CURRICULUM VITAE

Dr. Eleftheria Katsivela, Associate Professor

HELLENIC MEDITERRANEAN UNIVERSITY

School of Engineering
Department of Electronic Engineering
Laboratory of Environmental Technologies and Applications





Romanou 3, GR-73133 Chania - Crete - Greece

Tel.: 0030 28210 23071 Fax: 0030 28210 23003 E-mail: katsivela@hmu.gr

https://ee.hmu.gr/en/department/staff/

http://scholar.google.ca/citations?view_op=list_works&hl=en&user=asSUZ5YAAAAJ

https://orcid.org/0000-0003-0955-2218

https://www.scopus.com/authid/detail.uri?authorId=56211296100

CURRICULUM VITAE

Dr. Eleftheria Katsivela, Associate Professor

Family name: Katsivela First name: Eleftheria

Birthdate: September 17, 1961, Athens, Greece

Nationality: Greek and German

University education

1980-1981 Studienkolleg, University of Hannover, Hannover, Germany 1981-1988 Degree in Biology, Technical University of Braunschweig,

Braunschweig, Germany

Major subject: Biochemistry and Biotechnology

Minor subject: Microbiology

Diploma thesis: Influence of biosurfactants on the growth of microorganisms

Ph.D.

Apr. 1988 - Febr. 1992 Ph.D. Degree in Natural Sciences (Dr. rer. nat.), Technical

University of Braunschweig, Braunschweig, Germany

Ph.D. Dissertation: Ustilago maydis ATCC 14826: Production, Isolation,

Characterization and Immobilization of two Lipases

Academic Experience

Nov. 1992 - Dec. 1995 **Postdoctoral Fellow**

National Research Centre for Biotechnology, Division of

Microbiology, Department of Microbial Ecology, Braunschweig, Germany (*renamed as Helmholz Centre for Infection Research*)

Project: Development and automation of separation techniques for the analysis of the Low Molecular Weight (LMW) RNA (5S

rRNA and tRNA) by the use of capillary electrophoresis.

The establishment of a data base of LMW RNA Profiles (tRNAs and 5S rRNA) for the identification and classification of

bacteria.

Jan. 1996 - Mai 1999 Research Scientist

National Research Centre for Biotechnology, Division of

Microbiology, Department of Biodegradation, Braunschweig, Germany (*renamed as Helmholz Centre for Infection Research*) Project: Enrichment and isolation of new bacterial strains with

novel degradation capabilities and clarification of their

metabolic pathways. In particular, clarification of pathway steps

in the biodegradation of chlorinated nitroaromatics and

chlorinated aliphatics, and technical application of microorganisms in the management and detoxification of industrial wastes.

Jan. 1999 – Dec. 2001

Senior Research Scientist and Project Leader

Technical University of Crete, Department of Environmental Engineering, Laboratory of Biochemical Engineering and Environmental Biotechnology, Chania, Greece.

Projects:

- 1. Biodegradation of petroleum hydrocarbons in oil refinery waste sludge.
- 2. Enhanced biodegradation of Polycyclic Aromatic Hydrocarbons (PAHs) in polluted soil and seawater of Greek coastal areas.

Oct. 2002 - Jan. 2003

Senior Research Scientist

Technical University of Crete, Department of Environmental Engineering, Laboratory of Atmospheric Particulate Matter, Chania, Greece.

Project:

Integrated Exposure Management Tool Characterizing Air Pollution-Relevant Human Exposure in Urban Environment.

Visiting Associate Professor

Technical University of Crete, Department of Environmental Engineering, Chania, Greece.

Jan. 2003-June 2019

2000-2002

Associate Professor

Technological Educational Institute of Crete, Department of Environmental and Natural Resources Engineering, Division of Environmental Technology, Laboratory of Environmental Chemistry and of Biochemical Processes, Chania, Greece.

Since June 2019

Associate Professor

Hellenic Mediterranean University, Department of Electronic Engineering, Division of Electronics and Applications, Laboratory of Environmental Technologies and Applications, Chania, Greece.

Teaching Experience

1988-1991

Institute of Biochemistry and Biotechnology, Technical University of Braunschweig, Braunschweig, Germany. Maintenance of laboratory courses in

"Biochemistry and Biotechnology" for undergraduate students ($6^{th} - 8^{th}$ semester level) of Biology, Chemistry and Biotechnology sciences.

Technical University of Crete, Department of Environmental Engineering, Chania, Greece.

Lectures in

- 1. "Environmental Microbiology" (Theory) for undergraduate students (5th semester level), and
- 2. "Management and Treatment of Toxic and Hazardous Wastes" (Theory) for under and postgraduate students (8th semester and master levels).

2000-2002

Since 2001

Department of Environmental and Natural Resources Engineering, TEI-Technological Educational Institute of Crete. Lectures in

- 1. "Engineering Thermodynamics" (Laboratory) for undergraduate students (2nd semester level),
- 2. "Environmental Microbiology" (Theory and Laboratory) for undergraduate students (2nd semester level)
- 3. "Environmental Chemistry" (Theory) for undergraduate students ($3^{rd} 5^{th}$ semester level).
- 4. "Management and Treatment of Municipal Wastewater" (Theory and Laboratory) for undergraduate students (5th semester level),
- 5. "Atmospheric Pollution" (Theory and Laboratory)for undergraduate students (6th semester level),
- 6. "Air Quality Control Technology" (Theory and Laboratory) for undergraduate students (7th semester level), and
- 7. Supervision of diploma theses

Department of Electronic Engineering, Hellenic Mediterranean University.

Lectures in the Undergraduate Program "Environmental and Natural Resources Engineering":

- 1. "Environmental Microbiology" (Theory and Laboratory) for undergraduate students (2nd semester level)
- 2. "Management and Treatment of Municipal Wastewater" (Theory and Laboratory) for undergraduate students (5th semester level),
- 3. "Atmospheric Pollution" (Theory and Laboratory) for undergraduate students (6th semester level),
- 4. "Air Quality Control Technology" (Theory and Laboratory) for undergraduate students (7th semester level), and
- 5. Supervision of diploma theses

Lectures in the Undergraduate Program "Electronic Engineering":

- 1. Management and Treatment of Municipal Wastewater" (Theory and Laboratory) for undergraduate students (8th semester level),
- 2. "Air Quality Control Technology" (Theory and Laboratory) for undergraduate students (9th semester level)

Participation in workshops / special training

Aug. - .Sept. '94 Participant in Workshop: International Summer School on

Molecular and Cell Biology "A World of RNA: Structure and Function", Spetsai, Greece.

Participation at the advanced vocational training for a project leader and certified biological safety expert for gene technology, GBF, Braunschweig, Germany.

Since 2019

Oct. '96

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Participation in European, Greek and German Projects

1987 – 1991	"Neue Einsatzmöglichkeiten nativer Öle und Fette als Chemierohstoffe". Project of the German Ministry for Research and Development (BMBF - Bundesministerium für Forschung und Technologie, Förder-Nr. 03 19038A).
1992 – 1995	Principal Investigator "High Resolution Automated Microbial Identification and Application to Biotechnologically Relevant Ecosystems". European Community Project. (Grant No. BIOT CT-910294).
1996 - 1999	<u>Principal Investigator</u> "Extractive Membrane Bioreactors for Detoxification of Chemical Industry Wastes". European Community Project (Grant No. PL 950176).
1999 – 2001	<u>Principal Investigator</u> "Biodegradation of Polycyclic Aromatic Hydrocarbons and Sulfurous Heterocyclic Compounds". Greek Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. (Grant No. 97EL-75).
1999 – 2001	Principal Investigator "Enhanced Biodegradation of Polycyclic Aromatic Hydrocarbons at Polluted Coastal sites in Greece". Bilateral S&T Cooperation Project between the Hellenic Republic and the Federal Republic of Germany (Grant No. A.P. 67/4-1-2000).
2000 – 2001	"Biotechnological Utilization of Microorganisms for the Generation of Products with of High Added Value, Diagnostics, Treatment of Foods and Wastes". Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. (EPET II Grant No. 98 AD-1).
2002 – 2005	"Urban Exposure" (Integrated Exposure Management Tool Characterizing Air Pollution-Relevant Human Exposure in Urban Environment). European Community Project (Grant No. EVK4-CT-2002-00090).
2003-2004	"Characterization of active microbial communities degrading petroleum waste sludge for remediation of contaminated soils" Bilateral S&T Cooperation Project between the Hellenic Republic and the Federal Republic of Germany (Grant No. 9513514).
2003-2005	"Reform of Undergraduate Study Programme – Department of Natural Resources and Environment", TEI-Technological Educational Institute of Crete". Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. EPEAEK II, Action 2.6.1.: Programme for the Protection of the Environment and Environmental Education (Grant No. 348/18.12.2003).
2004-2006	"Contribution of Biogas Emitted from Landfills to the Climate Change, the Atmospheric Pollution, and the Development of Renewable Energy Resources". Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. EPEAEK II, Programme Pythagoras I – Support of Research Groups at the University of Aegean (Grant No. MIS 89200).

2005-2006 2005-2006 2005-2006 2005-2006 2005-2006 2010-2013

2012-2015

2012-2015

"Preventive Conservation Strategies for Protection of Organic Objects in Museums, Historic Buildings and Archives" (MASTER). European Community Project (Grant No. EVK4-CT-2002-00093).

"Modeling of Particulate Matter Pollution—Production of New Particles in the Mediterranean Area". Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. EPEAEK II, Program Pythagoras II — Support of Research Groups at the University of Aegean (Grant No. MIS 97481).

"Quantification of Atmospheric Emissions of Particulate Matter from Natural Sources and their Influence to the Ambient Air Quality in Greece". Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. EPEAEK II, Programme Pythagoras II - Support of Research Groups at the Technical University of Crete (Grant No. MIS 97511).

"Study on the Quality of the Water of the Broader Aquiferous System of Agyia Springs, in Western Crete". Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. EPEAEK II, Programme Archimedes II - Support of Research Groups at the Technological and Educational Institute of Crete (Grant No. MIS 10007).

"Development of a Research Methodology for the Determination of the Air Quality in Air Conditioned Indoor Places". Project of the General Secretariat for Research & Technology of the Greek Ministry for Development. EPEAEK II, Program Archimedes II – Support of Research Groups at the Technological and Educational Institute of Chalkida (Grant No. MIS 99997).

"Vocational Practice of Students at the Technological and Educational Institute of Crete" Project of the Greek Ministry of Education, Lifelong Learning, and Religious Affairs. Framework "Employment and Carrier Structure (ECT) for the Technological and Educational Institutes Vocational Practice - Education and Lifelong Learning" [Subproject 1: "Financial Support for Vocational Practice of Students at the Technological and Educational Institute of Crete" (Grant No. MIS 299964).

"Investigation of the Environmental Factors effects on Organic Materials constituting the Natural and Cultural Heritage (INVENVORG)". Thales Programme co-financed by Greek National Founds and the European Union. National Strategic Reference Framework (NSRF) 2007-2013. Coordinator: Technological and Educational Institute of Athens (Grant No. MIS-376986).

"Comparative Study of the Accumulation of Heavy metals by Freshwater and Marine Phytoplankton. (A) heavy metal-protein interaction mechanisms. (B) Use of algae as biomarkers for heavy metal pollution and / or as bioremediation systems". Programme Archimedes III, Support of Research Groups at the Technological Educational Institutes co-financed by Greek

National Founds and the European Union. National Strategic Framework (NSRF) 2012-2015. Technological and Educational Institute of Crete (Grant No. MIS 380353).

2014-2015

"Management and Protection of Sensitive Art Works in Museums from Air Pollutants (MOUSEIA)". European Territorial Cooperation Programme Greece - Cyprus 2007-2013 (INTERREG Project) co-financed through the European Regional Development Fund (ERDF 80%) and Greek National Founds (20%) in the framework of National Strategic Reference 2007-2013. Coordinator Framework (NSRF) University of Crete, 2014-2015 (Grant No. MIS 901065).

November 2015

External Evaluator of the Project "Archimedes III, Support of Research Groups at the Technological Educational Institute of Mesolongi", Subproject 01 "Central Action". Programme Archimedes III, Support of Research Groups at Technological Educational Institutes co-financed by Greek National Founds and the European Union. National Strategic Reference Framework (NSRF) 2012-2015. Coordinator: Technological and Educational Institute of Western Greece (Grant No. MIS 383566).

2018-2020

«Protection and Promotion of the Cultural Heritage of Greece and Cyprus in Museum Collections –MOUSEIA II – No. 81717» European Territorial Cooperation Programme Greece - Cyprus 2014-2020 (INTERREG V-A Project) co-financed through the European Regional Development Fund (ERDF 85%) and Greek National Founds (15%) in the framework of National Strategic Framework Reference (NSRF) 2014-2020. Coordinator Technical University of Crete, 2017-2020 (No. 81717).

2020-2022

"National Network on Climate Change and its Impacts -Climpact" which is implemented under the sub-project 3 of the project "Infrastructure of national research networks in the fields of Precision Medicine, Quantum Technology and Climate Change", funded by the Public Investment Program of Greece, General Secretary of Research and Technology/Ministry of Development and Investments.

Research Interests

- Atmospheric pollution and air quality control
- Chemical and microbiological analysis of airborne particulate matter
- Applied and Environmental Microbiology.
- Microbial Ecology and Environmental Biotechnology (Biotechnological Applications in the Environment).
- Bioremediation of recalcitrant pollutants.
- Development of effective biotechnological processes to remediate sites polluted with toxic chemicals.
- Development of new innovative technologies for the biological treatment of refinery waste sludge in soil and remediation of petroleum pollution in the sea.

- Waste water treatment in bioreactors.
- Microbial production of novel biotechnological products (such as biosurfactants, enzymes and other proteins, diagnostics).
- Biodegradation of toxic organic compounds (polycyclic aromatic and heterocyclic hydrocarbons, chloronitroaromatics and chloroaliphatics).
- Elucidation of catabolic activities and metabolic pathways of bacteria with degradation capabilities for toxic chemicals.
- Identification of microbial potential for the degradation of recalcitrant xenobiotics.
- Microbial taxonomy and community structure analysis.

Practical Experience with analytical techniques

Liquid Chromatography, Fast Protein Liquid Chromatography, High Pressure Liquid Chromatography, Gas Chromatography – Flame Ionization Detector, Gas Chromatography - Mass Spectrometry, Thin Layer Chromatography, preparative und analytical SDS- DISK- und native electrophoresis, Isoelectric Focussing Electrophoresis, Capillary Electrophoresis, Atomic Absorption Spectroscopy, Microscopy, UV/VIS Spectrophotometry, Polymerase Chain Reaction, Low-Molecular-Weight RNA Fingerprinting, 16S rDNA Terminal Restriction Fragment Length Polymorphism Fingerprinting.

Environmental Analysis

Air Quality Control, Water and Wastewater Control, Microbial Identification

Professional Memberships

Greek Society of Biochemistry and Biophysics (EBBE) (since 1994) Greek Society of Biological Science (EEBE) (since 1996) Greek Biotechnology Network (since 2000) European Federation of Biotechnology (μέλος από το 2000)

Referee in Peer Reviewed Journals

Water, Air & Soil Pollution: Focus From 2002: From 2003: **Biodegradation** From 2004: **Environment International** From 2004: Journal of Chromatography European Journal of Soil Biology From 2006: From 2006: Organic Geochemistry Ecotoxicology and Environmental Safety From 2006: Biochemical Engineering Journal From 2007: Archive of Environmental Protection From 2007: Ecotoxicology and Environmental Safety From 2007: From 2008 Journal of Applied Microbiology From 2008: Journal of Industrial Microbiology & Biotechnology From 2008 Desalination From 2009 Water Research From 2009 Journal of Aerosol Science

From 2009 Chemosphere

From 2009 Journal of Hazardous Materials

Administrative Experience

1996 – 1999	Director of the Laboratory of Biotechnology of the Research Group of Biodegradation, Division of Microbiology, Department of Microbial Ecology, <i>GBF</i> - National Research Center for Biotechnology, Braunschweig, Germany (<i>renamed as Helmholz Centre for Infection Research</i>).
1999 – 2001	Responsible for the formation of the Research Group of Environmental Microbiology at the Laboratory of Biochemical Engineering and Environmental Biotechnology, Department of Environmental Engineering, Technical University of Crete, Chania, Greece.
2004 – 31-08-2022	Director of the Laboratory of Environmental Chemistry and Biochemical Processes at the Department of Environmental and Natural Resources Engineering, Technological Educational Institute of Crete, Chania, Greece.
2003-2004, 2007-2008 &	
2010-2013, 2014-2018	Head of the Section of Environmental Technology at the Department of Environmental and Natural Resources
	Engineering, Technological Educational Institute of Crete,
	Chania, Greece.
2008-2010	Head of the Department of Environmental and Natural
	Resources Engineering, Technological Educational Institute of Crete, Chania, Greece.
2009-2010, 2012-2013 &	Crete, Chama, Greece.
2015-2016	Member of the Teaching Course Committee of the Department
2013-2010	of Environmental and Natural Resources Engineering, Technological Educational Institute of Crete, Chania, Greece.
2004-2005, 2010-2014 &	reclinological Educational histitute of Crete, Chaina, Greece.
01/09/2018-07/05/2019	Deputy Head of the Department of Environmental and Natural
01/07/2018-07/03/2017	Resources Engineering, Technological Educational Institute of Crete, Chania, Greece.
2011 - 2019	Member of the Internal Evaluation Committee of the
2011 2019	Department of Environmental and Natural Resources
	Engineering, Technological Educational Institute of Crete, Chania, Greece.
2003 - 2022	Member of a large number of departmental, faculty and university level committees (e.g. new staff selection committees,
	library committee, Department and Faculty representative etc).
01/09/2020-31/08/2022	Deputy Head of the Department of Electronic Engineering, Hellenic Mediterranean University, Chania, Greece.

Languages

Greek (native language), German (fluent), English (fluent) and French (basic)

PUBLICATIONS (TO JANUARY, 2018)

REFEREED PUBLICATIONS IN JOURNALS

- 1. S. Lang, E. Katsiwela and F. Wagner. 1989. Antimicrobial Effects of Biosurfactants. Fat Science Technology 91 (9), 363-366. DOI: 10.1002/lipi.19890910908
- 2. E. Katsivela, F. Kleppe, S. Lang, and F. Wagner. 1995. *Ustilago maydis* lipase; I. Hydrolysis and Ester-synthesis Activities of Crude Enzyme Preparation. *Enzyme and Microbial Technology* 17, 739-745. DOI 10.1016/0141-0229(94)00127-D
- 3. E. Katsivela and M.G. Höfle. 1995. Separation of Transfer RNA and 5S Ribosomal RNA using Capillary Electrophoresis. *Journal of Chromatography A* 700, 125-136. DOI: 10.1016/0021-9673(94)01091-R
- **4. E. Katsivela and M.G. Höfle**. 1995. Low-Molecular-Mass RNA Fingerprinting of Bacteria by Capillary Electrophoresis using Entangled Polymer Solutions. *Journal of Chromatography A* 717, 91-104. DOI 10.1016/0021-9673(95)00628-5
- **E. Katsivela, V. Wray, D. H. Pieper, and R.-M. Wittich**. 1999. Initial Reactions in the Biodegradation of 1-Chloro-4-nitrobenzene by a Newly Isolated Bacterium, Strain LW1. *Applied and Environmental Microbiology* 65 (4), 1405-1412. DOI: 10.1128/aem.65.4.1405-1412.1999
- **6. E. Katsivela, D. Bonse, A. Krüger, C. Strömpl, A. Livingston and R.-M. Wittich.** 1999. An Extractive Membrane Biofilm Reactor for Degradation of 1,3-Dichloropropene in Industrial Waste Water. *Applied Microbiology and Biotechnology* 52, 853-862. DOI: 10.1007/s002530051603
- 7. A. Livingston, D. Bonse, K. Hughes, E. Katsivela and R.-M. Wittich. 1999. Extraktiver Biofilmreaktor zum Abbau lipophiler Schadstoffe. *WLB Wasser*, *Luft und Boden* 10, 36-38.
- **8. E. Katsivela, E. R. B. Moore and N. Kalogerakis**. 2003. Biodegradation of Aliphatic and Aromatic Hydrocarbons: Specificity among Bacterial Isolated from Refinery Waste Sludge. *Water, Air & Soil Pollution: Focus* 3 (3), 103-115. DOI: 10.1023/A:1023938003361
- **9. E. Katsivela, E. R. B. Moore and N. Kalogerakis.** 2004. Monitoring of the Degradation Activities and the Diversity of the Microbial Community Degrading Petroleum Waste Sludge. *Water, Air & Soil Pollution: Focus* 4 (4), 75-85. DOI: 10.1023/B:WAFO.0000044788.74647.27
- **10. E. Katsivela, E. R. B. Moore, D. Maroukli, C. Strömpl, D. Pieper and N. Kalogerakis.** 2005. Bacterial Community Dynamics during in-situ Bioremediation of Petroleum Waste Sludge in Landfarming Sites. *Biodegradation* 16, 169-180. DOI 10.1007/s10532-004-4883-y

- 11. N. Lydakis-Simantiris, D. Pentari, E. Katsivela, D. Koutoulakis, V. Perdikatsis and A. Pavlaki. 2006. A Chemical and Microbiological Study of the Water of the Agyia Springs in Western Crete. WSEAS Transactions on Environment and Development 6 (2), 816-822. ISSN 1790-5079.
- **12. S. Karra and E. Katsivela.** 2007. Microorganisms in Bioaerosol Emissions from Wastewater Treatment Plants during Summer at a Mediterranean Site. *Water Research* 41, 1355-1365. DOI 10.1016/j.watres.2006.12.014
- 13. M. Lazaridis, V. Aleksandropoulou, J. E. Hansen, C. Dye, K. Eleftheriadis and E. Katsivela. 2008. Inorganic and carbonaceous components in indoor/outdoor particulate matter in two residential houses in Oslo, Norway. *Journal of the Air and Waste Management Association* 58 (3), 346-356. DOI 10.3155/1047-3289.58.3.346
- 14. M. Lazaridis, L. Dzumbova, I. Kopanakis, J. Ondracek, T. Glytsos, V. Aleksandropoulou, A. Voulgarakis, E. Katsivela, N. Mihalopoulos and K. Eleftheriadis. 2008. PM₁₀ and PM_{2.5} Levels in the Eastern Mediterranean (Akrotiri Research Station, Crete, Greece). Water Air Soil Pollution 189, 85-101. DOI 10.1007/s11270-007-9558-y
- **15. A. Theophanoudi, C. Diakaki and E. Katsivela.** 2009. Environmental and Socio-Economic Aspects of the Operation of Iindustrial Regions: The Case Study of the Industrial Area of Alexandroupolis (Greece). *Water Air Soil Pollution: Focus* 9, 79-88. DOI: 10.1007/s11267-008-9199-1
- 16. N. Lydakis Simantiris, D. Riga, E. Katsivela, D. Mantzavinos and N. P. Xekoukoulotakis. 2010. Disinfection of Spring Water and Secondary Treated Municipal Wastewater by TiO₂ Photocatalysis. *Desalination* 250 (1), 351-355. **DOI:** 10.1016/j.desal.2009.09.055
- 17. L. Raisi, M. Lazaridis, and E. Katsivela. 2010. Relationship between Airborne Microbial and Particulate Matter Concentrations in the Ambient Air at a Mediterranean Site. *Global Nest Journal* 12 (1), 84-91. DOI: https://doi.org/10.30955/gnj.000694
- 18. I. Kopanakis, N. Lydakis Simantiris, E. Katsivela, D. Pentari, P. Zarmpas, N. Mihalopoulos, and M. Lazaridis. 2010. Size Distribution and Chemical Composition of Airborne Particles at Akrotiri Research Station, Crete, Greece. *Global Nest Journal* 12 (1), 54-62. DOI: https://doi.org/10.30955/gnj.000687
- 19. I. Kopanakis, K. Eleftheriadis, N. Mihalopoulos, N. Lydakis Simantiris, E. Katsivela, D. Pentari, P. Zarmpas, and M. Lazaridis. 2012. Physico-chemical Characteristics of Particulate Matter in the Eastern Mediterranean. *Atmospheric Research* 106, 93-107. DOI: 10.1016/j.atmosres.2011.11.011
- **20. L. Raisi, V. Aleksandropoulou, M. Lazaridis, and E. Katsivela.** 2013. Size Distribution of Viable, Cultivable, Airborne Microbes and their Relationship to Particulate Matter Concentrations and Meteorological Conditions in a Mediterranean Site. *Aerobiologia* 29, 233-248. DOI: https://doi.org/10.1007/s10453-012-9276-9.

- **21. M.** Lazaridis, E. Katsivela, I. Kopanakis, L. Raisi and G. Panagiaris. 2015. Indoor/Outdoor Particulate Matter Concentrations and Microbial Load in Cultural Heritage Collections. *Heritage Science* 3, 34. DOI: https://doi.org/10.1186/s 40494-015-0063-0.
- **22. E. Katsivela, E. Latos, L. Raisi, V. Aleksandropoulou, and M. Lazaridis**. 2017. Particle size distribution of cultivable airborne microbes and inhalable particulate matter in a waste water treatment plant. *Aerobiologia* 33 (3), 297-314. DOI: 10.1007/s10453-016-9470-2
- **M.** Lazaridis. E. Katsivela, I. Kopanakis, L. Raisi, N. Mihalopoulos and G. Panagiaris. 2018. Characterization of Airborne Particulate Matter and Microbes inside Cultural Heritage Collections. *Journal of Cultural Heritage* 30, 136-146. DOI: https://doi.org/10.1016/j.culher.2017.09.018.
- 24. S. E. Chatoutsidou, A. Saridaki, L. Raisi, E. Katsivela, G. Tsiamis, M. Zografakis, and M. Lazaridis. 2021. Airborne particles and microorganisms in a dental clinic: variability of indoor concentrations, impact of dental procedures and personal exposure during everyday practice. *Indoor Air* 31 (4), 1164–1177. DOI: https://doi.org/10.1111/ina.12820
- 25. E. Katsivela, L. Raisi, and M. Lazaridis. 2021. Viable airborne and deposited microorganisms inside the Historical Museum of Crete. *Aerosol and Air Quality Research* 21, 200649. DOI: https://doi.org/10.4209/aaqr.200649
- 26. A. Saridaki, E. Katsivela, T. Glytsos, G. Tsiamis, E. Violaki, A. Kaloutsakis, N. Kalogerakis, and M. Lazaridis. 2022. Identification of bacterial communities on different surface materials of museum artefacts using high throughput sequencing. Journal of Cultural Heritage 54, 44-52. DOI: https://doi.org/10.1016/j.culher.2022.01.010
- **27. E. Chalvatzaki, E. Katsivela, L. Raisi, and M. Lazaridis.** 2022. Assessment of personal deposited dose of bioaerosols and particles in a wastewater treatment plant facility. *Air Quality, Atmosphere & Health.* DOI: https://doi.org/10.1007/s11869-022-01264-2
- **28. A. Saridaki, T. Glytsos, L. Raisi, E. Katsivela, G. Tsiamis, N. Kalogerakis, and M. Lazaridis.** 2022. Airborne particles, bacterial and fungal communities insights of two museum exhibition halls with diverse air quality characteristics. *Aerobiologia*. DOI: https://doi.org/10.1007/s10453-022-09775-2

BOOKS

1. **E. Katsivela.** 1997. Analysis of Transfer RNA and 5S Ribosomal RNA. In: Analysis of Nucleic Acids by Capillary Electrophoresis. (Heller, C., ed.), Chromatography CE Book Series, Springer Vieweg press, Series Editor - K. Altria. p. 272-291. Softcover ISBN 978-3-322-91017-2, eBook (pdf) ISBN 978-3-322-91015-8 (*Before 2013 available as ISBN 3-528-06871-X*).

- 2. V. Gekas, N. Frantzeskaki, E. Katsivela, Management and Treatment of Toxic and Hazardous Wastes, 2002. Tziolas Press, Thessaloniki, ISBN: 960-8050-69-3 (in Greek).
- 3. **E. Katsivela**, 2008, Chapter 3 "Bioaersols". In the book: M. Lazaridis "Indoor Air Quality", Tziolas Press, Thessaloniki, ISBN. 978-960-418-151-3, pages 121-136 (in Greek).
- 4. **T. Glytsos, I. Kopanakis, E. Katsivela, T. Grøntoft, V. Violaki and M. Lazaridis**, 2018. The Influence of Outdoor Air Pollution to Indoor Air Quality in a Mechanically Ventilated Museum Envelope. In: Chemical Interactions between Cultural Artefacts and Indoor Environment. (Adriaens, M., Bioletti, S., and Rabin, I., eds.), Uitgeverij Acco press, Nederland. *Chapter 23*. p. 173-192. Softcover ISBN 978-94-6344-798-0, eBook available from http://hdl.handle.net/1854/LU-8550694.

REFEREED PUBLICATIONS IN CONFERENCE PROCEEDINGS / BOOKS

- 1. M. Markweg, E. Katsivela, S. Lang and F. Wagner. 1989. Substrate Specifity and Inhibition of Microbial Lipases. *Actes du Congres international "Chevreul" pour létude des corps gras (Angers, France, 1989)*, Tome II, 997-1004.
- E. Katsivela, S. Lang and F. Wagner. 1990. Production and Isolation of a Lipase from Ustilago maydis. DECHEMA Biotechnology Conferences (Lectures of the annual meeting 1990) (Behrens, D. and P. Krämer, eds.), Vol. 4, Part B, 1089-1092, VCH Verlagsgesellschaft, Weinheim.
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- 54. **V. Bofili, L. Raisi, E. Katsivela**. Effect of student attendance on airborne microbial characteristics in educational facilities. E-Book of Abstracts of the 8th European Bioremediation Conference (EBC-VIII 2022), Chania, Crete, Greece, June 12 17, 2022, ISBN 978-618-5558-01-7, Abstract ID 58, p. 206-207.
- 55. S.E. Chatoutsidou, A. Saridaki, L. Raisi, E. Katsivela, G. Tsiamis, A. Voulgarakis and M. Lazaridis. Analysis of source origins and associations between airborne particles and microorganisms at a coastal Mediterranean site. 11th International Aerosol Conference (IAC), Athens, Greece, 4-9 September 2022, Abstract ATAS-P2_054 (e-Abstracts), p. 754.

ISOLATED BACTERIAL STRAINS WITH DEGRADATION CAPABILITIES FOR XENOBIOTIC COMPOUNDS, IDENTIFIED AND REGISTERED IN BACTERIAL STRAIN COLLECTIONS

- 1. *Acidovorax* sp. LW1: German Collection of Microorganisms and Cell Cultures –DSM No. 13225.
- 2. *Alcaligenes sp. EK5*: Nucleotide Sequence Database of the European Molecular Biology Laboratory EMBL database Accession No. AJ 440003.
- 3. *Delftia sp.* EK3: German Collection of Microorganisms and Cell Cultures –DSM No. 12781.
- 4. *Delftia sp.* EK4: German Collection of Microorganisms and Cell Cultures –DSM No. 12782
- 5. *Pseudomonas* sp. EK1: German Collection of Microorganisms and Cell Cultures –DSM No. 12800.
- 6. *Rhodococcus erythropolis* EK2: German Collection of Microorganisms and Cell Cultures DSM No. 12788.
- 7. *Rhodococcus erythropolis* EK5: German Collection of Microorganisms and Cell Cultures –DSM No. 12789.
- 8. *Enterobacter* sp. EK3.1: German Collection of Microorganisms and Cell Cultures –DSM No. 15156.
- 9. *Enterobacter* sp. EK4: German Collection of Microorganisms and Cell Cultures –DSM No. 15213.
- 10. Ochrobactrum sp. EK6: German Collection of Microorganisms and Cell Cultures.