

Curriculum Vitae 	Personal Informations Name: ELISAVET Surname: AMANATIDOU Address: Ag. Paraskevis 37A, 50100 Kozani Tel.: 24610 68015, 68012 (lab.) Email: eamanatidou@uowm.gr
Position	14/03 2017 until June 2019 : Professor of Environmental Engineering and Pollution Control Department of Western Macedonia University of Applied Sciences. From June 2019 util today: Professor of Chemical Eng. Department of University of Western Macedonia
Studies	Chemical Engineering Diploma, 1983, Very Good (8) Post graduate diploma of the College for Educators in Professional and Technical Institutions, SELETE, Thessaloniki, 1997 PhD in Advanced Wastewater Treatment, 1992
Foreign languages:	French very good Romanian excellent English good
Taught Courses:	— Environmental Chemistry — Wastewater Engineering I — Wastewater Engineering II — Special Waste Management
Research group	Environmental Chemistry and Water & Wastewater Treatment Laboratory (accredited according to ISO 17025)
Research interests	The major research fields are water quality monitoring and water & wastewater treatment and management. More analytically: <ul style="list-style-type: none"> • Water and 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 • Electrooxidation, Electrocoagulation, Electroflotation • Water quality monitoring • Measurement Uncertainty of water and wastewater quality parameters The Laboratory's research team implements independent research (and publications) with semantic performance in the field of the: <ul style="list-style-type: none"> - excess sludge reduction (produced in the biological wastewater treatment) - - redefining the biological wastewater treatment plants design parameters and constants, in complete sludge retention conditions. -photosynthetic biomass cultivation for added value and energy production
Qualifications	<ul style="list-style-type: none"> • Excellent knowledge and experience in designing water and wastewater treatment facilities • Excellent experience in chemical and microbiological analysis • Excellent knowledge of Quality Management Systems implementation, and validation of analytical methods • Special experience in the Environmental problems in the area of Western Macedonia
Administrative and organizational ability	Grand administrative and organizational experience: <ul style="list-style-type: none"> • Participation in the organization of the Fur Centre S.A. Laboratory in Kastoria-Greece (1998). • Organization of the Purely Prefectional Enterprise of Kozani “Environmental Centre” (KEPE), Prefecture of Kozani-Greece (1999-2004). • 4,5 years General Director of the Purely Prefectional Enterprise of

	<p>Kozani “Environmental Centre”, Prefecture of Kozani-Greece (1999-2004).</p> <ul style="list-style-type: none"> • Organization (2001) of KEPE Laboratory (and its ISO 17025). • Organisation of the “Pollution Control Technologies Department” of Technological Educational Institution (TEI) of West Macedonia (2000). • Organization of the Environmental Chemistry and Wastewater Treatment Laboratory (2005) of Environmental Engineering and Pollution Control Department of Technological Educational Institute of Western Macedonia (and its ISO 17025). • Delegation Member of Technical Chamber of Greece / Dep. of Western Macedonia in the period 2000 to November 2013. • Member of Administrative Committee of Technical Chamber of Greece / Dep. of Western Macedonia in the period: 2003-2007 and 2008-2010. • General Secretary of the Administrative Committee of Technical Chamber of Greece / Dep. of Western Macedonia in the period 16/02/2004 to 21/03/2007. • Member of Administrative Council of Purely Prefectional Enterprise of Kozani “Environmental Centre”, Prefecture of Kozani - Greece in the period 2007 to September 2009. • Member of the Committee of the Special Account for Research Funds (ELKE) of TEI of Western. Macedonia from September 2013 to March 2017. • Organization of an International and a National Scientific Conference. • Deputy Head of Environmental Engineering and Pollution Control Department of Western Macedonia University of Applied Sciences from 1/12/2016 to 31/8/2017. • Head of the Control and Environmental Protection Research Sector, Technological Research Center (KTE), Western Macedonia, from 17-4-2018 to date, ID: ΨΤ314694ΧΩ-ΙΙΠ • Director of the Institutionalized and Accredited Laboratory of Environmental Chemistry and Water and Wastewater Treatment from 13-12-2018 until June 2019 (FEK 741 / 13-12-2018, issue: Y.O.D.D. and from April. 2020 until today. • Deputy Head of Chemical Engineering Dept., University of Western Macedonia, 2021-today
Supervision of bachelor’s and Diploma Theses	<ul style="list-style-type: none"> • more than 40
Supervision of Doctoral Dissertations	<ul style="list-style-type: none"> • “Wastewater treatment and valorization coupled with cyanobacterium <i>Synechococcus elongatus</i> PCC 7942 cultivation”, supported on 11-15-2022. • “Reduction of carbon footprint and energy consumption in wastewater treatment through innovative biological processes”, is implemented.
Publications	<ul style="list-style-type: none"> • 41 publications in scientific journals (1 under review & 1 submitted) • 53 publications in scientific conferences
Scientific references	390
Environmental Chemistry and Wastewater Treatment Lab. Services	The excellent organization of the Environmental Chemistry and Water & Wastewater Treatment Research Laboratory and its Accreditation according to ISO 17025 contributed to the participation in many research programs or specific services with total budget of 7.588.353,48 € for the period 2007-2022.
Society Memberships:	<ul style="list-style-type: none"> • Technical Chamber of Greece • Member of the Environment Committee of the Technical Chamber of Greece TEE. • Hellenic Association of Chemical Engineers • Member of Ecological Movement of Kozani
PROFESSIONAL & ACADEMIC EMPLOYMENT	
Generally:	
<ul style="list-style-type: none"> • 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 in similar discipline (about 25 years of independent teaching) and 3years at Chemical Eng. Depatremnt – University of Western Macedonia
- **23 research projects**
- Number of lectures and presentations to seminars and conferences of professional and scientific institutions in the region after an invitation
- Number of studies in the field of water and wastewater management and treatment
- Technical-Scientific Consultant to Factories in Greece.
- Scientific Collaborator in the Centre for Solid Fuels Technology and Applications (C.S.F.T.A.).
- Scientific Collaborator in the Macedonia Research Centre (MARC).
- Reviewer in 12 scientific journals and member of International Scientific Conference Committee
- Guest Editor in Plant Journal Special Issue 2022

REPRESENTATIVE PUBLICATIONS IN LAST FIVE YEARS:

1. Georgios Samiotis *, Adam Stimoniaris, Ilias Ristanis, Liana Kemmou, Charoula Mavromatidou, Elisavet Amanatidou, “Novel applications of iron in water and wastewater treatment” submitted to Special Issue "Advanced and Modern Processes of Wastewater Treatment" of Resources Journal, Manuscript ID resources-2208589, 2023.
2. 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).
3. 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.
4. A. G. Kapagiannidis*, S. Kastanakis, D. Gkelezis, A. Hatzibalios and E. Amanatidou. TREATMENT OF TABLE OLIVE WASTEWATER VIA ELECTROCOAGULATION: EFFECT OF BASIC OPERATIONAL PARAMETERS. 13^o Panhellenic Scientific Conference of Chemical Engineering, Patras, June 2-4, 2022.
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.
6. Samiotis, G., Ziagova, M.G. & 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>.
7. Maria G. Ziagova, Charoula Mavromatidou, Georgios Samiotis and Elisavet Amanatidou, “Enhancing Phenolic Content of Medicinal Aromatic Plants Extracts-Biofunctional Foods Preparation” *Plants* 2022, 11, 76. <https://doi.org/10.3390/plants11010076>.
8. 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>.
9. Georgios Samiotis, Charoula Mavromatidou, Eleni Trikilidou, Elisavet Amanatidou, "Correlation of greenhouse gases emissions with the trophic state and water quality of natural and artificial lakes", *Environmental Monitoring and Assessment, Limnology J.*, Under review 2022.
10. Mavromatidou Charoula, Batsi Anna, Samiotis Georgios and Amanatidou Elisavet, “Correlation of hexavalent chromium concentration to groundwater hydrochemical zones chemistry” *Groundwater for Sustainable Development J.*, 15 (2021) 100672.
11. G. Samiotis¹, K. Stamatakis², E. Amanatidou, *Synechococcus elongatus* sp. PCC 7942 – A fresh water cyanobacterium for sustainable wastewater treatment. *Water Science and Technology J*, September 2021, *Water Science and Technology J*, DOI: [10.2166/wst.2021.319](https://doi.org/10.2166/wst.2021.319)
12. Giakoumidaki-Voyiatzi Aikaterini, Amanatidou Elisavet, Melis Anastasios, Stamatakis Kostas, “STUDIES ON PHOTOSYNTHESIS OF CYANOBACTERIA LACKING PHYCOCYANIN”, 71st Conference of Hellenic Society of Bioscience and Molecular Biology, Αθήνα, Εθνικό Κέντρο Έρευνας Φυσικών Επιστημών «Δημόκριτος», στις 26-28 Νοεμβρίου 2021.
13. Liana Kemmou, Georgios Samiotis and Elisavet Amanatidou, “Oxygen requirements in relation to sludge age in wastewater treatment plants”, 2nd International Conference on environmental design, ICED2021, 23-24 October 2021, Virtual.
14. G. Samiotis, S.A. Theofanidis, K. Stamatakis, E. Amanatidou, “Cultivation of cyanobacterium

- Synechococcus elongatus PCC 7942 in wastewater substrate – A challenge to be addressed”, THESSALONIKI 2021 8th International Conference on Sustainable Solid Waste Management, 23-26 June 2021, Greece.
15. Georgios Samiotis, Liana Kemmou and Elisavet Amanatidou, “Limiting environmental impact of wastewater treatment by complete solids retention activated sludge process”, 13th European Congress of Chemical Engineering and 6th European Congress of Applied Biotechnology, 20-23 September 2021, virtual.
 16. C. Tsiptsias & G. Samiotis & L. Lefteri & E. Amanatidou. “Cr(VI) Leached from Lignite Fly Ash—Assessment of Groundwater Contamination Risk”, *Water Air Soil Pollut* (2020) 231:373, <https://doi.org/10.1007/s11270-020-04750-4>
 17. Eleni Trikilidou , Georgios Samiotis , Lazaros Tsikritzis & Elisavet Amanatidou (2020): Performance of Semi-Micro-Kjeldahl Nitrogen Method – uncertainty and nitrate interference, *International Journal of Environmental Analytical Chemistry*, DOI: 10.1080/03067319.2020.1807967
 18. Samiotis G.1, Lefteri L. 1, Mavromatidou C. 1, Tsiptsias C. 1, Trikilidou E.1, Batsi A.1, Amanatidou E.1*, «Hexavalent Chromium Removal from Groundwater – A Low-Tech Approach», 4th EWaS (Efficient Water Systems) International Conference: Valuing on the Water-Carbon-Ecological Footprints of Human Activities 24-27 June 2020 Corfu Island, Greece.
 19. Mavromatidou C. 1, Trikilidou E.1, Samiotis G.1, Pekridis G., Lefteri L. 1, Tsikritzis L.1, Amanatidou E.1, «A water quality assessment tool for decision making, based on widely used water quality indices» ATO, 4th EWaS (Efficient Water Systems) International Conference: Valuing on the Water-Carbon-Ecological Footprints of Human Activities 24-27 June 2020 Corfu Island, Greece.
 20. Amanatidou, E. Trikilidou, G. Samiotis, N. Taousanidis and Lazaros Tsikritzis, “Centennial assessment of greenhouse gases emissions of a young and an old 1 hydroelectric reservoir in Mediterranean mainland” *Journal of Environmental Informatics*, J., 2019 Manuscript Num: JEI 16JM092719C.
 21. THEOFANIDIS S.A., SAMIOTIS G., BELLOS D. PEKRIDIS G., TSIPTSAS C. AND AMANATIDOU E*, “Challenges in biological treatment plants: the approach of zero sludge waste”, 16th International Conference on Environmental Science and Technology, CEST2019, 4-7 September 2019, Rhodes, Greece.
 22. TSIPTSAS C., SAMIOTIS G., KAKLIDIS N., PEKRIDIS G. AND AMANATIDOU E.*, “Greenhouse Gas Emissions from Natural and Artificial Lakes in Western Macedonia, Greece”, 16th International Conference on Environmental Science and Technology, CEST2019, 4-7 September 2019, Rhodes, Greece.
 23. STAMOS A., SAMIOTIS G., PEKRIDIS G., TSIPTSAS C. and AMANATIDOU E.*, “Natural presence of hexavalent chromium in spring waters of South-West Mountain Vermion, Greece”, 16th International Conference on Environmental Science and Technology, CEST2019, 4-7 September 2019, Rhodes, Greece.
 24. Samiotis Georgios^{1*}, Tzelios Dimitrios¹; Trikoilidou Eleni¹; Koutelias Alexandros and Amanatidou Elisavet¹, “Innovative approach on aerobic activated sludge process towards more sustainable wastewater treatment”, 3rd EWaS International Conference on “insights on the Water-Energy-Food Nexus”, 27 to 30 June 2018, Lefkada Island, Greece.
 25. Georgios Samiotis^{1*}, Eleni Trikoilidou¹, Lazaros Tsikritzis¹ and Elisavet Amanatidou¹, "Comparative water quality assessment between a young and a stabilized reservoir in Aliakmon River, Greece" *J. Environmental Monitoring and Assessment*, April 2018, 190: 234. <https://doi.org/10.1007/s10661-018-6602-x>
 26. Samiotis Georgios^{1*}, Pekridis Giorgos¹, Kaklidis Nikolaos³, Trikoilidou Eleni¹, Taousanidis Nikolaos², Amanatidou Elisavet¹, “Greenhouse gases emissions from two hydroelectric reservoirs in Mediterranean region”, *J. Environmental Monitoring and Assessment*, 190(6), June 2018, DOI: 10.1007/s10661-018-6721-4.
 27. Elisavet Amanatidou, Eleni Trikilidou, George Pekridis, George Samiotis, Lazaros Tsikritzis, Nikolaos Taousanidis, Stavros Karapanos, «Pollution sources in water of young reservoirs - Case of Ilarion Hydroelectric Dam, Greece», *Environmental Engineering and Management Journal*, *Environmental Engineering and Management Journal*, Volume 17, No. 9/2018.
 28. Eleni Trikoilidou^{1*}, Georgios Samiotis¹, Lazaros Tsikritzis¹, Theodoros Kevrekidis² and Elisavet Amanatidou¹, “Evaluation of Water Quality Indices Adequacy in Characterizing the Physico-Chemical Water Quality of Lakes”, *Journal: Environmental Processes / March 2017*, DOI: 10.1007/s40710-017-0218-y

29. Fani Iakovidou^{1*}; Eleni Trikoilidou¹; Georgios Samiotis¹; Lazaros Tsikritzis¹ and Elisavet Amanatidou¹, "Development of an updated water quality index based on legislation and experts' opinion", 10th World Congress of EWRA on Water Resources and Environment, Athens, 5-9 July 2017.
30. Elisavet Amanatidou, Georgios Samiotis, Eleni Trikoilidou, Lazaros Tsikritzis, "Particulate organics degradation and sludge minimization in aerobic, complete SRT bioreactors", Water Research Volume 94, 1 May 2016, Pages 288–295, DOI 10.1016/j.watres.2016.02.008.
31. G. Samiotis^{1*}, E. Trikoilidou¹, A. Michailidis¹, E. Zagana² and E. Amanatidou¹, "Comparative water quality assessment of a new and an old reservoir in Aliakmon River using both statistical tools and a modified NSF water quality index", 13th International Conference on Protection and Restoration of the Environment, Mykonos island, Greece, | 3rd to 8th of July, 2016.
32. E. Trikoilidou^{1*}, G. Samiotis¹, Bellos D. and E. Amanatidou¹, "Sustainable operation of biological wastewater treatment plants", Conference on Innovative Manufacturing Engineering & Energy, IManEE 2016, 20th Edition, "Science and Engineering in the land of Aristotle", Kallithea Chalkidiki, Greece, September 23-25, 2016, <http://www.imane.ro/>.
33. Amanatidou E¹, Samiotis G¹, Trikoilidou E¹, Pekridis G¹, Tsikritzis L¹, "Complete Solids Retention Activated Sludge Process", Water Science and Technology, 73.6, 2016, Pages 1364 – 1369, DOI: 10.2166/wst.2015.614.

RECENT WRITINGS

1. Elisavet Amanatidou, "Speciation, chemistry, geogenic formation and dispersion of Chromium in groundwater " Chapter in the book "Chromium in Plants and the Environment" **N. Kumar, C. Walther and D.K. Gupta, Springer publication. In preparation for submission in 2023.**
2. ^{BOOK} Amanatidou Elisavet. "Advanced & Modern Processes of Wastewater Treatment" - Basic Design Principles », Ed. TZIOLA, 2019
3. "Wastewater Treatment and Disposal", Theory Courses, Department of Environmental Engineering and Pollution Control, Technological Education Institution of Western Macedonia, Dr. Amanatidou Elisavet, Chemical Engineering, Assoc. Prof., 2nd Ed.: Kozani, December 2015.
4. "Wastewater Treatment and Disposal" Laboratory Courses, Department of Environmental Engineering and Pollution Control, Technological Education Institution of Western Macedonia, Dr. Amanatidou Elisavet, Chemical Engineering, Assoc. Prof., 1st Ed.: Kozani, November 2013.
5. "Advanced & Modern Processes of Wastewater Treatment" Theory Courses, Department of Environmental Engineering and Pollution Control, Technological Education Institution of Western Macedonia, Dr. Amanatidou Elisavet, Chemical Engineering, Assoc. Prof., 5th Ed.: Kozani, March 2010.
6. "Advanced & Modern Processes of Wastewater Treatment – Laboratory Exercises" Laboratory Courses, Department of Environmental Engineering and Pollution Control, Technological Education Institution of Western Macedonia, Dr. Amanatidou Elisavet, Chemical Engineering, Assoc. Prof., 5th Ed.: Kozani, September 2010.
7. "Environmental Chemistry- Laboratory Exercises" Laboratory Courses, Department of Environmental Engineering and Pollution Control, Technological Education Institution of Western Macedonia, Dr. Amanatidou Elisavet, Chemical Engineering, Assoc. Prof., 5th Ed.: Kozani, September 2010.

RESEARCH PROJECTS IN LAST FIVE YEARS:

1. «Assessment of the presence and origin of chromium and other constituents in groundwater and surface water of the Kozani regional unit - Mapping of hydrogeological conditions in areas». Funding: REGION OF WESTERN MACEDONIA 2017, Scientifically Responsible for the UOWM. 2017-2019.
2. "Improving water management and supply infrastructure via smart technologies, policies and tools" budget 3.500.000 ευρώ. Funding: INTERREG IPA II CROSS-BORDER COOPERATION PROGRAMME "GREECE – ALBANIA 2014-2020, Scientific Responsible for UOWM, 2018-2023.
3. "Measurement of greenhouse gas emissions and assessment of water quality status in natural and artificial lakes of Western Macedonia". Funding: NATIONAL CENTER FOR THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT (E.K.P.A.A.), 2017-2019, Scientifically Responsible.
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. The operation is co-financed by the European Regional Development Fund (ERDF). Scientific Responsible. 2019-2023.
5. "Investigation of the groundwater hexavalent chromium in situ remediation", Funding: ELKE

UOWM, 2019, Scientifically Responsible.

6. «Encapsulation of bioactive substances of aromatic and pharmaceutical plants in nanosomatides for use in the production of (a) biological foods & food supplements (b) animal health protection products (c) plant protection products, », ESPA (PA) PDM. PRIORITY AXIS 01: "Strengthening research, technological development and innovation. 2020-2023.
7. «Clean technology for the production of bio-hydrogen, based on cyanobacteria, with simultaneous utilization of CO₂ 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. Priority Axis "Development of entrepreneurship support mechanisms" of the EP. "Competitiveness Entrepreneurship and Innovation", 2020-2023.
8. «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. Ministry of Environment and Energy, Special Service "Staff Structure NSPA YPEN, Environment Sector", Unit A: Planning, Coordination, Monitoring and Evaluation of the Implementation of Environmental Policies. Scientific Responsible. 2022-2024.