CURRICULUM VITAE

IOANNA VASILIADOU

Assistant Professor, Chemical Engineering Department,
University of Western Macedonia, Greece

WEB OF SCIENCE ID: B-3478-2017
ORCID: 0000-0003-4947-543X
SCOPUS AUTHOR ID: 13103491500

PERSONAL INFORMATION	
SURNAME	VASILIADOU
NAME	IOANNA
e-mail	ivasiliadou@uowm.gr
TEL.	+30 2461056544
WEBPAGE	HTTPS://CHEMENG.UOWM.GR/EN/IVASILIADOU_EN/

CURRENT POSITION(S)	
05/2023 - present	**Assistant Professor of Physical Process Engineering** Chemical Engineering Department, School of Engineering, University of Western Macedonia, Greece
PREVIOUS POSITION(S)	
2022 -2023	**Postdoctoral researcher** Department of Civil Engineering, School of Engineering, Democritus University of Thrace, Greece
2022 -2023	**Teaching staff (under contract)** Chemical Engineering Department, School of Engineering, University of Western Macedonia, Greece
2018 -2022	**Postdoctoral researcher / Teaching staff (under contract)** Department of Environmental Engineering, School of Engineering, Democritus University of Thrace, Greece
2017 -2018	**Postdoctoral researcher** Department of Chemical and Environmental Technology, University Rey Juan Carlos de Madrid, Spain
2016	**Postdoctoral researcher** Department of Engineering and Architecture Department, University of Trieste, Italy
2015	**Maternity leave**
2012-2014	**Postdoctoral researcher** Department of Chemical and Environmental Technology, University Rey Juan Carlos de Madrid, Spain
2011-2012	**Postdoctoral researcher and Teaching staff** Materials Science and Engineering and Chemical Engineering Department University Carlos III de Madrid, Spain
2008-2010	**Postdoctoral researcher and Teaching staff (under contract)** Department of Civil Engineering, School of Engineering, University of Patras, Greece

EDUCATION

2004 -2008	Department of Environmental & Natural Resources Management, University of Ioannina, Greece, Thesis title "Hydrogenotrophic denitrification of drinking water", Ph.D. degree.
1999 -2004	Department of Environmental & Natural Resources Management, University of Ioannina, Greece, equivalent to Environmental Engineering Department, University of Patras, B.Sc. Degree, Integrated master

PUBLICATIONS https://orcid.org/0000-0003-4947-543X

Her scientific work includes 51 articles in scientific journals, 2 book chapters and 37 announcements in international conferences. Citations: 1766 / Scopus: H_{index}: 25

1. V. Vasileiadis*, I.Th. Papageorgiou, C. Kyriklidis, **I.A. Vasiliadou***, C.G. Tsanaktsidis (2025) "Mathematical correlations for volumetric (density and specific gravity) properties of diesel/biodiesel blends" Appl. Sci. 15, 4404. https://doi.org/10.3390/app15084404
2. I. Karametos, **I.A. Vasiliadou***, V. Papaevangelou, S. Mar-Yam, A.G. Tekerlekopoulou, D.V. Vayenas, C.S. Akratos (2024) "Mathematical modeling of constructed wetlands for hexavalent chromium removal", Science of The Total Environment 917, 170088. https://doi.org/10.1016/j.scitotenv.2024.170088
3. Kalogiannis, **I.A. Vasiliadou**, A. Tsiamis, I. Galiatsatos, P. Stathopoulou, G. Tsiamis, K., Stamatelatou, K. Enhancement of Biodegradability of Chicken Manure via the Addition of Zeolite in a Two-Stage Dry Anaerobic Digestion Configuration. Molecules 2024, 29, 2568. https://doi.org/10.3390/molecules29112568
4. Díaz-Rullo Edreira, S., **Vasiliadou, I.A**., Prado, A., Espada, J.J., Wattiez, R., Leroy, B., Martínez, F., Puyol, D. Elucidating metabolic tuning of mixed purple phototrophic bacteria biofilms in photoheterotrophic conditions through microbial photo-electrosynthesis Communications Biology, 2024, 7(1), 1526. https://doi.org/10.1038/s42003-024-07188-0
5. Th. Ioannidou, M. Anagnostopoulou, **I.A. Vasiliadou**, C. Marchal, E.O. Alexandridou, V. Keller, K.C. Christoforidis* (2024) "Mixed phase anatase nanosheets/brookite nanorods TiO_2 photocatalysts for enhanced gas phase CO_2 photoreduction and H_2 production", Journal of Environmental Chemical Engineering, 12, 111644. https://doi.org/10.1016/j.jece.2023.111644
6. **I.A. Vasiliadou***, Z.A. Semizoglou, V.G. Karayannis, C.G. Tsanaktsidis, (2024) "Extraction study of lignite coalbed methane as a potential supplement to natural gas for enhancing energy security of Western Macedonia Region in Greece", Appl. Sci. 14, 174. https://doi.org/10.3390/app14010174
7. A. Itziou, K. Zaralis, A. Theofanous, M. Louloudi, G. Rozos, **I.A. Vasiliadou**, E. Lakioti, V. Karayannis, C. Tsanaktsidis, (2023) "Sustainable antioxidant production for hygienic disinfection using bioextractants from lavender and oregano distillation process", Energies 16, 7534. https://doi.org/10.3390/en162275342023
8. A. Spyridonidis, **I.A. Vasiliadou**, P. Stathopoulou, A. Tsiamis, G. Tsiamis K. Stamatelatou, (2023) "Enrichment of microbial consortium with hydrogenotrophic methanogens for biological biogas upgrade to biomethane in a bubble reactor under mesophilic conditions", Sustainability, 15, 15247. https://doi.org/10.3390/su152115247
9. A.K. Benekos, **I.A. Vasiliadou***, A.G. Tekerlekopoulou, S. Pavlou, A. Katsaounis, D.V. Vayenas, (2023) "Groundwater denitrification using a continuous flow mode hybrid system combining a hydrogenotrophic biofilter and an electrooxidation cell", Journal of Environmental Management, 3391 Article number 117914. https://doi.org/10.1016/j.jenvman.2023.117914
10. **I.A. Vasiliadou***, A. Kalogiannis, A. Spyridonidis, A. Katsaounis, K. Stamatelatou (2022) "Effect of applied potential on the performance of an electroactive methanogenic biocathode used for bioelectrochemical CO_2 reduction to CH_4", Journal of Chemical Technology & Biotechnology, 97, 643-652. https://doi.org/10.1002/jctb.6946
11. A. Spyridonidis, **I.A. Vasiliadou**, K. Stamatelatou (2022) "Effect of zeolite on the methane production from chicken manure leachate", Sustainability, 14, 2207. https://doi.org/10.3390/su14042207

12. A. Kalogiannis, **I.A. Vasiliadou**, A. Spyridonidis, V. Diamantis, K. Stamatelatou (2022) "Biogas production from chicken manure wastes using an LBR-CSTR two-stage system: process efficiency, economic feasibility, and carbon dioxide footprint", Journal of Chemical Technology & Biotechnology, 97, 2952-2961. https://doi.org/10.1002/jctb.7170
13. **I.A. Vasiliadou***, Th. Ioannidou, M. Anagnostopoulou, A. Polizotou, D. Papoulis, K.C. Christoforidis* (2022) "Adsorption of anionic dyes on a novel Palygorskite / UiO-66 nanocomposite", Applied Sciences, 12(15), 7468. https://doi.org/10.3390/app12157468
14. Th. Ioannidou, M. Anagnostopoulou, D. Papoulis, K.C. Christoforidis*, **I.A. Vasiliadou***, (2022) "UiO-66/Palygorskite/TiO_2 ternary composites as adsorbents and photocatalysts for methyl orange removal", Applied Sciences, 12(16), 8223. https://doi.org/10.3390/app12168223
15. S.A. Díaz-Rullo Edreira, S. Barba**, I.A. Vasiliadou**, R. Molina, J.A. Melero, J.J. Espada, D. Puyol, F. Martínez (2021) "Assessment of Voltage Influence in Carbon Dioxide Fixation Process by a Photo-Bioelectrochemical System under Photoheterotrophy", Microorganisms, 9, 474. https://doi.org/10.3390/microorganisms9030474
16. R. Vitanza, A. Cortesi, V. Gallo, M.E. De Arana, **I.A. Vasiliadou** (2021) "Simulation of an Oxic-Settling-Anaerobic Pilot Plant Operated under Real Conditions Using the Activated Sludge Model No.2d", Water, 13, 3383. https://doi.org/10.3390/w13233383
17. M. Zhurka, A. Spyridonidis, **I.A. Vasiliadou**, K. Stamatelatou (2020) "Biogas production from sunflower head and stalk residues: Effect of alkaline pretreatment", Molecules, 25, 164. doi:10.3390/molecules25010164
18. **I.A. Vasiliadou**, J.A. Melero, R. Molina, D. Puyol, F. Martinez (2020) "Optimization of H_2 production through minimization of CO_2 emissions by mixed cultures of purple phototrophic bacteria in aqueous samples", Water, 12:2015. doi:10.3390/w12072015
19. A. Spyridonidis A., **I.A. Vasiliadou**, C.S. Akratos, K. Stamatelatou (2020) "Performance of a full-scale biogas plant operation in Greece and its impact on the circular economy", Water, 12:3074. https://doi.org/10.3390/w12113074
20. **I.A. Vasiliadou***, R. Molina, M.I. Pariente, K.C. Christoforidis, F. Martinez, J.A. Melero (2019) "Understanding the role of mediators in the efficiency of advanced oxidation processes using white-rot fungi", Chemical Engineering Journal, 359, 1427-1435. https://doi.org/10.1016/j.cej.2018.11.035
21. R. Vitanza, A. Cortesi, M.E. De Arana-Sarabia, V. Gallo, **I.A. Vasiliadou** (2019) "Oxic settling anaerobic (OSA) process for excess sludge reduction: 16 months of management of a pilot plant fed with real wastewater", Journal of Water Process Engineering, 32,100902. https://doi.org/10.1016/j.jwpe.2019.100902
22. A. Cruz del Álamo, M.I. Pariente, **I.A. Vasiliadou**, B. Padrino, D. Puyol, R. Molina, F. Martínez (2018) "Removal of pharmaceutical compounds from urban wastewater by an advanced bio-oxidation process based on fungi Trametes versicolor immobilized in a continuous RBC system", Environmental Science and Pollution Research, 25, 34884-34892 https://doi.org/10.1007/s11356-017-1053-4
23. **I.A. Vasiliadou**, S. Bellou, A. Daskalaki, L. Tomaszewska- Hetman, C. Chatzikotoula, B. Kompoti, S. Papanikolaou, D. Vayenas, S. Pavlou, G. Aggelis (2018) "Biomodification of fats and oils and scenarios of adding value on renewable fatty materials through microbial fermentations: Modelling and trials with Yarrowia lipolytica", Journal of Cleaner Production 200, 1111-1129. https://doi.org/10.1016/j.jclepro.2018.07.187
24. A. Daskalaki, **I.A. Vasiliadou**, S. Bellou, L. Tomaszewska- Hetman, C. Chatzikotoula, B. Kompoti, S. Papanikolaou, D. Vayenas, S. Pavlou, G. Aggelis (2018) "Data on cellular lipids of Yarrowia lipolytica grown on fatty substrates" Data in Brief 21, 1037-1044.
25. M.E. De Arana-Sarabia, **I.A. Vasiliadou***, R. Vitanza, A. Cortesi, V. Gallo (2018) "Mathematical Simulation and Validation of a Wastewater Treatment Plant in Northern Italy", Environmental Engineering Science 35, https://doi.org/10.1089/ees.2017.0424
26. **I.A. Vasiliadou***, R. Molina, F. Martinez, J.A. Melero, P.M. Stathopoulou, G. Tsiamis (2018) "Toxicity assessment of pharmaceutical compounds on mixed culture from activated sludge using respirometric technique: The role of microbial community structure", Science of the Total Environment 630, 809-819. https://doi.org/10.1016/j.scitotenv.2018.02.095
27. **I.A. Vasiliadou**, A. Berná, C. Manchon, J.A. Melero, F. Martinez, A. Esteve-Nuñe, D. Puyol (2018) "Biological and bioelectrochemical systems for hydrogen production and carbon fixation using purple phototrophic bacteria" Frontiers in Energy Research 6:107. doi: 10.3389/fenrg.2018.00107

28. K.C. Christoforidis, **I.A. Vasiliadou**, M. Louloudi, Y. Deligiannakis (2018) "Gallic acid mediated oxidation of pentachlorophenol by the Fenton reaction under mild oxidative conditions" Journal of Chemical Technology and Biotechnology 93, 1601-1610. doi:10.1002/jctb.5529
29. **I.A. Vasiliadou**, M.I. Pariente, F. Martínez, J.A. Melero, R. Molina (2016) "Modeling the integrated heterogeneous catalytic fixed-bed reactor and RBC system for the treatment of poorly biodegradable industrial agrochemical wastewater", Journal of Environmental Chemical Engineering, 4, 2313-2321. http://dx.doi.org/10.1016/j.jece.2016.04.007
30. K.A. Karanasios, **I.A. Vasiliadou**, A.G. Tekerlekopoulou, S. Pavlou, D.V. Vayenas (2016) "Effect of C/N ratio and support medium on the heterotrophic denitrification of bio-filters using sugar as carbon substrate", International Biodeterioration & Biodegradation, 111, 62-73. http://dx.doi.org/10.1016/j.ibiod.2016.04.020
31. **I.A. Vasiliadou***, R. Sánchez-Vázquez, R. Molina, F. Martínez, J.A. Melero, L.F. Bautista, J. Iglesias, G. Morales (2016) "Biological removal of pharmaceutical compounds using white-rot fungi with concomitant FAME production of the residual biomass", Journal of Environmental Management, 180, 228-237. https://doi.org/10.1016/j.jenvman.2016.05.035
32. **I.A. Vasiliadou***, A.K.Md.M. Bari Chowdhury, C.S. Akratos, A.G. Tekerlekopoulou, S. Pavlou, D.V. Vayenas (2015) "Mathematical modeling of olive mill waste composting process" Waste Management, 43, 61-71. doi:10.1016/j.wasman.2015.06.038
33. J.A. Melero, R. Sánchez-Vázquez, **I.A. Vasiliadou**, F. Martínez, L.F. Bautista, J. Iglesias, G. Morales and R. Molina (2015) "Municipal sewage sludge to biodiesel by simultaneous extraction and conversion of lipids" Energy Conversion and Management, 103, 111-118. doi: 10.1016/j.enconman.2015.06.045
34. **I.A. Vasiliadou***, R. Molina, F. Martínez, J.A. Melero (2014) "Experimental and modeling study of pharmaceutically active compounds removal in rotating biological contactors" Journal of Hazardous Materials, 274, 473-482. doi:10.1016/j.jhazmat.2014.04.034
35. R. Molina, M.I. Pariente, **I.A. Vasiliadou**, I. Rodriguez, F. Martínez, J.A. Melero (2014) "A friendly-Biological Reactor Simulator (BioReSIM) for studying biological processes in wastewater treatment processes" @tic. Revista d' InnovacióEducativa, Nº13, 104-113. doi:10.7203/attic.13.3886
36. A.M. Lunde, C. Lopez-Monis, **I.A. Vasiliadou**, L.L. Bonilla, and G. Platero (2013) "Temperature dependent dynamical nuclear polarization bistabilities in double quantum dots in the spin-blockade regime" Physical Review B - Condensed Matter and Materials Physics, 88, Article number 035317. doi:10.1103/PhysRevB.88.035317
37. **I.A. Vasiliadou***, R. Molina, F. Martínez, J.A. Melero (2013) "Biological removal of pharmaceutical and personal care products by a mixed microbial culture: Sorption, desorption and biodegradation" Biochemical Engineering Journal, 81, 108-119. doi:10.1016/j.bej.2013.10.010
38. C.V. Chrysikopoulos, V.I. Syngouna, **I.A. Vasiliadou**, V.E. Katzourakis (2012) "Transport of *Pseudomonas putida* in a 3-D benchscale experimental aquifer" Transport in Porous Media, 94, 617-642. doi:10.1007/s11242-012-0015-z
39. K.A. Karanasios, M.K. Michailidis, **I.A. Vasiliadou**, S. Pavlou, D.V. Vayenas (2011) "Potable water hydrogenotrophic denitrification in packed-bed bioreactors coupled with a solar-electrolysis hydrogen production system" Desalination and Water Treatment, 33, 86-96. doi:10.5004/dwt.2011.2614
40. **I.A. Vasiliadou** and C.V. Chrysikopoulos (2011) "Cotransport of *Pseudomonas putida* and kaolinite particles through water saturated columns packed with glass beads" Water Resources Research, 47, W02543. doi:10.1029/2010WR009560
41. **I.A. Vasiliadou***, D. Papoulis, C.V. Chrysikopoulos, D. Panagiotaras, E. Karakosta, M. Fardis, G. Papavassiliou (2011) "Attachment of *Pseudomonas putida* onto differently structured kaolinite minerals: A combined ATR-FTIR and 1H NMR study" Colloids and Surfaces B: Biointerfaces, 84, 354-359. doi:10.1016/j.colsurfb.2011.01.026
42. Ch.N. Economou, **I.A. Vasiliadou**, G. Aggelis, S. Pavlou, D.V. Vayenas (2011) "Modeling of oleaginous fungal biofilm developed on semi-solid media" Bioresource Technology, 102, 9697-9704. doi:10.1016/j.biortech.2011.08.003
43. K.A. Karanasios, **I.A. Vasiliadou**, S. Pavlou, D.V. Vayenas (2010) "Hydrogenotrophic denitrification of potable water: A review" Journal of Hazardous Materials, 180, 20-37. doi:10.1016/j.jhazmat.2010.04.090
44. **I.A. Vasiliadou**, S. Pavlou, D.V. Vayenas (2009) "Dynamics of a chemostat with three competitive hydrogen oxidizing denitrifying microbial populations and their efficiency for denitrification" Ecological Modelling, 220, 1169-1180. doi:10.1016/j.ecolmodel.2009.02.009

45. **I.A. Vasiliadou**, K.A. Karanasios, S. Pavlou, D.V. Vayenas (2009) "Experimental and modelling study of drinking water hydrogenotrophic denitrification in packed-bed reactors" Journal of Hazardous Materials, 165, 812-824. doi:10.1016/j.jhazmat.2008.10.067
46. **I.A. Vasiliadou**, K.A. Karanasios, S. Pavlou, D.V. Vayenas (2009) "Hydrogenotrophic denitrification of drinking water using packed-bed reactors" Desalination, 248, 859-868. doi:10.1016/j.desal.2009.01.015
47. A.G. Tekerlekopoulou, **I.A. Vasiliadou**, D.V. Vayenas (2008) "Biological manganese removal from potable water using trickling filters" Biochemical Engineering Journal, 38, 292-301. doi:10.1016/j.bej.2007.07.016
48. **I.A. Vasiliadou**, G. Tziotzios, D.V. Vayenas (2008) "A kinetic study of combined aerobic biological phenol and nitrate removal in batch suspended growth cultures" International Biodeterioration & Biodegradation, 61, 261-271. doi:10.1016/j.ibiod.2007.09.002
49. A.G. Tekerlekopoulou, **I.A. Vasiliadou**, D.V. Vayenas (2006) "Physicochemical and biological iron removal from potable water" Biochemical Engineering Journal, 31, 74-83. doi:10.1016/j.bej.2006.05.020
50. **I.A. Vasiliadou**, S. Pavlou, D.V. Vayenas (2006) "A kinetic study of hydrogenotrophic denitrification" Process Biochemistry, 41, 1401-1408. doi:10.1016/j.procbio.2006.02.002
51. **I.A. Vasiliadou**, S. Siozios, I.T. Papadas, K. Bourtzis, S. Pavlou, D.V. Vayenas (2006) "Kinetics of pure cultures of hydrogen-oxidizing denitrifying bacteria and modeling of the interactions among them in mixed cultures" Biotechnology and Bioengineering, 95, 513-525. doi:10.1002/bit.21031

CONFERENCES/WORKSHOPS/etc (selected)

- 2nd International Conference on Sustainable Chemical and Environmental Engineering, Social acceptance of sustainable bioenergy transition policies for public health, E. Lakioti, A. Itziou, **I.A. Vasiliadou**, V. Karayannis and C. Tsanaktsidis, 14-18 June 2023, Limassol, Cyprus.
- 5th Euro-Mediterranean Conference for Environmental Integration (EMCEI-2023), Theoretical prediction of physicochemical properties of diesel-biodiesel blends using mathematical modelling V. Vasileiadis, I.Th. Papageorgiou, Ch. Kyriklidis, **I.A. Vasiliadou**, C.G. Tsanaktsidis, 2-5 October 2023, Rende (Cosenza) Italy.
- International Society for Microbial Electrochemistry and Technology, ISMET8, The metabolic tuning of mixed purple phototrophic bacteria biofilms in heterotrophic conditions through microbial photoelectrosynthesis, S. Díaz-Rullo Edreira, A. Prado, **I.A. Vasiliadou**, J.J. Espada, R. Wattiez, B. Leroy, F. Martínez, D. Puyol, 19-23 September 2022, Chania, Greece.
- 3rd Symposium on Circular Economy and Sustainability, Adsorption of organics on novel clay/metal-organic frameworks (MOFs) nanocomposites, **I.A. Vasiliadou**, Th. Ioannidou, M. Anagnostopoulou, K.C. Christoforidis, June 27-29 2022, Chania, Greece.
- 17th International Conference on Environmental Science and Technology, Biogas upgrade via ex-situ technologies, A. Spyridonidis, **I.A. Vasiliadou**, K. Stamatelatou, 1-4 September 2021, Athens, Greece.
- 2nd Online Symposium on Circular Economy and Sustainability, Sustainable hydrogen production from water and hydrocarbons using photo-triggered reactions, Th. Ioannidou, **I.A. Vasiliadou**, Z. Syrgiannis, K.C. Christoforidis, 14-16 July 2021, Alexandroupolis, Greece
- 8th International conference on sustainable solid waste management**,** Bioelectrochemical biogas upgrade: A novel technology for reduction of carbon dioxide (CO_2) into methane, **I.A. Vasiliadou**, A. Kalogiannis, A. Spyridonidis, A. Katsaounis, K. Stamatelatou, 23-26 June 2021, Thessaloniki, Greece.
- Online Symposium on Circular Economy and Sustainability, Biogas production from chicken manure wastes using a two-stage LBR-CSTR system: The effect of zeolite as bulking and adsorbing agent, A. Kalogiannis, A. Spyridonidis, **I.A. Vasiliadou**, K. Stamatelatou, 1-3 July 2020, Alexandroupolis, Greece.
- 16th IWA Leading Edge Conference, Reducing carbon dioxide emissions from wastewater by bioelectrochemical systems with purple phototrophic bacteria: effect of polarization, **I.A. Vasiliadou**, J.A. Melero, F. Martinez, A. Esteve-Nuñez, D. Puyol10-14 June 2019, Edinburgh, UK.
- 16th IWA World Conference on Anaerobic on digestion, Anaerobic digestion of slaughterhouse wastes after hygienization in a continuous two-stage process, A. Spyridonidis, **I.A. Vasiliadou**, S. Antonoudis, C. Kivraki, K. Stamatelatou, 23-27 June 2019, Delft, The Netherlands.

- VII International Conference on Environmental, Industrial and Applied Microbiology, BioMicroWorld, Electrochemical engineering of purple phototrophic bacterial metabolism towards resources and energy recovery from wastewater, **I.A. Vasiliadou**, R. Molina, A. Berná, C. Manchon, J.A. Melero, F. Martinez, A. Esteve-Nuñez, D. Puyol, 18-20 October 2017, Madrid, Spain.
- 7th European Meeting on Chemical Industry and Environment, EMChIE, Intimate coupling of wastewater treatment and biodiesel production, **I.A. Vasiliadou**, R. Sánchez-Vázquez, R. Molina, J.A. Melero, F. Martínez, LF Bautista, J. Iglesias, G. Morales, 10-12 June 2015, Tarragona, Spain.

MEMBERSHIPS & REVIEWING ACTIVITIES

2022 - present	Member of the Management Committee and Training Schools Coordinator of the Cost Action Fundamentals and applications of purple bacteria biotechnology for resource recovery from waste-PURPLEGAIN-2022 (https://purplegain.eu/)
2022 - present	Member of the Technical Chamber of Greece
2020 - present	Member of the scientific committee at 4 international conferences/symposiums September 2024 "1st International Conference on novel photo(bio)refineries for Resource Recovery" April 2025 "6th International Conference on Water Economics, Statistics and Finance" July 2021 "2nd Online Symposium on Circular Economy and Sustainability" INFER 2021 July 2020 "Online Symposium on Circular Economy and Sustainability" INFER 2020
2020	Member of the World Technology Network
2017 - present	Member of scientific proposal evaluation committee of: i) National Research Foundation (NRF) of **South Africa**, ii) **Spanish** State Research Agency, Agencia Estatal de Investigación (AEI), iii) **French** National Research Agency Projects for science, ANR
2020-2021	Member of the Steering Committee and the Advisory Board of Got Energy Talent MSCA-Cofund Programme, Universidad de Alcalá (UAH) and Universidad Rey Juan Carlos (URJC), Spain.
2018 - present	Guest editor of 5 special issues of scientific journals (https://susy.mdpi.com/academic-editor/special_issues) and Associate editor Applied Sciences Journal.
2020	Member of Ana Belén Cruz del Álamo Doctoral thesis evaluation committee member: "Advanced oxidation processes based on fungal rotating biological contactors and heterogeneous Fenton catalytic fixed bed reactors for the removal of pharmaceutical micropollutants in wastewater streams" Author: (30/03/2020) Rey Juan Carlos University, Spain.
2009 – present	Reviewer of 40 international peer-reviewed journals.

TEACHING ACTIVITIES

acad. year 2023-2024 **2024-2025**	Department of Chemical Engineering, School of Engineering, University of Western Macedonia, Greece, **Assist. Prof.**, Courses: i) Physical Process engineering, ii) Calculus I, iii) Biochemical Engineering, iv) Transfer phenomena III (mass transfer)
acad. year 2022-2023	Department of Chemical Engineering, School of Engineering, University of Western Macedonia, Greece, Contracted Teaching staff, Courses: i) Calculus I, II, and III, ii) Transfer phenomena III (mass transfer), iii) **Master course:** Use of biomass in energy production, contracted Teaching staff, Master of Energy investments and environment
July 2023	Instructor in International Training School in Modelling Purple Phototrophic Bacteria for Resource Recovery, Course: Modeling of PPB Photoheterotrophic Substrate uptake (lecturers in English), Aranjuez, Rey Juan Carlos University, Madrid, Spain
acad. year 2021-2022	Department of Environmental Engineering, School of Engineering, Democritus University of Thrace, Greece, Contracted Teaching staff, Courses: i) Physical Process engineering, ii) Chemical and Biochemical Process engineering

acad. year 2017-2018	Food Science and Technology Degree, Rey Juan Carlos University, Madrid, Spain Analytical control of contaminants in food (lecturers in Spanish), Teaching assistant
July 2011	Instructor in European Summer School in Industrial Mathematics (ESSIM), Course: Modeling of Biofilms in Industrial Applications (lecturers in English), Department of Mathematics, University Degli Studi de Milano, Italy
acad. year 2010-2012	Escuela Politecnica Superior, University Carlos III de Madrid, Spain (lecturers in English), contracted Teaching staff, Courses: i) Calculus I and II, ii) **Master course**: Modeling in Science and Industry, Master in Industrial Mathematics
acad. year 2008-2010	Department of Civil Engineering, School of Engineering, University of Patras, Greece Contracted Teaching staff, Courses: i) Water Treatment, ii) Wastewater Treatment

SUPERVISION OF UNDERGRADUATE AND GRADUATE STUDENTS	
2023-2025	Supervision of master thesis of **4** master students, Chemical Engineering Department, School of Engineering, University of Western Macedonia, Greece
2023-2025	Supervision of diploma thesis of **4** students, Chemical Engineering Department, School of Engineering, University of Western Macedonia, Greece
2011-2018	Supervision of diploma thesis of **7** students, BSc in Environmental Engineering/Chemical Engineering/ Environmental Science, University Rey Juan Carlos de Madrid, Spain

FELLOWSHIPS and AWARDS	
2020	Katerva Awards-PEOPLE'S CHOICE 2020 - Cities and Mobilities- Energy from sewage (Ioanna A. Vasiliadou et al. 10.3389/fenrg.2018.00107)
2018	WORLD TECHNOLOGY AWARDS - Finalists ENVIRONMENT (Ioanna A. Vasiliadou et al. 10.3389/fenrg.2018.00107) https://www.wtn.net/2018/world-technology-awards-winners-and-finalists
2017	Individual Post-Doctoral Fellowship: International incoming researchers - International excellence campus SMART ENERGY program CEISEP, Project title «Smart electrochemical engineering of bacterial metabolism towards resources and energy recovery from wastewater», Chemical and Environmental Technology Department, University Rey Juan Carlos de Madrid, Spain
2012 - 2014	Individual Postdoctoral **Marie Curie** Fellowship (MC Intra-European Fellowships for career development 2010, 7th Framework Programme on Research, Technological Development and Demonstration. Project Title: «Intimate coupling of biological advanced oxidation processes for environmental de-pollution and biodiesel production», Chemical and Environmental Technology Department, University Rey Juan Carlos de Madrid, Spain
2011 - 2012	Individual Post-Doctoral Fellowship, Social Council of Universidad Carlos III de Madrid, Materials Science and Engineering and Chemical Engineering Department, University Carlos III, Leganes, Marid, Spain
2012	Praise based on student evaluation for the teaching of the Calculus I course (Academic year: 2011-2012) in the Aerospace Engineering Degree of Carlos III University (Spain), which was held in the English language.

RESEARCH GRANTS			
Project Title	**Funding source**	**Period**	**Role of the PI**

ECOLEFINS	Horizon 2020	2025 1/2/2025 – 31/12/2025	Participant
Strengthening the water management practices (in EMT-R) through the development of innovative ICT methodologies and improvement of research infrastructures	Operational Program "Competitiveness, Entrepreneurship and Innovation" under the NSRF 2014-2020, with the co-financing of Greece and the European Union (European Regional Development Fund)	2022-2023 18/7/2022-17/4/2023	Participant
Employing circular economy approach for OFMSW management within the Mediterranean countries (CEOMED)	"ENI-CBC Mediterranean Sea Basin Program 2014-2020", Co-financed by the European Neighborhood Mechanism (ENI) and national resources	2020-2021 11/6/2020-31/8/2020 21/9/2020-15/2/2021	Participant
Research Infrastructure for Waste Valorization and Sustainable Management of Resources, INVALOR Title: "Utilization of agro-industrial residues and biomass for biofuel production and materials"	Operational program "Competitiveness Entrepreneurship and Innovation" Priority axis 03 "Development of support mechanisms and entrepreneurship" ESPA 2014-2020	2018-2021 28/9/2018-27/12/2018 01/1/2019-31/7/2019 02/10/2019-09/6/2020 01/9/2020-20/9/2020 16/2/2021-31/5/2021	Participant
Bio-electrochemical upgrading of biogas to methane (CH_4): An innovative method of carbon dioxide (CO_2) conversion	Operational Program "Human Resource Development, Education and Lifelong Learning ESPA 2014-2020", Improving the quality and efficiency of the Educational System	2020-2021 18/3/2020-17/9/2021	Participant
Madrid network of advanced treatments for wastewater with non-biodegradable contaminants (REMTAVARES)	Community of Madrid. 10/2014 - 09/2018 (S-2013/MAE-27166).	2017-2018 01/6/2017-30/6/2018	Participant
Smart electrochemical engineering of bacterial metabolism towards resources and energy recovery from wastewater	International incoming researchers - International excellence campus SMART ENERGY program CEISEP, University Rey Juan Carlos de Madrid, Spain	2017 01/1/2017-31/12/2017	Principal Investigator
Respirometric analysis and modeling of sewage sludge in oxic-settling-anaerobic (OSA) pilot-plant process for wastewater treatment	CAFC SpA private company Trieste, Friuli-Venezia Giulia, Italy	2016 11/6/2016-10/10/2016	Participant
Advanced bio-oxidation and photocatalytic processes for the elimination of emergency contaminants	Ministry of Science and Innovation (CTM2011-29143-C03-01), Spain	2014 01/2/2014-31/12/2014	Participant
Intimate coupling of biological advanced oxidation processes for	Marie Curie Intra-European Fellowships for career	2012-2014 01/2/2012-31/1/2014	Principal Investigator

environmental de-pollution and biodiesel production	development 2010, 7th Framework Programme on Research, Technological Development and Demonstration.		
Integrated actions in order to protect coastal areas from anthropogenic pollutions and for groundwater restoration by reversing the seawater intrusion in coastal aquifers	INTERREG IIIA GREECE-ITALY 2000-2006, PRIMAC	2008 01/1/2008-30/6/2008	Participant
Study of groundwater contamination by viruses during recycled water filtration: laboratory scale experiments	Competitiveness (act 4.3.6.1.d), General Secretariat of Research and Innovation of the Ministry of Development, 2006-2008	2007-2008 01/1/2007-31/3/2008	Participant
Development of heterogeneous biological systems for the integrated management of olive mill waste	Operational Program of Western Greece (E.D.E.I.L.: 61/2088), General Secretariat of Research and Innovation of the Ministry of Development, 2000-2006.	2006-2008 01/8/2006-31/3/2008	Participant

OTHER ACHIEVEMENTS

Invited Instructor in advanced schools

- Invited Instructor in International Training School in Modelling Purple Phototrophic Bacteria for Resource Recovery, Course: Modeling of PPB Photoheterotrophic Substrate uptake (lecturers in English), 3-5 July 2023, Rey Juan Carlos University, Madrid, Spain
- Invited Instructor in European Summer School and Modelling week in Industrial Mathematics (ESSIM), Course: Modeling of Biofilms in Industrial Applications (lecturers in English), Department of Mathematics, 18-30 July 2011, University Degli Studi de Milano, Italy

Invited Speaker

- "The Open City Biohacking Laboratory" celebrated on 20/09/2024 in High School "Marija Kiri Sklodovska", Skopje, North Macedonia

Organization of international events (workshops, training schools)

- 1st International Workshop on Applied Physics to PPB-based Environmental Biotechnology 25th April 2023, Szeged – Hungary. https://purplegain.eu/1st-workshop/
- 2nd International Workshop on Resource recovery from waste and wastewater and downstream procedures for PPB biomass 6th July 2023, Madrid – Spain. https://purplegain.eu/2nd-workshop/
- 3rd International Workshop on Sustainability assessment of multiple PPB process chains and recovered resources to support market penetration and social acceptance, 4th September 2023, Delft – Netherlands. https://purplegain.eu/3rd-workshop/
- 1st International Training School on Modelling Purple Phototrophic Bacteria for Resource Recovery, 3-5 July 2023, Aranjuez, Madrid – Spain. https://purplegain.eu/first-training-school/
- 4th Workshop (WG2), 18 April 2024, Lisbon – Portugal "Practical aspects of culturing and monitoring Purple Bacteria mixed and pure cultures" https://purplegain.eu/4th-workshop/
- 2nd Training school (WG2), 15-17th April 2024, Lisboa-Portugal "PurpleEng: applying engineering principles to Purple Phototrophic Bacteria for resource recovery" https://purplegain.eu/second-training-school/

- 5th Workshop (WG3), 11 September 2024, Valladolid-Spain "Market PPB technologies and products based on sustainable biorefineries" https://purplegain.eu/workshop-5/
- 6th Workshop (WG1), 13 September 2024, Valladolid-Spain "Integrating ecological, metabolic and modelling insights in engineered" phototrophic communities for PPB derived processes development and control. https://purplegain.eu/workshop-6/
- 7th Workshop (WG1), International Rhodobacter Symposium 2025, 12-3th May 2025, Wageningen – Netherlands. https://purplegain.eu/7th-workshop/
- 8th Workshop (WG2), 1 & 2 July 2025, Ankara-Turkey – "PPB in Wastewater Treatment; Challenges, Opportunities and Potential for Resource Recovery" 1st & 2nd July 2025, Middle East Technical University (METU) – ANKARA. https://purplegain.eu/8th-workshop/
- Third Training School, PurpleFood: PPB in sustainable nutritional and functional foods, 14-16 May 2025, Antwerp – Belgium. https://purplegain.eu/third-training-school/