

Dr. Evroula A. Hapeshi

CURRICULUM VITAE

CONTACT DETAILS

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Education

09/2002-05/2007

*Department of Chemistry Faculty of Pure and Applied Sciences
University of Cyprus*

Ph.D. in Chemistry

Dissertation: 'Preparation and characterization of nanoporous mixed oxides Mn-Ce ($Mn_xCe_{1-x}O_{2-y}$; $x = 0 - 1$)'.

Dissertation grade: Excellent

10/1997-09/2002

*Department of Chemistry Aristotle University of Thessaloniki
Direction: Physical Analytical Chemistry & Environmental
Chemistry)*

B.Sc. in Chemistry

Thesis: 'Rapid and sensitive high-performance liquid chromatographic determination of four cephalosporin antibiotics in pharmaceuticals and body fluids'.

Thesis grade: 10/10

09/1991-06/1997

Apolytirion Leaving Certificate Pankyprio Lyceum of Larnaca, Cyprus

Research Interests Current Experience

The research interests focus on the development/application of advanced analytical methods based on UPLC tandem MS/MS and UPLC hybrid MS (QqTOF) capable for the multi-residue target analysis of organic compounds and especially licit and illicit drugs

and their metabolites in different difficult matrices including urine and blood serum. In addition to that most recent research lines are focused on the application hyphenated chromatography/mass spectrometry using LC-MS/MS with a variety of mass analyzers, as triple quadruple, ion trap, TOF and hybrid QTOF for the identification of unknown degradation products and metabolites of selected drugs including elucidation of degradation pathways. Special attention has been directed in the last years on the determination of licit and illicit drugs and their metabolites in wastewater used them as biomarkers as a new source of epidemiological information. In addition, her research is directed on the development /application of new technologies into Pharmacovigilance and Eco-pharmacovigilance of drugs.

The development and the application biological and Advanced Oxidation Processes (AOPs), which are efficient novel methods for water treatment. Specifically, my research focuses on the removal of emerging contaminants from different aqueous matrices like for example urban wastewater and the assessment of their toxicity before and after treatment.

Past Experience

The synthesis of cerium-based catalysts (mixed oxides like for example $Mn_xCe_{1-x}O_{2-y}$ and Ce-K-OMS-2) and consequently the study of their properties such as structure and texture. Moreover, it was intended to find a simple methodology on the synthesis of pure cerium and its derivatives with optimum surface properties. More specifically, the optimization of the synthetic procedure of nanoporous particles with narrow particle size distribution, large surfaces, high purities and yields were aimed.

Therefore, the research interests were focalized at the synthesis and characterization of the simple and mixed oxides like for example TiO_2 , Mn-Ce ($Mn_xCe_{1-x}O_{2-y}$); $x = 0-1$) used as a photocatalyst for the degradation and mineralization of emerging contaminants from water and urban wastewaters.

Career History

01/2008 – 01/2011

Post-doctoral Fellow (Researcher)

Department of Civil and Environmental Engineering, University of Cyprus, GAIA-Laboratory of Environmental Engineering

02/2011-07/2016	Senior Researcher NIREAS, International Water Research Center (IWRC), University of Cyprus
2015-	Adjunct Lecturer Univesrity of Nicosia
Detailed Professional Profile	
	I. TEACHING EXPERIENCE (AS INSTRUCTOR)
02/2015-06/2015, 02/2016-06/2016, 09/2016-01/2017, 02/2017-06/2017, 09/20017-01/2018	<i>Department of Life and Health Sciences, School of Sciences and Engineering, University of Nicosia</i> 'Pharmaceutical Analysis & Quality Control II', PHAR-321
10/2014-01/2015, 10/2015-01/2016, 02/2016-06/2016, 09/2016-01/2017, 02/2017-06/2017, 09/20017-01/2018	<i>Department of Life and Health Sciences, School of Sciences and Engineering, University of Nicosia</i> 'Pharmaceutical Analysis & Quality Control I', PHAR-320
10/2015-01/2016	<i>Department of Life Sciences, School of Sciences, European University Cyprus</i> 'Analytical Chemistry', CHE-126
10/2015-01/2016	<i>Department of Life and Health Sciences, School of Sciences and Engineering, University of Nicosia</i> 'Environmental Chemistry', CHE-120
10/2015-01/2016	<i>Department of Electrical & Computer Engineering, Civil and Environmental Engineering University of Nicosia</i> 'Principles of Environmental Engineering, CVEE-260
9/2013-12/2013	<i>Department of Civil and Environmental Engineering, UCY</i> 'Introduction to Environmental Engineering', CEE181
01/2013-06/2013, 01/2015-06/2015, 01/2016-05/2017	<i>Department of Civil and Environmental Engineering, UCY</i> 'Advanced Topics in Environmental Chemistry", CEE584
01/2012-06/2012	<i>Department of Civil and Environmental Engineering, UCY</i> 'Wastewater management', CEE480
01/2010-06/2010	<i>Department of Civil and Environmental Engineering, UCY</i> 'Experimental methods in water and wastewater analysis and treatment', CEE585

2009-2014	<p>Teaching Assistant</p> <p><i>Department of Civil and Environmental Engineering, UCY</i> Participation in the experimental exercises of undergraduate (CEE480, CEE 181) and graduate students (CEE585).</p>
09/2002-01/2007	<p>Teaching Assistant</p> <p><i>Postgraduate Laboratory Demonstrator</i></p> <p><i>Department of Chemistry, UCY</i></p> <p>The job considered supervising and assisting undergraduate students in laboratory classes and the lessons based on chemistry together with assessing their scripts.</p> <p>Courses: Chemistry laboratory (1st Year) Organic Chemistry I (1st Year) Inorganic Chemistry I (1st Year) Inorganic Chemistry laboratory (3rd Year) Organic Chemistry laboratory (2nd Year) Analytical Chemistry I (1st Year) Organic Chemistry II (2nd Year)</p>
10/2015-06/2016	<p>STUDENT ADVISING</p>
UNDERGRADUATE DIPLOMA THESES	<p>M. Papavasili: 'Development and optimization of an analytical method based on high performance liquid chromatography (HPLC) for the simultaneous determination of five β-blockers; atenolol, timolol, metoprolol, propranolol and sotalolol.', University of Nicosia (completed in May 2015).</p>
	<p>Contribution to student co-advising</p> <p>Overseeing daily experimental work of and collaboration with researchers and students at GAIA Laboratory and NIREAS- IWRC under the supervision of Assoc. Prof. D. Fatta-Kassinou.</p>
Ph.D. LEVEL	
	<p>Irene Michael: 'Development of a solar-driven oxidation process for the removal of effluent organic matter from wastewaters', (completed in May 2012).</p>
MASTER LEVEL	<p>M.Sc. THESES</p>
	<p>Andreas Parpounas: 'Fate of enrofloxacin in swine sludge and the surrounding environment, (completed in May 2016).</p> <p>P. Koutsoftas: 'MBBR technology for the removal of xenobiotic compounds from sewage', (completed in May 2014).</p>

	<p>Elena Eliadou: 'Heavy metals uptake by soil and crops in areas of intense wastewater reuse irrigation', (completed in May 2013).</p> <p>I. Fotiou: 'Sonolysis and sonophotocatalysis for the treatment of wastewater laden with pharmaceutical compounds', (completed in May 2013).</p> <p>L. Ioannou: 'Oxidation of b-blockers through a solar-driven photooxidation process', (completed in December 2009). (Second Prize by Hydrotech Ltd Competition in Czech Republic).</p> <p>A. Papaioannou: 'Solar photocatalysis for the removal of sulfamethoxazole and amoxicillin from sewage', (completed in May 2009). (Diploma of Excellence by Hydrotech Ltd Competition in Czech Republic).</p>
	M.Eng. THESES
	<p>E. Efthimiou: 'Occurrence, fate and effects of antibiotics in the environment', (completed in May 2010).</p> <p>P. Kakouri: 'Occurrence, fate and effects of pharmaceuticals in hospital wastewater', (completed in May 2010).</p> <p>E. Kassininidis: 'Evaluation of the impact caused by the presence of active pharmaceutical ingredients in environmental waters and wastewaters', (completed in May 2010).</p>
STUDENT ADVISING	Past Chemistry Department Undergraduate Diploma Theses (co-supervision with prof. C. R. Theocharis)
	<p>P. Conomou: 'The influence of the methanol as solvent at the structure and texture properties of the ceria', (completed in May 2004).</p> <p>A. Constantinou: 'Synthesis and study of the structure properties of the mixed oxides $Mn_xCe_{1-x}O_2$; $x = 0-1$', (completed in May 2005).</p> <p>C. Savva: 'Synthesis and Characterization of the mixed oxide $Mn_xCe_{1-x}O_2$ with Co^{2+} as dopant', (completed in May 2007).</p>
	II. RESEARCH
	PARTICIPATION IN RESEARCH PROJECT
2014-2017	"Stopping Antibiotic Resistance Evolution (StARE)", Water JPI Pilot Call, (Project Coordinator: Dr. C. Manaia, total budget: 2,100,00 euro), approved in June 2014.
2015-2016	Contaminants of Emerging Concern in Oued Souhil area, Nabeul, Tunisia: occurrence in Irrigation water and implications, ECOSI (Project coordinator: Dr. Olfa Mahjoub, Budget: 5500 US Dollars),

	Funding Agencies UNESCO Programme, Major Programme II, MLA6, International Hydrological Programme
2011-2016	Investigation of the potential adverse effects to the soil and the environment caused by wastewater reuse for irrigation and assessment of public health risks in Cyprus. Beneficiary: Agricultural Research Institute, Funded by Cyprus Government (UCY Principal Investigator).
2013-2015	<i>Closing Gaps of Knowledge with respect to Advanced Chemical Oxidation Processes for the Removal of Contaminants of Emerging Concern (GAPS)</i> ", KOYΛTOYPA/BENΣ/0412/24, (Project coordinator: Dr. D. Fatta-Kassinou, total budget: 49,992 euro, funded by Cyprus Research Promotion Foundation).
2010-2015	<i>"Nireas, International Water Research Center"</i> , NEA ΥΠΟΔΟΜΗ/ΣΤΡΑΤΗ/0308/09, (Project coordinator: Dr. D. Fatta Kassinou, total budget: 1,398,945 euro, funded by Cyprus Research Promotion Foundation).
2012-2015	Integrating Water cycle management: building capability, capacity and impact in Education and Business, I-WEB, (Project coordinator: Middlesex University, United Kingdom, total budget: 928,266.02, funded by European Commission (TEMPUS IV)
2010-2012	Advanced systems for the enhancement of the environmental performance of wineries in Cyprus, WINEC- LIFE08 ENV/CY/455, (Project Coordinator), (total budget: 1,366,183 euros).
2009-2013	Fate, effect and removal potential of xenobiotics present in aqueous matrices (IX-Aqua) UPGRADING/DURABLE/0308/07, (Project coordinator: Dr. D. Fatta Kassinou, total budget: 396,372 euros).
2008-2010	<i>"Development of a solar technology for the removal of effluent organic matter from wastewaters (SolTec)"</i> , ΑΕΙΦΟΡΙΑ/0308/BIE/01, (Project coordinator: Dr. D. Fatta-Kassinou, total budget: 139,885 euro, funded by Cyprus Research Promotion Foundation).
June 2010	'Treatment of Two Antibiotics at Pilot Plant Scale Project (SOL-TROF)'. Plataforma Solar de Almeria under SFERA Project ' G. Agreement no: 228296 FP7-INFRASTRUCTURES-2008-1' funded by the European Commission, (SFERA Project coordinator: Dr. Sixto Malato / SOL-TROF Project Coordinator: Dr. D. Fatta-Kassinou).
2008-2009	<i>"Degradation of estrogens in water as well as in treated municipal and hospital wastewaters by heterogeneous photocatalytic chemical oxidation (ESTROGENS)"</i> , ΠΡΟΣΕΛΚΥΣΗ/ΠΡΟΕΜ/0308/07, 2008-2009, (Project coordinator: Dr. D. Fatta-Kassinou, total budget: 49,920 euro,

	funded by Cyprus Research Promotion Foundation).
2007-2009	Development and application of innovative advance oxidation processes for the removal of active organic compounds in urban wastewaters and monitoring of toxicity (PHAREM), Research Promotion Foundation of Cyprus, AEIFO/0506/16. (Project coordinator: Dr. D. Fatta Kassinos, total budget: 219,713 euros).

Participation in other scientific projects and networks

	<ul style="list-style-type: none"> - Sewage biomarker analysis for community health assessment (SCORE), COST Action ES1307, 2014-2018 (Member of the Management Committee, Member of the WG 2). - New and emerging challenges and opportunities in wastewater reuse (NEREUS), COST Action ES1403, 2014-2018. - Detecting evolutionary hot spots of antibiotic resistances in Europe (DARE), Cost Action TD0803, 2009-2013 – (Coordinator and Chair: Prof. Thomas Berendonk). - Participation as a guest researcher at the Plataforma Solar de Almería under SFERA project ‘G.Agreement no: 228296 FP7-INFRASTRUCTURES-2008-1’ funded by the European Commission. The research activity has focused on the "Treatment of Two Antibiotics at Pilot Plant Scale Project (SOL-TROF)", carrying out experiments at the Plataforma Solar Detoxification Laboratory at June 2010. - Xenobiotics in the urban water cycle, COST Action 636, 2008-2009 (WG4: Analytical Issues)-(Coordinator and Chair: Prof. Anna Ledin), (completed). - Attending the course ‘Decontamination and disinfection of water and air by solar advanced oxidation processes (CIEMAT)’, 24-26 October 2011, Madrid, Spain. The main objective of this course was to communicate the information and the experience accumulated in the research group of Plataforma Solar de Almería in water and air solar decontamination and disinfection.
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PUBLICATIONS

REFEREED JOURNAL PAPERS	<i>Published (or recently accepted)</i>
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1. P. Karaolia, I. Michael-Kordatou, **E. Hapeshi**, C. Drosou, Y. Bertakis, D. Christofilos, G. S. Armatas, L. Sygellou, T. Schwartz, N. P. Xekoukoulotakis, D. Fatta-Kassinou, "Removal of antibiotics, antibiotic-resistant bacteria and their associated genes by graphene-based TiO₂ composite photocatalysts under solar radiation in urban wastewaters". *Applied Catalysis B: Environmental*, 2018, (**accepted**).
2. B. Moslah, **E. Hapeshi**, A. Jrad, D. Fatta-Kassinou, A. Hedhili 'Pharmaceuticals and illicit drugs in wastewater samples in north-eastern Tunisia'. *Environmental Science and Pollution Research*, 2017, DOI 10.1007/s11356-017-8902-z.
3. E. Gracia-Lor, S. Castiglioni, R. Bade, F. Been, E. Castrignanò, A. Covaci, I. González-Mariño, **E. Hapeshi**, B. Kasprzyk-Hordern, J. Kinyua, F. Yin Lai, T. Letzel, L. Lopardo, M. R. Meyer, J. O'Brien, P. Ramin, N. Rousis, A. Rydevik, Y. Ryu, M. M. Santos, I. Senta, N. S. Thomaidis, S. Veloutsou, Z. Yang, E. Zuccato, L. Bijlsma. 2017 'Measuring excretion biomarkers in wastewater as a new source of epidemiological information: current state and future perspectives'. *Environment International*, 99 (2017) 131–150.
4. A. T. Christou, P. Karaolia, **E. Hapeshi**, C. Michael, D. Fatta-Kassinou. 2017 'Long-term wastewater irrigation of vegetables in real agricultural systems: Concentration of pharmaceuticals in soil, uptake and bioaccumulation in tomato fruits and human health risk assessment'. *Water Research*, 109, 24-34.
5. A. Parpounas, V. Litskas, **E. Hapeshi**, C. Michael, D. Fatta-Kassinou. Assessing the presence of enrofloxacin and ciprofloxacin in piggery wastewater and of their adsorption behaviour onto solid materials, with a newly developed chromatographic method. *Environmental Science and Pollution Research*, 2017 (**accepted**).
6. P. Karaolia; I. Michael-Kordatou, **E. Hapeshi**, J. Alexander, T. Schwartz, D. Fatta-Kassinou. Investigation of the potential of a membrane bioreactor followed by solar Fenton oxidation to remove antibiotic-related microcontaminants. *Chemical Engineering Journal*, 2017, 310, 491-502.
7. M. Vasquez Christodoulou, M. Tarapoulouzi, N. Lambrianides, **E. Hapeshi**, K. Felekkis, M. Saile, C. Sticht, N. Gretz, D. Fatta Kassinou. "Assessing the mutagenic and estrogenic effect potential of pharmaceuticals and of their transformation products. Implications in the gene expression profiling". *Environmental Toxicology and Chemistry* 2016, 9999 (9999), 1-12.
8. A. Christou, G. Maratheftis, M. Elia, **E. Hapeshi**, C. Michael, D. Fatta-Kassinou. Effects of wastewater applied with discrete irrigation techniques on strawberry plants' productivity and the safety, quality characteristics and

antioxidant capacity of fruits. *Agricultural Water Management*, 2016, 173, 48–54.

9. I. Michael-Kordatou, R. Andreou, M. Iacovou, Z. Frontistis, **E. Hapeshi**, C. Michael, D. Fatta-Kassinou, "On the capacity of ozonation to remove antimicrobial compounds, resistant bacteria and toxicity from urban wastewater effluents", *Journal of Hazardous Materials*, 2016 doi:10.1016/j.jhazmat.2016.02.023.
10. A. Christou, C. Antoniou, C. Christodoulou, **E. Hapeshi**, I. Stavrou, C. Michael, D. Fatta-Kassinou, V. Fotopoulos. Stress-related phenomena and detoxification mechanisms induced by common pharmaceuticals in alfalfa (*Medicago sativa* L.) plants. *Science of the Total Environment* 2016, 557-558, 652-664.
11. C. A. Georgiou, M. S Constantinou, **E. Hapeshi**, D. Fatta-Kassinou, C. Kapnissi-Christodoulou. Novel approach to fast determination of cholesterol oxidation products in Cypriot foodstuffs using ultra-performance liquid chromatography-tandem mass spectrometry. *Electrophoresis*, 2016, 37 (7-8), 1101-1108.
12. **E. Hapeshi**, M. Gros, R. Lopez-Serna, M.R. Boleda, F. Ventura, M. Petrovic, D. Barcelo and D. Fatta-Kassinou. 'Investigating the occurrence and fate of licit and illicit drugs in urban wastewater treatment plants in Cyprus', *CLEAN-Soil, Air, Water* 2015, 43(9), 1271-1278.
13. I. Michael-Kordatou, M. Iacovou, Z. Frontistis, **E. Hapeshi**, D. Dionysiou, D. Fatta-Kassinou. Erythromycin oxidation and ERY-resistant *E. coli* inactivation in urban wastewater by sulfate radical-based oxidation process under UV-C irradiation. *Water Research*, 2015, 85, 346-358.
14. T. Velegraki, **E. Hapeshi**, D. Fatta-Kassinou, I. Poullos. Solar-induced Heterogeneous Photocatalytic Degradation of Methyl-Paraben. *Applied Catalysis B: Environmental*, 2015, 178, 2-11.
15. Z. Frontistis, **E. Hapeshi**, D. Fatta-Kassinou, D. Mantzavinos. Ultraviolet-activated persulfate oxidation of methyl orange: A comparison between artificial neural networks and factorial design for process modeling. *Photochemical & Photobiological Sciences*, 2015, 14(3), 528-535.
16. Z. Frontistis, M., Kouramanos, S. Moraitis, E. Chatzisyneon, **E. Hapeshi**, D. Fatta-Kassinou, N. P. Xekoukoulotakis, D. Mantzavinos. UV and simulated solar photodegradation of 17 α -ethynylestradiol in secondary-treated wastewater by hydrogen peroxide or iron addition. *Catalysis Today*, 2015, 252, 84-92.
17. J. Ali Khan, X. He, H. M. Khan, N. S. Shah, **E. Hapeshi**, D. Fatta-Kassinou, D. D. Dionysiou. Photochemical Degradation of Atrazine through Kinetic and Reaction Mechanism Investigation, *Chemical Engineering Journal*, 2014, 252, 393-403.

18. A. Christou, G. Maratheftis, E. Eliadou, C. Michael, **E. Hapeshi**, D. Fatta-Kassinou. Impact assessment of the reuse of two discrete treated wastewaters for the irrigation of tomato crop on the soil geochemical properties, fruit safety and crop productivity, *Agriculture, Ecosystems and Environment*, 2014, 192, 105-114.
19. A. Christou, G. Maratheftis, E. Eliadou, C. Michael, **E. Hapeshi**, D. Fatta-Kassinou. "Assessment of long-term wastewater irrigation impacts on the soil geochemical properties and the bioaccumulation of heavy metals to the agricultural products", *Environmental Monitoring and Assessment*, 2014, 186(8), 4857-4870.
20. A. Jelic, I. Michael, A. Achilleos, **E. Hapeshi**, D. Lambropoulou, S. Perez Solsona, M. Petrovic, D. Fatta-Kassinou, D. Barceló. 'Transformation products and reaction pathways of carbamazepine during photocatalytic and sonophotocatalytic treatment', *Journal of Hazardous Materials*, 2013, 263, 177-186.
21. I. Michael, **E. Hapeshi**, S. Pèrez, M. Petrović, M., A. Zapata, S. Malato, D. Barceló, D. Fatta-Kassinou. 'Light-induced catalytic transformation of ofloxacin by solar Fenton in various water matrices at a pilot plant: Mineralization and characterization of major intermediate products', *Science of the Total Environment*, 2013, 461-462, 39-48.
22. **E. Hapeshi**, A. Lambrianides, P. Koutsoftas, E. Kastanos, C. Michael, D. Fatta-Kassinou. 'Investigating the fate of the iodinated X-ray contrast media iohexol and diatrizoate during microbial degradation in an MBBR system treating urban wastewater', *Environmental Science and Pollution Research* 2013, 20 (6), 3592-3606.
23. **E. Hapeshi**, I. Fotiou, D. Fatta-Kassinou. 'Sonophotocatalytic treatment of ofloxacin in secondary treated effluent and elucidation of its transformation products', *Chemical Engineering Journal*, 2013, 224, 96-105.
24. I. Michael, **E. Hapeshi**, C. Michael, D. Fatta-Kassinou. 'Superiority of solar Fenton oxidation over TiO₂ photocatalysis for the degradation of trimethoprim in secondary treated effluents: A mechanistic study', *Water Science and Technology*, 2013, 67(6), 1260-1271.
25. M.I. Vasquez, **E. Hapeshi**, D. Fatta-Kassinou, K. Kümmerer. 'Biodegradation potential of ofloxacin and its resulting transformation products during photolytic and photocatalytic treatment', *Environmental Science and Pollution Research*, 2013, 20, 1302-1309.
26. M.I. Vasquez, M. Garcia-Käuffer, **E. Hapeshi**, J. Menz, K. Kostarelos, D. Fatta-Kassinou, K. Kümmerer. 'Chronic ecotoxic effects to *Pseudomonas putida* and *Vibrio fischeri*, and cytostatic and genotoxic effects to the hepatoma cell line (HepG2) of ofloxacin photo(cata)lytically treated

solutions'. *Science of the Total Environment*, 450-451, 2013, 356-365.

27. I. Michael, **E. Hapeshi**, C. Michael, A.R. Varela, S. Kyriakou, C. Manaia, D. Fatta-Kassinos. 'Effectiveness of solar Fenton process on abatement of antibiotics at a pilot plant scale: Degradation kinetics, ecotoxicity assessment and removal of antibiotic resistant enterococci', *Water Research*, 2012, 46, 5621-5634.
28. I. Michael, **E. Hapeshi**, C. Michael, D. Fatta-Kassinos. 'Development and validation of a UPLC-MS/MS method for studying the degradation kinetics of ofloxacin and trimethoprim during the application of solar Fenton process in secondary treated sewage', *Water Science and Technology*, 2012, 66(7), 1574-1581.
29. Z. Frontistis, D. Venieri, **E. Hapeshi**, C. Drosou, D. Fatta-Kassinos, N.P. Xekoukoulotakis, D. Mantzavinos. 'Photocatalytic (UV-A/TiO₂) degradation of 17 α -ethynylestradiol in environmental matrices: experimental studies and artificial neural network modelling', *Journal of Photochemistry and Photobiology A: Chemistry*, 2012, 240, 233-241.
30. I. Michael, **E. Hapeshi**, V. Osorio, S. Pèrez, M. Petrović, M., A. Zapata, S. Malato, D. Barceló, D. Fatta-Kassinos. 'Solar photocatalytic treatment of trimethoprim in four environmental matrices at a pilot scale: Transformation products and ecotoxicity evaluation', *Science of the Total Environment* 2012, 430, 167-173. (*This paper was part of the virtual special issue on "Pharmaceuticals and Illicit Drugs in Aquatic Systems" published by STOTEN in October 2012. The papers selected, based on the editors' opinion, represent excellent examples of the active research in this field*).
31. Z. Frontistis, N. P. Xekoukoulotakis, **E. Hapeshi**, D. Venieri, D. Fatta-Kassinos and D. Mantzavinos. 'Fast removal of estrogen hormones from secondary treated wastewater by solar-Fenton oxidation', *Chemical Engineering Journal*, 2011, 178, 175-182.
32. L. A. Ioannou, **E. Hapeshi**, M. I. Vasquez and D. Fatta-Kassinos. 'On the application of solar TiO₂ photooxidation for the conversion of atenolol and propranolol in water and wastewater', *Solar Energy* 2011, 85, 1915-1926.
33. D. Kassinos, **E. Hapeshi**, A. Achilleos, S. Meric, M. Gros, M. Petrovic and D. Barcelo. The rising concern that is related to the occurrence of xenobiotics in tertiary treated urban wastewater intended for reuse applications', *Journal of Water Resources Management* 2011, 25, 1183-1193.
34. N. P. Xekoukoulotakis, C. Drosou, C. Brebou, E. Chatzisyneon, **E. Hapeshi**, D. Fatta-Kassinos and D. Mantzavinos. 'Kinetics of UV-A/TiO₂ photocatalytic degradation and mineralization of the antibiotic

sulfamethoxazole in aqueous matrices', *Catalysis Today* 2011, 161, 163-168.

35. **E. Hapeshi**, A. Achilleos, A. Papaioannou, L. Valanidou, N.P. Xekoukoulotakis, D. Mantzavinos and D. Kassinos. 'Sonochemical degradation ofloxacin in aqueous solutions', *Water Science and Technology* 2010, 61 (12), 3141-3146.
36. I. Michael, **E. Hapeshi**, C. Michael and D. Fatta-Kassinos. 'Solar Fenton and TiO₂ photocatalytic treatment of ofloxacin in secondary treated effluents: Evaluation of operational and kinetic parameters', *Water Research* 2010, 44, 5450-5462.
37. A. Achilleos, **E. Hapeshi**, N. P. Xekoukoulotakis, D. Mantzavinos and D. Kassinos. 'UV-A and solar photodegradation of ibuprofen and carbamazepine catalyzed by TiO₂', *Separation Science and Technology* 2010, 45, 1564-1570.
38. A. Achilleos, **E. Hapeshi**, N. Xekoukoulotakis, D. Mantzavinos and D. Kassinos. 'Factors affecting diclofenac decomposition in water by UV-A/TiO₂ photocatalysis', *Chemical Engineering Journal* 2010, 161, 53– 59.
39. N. P. Xekoukoulotakis, N. Xinidis, M. Chroni, D. Mantzavinos, D. Venieri, **E. Hapeshi** and D. Kassinos. 'UV-A/TiO₂ photocatalytic decomposition of erythromycin in water: Factors affecting mineralization and antibiotic activity', *Catalysis Today* 2010, 151, 29–33.
40. **E. Hapeshi**, A. Achilleos, C. Michael, N. P. Xekoukoulotakis, D. Mantzavinos and D. Kassinos. 'Drugs degrading photocatalytically: kinetics and mechanisms of ofloxacin and atenolol removal on titania suspensions', *Water Research* 2010, 44, 1737-1746.
41. C. Mavronikola, M. Demetriou, **E. Hapeshi**, D. Partassides, C. Michael, D. Mantzavinos and D. Kassinos. 'Mineralisation of the antibiotic amoxicillin in pure and surface waters by artificial UVA- and sunlight- induced Fenton oxidation', *Journal of Chemical Technology and Biotechnology* 2009, 84, 1211-1217.
42. **E. Hapeshi** and C. R. Theocharis. 'Preparation and Characterization of a Cerium (IV)-incorporated Manganese Oxide OMS- 2. Effect of Cerium (IV) Template on Octahedral Molecular Sieves of Manganese Oxide and Characterization of Manganese Oxide Molecular Sieves with Cerium (IV) as Dopant', *Adsorption Science & Technology* 2008, 26 (10), 789-801.
43. C.R. Theocharis, C. Attipa, **E. Hapeshi**, A. Tillirou and R. Kokkinofa. 'Study of The Crystallization of Nanoporous Mixed Metal Oxide Phases', *Adsorption Science & Technology* 2008, 26(8), 643-650.
44. **E. Hapeshi** and C.R. Theocharis. 'Preparation and Characterization of Nanoporous Solids With Composition Ce_xMn_{1-x}O_{2-y} with x Values 0 to 1', *Studies in Surface*

Science and Catalysis, Elsevier Science Publishers 2006, 160, 645-650.

45. V. F. Samanidou, **E. A. Hapeshi** and I. N. Papadoyannis. 'Rapid and sensitive high-performance liquid chromatographic determination of four cephalosporin antibiotics in pharmaceuticals and body fluids', *Journal of Chromatography B* 2003, 788, 147-158.

**PAPERS/ABSTRACTS-REFEREED INTERNATIONAL
CONFERENCES/ORAL PRESENTATIONS**

1. P. Karaolia, **E. Hapeshi**, I. Michael, C. Drosou, N. Xekoukoulotakis, D. Fatta-Kassinou. Decontamination of antibiotics and inactivation of antibiotic-resistant bacteria in urban MBR wastewater using novel grapheme-based composites. 4th European Conference on Environmental Applications of Advanced Oxidation Processes, 21-24 October 2015, Athens-Greece.
2. **E. Hapeshi**, A. Christou, G. Maratheftis, C. Michael, D. Fatta-Kassinou. Assessing the fate of pharmaceutical residues in crops irrigated with wastewater using a multi-residue method based on Liquid chromatography tandem mass spectrometry. 14th International Conference on Environmental Science and Technology. CEST2015, 3-5 September 2015, Rhodes, Greece, *accepted*.
3. A. Christou, C. Antoniou, **E. Hapeshi**, C. Christodoulou, C. Michael, D. Fatta-Kassinou, V. Fotopoulos. Uptake, translocation and detoxification mechanisms induced by four selected pharmaceutically active compounds in hydroponically cultured alfalfa (*Medicago sativa* L.) plants. SETAC Europe 2015, 3-7 May 2015, Barcelona, Spain, *accepted*.
4. V. Litskas, A. Parpounas, **E. Hapeshi**, C. Michael, D. Fatta-Kassinou. Monitoring of fluoroquinolone antibiotics in piggery wastewater and their mobility in solid materials after the application of the slurry as fertilizer. SETAC Europe 2015, 3-7 May 2015, Barcelona, Spain, *accepted*.
5. **E. Hapeshi**, A. Christou, G. Maratheftis, C. Michael, D. Fatta-Kassinou. Assessing the presence of pharmaceutical residues in irrigated crops by liquid chromatography tandem mass spectrometry. 8th European Conference on Pesticides and Related Organic Micropollutants in the Environment & 14th Symposium on Chemistry and Fate of Modern Pesticides, University of Ioannina, Ioannina, Greece, September 18-21, 2014.
6. I. Michael, M. Iacovou, Z. Frontistis, P. Karaolia, **E. Hapeshi**, D. Dionysiou, D. Fatta-Kassinou. 'UV light-activated persulfate oxidation of erythromycin in aqueous matrices: Evaluation of operational parameters and

removal of antibiotic resistance', 8th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA 8), Thessaloniki, Greece, 25-28 June, 2014.

7. **E. Hapeshi**, M. Gros, R. Lopez-Serna, M.R. Boleda, F. Ventura, M. Petrovic, D. Barcelo, D. Fatta-Kassinou, 'Contaminants of emerging concern: The case of licit and illicit drugs in urban wastewaters'. IWA, Regional Symposium on Water, wastewater and Environment: Traditions and Culture, 22-24 March, Patra, Greece. ISBN 978-960- 538-921-5.
8. **E. Hapeshi**, D. Fatta-Kassinou, " Assessing the presence of drugs of abuse and relevant metabolites in urban wastewater by liquid chromatography tandem mass spectrometry". International Symposium on Emerging Pollutants in Irrigation Waters: Origins, Fate, Risks, and Mitigation, Gammarth, Tunisia, 25-28 November 2013.
9. M. Vasquez, M. Tarapoulouzi, **E. Hapeshi**, D. Lambropoulou, D. Fatta- Kassinou, "Ecotoxic and mutagenic effects of photolytic transformation products of pharmaceuticals: An experimental design for the investigation of mixtures", ICCE2013, 14th EuCheMS International Conference on Chemistry and the Environment, Barcelona, Spain, 25- 28 June, 2013.
10. I. Michael, **E. Hapeshi**, C. Michael, A.R. Varela, C.M. Manaia, D. Fatta- Kassinou. 'Pilot scale evaluation of solar Fenton on the removal of antibiotics and antibiotic resistant enterococci from secondary effluents: Degradation kinetics, ecotoxicity and phytotoxicity assessment'. 8th IWA Specialized Conference on 'Assessment and control of micropollutants and hazardous substances in water'. Micropol & Ecohazard 2013, Zurich, Switzerland, 16-20 June 2013.
11. **E. Hapeshi**, M. Gros, R. Lopez-Serna, M.R. Boleda, F. Ventura, M. Petrovic, D. Barcelo and D. Fatta-Kassinou. 'Investigating the occurrence and fate of licit and illicit drugs in urban wastewater treatment plants in Cyprus'. 12th International Conference on Environmental Science and Technology (CEST2011), Rhodes island, Greece, 8-10 September 2011.
12. M.I. Vasquez, **E. Hapeshi**, J. Menz, K. Kümmerer and D. Fatta- Kassinou. 'Active pharmaceutical ingredients as multi-component matrices: Focus on effects of mixtures and phototransformation products'. 15th International Symposium on Toxicity Assessment, Hong Kong, 3-8 July 2011.
13. I. Michael, **E. Hapeshi**, C. Michael and D. Fatta-Kassinou. 'Ofloxacin removal from secondary treated domestic effluents by solar catalytic processes'. SSS4WATER, Venice, 18-21 April 2011.

14. L.A. Ioannou, **E. Hapeshi**, M.I. Vasquez, D. Mantzavinos and D. Fatta-Kassinou. 'Solar photocatalytic decomposition of the two β -blockers atenolol and propranolol in water and wastewater. International Conference on Energy', Water and Environment, ICEWE 2010, Amman, Jordan, 12-15 December 2010.
15. D. Kassinou, **E. Hapeshi**, A. Achilleos, S. Meric, M. Gros, M. Petrovic and D. Barcelo. 'The rising concern that is related to the occurrence of xenobiotics in tertiary treated urban wastewater intended for reuse applications'. EWRA, European Water Resources Association, 7th International Conference, Water Resources Conservation and Risk Reduction Under Climatic Instability, Limassol, Cyprus, 25-27 June 2009.
16. **E. Hapeshi**, A. Achilleos, C. Michael, N. P. Xekoukoulotakis, D. Mantzavinos and D. Kassinou. 'Photocatalytic degradation ofloxacin and atenolol in aqueous TiO₂ suspensions'. Xenowac 2009, International Conference on Xenobiotics in the Urban water cycle, Paphos, Cyprus, 11-13 March 2009.
17. A. Achilleos, **E. Hapeshi**, N. Xekoukoulotakis, D. Mantzavinos and D. Kassinou. 'Factors affecting diclofenac decomposition in water by UV- A/TiO₂ photocatalysis'. Xenowac 2009, International Conference on Xenobiotics in the Urban water cycle, Paphos, Cyprus, 11-13 March 2009.
18. A. Achilleos, M. Ines Vasquez-Hadjilyra, **E. Hapeshi**, C. Michael, M. Monou, S. Meric and D. Fatta Kassinou. 'Predicted environmental concentrations of selected pharmaceutical active ingredients in urban wastewaters in Cyprus'. Protection and Restoration of the Environment IX, PRE9, Kefalonia, Greece, 29 June-3 July 2008.
19. **E. Hapeshi**. 'Preparation and Characterization of mixed manganese oxide phases with composition Mn-Ce (Mn_xCe_{1-x}O₂; x = 0-1)'. 9th Chemistry Conference Cyprus-Greece, Larnaca, Cyprus, April 2007.
20. **E. Hapeshi**. 'Synthesis and Characterization of the nanoporous manganese oxide K-OMS-2 with Ce(IV) as Dopant'. 3th Panhellenic Symposium of Porous Solids, Thessaloniki, Greece, November 2007.

POSTERS IN INTERNATIONAL CONFERENCES

1. Z. Frontistis, **E. Hapeshi**, D. Fatta-Kassinou, D. Mantzavinos, 'Ultraviolet-activated persulfate oxidation of methyl orange: A comparison between neural networks and factorial design for process modelling', 3rd European Conference on environmental applications of Advanced Oxidation Processes (AOPs), EAAOP3 conference, Almería, 27-30 October 2013.

2. Z. Frontistis, A. Kouroushi, I. Michael, **E. Hapeshi**, N.P. Xekoukoulotakis, D. Fatta-Kassinou 'Photodegradation of the Antibiotics Sulfamethoxazole and Trimethoprim by UV/H₂O₂ in Various Actual and Model Aqueous Matrices', 3rd European Conference on environmental applications of Advanced Oxidation Processes (AOPs), EAAOP3 conference, Almería, 27-30 October 2013.
3. Z. Frontistis, I. Michael, M. Iacovou, **E. Hapeshi**, C. Michael, D. Dionysiou, D. Fatta-Kassinou. 'UV light-activated persulfate for the removal of erythromycin and antibiotic resistance from secondary wastewater', 14th EuCheMS International Conference on Chemistry and the Environment, ICCE 2013, Barcelona, June 25 - 28, 2013
4. I. Michael, Z. Frontistis, R. Andreou, **E. Hapeshi**, C. Michael, D.D. Dionysiou, D. Fatta-Kassinou D. 'The effectiveness of sulfate radicals on the abatement of ethylparaben in aqueous media', 14th EuCheMS International Conference on Chemistry and the Environment, ICCE 2013, Barcelona, June 25 - 28, 2013.
5. A. Jelic, A. Achilleos, I. Michael, **E. Hapeshi**, D. Lambropoulou, S.Perez, M. Petrovic, D. Fatta-Kassinou and D. Barcelo, 'Photocatalytic and sonophotocatalytic degradation of carbamazepine. Identification of transformation products', 3rd SCARCE International Conference, Bridging toxicants, stressors and risk-based management under water scarcity, 26-27 November 2012, Valencia, Spain.
6. **E. Hapeshi**, A. Lambrianides, P. Koutsoftas, E. Kastanos, I. Michael, D. Fatta-Kassinou. 'Development and application of Moving Bed Biofilm progress for the abatement of iodinated X-ray contrast media in urban wastewater' Norman Network Workshop, 'Occurrence, fate and effects of emerging pollutants in the environment-chemical analysis and toxicological assessment', Amsterdam, Netherlands, 29- 30 November 2012.
7. **E. Hapeshi**, I. Fotiou and D. Fatta-Kassinou, 'Heterogeneous sonophotocatalytic treatment of ofloxacin and its transformation products in secondary treated effluents'. 7th European meeting on solar chemistry and photocatalysis: Environmental applications, SPEA 7, Oporto, Portugal, 17-21 June 2012.
8. M.I. Vasquez, M. Garcia-Käufer, **E. Hapeshi**, K. Kümmerer, D. Fatta-Kassinou, 'Investigating the genotoxicity effects of pharmaceutical photo-transformation products'. SETAC Europe Annual Meeting, Berlin, Germany, 21-25 May 2012 (with oral presentation).
9. M.I. Vasquez, M. Garcia-Käufer, **E. Hapeshi**, J. Menz, D. Fatta-Kassinou, K. Kümmerer, 'Pharmaceuticals as dynamic active transformation products in the urban water cycle'. Sampling and Analysis of Emerging Contaminants in the Aquatic Environment: Current and future challenges,

Organized by NIVA and the Norman Network, Oslo, Norway, 1-3 March 2012, (with oral presentation).

10. I. Michael, **E. Hapeshi**, C. Michael and D. Fatta-Kassinou, 'Removal of ofloxacin and trimethoprim from secondary treated domestic wastewaters-A study on the degradation kinetics by a developed UPLC- MS/MS method. ICCE, Zyrich, 11-15 September 2011.
11. **E. Hapeshi**, I. Michael, L. Ioannou and D. Fatta-Kassinou, 'UV-A and solar driven photocatalytic removal of ofloxacin, atenolol and propranolol from urban wastewater'. SP3-Third International Conference on Semiconductor Photochemistry, University of Strathclyde, Glasgow-Scotland, 12-16 April 2010.
12. N.P. Xekoukoulotakis, Z. Frontistis, D. Mantzavinos, **E. Hapeshi** and D. Fatta-Kassinou. 'TiO₂ photocatalytic oxidation of estrogens followed by cross-flow microfiltration for the recovery and reuse of the photocatalyst'. SP3-Third International Conference on Semiconductor Photochemistry, University of Strathclyde, Glasgow-Scotland, 12-16 April 2010.
13. **E. Hapeshi**, I. Michael, L. Ioannou, A. Achilleos, N. P. Xekoukoulotakis, D. Mantzavinos and D. Fatta-Kassinou. 'Photocatalytic removal of ofloxacin, atenolol, propranolol and diclofenac in urban wastewater with TiO₂ and solar radiation'. Neptune and Innowatech End User Conference, Innovative and Sustainable Technologies for Urban and Industrial Wastewater Treatment, University of Ghent, Belgium, 27 Jan 2010.
14. **E. Hapeshi**, I. Michael, C. Michael, N.P. Xekoukoulotakis, D. Mantzavinos and D. Fatta-Kassinou. 'UV-A and solar driven catalytic removal of ofloxacin present in sewage intended for reuse'. INNOVA- MED CONFERENCE: Innovative processes and practices for wastewater treatment and re-use in the Mediterranean region, Girona, Spain 8-9 October 2009.
15. Z. Frontistis, N. P. Xekoukoulotakis, **E. Hapeshi**, D. Fatta-Kassinou and D. Mantzavinos. 'Photocatalytic oxidation of 17 α -ethinylestradiol under simulated solar light in aqueous TiO₂ suspensions'. INNOVA- MED CONFERENCE: Innovative processes and practices for wastewater treatment and re-use in the Mediterranean region, Girona, Spain 8-9 October 2009.
16. **E. Hapeshi**, A. Achilleos, A. Papaioannou, L. Valanidou, N.P. Xekoukoulotakis, D. Mantzavinos and D. Kassinou. 'Sonolytic degradation of diclofenac and ofloxacin in aqueous solutions'. Xenowac 2009, International Conference on Xenobiotics in the Urban water cycle, Paphos, Cyprus, 11-13 March 2009.
17. D. Kassinou, **E. Hapeshi**, M. Guillamon, M. Petrovic and D. Barcelo. 'Real-life performance of activated sludge

	<p>treatment with respect to pharmaceuticals removal in three sewage treatment plants in Cyprus'. Xenowac 2009, International Conference on Xenobiotics in the Urban water cycle, Paphos, Cyprus, 11-13 March 2009.</p> <p>18. C. Attipa, A. Tillirou, E. Hapeshi and C.R. Theocharis. 'Study of The Crystallization of Nanoporous Mixed Cerium Oxide Phases'. 9th Chemistry Conference Cyprus-Greece, Larnaca, April 2007.</p> <p>19. E. Hapeshi and C.R. Theocharis. 'The influence of solvent in surface properties of the nanoporous cerium oxide'. 2th Panhellenic Symposium of Porous Solids, Athens, September 2005.</p> <p>20. C.R. Theocharis, C. Attipa, A. Tillirou, and E. Hapeshi. 'Preparation and Characterization of Mixed and Pristine Nanoporous Ceria'. 10th European Conference On Solid State Chemistry, Sheffield UK, August 2005.</p> <p>21. E. Hapeshi, and C. R. Theocharis. 'Preparation and Characterization of Nanoporous Solids With Composition $Ce_xMn_{1-x}O_{2-y}$ with x Values 0 to 1'. Symposium on Characterisation of Porous Solids (COPS VII), Aix en Provence (France), May 2005.</p> <p>22. E. Hapeshi and C.R. Theocharis. 'The influence of solvent in surface properties of the nanoporous cerium oxide'. 8th Panhellenic Symposium on Catalysis, Agia Napa, Cyprus, October 2004.</p> <p>23. E. Hapeshi and C.R. Theocharis. 'The Surface Properties of the Porous mixed oxides $Mn_xCe_{1-x}O_2$ (MnIII,IV; CeIV)'. 8th Panhellenic Symposium on Catalysis, Agia Napa, Cyprus, October 2004.</p> <p>21. E. Hapeshi and C.R. Theocharis. 'The influence of solvent type in surface properties of the nanoporous cerium oxide'. 8th Chemistry Conference Cyprus-Greece, Thessaloniki, December 2004.</p>
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BOOK CHAPTERS

	<p>1. I. Michael, M.I. Vasquez, E. Hapeshi, T. Haddad, E. Baginska, K. Kümmerer D. Fatta-Kassinos, 'Transformation products of emerging contaminants in the environment: Analysis, Processes, Occurrence, Effects and Risks'. John Wiley & Sons Inc., 425-470, ISBN: 978-1-118-33959-6.</p> <p>2. I. Michael, E. Hapeshi, M.I. Vasquez, T. Toumazis, D. Fatta-Kassinos, 2014. "<i>Urban wastewater treatment processes</i>" in Meyer B. C. & L. Lundy (Eds), "Integrated Water Cycle Management in Kazakhstan", Al-Farabi Kazakh National University, Publishing House, Almaty, 113-118, ISBN: 978-601-04-0900-2.</p> <p>3. M.I. Vasquez, I. Michael, E. Hapeshi, T. Toumazis, D. Fatta-Kassinos, 2014. "<i>Drinking water purification technologies and monitoring of water quality</i>" in Meyer B.</p>
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C. & L. Lundy (Eds), "Integrated Water Cycle Management in Kazakhstan", Al-Farabi Kazakh National University, Publishing House, Almaty, 118-123, ISBN: 978-601-04-0900-2.

4. **E. Hapeshi**, I. Michael, M.I. Vasquez T. Toumazis, D. Fatta-Kassinis, 2014. "*Sources and occurrence of pharmaceutical residues in the aquatic environment*" in Meyer B. C. & L. Lundy (Eds), "Integrated Water Cycle Management in Kazakhstan", Al-Farabi Kazakh National University, Publishing House, Almaty, 124-128, ISBN: 978-601-04-0900-2.
5. I. Michael, **E. Hapeshi**, M.I. Vasquez, T. Toumazis, D. Fatta-Kassinis, 2014. "*Removal of pharmaceuticals from aqueous matrices by biological and advanced chemical oxidation processes*" in Meyer B. C. & L. Lundy (Eds), "Integrated Water Cycle Management in Kazakhstan", Al-Farabi Kazakh National University, Publishing House, Almaty, 129-133, ISBN: 978-601-04-0900-2.
6. I. Michael, **E. Hapeshi**, M.I. Vasquez, T. Toumazis, D. Fatta-Kassinis, 2014. "*Potential implications related with wastewater reuse in agriculture*" in Meyer B. C. & L. Lundy (Eds), "Integrated Water Cycle Management in Kazakhstan", Al-Farabi Kazakh National University, Publishing House, Almaty, 133-136, ISBN: 978-601-04-0900-2..
7. I. Michael, **E. Hapeshi**, M.I. Vasquez, T. Toumazis, D. Fatta-Kassinis, 2014. "*Removal of pharmaceuticals from aqueous matrices by biological and advanced chemical oxidation processes*" in Meyer B. C. & L. Lundy (Eds), "Integrated Water Cycle Management in Kazakhstan", Al-Farabi Kazakh National University, Publishing House, Almaty, 113-118, ISBN: 978-601-04-0900-2.
8. D. Fatta-Kassinis, **E. Hapeshi**, S. Malato, D. Mantzavinos, L. Rizzo, N. P. Xekoukoulotakis. 'Removal of xenobiotic compounds from water and wastewater by advanced oxidation processes', in D. Fatta-Kassinis, K. Bester, K. Kummerer (Eds) 'Xenobiotics in the Urban Water Cycle-Fate'. Book Environmental Series, Springer (1st Edition, 2010, ISBN 978-90-481-3508-0, pages: 387-412).

Laboratory Skills

- Ultra- Performance Liquid Chromatography-tandem Mass Spectrometry (UPLC-MS/MS, Acquity TQD Operator)
- Quadruple Time-of-Flight-tandem Mass Spectrometry (QTOF-MS)
- High Performance Liquid Chromatography-tandem Mass Spectroscopy (HPLC-MS/MS)
- High Performance Liquid Chromatography (HPLC)
- Gas Chromatography (GC)
- X-ray diffraction method (XRD)

	<ul style="list-style-type: none"> - Infrared Spectroscopy (FTIR, Fourier Transformed Infrared Spectroscopy, ATR-FTIR method, Attenuated Total Reflection) - Scanning Electron Microscopy-Energy Dispersive Analysis (SEM-EDS) - Thermogravimetric Analysis (TGA) - Differential Scanning Calorimetry (DSC) - N₂ Adsorption/Desorption Isotherm (surface area: BET method and pore size distribution measurements: BJH and DFT (Density Functional Theory) - Ultraviolet-Visible Spectroscopy (UV-Vis spectroscopy) - Catalytic Experiments (Decomposition of N₂O and isopropanol) - Advanced Oxidation Processes (AOPs, Heterogeneous and homogeneous photocatalytic oxidation, sonolytic oxidation, sonophotocatalytic oxidation) - Chemical Oxygen Demand (COD) and Biological Oxygen Demand (BOD) - Total Organic Carbon (TOC) - Atomic Absorbance Spectroscopy (AAS) <p>9. Toxicity Biossays (<i>D. Magna</i>, <i>V. fischeri</i>, etc.)</p>
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III. PROFESSIONAL AND EDUCATIONAL SERVICE ACTIVITIES

PARTICIPATION IN NETWORKS/ ORGANIZATIONS

	<ul style="list-style-type: none"> - European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)- Collaboration for the analysis of illicit drugs in wastewaters from European cities: 2012-present.
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TRAINING SCHOOLS

	<ul style="list-style-type: none"> - COST Training School University Jaume, Castellón, Spain. Title of the Course: "Method Validation and Quality Control", 29th - 30th April, 2015. - COST Training School at the Istituto di Ricerche Farmacologiche Mario Negri, Milan, Italy. Title of the Course: "Assessing human health and lifestyle by sewage epidemiology", 17-18 September 2014 - Attending the ACQUITY TQD UPLC-MS/MS system training, took place in Waters Company, MS Technologies Centre, Atlas Park, Simonsway, Manchester, September 2010. - Practical exercise as required by the Department of Chemistry, Aristotle University of Thessaloniki, Greece. The exercise took place at the Cyprus Milk Industry
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	Organization. During the exercise, I specifically dealt with: Analytical methods using to determine the concentration of specific compound e.g. lactose in real samples and the quality control of the samples, 07/2000-08/2000.
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	REVIEWER-INTERNATIONAL JOURNALS
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| | <ul style="list-style-type: none">- Applied Catalysis B: Environmental, by invitation, M. Flytzani-Stephanopoulos, Editor.- Journal of Hazardous Material, by invitation, G. Lyberatos, Editor- Chemical Engineering Journal, by invitation, D. D. Dionysiou, Editor.- Journal of Chemical Technology and Biotechnology, by invitation, D. Mantzavinos, Associate Editor.- Separation Science and Technology, by invitation, A.I. Zouboulis and D. Mantzavinos, Guest Editors.- Water Science & Technology, by invitation, D. Fatta-Kassinos, Editor.- Catalysis Today, by invitation, Pilar Fernandez, Special Issue Guest Editor.- Journal of Environmental Chemical Engineering, by invitation, D. Fatta-Kassinos.- Science of the Total & Technology, by invitation, K. V. Thomas.- CLEAN - Soil, Air, Water, by invitation, Serge Chiron.- Water Research, by invitation Gregory Vladimir Korshin, Editor- Environmental International, by invitation, Andrian Covaci. |
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	COLLABORATIONS WITH RESEARCH LABORATORIES ABROAD
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	<i>Analytical Chemistry Director of the Research Institute for Pesticides and Water University Jaume, Castellón, Spain</i>
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	Dr. Felix Hernandez.
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	<i>Department of Environmental Chemistry IDAEA-CSIC, Barcelona, Spain</i>
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	Dr. D. Barcelo, Dr. F. Ventura and Dr. S. Perez.
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	<i>Catalan Institute for Water Research (ICRA), Girona, Spain</i> Dr. M. Petrovic, Dr. D. Barcelo and Dr. M. Gros.
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	<i>Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain</i>
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	Dr. M. Petrovic.
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	<p>Department of Chemical Engineering, University of Patras Dr. D. Mantzavinos</p> <p>Department of Environmental Engineering Technical University of Crete, Greece Dr. N. Kalogerakis and Dr. N. Xekoukoulotakis.</p> <p>AGBAR-Aigües de Barcelona, Analytical Organic Chemistry Division, Barcelona, Spain Dr. M.R. Boleda.</p> <p>Norwegian Institute for Water Research (NIVA) Dr. Kevin Thomas.</p> <p>Analytical and Environmental Chemistry, Aristotle University of Thessaloniki, Greece Dr. Lambropoulou Dimitra.</p> <p>Material Resources, Institute of Environmental Chemistry, Leuphana University Lüneburg, Germany Dr. K. Kümmerer</p> <p>Plataforma Solar de Almeria, Spain Dr. S. Malato.</p> <p>Department of Civil Engineering University of Salerno, Italy Dr. L. Rizzo</p>
	<p>IV. OTHER INFORMATION</p>
	<p>MEMBERSHIPS</p>
	<ul style="list-style-type: none"> - Member of the Pancyprian Union of Chemists (PUC) <p>Member of the Chemist Young Division</p>