


**DEPARTMENT OF CHEMICAL ENGINEERING – UNIVERSITY OF WESTERN MACEDONIA**

<b>Name and Surname:</b>	Zacharias Frontistis	
<b>Specialization/Position:</b>	Associate Professor of Water and Wastewater Process Engineering	
<b>Short CV:</b>	<p>Dr. Zacharias Frontistis is an Associate Professor of Water and Wastewater Process Engineering at the Department of Chemical Engineering, University of Western Macedonia. He has served as chairman of the departments of Environmental Engineering (2018-2019) and Chemical Engineering (2019-2021) at the University of Western Macedonia. In 2005 he obtained a Diploma in Environmental Engineering, in 2007 a Master's Degree and in 2011 a PhD in Environmental Engineering from the Technical University of Crete. He has worked as a Postdoctoral Researcher at the Department of Civil &amp; Environmental Engineering, University of Cyprus and at the International Water Research Centre NIREAS, at the Department of Civil and Environmental Engineering, Namik Kemal University and at the Department of Chemical Engineering, University of Patras. His research interests focus on catalysis for environmental and energy applications, the development of new physicochemical processes for water treatment, the combination of physicochemical and biological processes for agro-industrial wastewater treatment and the simulation of these processes. He has supervised or co-supervised a large number of diploma and postgraduate theses. He has published a large number of articles both in high impact international journals &gt;130 articles, h index 40, ≈4000 citations (Scopus) and in international conference proceedings (&gt;60) and is author of 2 chapters of books on advance wastewater treatment and reuse. He is a reviewer in more than 50 high-impact scientific journals for &gt;600 papers and is part of the editorial board of 5 international journals and has been guest editor in 11 special issues in his fields of interest. He has participated in more than 17 research projects (European and national projects).</p>	
<b>Publications 2013-2018 (up to 5)</b>	<ol style="list-style-type: none"> <li>1. K. Lalas, O.S. Arvaniti, E. Zkeri, M.-C. Nika, N.S. Thomaidis, D. Mantzavinos, A.S. Stasinakis, <b>Z. Frontistis</b>. Thermally activated persulfate oxidation of ampicillin: Kinetics, transformation products and ecotoxicity, <i>Science of the Total Environment</i> <b>846</b> (2022) 157378.</li> <li>2. O.S. Arvaniti, I.Konstantinou, D. Mantzavinos, <b>Z. Frontistis</b>. Destruction of valsartan using electrochemical and electrochemical/persulfate process. Kinetics, identification of degradation pathway and application in aqueous matrices. <i>Journal of Environmental Chemical Engineering</i> <b>9</b> (2021) 106265.</li> <li>3. A. Ioannidi, O.S. Arvaniti, M.C. Nika, R. Aalizadehm N.S. Thomaidis, D. Mantzavinos, <b>Z. Frontistis</b>. Removal of drug losartan in environmental aquatic matrices by heat-activated persulfate: kinetics, transformation products and synergistic effects. <i>Chemosphere</i> <b>287</b> (2022) 131952.</li> <li>4. A. Petala, D. Mantzavinos, <b>Z. Frontistis</b>, Impact of water matrix on the photocatalytic removal of pharmaceuticals by visible light active materials. <i>Current opinions in Green and Sustainable Chemistry</i> <b>28</b> (2021) 100145</li> <li>5. N. Pueyo, M.P. Ormad, N. Miguel, P. Kokkinos, A. Ioannidi, D. Mantzavinos, <b>Z. Frontistis</b>, Electrochemical oxidation of butyl paraben on boron doped diamond in environmental matrices and comparison with sulfate radical-AOP. <i>Journal of Environmental Management</i> <b>269</b> (2020) 110783</li> </ol>	

<b>Research Projects 2013-2018 (up to 5)</b>	<ol style="list-style-type: none"> <li>1. Development of advanced wastewater treatment technologies supported by renewable energy sources (PI) HFRI (2022-2026)</li> <li>2. Advanced Wastewater treatment of wineries using environmentally friendly and low-cost photocatalytic processes (PI) GSSF (2020-2022)</li> <li>3. Development of an innovative biomass-based hybrid electrochemical process for the removal of endocrine disruptors (PI) NSRF 2020-2021</li> <li>4. Development and Demonstration of a Photocatalytic Process for removing Pathogens and Pharmaceuticals from wastewaters (2De4P) HFRI (PI) (2019-2022)</li> <li>5. Development of new innovative low carbon footprint energy technologies NSRF (2020-2023)</li> </ol>
<b>Distinctions:</b>	<ol style="list-style-type: none"> <li>1. Dr. Frontistis is included in the top 2% of researchers with the highest recognition in the field of Environment and Energy and Physical Chemistry, Environmental Science and Chemistry and in the top 100,000 most influential researchers overall for the years 2019, 2020 and 2021 (Stanford University's list)</li> <li>2. Top 1% Reviewer for Engineering (2018) Environment and Ecology (2018) and Top Reviewer in Cross Field (2019), Environment and Ecology (2019) and Engineering (2019) (Clarivate Analytics)</li> <li>3. Marie Curie Individual Postdoctoral Fellowship (IF, 2018)</li> <li>4. IKY SIEMENS Postdoctoral Fellowship of Excellence (2017)</li> <li>5. Postdoctoral Fellowship TUBITAK International Researchers 2216 (2016)</li> </ol>