


DEPARTMENT OF CHEMICAL ENGINEERING – UNIVERSITY OF WESTERN MACEDONIA

<p><b>Name and Surname:</b></p>	<p><b>ELISAVET AMANATIDOU</b></p>	
<p><b>Specialization /Position:</b></p>	<p>Chemical Engineering, Professor of Chemical Eng. Department - University of Western Macedonia. Deputy Head of Chemical Engineering Dept., University of Western Macedonia, 2021-today. Director of the Institutionalized and Accredited Laboratory of Environmental Chemistry and Water and Wastewater Treatment.</p>	
<p><b>Short CV:</b></p>	<p>13 years as chemical engineer (researcher and consultant), 4,5 years General Director of the Purely Prefectional Enterprise of Kozani "Environmental Centre", Prefecture of Kozani-Greece, more than 27 years teaching at TEI and 3,5 years at Chemical Eng. Department of University of Western Macedonia, 41 publications in scientific journals, 53 publications in scientific conferences 23 research projects, Reviewer in 12 scientific journals, Guest Editor in Resources Journal Special Issue 2022: "Advanced and Modern Processes of Wastewater Treatment". The major research fields are water quality monitoring and water &amp; wastewater treatment and management. Advanced and Modern Processes of water and wastewater treatment, nutrients removal, membrane separations, etc. Design and optimization of operation of wastewater treatment installations. Excess sludge reduction in complete sludge retention conditions. Photosynthetic biomass cultivation for added value and energy production. Electrooxidation, Electrocoagulation, Water quality monitoring. Measurement Uncertainty of water and wastewater quality parameters.</p>	
<p><b>Publications 2018-2023 (up to 5)</b></p>	<p>1.Amanatidou, E. Trikilidou, G. Samiotis, N. Taousanidis and Lazaros Tsikritzis, "Centennial assessment of greenhouse gases emissions of a young and an old hydroelectric reservoir in Mediterranean mainland", Journal of Environmental Informatics 41(1) 27-36 (2023). 2.Georgios Samiotis, Christos Lykas, Ilias Ristanis, Adamos Z. Stimoniaris and Elisavet Amanatidou, "Integrated management of hydroponic wastewater for complete water recycle and cyanobacteria cultivation using an electric conductivity-based tool", Bioresource Technology Reports 19 (2022) 101191. doi.org/10.1016/j.biteb.2022.101191. 3.Samiotis, G., Ziagova, M.G. &amp; Amanatidou, E. Wastewater substrate disinfection for cyanobacteria cultivation as tertiary treatment. Environ Sci Pollut Res (2022). https://doi.org/10.1007/s11356-022-20369-w. 4.Georgios Samiotis, Kostas Stamatakis, Elisavet Amanatidou, Dimensioning of Synechococcus elongatus PCC 7492 cultivation photobioreactor for valorization of wastewater resources, Chemical Engineering Journal, Volume 435, Part 2, 2022, 134895, ISSN 1385-8947, https://doi.org/10.1016/j.cej.2022.134895. 5.Maria G. Ziagova, Charoula Mavromatidou, Georgios Samiotis and Elisavet Amanatidou, "Total phenolic content and antioxidant capacity of Greek medicinal and aromatic plant extracts using pulsed electric field followed by ultrasounds extraction process", J. of Food Processing and Preservation, 14 April 2022, DOI: 10.1111/jfpp.16639.</p>	
<p><b>Research Projects 2018-2023 (up to 5)</b></p>	<p>1.«Assessment of Arsenic and Other Contaminants in Surface and Groundwaters of Pella regional unit areas, Greece - hydrogeological conditions mapping». YPEN ESPA (PA) 2014-2020, EEA Grants, 2022-2024. 2.«Clean technology for the production of bio-hydrogen, based on cyanobacteria, with simultaneous utilization of CO<sub>2</sub> from flue gases and nutrients from wastewater» Cod. OPS 5047197, EPAnEK 2014-2020, Development of New Innovative Low-Carbon Energy Technologies to Enhance EXCELLENCE in the Region of Western Macedonia, 2020-2023. 3.«Encapsulation of bioactive substances of aromatic and pharmaceutical plants in nanosomatides for use in the production of (a) biological foods &amp; food supplements (b) animal health protection products (c) plant protection products, », ESPA (PA) PDM, 2020-2023. 4.«Anaerobic biological pre-treatment and energy recovery system for add-on applications in wastewater treatment plants, acronym "Bio-Energ-On», ESPA (PA) PDM, 2014-2020, Priority Axis "Strengthening research, technological development and innovation, Cod. OPS 5030783, 2019-2023. 5."Improving water management and supply infrastructure via smart technologies, policies and tools", INTERREG "GREECE – ALBANIA 2014-2020", 2018-2023.</p>	
<p><b>Distinctions:</b></p>	<p>1. Adoption by the EU of the CRAS process (complete solids retention activated sludge process) developed by our laboratory, as a Good Practice for the treatment of wastewater and the design of treatment plants, based on the principles of circular economy (Reduce-Recycle-Reuse).</p>	