounds

Patrycja Tarnawska¹, Weronika Szuba¹, Maciej Walczak¹

¹Nicolaus Copernicus University in Toruń

GENERAL INFORMATION



Congress Dates

22 September - 24 September 2025



Venue

Concert Hall of Thessaloniki, Greece
25 Martiou &, Thessaloniki 546 46



Secretariat Opening Hours

The Conference Secretariat will be operating in the Conference venue according to the following time schedule for the provision of support to Participants, Speakers and Sponsors.

Monday, 22 September 2025	→	08.30 – 20.30
Tuesday, 23 September 2025	→	08.30 – 20.00
Wednesday, 24 September 2025	→	08.30 – 17.00



Official Language

The official language of the Conference is English.
No interpretation will be provided.



Scientific Program Sessions

For the smooth flow of the scientific program, it is kindly requested that: Speakers limit their lecture within the predetermined duration and abstract presenters (oral presentations) within 15 minutes in total. Moderators adhere to the time frame of the session they are chairing, ensuring the necessary time for discussion, and encouraging questions from the audience.



Social Activities

WELCOME RECEPTION

Date: 22 September 2025 **Venue:** Concert Hall of Thessaloniki
Time: 20.30



Speakers Preview Desk

All Speakers are kindly requested to have their presentations available in electronic format (USB sticks). The use of personal computers and tablets is not allowed. All presentations will be delivered at least two (2) hours before the start of the session to the authorized personnel that staffs the Speakers Preview Desk, which will be located at the Conference Venue for the whole duration of the Conference.

GENERAL INFORMATION



Smoking Policy

Smoking is not allowed at the venue; the meeting is a non-smoking event!



Certificates

Certificates of attendance will be shared electronically to all registered participants after the completion of the evaluation form.



Badges

Badges will be provided to all registered participants by the Conference Secretariat. Conference badges are mandatory for admission and access to the meeting hall and exhibition, as well as all congress functions. Please wear your badge visibly at all times.



Disclaimer

The Organizing Committee and the PCO, AFEA Congress accept no liability for any personal injury, loss or damage of property or additional expenses incurred to congress participants either during the congress or as a result of delays, strikes or any other circumstances.



Currency – Credit Cards

Greece is a member of the eurozone, the group of EU countries that use Euro (€). No other currency is accepted. Major cities of Greece, as Thessaloniki, are cash-free to a great extent and the use of debit and credit cards is very widespread. All major credit cards are accepted in almost all hotels, shops and restaurants. Stickers in the front windows will advise you as to which cards are accepted. Banks are open from Monday to Thursday, 8:00-14:30 hrs and on Friday, 8:00-14:00hrs; on Saturdays and Sundays they are closed. Using an ATM is most probably the best way to get some cash in euro while you are traveling in Greece. There are no set rules when it comes to tipping in Greece. It is recommended to leave a small tip for each service.

GENERAL INFORMATION

About the host city

Thessaloniki, is Greece's second tier city and capital of the region of Central Macedonia. The city is located on the Thermaic Gulf at the northwestern corner of the Aegean Sea and is a lively and generous urban center that it is at the same time historic and avant-garde.

Thessaloniki is the perfect destination for the Meeting Industry to connect with culture: meeting planners can opt between interesting, high quality venues, events attendants can enjoy a walk to the waterfront or a quick glimpse to the main attractions and capture the easygoing atmosphere and charm of the city.

Thessaloniki is also the optimal destination to connect with an emerging entrepreneurial community, to share knowledge with outstanding academics, to liaise with a dynamic startup ecosystem, to explore contemporary art and modern cultural creation through festivals and art fairs.



Arts & Culture

Thessaloniki is a city with a continuous history of 2.300 years, with traces and monuments of the Roman, early Christian, Byzantine, Ottoman and Jewish heritage.

The once mighty Byzantine Empire that ruled over the eastern Mediterranean for more than a thousand years is lost centuries ago, but the city of Thessaloniki still faithfully guards some of the most characteristic remnants. Today, visitors to the city have the unique opportunity to explore the Byzantine civilization through Thessaloniki's mediaeval masterpieces, which are UNESCO World Heritage Sites, 15 in total.

Museums and monuments, architectural landmarks and modern art installations, open-air archeological sites, old warehouses in the Thessaloniki Port Pier, create a charming blend of history and culture, merging east and west, traditional and modern, past and present.

A visit to Thessaloniki, a journey through time!

Sightseeing

As Thessaloniki is a town with a long history, there are many sites to visit. The main sites of Thessaloniki date from Roman and Byzantine times, and include the Roman Arch of Galerius, the Monument of Rotonda, the Church of Saint Demetrius and the Medieval Castle. The symbol - and most important monument in Thessaloniki - is the White Tower, found at the famous Beach Promenade of the city. As Thessaloniki is geographically located in a central spot of the country, it is nice as an excursion base to places like Halkidiki, Kavala, and Meteora.

Getting around

If you are wondering how to get around in Thessaloniki city center, you should know that the best way of moving around is on foot, since the most important tourist attractions are located within short walking distance in the center of the city. Historic Thessaloniki city center offers many UNESCO World Heritage Sites and museums with themes ranging from Archeology to Contemporary Sports.

GENERAL INFORMATION

Getting around in Thessaloniki by bus is perfect since no city point is more than 30 minutes away from the center by public transportation. The Organization of Urban Transportation of Thessaloniki (OASTH) is a public bus provider that connects the entire Thessaloniki via 224 buses and 75 bus routes.

Gastronomy

A multitude of influences enriched Thessaloniki's cuisine during the centuries with different products and cultures, eating habits and techniques, leading to delicious results. All kinds of travelers with different gastronomy expectations will meet their expectations in Thessaloniki.

Get acquainted with the great products of the Greek land, produced around Thessaloniki and the Thermaikos gulf, by visiting the colorful open markets in the town's center. Taste local delicacies in the typical, traditional, casual eateries, "tavernas or mezedopolia". A great tribute is given also to fine dining and executive seafood restaurants in unique locations, 5 star hotel's terraces, gardens and balconies by the seafront.

Modern delicatessens, small specialty shops and new age wine & cocktail bars are created intensely by very well informed food & drink enthusiasts.

Shopping

Shopping in Thessaloniki Greece is a pleasure. There's excellent shopping for fashions, specialty foods, antiques, books, and unique souvenirs. For many visitors from the Balkans, Thessaloniki is a major shopping destination.

Shopping Hours

- Major outlets Monday-Friday. 9:00-21:00
- Small shops Monday & Wednesday 9:00 to 15:30
- Friday, 9:00 to 20:30 Saturday 9:00 to 15:30

Weather

Typical Mediterranean with warm summers, mild winters and an annual average of 300 days of sunshine, the climate is yet another one of the advantages the city offers to the visitors. The generous touch of the bright Mediterranean sun

and the gentle Aegean Sea breeze attract locals and visitors to the long waterfront all year round and invite them to enjoy the nearby beaches from late spring till early fall.

The airport

Thessaloniki Airport Makedonia

Thessaloniki Airport, modern and smarter after an extensive renovation, opened its doors to passengers in February 2021, expanded, fresh and modernized.

The enhancement changes implemented at the airport include a new terminal and remodeling and expansion of existing terminal by 30,998m². Thessaloniki Airport has double the security lanes, while the check-in points have increased by 47% and the departure gates have jumped from 16 to 24.

The port of Thessaloniki

The port of Thessaloniki is the largest transit-trade port in the country and serves the needs of approximately 15 million inhabitants of its international mainland.

The installations include 6 piers suitable for servicing all types of cargo as well as passenger traffic, occupying a total space of 1.5 million m². It links directly to the national and international road network, bypassing thus city entrance.

Pier 1 is one of the most favorite hangouts for local. It houses the Museum of Photography, the Experimental Center for the Arts, the Cinema Museum and the Aristotle Museum of Natural History. Thessaloniki International Film Festival hosts here its busy and vibrant visitors' center and screenings during its annual event.

Transportation

Network includes new buses, pollution-free trolleys and taxis that are inexpensive by European standards.



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From Microbial Ecology to Environmental Biotechnology: Insights from MBK-CEESME 2025



Mikrobiokosmos

We invite contributions that demonstrate how microorganisms and biotechnological approaches can address environmental challenges and support sustainability.

Topics of interest include:

- **Biotechnology for sustainable agriculture and forestry**
- **Environmental microbiology and bioremediation**
- **Waste valorization and industrial biotechnology**
- **Microbial genomics and functional ecology**
- **Climate change, environmental risk, and sustainability**

By integrating fundamental ecological insights with applied biotechnological innovations, this Collection aims to highlight the transformative role of microbial biotechnology in environmental

protection, sustainable agriculture, waste management, and climate resilience.

Guest Editors:

Evangelos Topakas, PhD, National Technical University of Athens, Greece

Jasmina Nikodinovic-Runic, PhD, Jasmina Nikodinovic-Runic, PhD





Thank you for attending

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