


**DEPARTMENT OF CHEMICAL ENGINEERING – UNIVERSITY OF WESTERN MACEDONIA (UOWM)**

<p><b>Name and Surname:</b></p>	<p align="center"><b>Vayos G. Karayannis</b></p>	
<p><b>Specialization/ Position:</b></p>	<p><b>Dr. Chemical Engineer NTUA / Professor (Full), Department of Chemical Engineering, School of Engineering, UOWM, Kozani, Greece</b></p>	
<p><b>Short CV:</b></p>	<p><u>Diploma in Chemical Engineering:</u> School of Chemical Engineering, National Technical University of Athens (NTUA), Greece, 1986  <u>Diplome d' Etudes Approfondies - D.E.A. (MSc):</u> "Applied Chemistry &amp; Industrial Process Engineering", Universite Pierre et Marie Curie-PARIS 6, Ecole Nationale Superieure de Chimie de Paris, France, 1988  <u>PhD:</u> Doctor Chemical Engineer, School of Chemical Engineering, NTUA, Athens, Greece, 2004  <u>Pedagogical Studies:</u> Postgraduate Degree, PATES/SELETE, Greece, 1998  <u>Languages:</u> Greek (Mother tongue), French, English  <u>Main research topics:</u>                      - Towards Circular Bio/economy: Characterization/processing/upgrading/valorization of industrial and agro-based solid wastes/by-products into sustainable value-added ceramic/composite products                      - Transition to low-carbon energy technologies, socio-economic aspects &amp; soft computing applications                      - Development of novel photo-catalytic materials for environmental applications                      - Degradation of effluents/wastewaters by advanced oxidation processes (AOPs)                      - Microalgal biofuels  <u>Published scientific work:</u> <b>70</b> publications in peer-reviewed international scientific journals (Scopus), <b>10</b> in scientific volumes (Scopus) and <b>&gt; 100</b> in refereed international &amp; national congress/conf. proc. <b>1/3</b> of the overall work published in the <b>last 5</b> years  <u>Scientific cooperations:</u> NTUA – School of Chemical Engineering, Hellenic Open University – School of Science &amp; Technology, AUTH – Chemical Engineering Dept., University of Thessaly – School of Technology and School of Engineering, International Hellenic University – Food Science &amp; Technology Dept., Democritus University of Thrace – Environmental Engin. Dept., University of Patras – Chemistry Dept., Centre for Research and Technology Hellas – Chemical Process &amp; Energy Resources Institute</p>	
<p><b>Publications (five selected)</b></p>	<ol style="list-style-type: none"> <li>1. K. Kokkinos, E. Nathanail, V. Gerogiannis, K. Moustakas, V. Karayannis, <b>Hydrogen storage station location selection in sustainable freight transportation via intuitionistic hesitant decision support system</b>, <i>Energy</i> 260 (2022) 125008</li> <li>2. E. Katsika, M. Volioti, V. Karayannis, A. Moutsatsou, <b>Transformation of Industrial By-Products into Composite Photocatalytic Materials</b>, <i>Periodica Polytechnica Chemical Engineering</i> 65 1(2021)12-20</li> <li>3. K. Kokkinos, V. Karayannis, E. Nathanail, K. Moustakas, <b>A comparative analysis of Statistical and Computational Intelligence methodologies for the prediction of traffic-induced fine particulate matter and NO<sub>2</sub></b>, <i>Journal of Cleaner Production</i> 328 (2021) 129500</li> <li>4. K. Kokkinos, V. Karayannis, K. Moustakas, <b>Circular bio-economy via energy transition supported by Fuzzy Cognitive Map modeling towards sustainable low-carbon environment</b>, <i>Science of the Total Environment</i> 721 (2020) 137754</li> <li>5. G. Papapolymerou, V. Karayannis, A. Besios, A. Riga, N. Gougoulis, X. Spiliotis, <b>Scaling-up sustainable <i>Chlorella vulgaris</i> microalgal cultivation from laboratory to pilot-plant photobioreactor, towards biofuel</b>, <i>Global Nest Journal</i> 21 (1) (2019) 37-42</li> </ol>	
<p><b>Research Projects (five selected)</b></p>	<ol style="list-style-type: none"> <li>1. <u>Scientific Coordinator</u> of the Research Project (financed by ELKE – TEIWM, Greece) <b>"Innovative valorization of industrial solid wastes/by-products in the development of new materials for the treatment &amp; advanced oxidation of industrial effluents"</b>, 2016-2017</li> <li>2. <u>Scientific Coordinator</u> of the Research Project "ARCHIMEDES III" (co-financed by the EU &amp; national funds) <b>"Valorization of industrial and agricultural solid wastes into ceramic materials"</b>, TEIWM, Greece, 2013-2015</li> <li>3. Main Research Team Member of the Research Program «COOPERATION 2011» <b>"Algal biofuel production"</b>, (co-financed by the EU &amp; national funds), 2013-2015</li> <li>4. Main Research Team Member of the Research Program «COOPERATION 2011» <b>"Novel ceramic materials"</b> (co-financed by the EU &amp; national funds), 2013-2015</li> <li>5. Main Research Team Member of the Research Program <b>"Development of appropriate technologies for the management of olive mill solid and liquid by-products, sewage sludge, alternative solid fuel and petroleum coke"</b> (financed by industrial funds), 2013</li> </ol>	
<p><b>Distinctions:</b></p>	<ol style="list-style-type: none"> <li>1. 800 Citations (Scopus) and 1300 (GoogleScholar)</li> <li>2. Publications in &gt; 20 journals with high impact factor</li> <li>3. Reviewer for &gt; 20 highly-respected international scientific journals</li> <li>4. Co-Guest Editor for 2 Journal Special issues</li> <li>5. Scientific Committee Member and Session Chairman of a wide number of international and national congresses/conferences/symposia, and Special issue Guest Editor</li> <li>6. 4th (2021) and 5th (2020) Best Publication Award, School of Engineering, UOWM</li> <li>7. Evaluator of several research proposals</li> </ol>	