



IOANNA VASILIADOU

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Education

- 2008: PhD, Department of Environmental & Natural Resources Management, University of Ioannina, Greece, Thesis Title: *“Hydrogenotrophic denitrification of drinking water”*
- 2004: Bachelor Degree, Department of Environmental Engineering, University of Patras, Greece

Academic and Research Career – Work Experience

- 2023 Assistant Professor, Chemical Engineering Dep., University of Western Macedonia, Greece
- 2018-22 Postdoctoral researcher and Instructor, Environmental Engineering Dep., Democritus University of Thrace, Greece - *‘Research infrastructure for waste valorization and sustainable management of resources’, ‘Strengthening the rational management of water through the development of innovative methodologies and the improvement of research infrastructures’*
- 2017-18 Research Associate, Chemical and Environmental Technology Dep., University Rey Juan Carlos de Madrid, Spain - *‘Madrid network of advanced treatments for wastewater with non-biodegradable pollutants (REMTAVARES)’*
- 2017 Postdoctoral researcher, Chemical and Environmental Technology Dep., University Rey Juan Carlos de Madrid, Spain - *‘Smart electrochemical engineering of bacterial metabolism towards resources and energy recovery from wastewater’*
- 2016 Postdoctoral researcher, Engineering and Architecture Dep., University of Trieste, Italy - *‘Minimization of excess sludge in oxic-settling anaerobic (OSA) pilot-plant process’*
- 2015-16 Maternity leave
- 2014-15 Research Associate, Chemical Engineering Dep., University of Patras, Greece - *‘Mathematical modeling of biological processes in bio-engineering schemes’*
- 2014 Postdoctoral researcher, Chemical and Environmental Technology Dep., University Rey Juan Carlos de Madrid, Spain - *‘Advanced bio-oxidation processes for the elimination of emergency contaminants from wastewater’*
- 2012-14 Postdoctoral researcher, Marie Curie IEF, Chemical and Environmental Technology Dep., University Rey Juan Carlos de Madrid, Spain - *‘Intimate coupling of Biological Advanced Oxidation Processes for environmental de-pollution and Biodiesel production’*
- 2011 Postdoctoral researcher, Materials Science and Engineering and Chemical Engineering Dep., University Carlos III de Madrid, Spain - *‘Modelling and Numerical Simulation’*
- 2008-10 Postdoctoral researcher and Instructor, Civil engineering Dep., University of Patras, Greece - *‘Experimental and theoretical study of fate and transport of bacteria and inorganic colloids in porous media’*

Teaching

- 2022-23 **Undergraduate Courses:** ‘Calculus I’ and ‘Calculus III’, Chemical and Biochemical Processes’, Chemical Engineering Dep., University of Western Macedonia, Greece
- 2021-22 **Undergraduate Courses:** ‘Engineering of Physical Processes’ and ‘Engineering of Chemical and Biochemical Processes’, Environmental Engineering Dep., Democritus University of Thrace, Greece
- 2017 **Undergraduate Course:** Analytical control of contaminants in food (Laboratory Exercises), Rey Juan Carlos University of Madrid, Spain.
- 2011 **Graduate Course:** Modeling in Science and Industry, ECMI Master in Industrial Mathematics, Rey Juan Carlos University of Madrid, Spain.
- 2011 **Undergraduate Courses:** Calculus I and II, **Graduate Course:** Modeling in Science and Industry, **European Summer School:** Modeling of Biofilms in Industrial Applications, University Carlos III of Madrid, Spain.

- 2008-10 **Undergraduate Courses:** i) Water Treatment, ii) Wastewater Treatment (Laboratory Exercises), University of Patras, Greece.
- 2005-08 Teaching assistant in **undergraduate course:** Soil and groundwater remediation, University of Ioannina, Greece

Research Interest

- Water and wastewater treatment
- Bio-electrochemical systems
- Resources and energy recovery from wastes
- Advanced bio-oxidation processes
- Mathematical modelling

Other activities

- MC member and Training Schools Coordinator CA21146 - PURPLEGAIN
- Reviewer for 40 scientific Journals
- Evaluator of scientific proposals for the French, Dutch, South Africa and Spanish National Research Agencies.
- Participation in 10 research projects
- Guest editor of 6 special issues

Grants/Awards & Prizes

- 2020 Katerva Awards 2020 – Cities and Mobilities- Energy from sewage (Ioanna A. Vasiliadou et al. 10.3389/fenrg.2018.00107) <https://katerva.org/awards/current-year-finalists>
- 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 Postdoctoral Fellowship - International excellence campus SMART ENERGY University Rey Juan Carlos de Madrid, Spain.
- 2012-14 Individual Postdoctoral Marie Curie Fellowship (IEF-People, 7thFP). University Rey Juan Carlos de Madrid, Spain.
- 2011 Individual Postdoctoral Fellowship - Social Council of Universidad Carlos III de Madrid.
- 2012 Individual Postdoctoral Fellowship - Supporting Postdoctoral Researchers Operational Program, Education and Lifelong Learning, Approved but denied by the applicant.
- 2011 Individual Postdoctoral Fellowship - Bodossaki Foundation, Athens, Approved but denied by the applicant.

Scientific results

- 42 publications in peer-reviewed international journals (19 in the last 5 years) and 2 chapters in books
- First author in 21 of them (7 in the last 5 years) and corresponding author in 10 (5 in the last 5 years)
- 1229 citations and h index 21 (self-citations are excluded)
- Publications/year 2.47 (3.6 for the last five years)
- 33 publications in international conferences proceedings

Selected Publications related to PPB

- **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
- **I.A. Vasiliadou**, J.A. Melero, R. Molina, D. Puyol, F. Martinez (2020) “Optimization of H₂ production through minimization of CO₂ emissions by mixed cultures of purple phototrophic bacteria in aqueous samples”, *Water*, 12:2015. doi:10.3390/w12072015
- 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>