


DEPARTMENT OF CHEMICAL ENGINEERING – UNIVERSITY OF WESTERN MACEDONIA

<p><b>Name and Surname:</b></p>	<p><b>Vayos G. Karayannis</b></p>	
<p><b>Specialization/ Position:</b></p>	<p><b>Dr. Chemical Engineer NTUA Professor, Department of Chemical 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 and Industrial Processes", 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>Other Languages:</u> French, English  <u>Research topics:</u> Characterization, management, recycling, processing, transformation, upgrading, utilization &amp; valorization of industrial and agro-based solid wastes/by-products/residues, Development of ceramic materials &amp; metal-ceramic composites (MMCs), Stabilization/Solidification of hazardous substances, Development of new materials for use in environmental protection, Treatment of industrial effluents by Advanced Oxidation Processes (AOPs), Carbon capture, storage and utilization technologies (CCS/CCU), Biofuels from microalgae, Application of computing and artificial intelligence technologies, Socio-economic aspects of environmental and energy issues, Circular Bio/Economy  <u>Published scientific work:</u> &gt; <b>55</b> publications in peer-reviewed international scientific journals (Scopus), &gt; <b>10</b> in scientific volumes (Scopus) as well as &gt; <b>87</b> in refereed proceedings of international and national scientific conferences. 2/3 of the overall work: published in the last 5 years  <u>Scientific cooperations:</u> NTUA - School of Chemical Engineering, Hellenic Open University - School of Science &amp; Technology, Δημοκρίτειο Πανεπιστήμιο Θράκης - Environmental Engineering Dept., University of Thessaly - Chemical Technology &amp; Materials Technology Labs., International Hellenic University - Food Science &amp; Technology Dept., University of Patras - Chemistry Dept., Centre for Research and Technology Hellas - Chemical Process &amp; Energy Resources Institute</p>	
<p><b>Publications 2013-2018 (up to five)</b></p>	<ol style="list-style-type: none"> <li>1. K. Kokkinos, <b>V. Karayannis</b>, E. Lakioti, K. Moustakas, Exploring social determinants of municipal solid waste management: Survey processing with fuzzy logic and self-organized maps, <i>Environmental Science and Pollution Research</i>, Article in Press</li> <li>2. E. Katsika, A. Moutsatsou, <b>V. Karayannis</b>, M. Volioti, D. Tsoukleris, Synthesis and characterization of lignite fly ash ceramic substrates coated with TiO<sub>2</sub> slurry &amp; evaluation in environmental applications, <i>Journal of the Australian Ceramic Society</i> 54(4) (2018) 711-719</li> <li>3. A. Baklavariadis, P. Samaras, <b>V. Karayannis</b>, Recent progress in the advanced oxidation of wastewaters using recycled fly ashes as alternative catalytic agents, <i>Desalination and Water Treatment</i>, 133 (2018) 292-306</li> <li>4. <b>V. Karayannis</b>, K. Ntampegiotis, S. Lamprakopoulos, G. Papapolymerou, X. Spiliotis, Novel sintered ceramic materials incorporated with EAF Carbon steel slag, <i>Materials Research Express</i> 4(1) (2017) 015505</li> <li>5. <b>V.G. Karayannis</b>, Development of extruded and fired bricks with steel industry byproduct towards circular economy, <i>Journal of Building Engineering</i> 7 (2016) 382-387</li> </ol>	
<p><b>Research Projects 2013-2018 (up to five)</b></p>	<ol style="list-style-type: none"> <li>1. <b>Scientific Coordinator</b> of the Research Project (financed by ELKE - TEI of Western Macedonia) "Innovative valorization of industrial solid wastes/by-products in the development of new materials for the treatment &amp; advanced oxidation of industrial effluents", 2016-2017</li> <li>2. <b>Scientific Coordinator</b> of the Research Project "ARCHIMEDES III" (co-financed by the EU &amp; national funds) "Valorization of industrial and agricultural solid wastes into ceramic materials", TEI of Western Macedonia, 2013-2015</li> <li>3. Main Research Team Member of the Research Program «COOPERATION 2011» (co-financed by the EU &amp; national funds), "Algal biofuel production", 2013-2015</li> <li>4. Main Research Team Member of the Research Program «COOPERATION 2011» (co-financed by the EU &amp; national funds), "Novel ceramic materials", 2013-2015</li> <li>5. Main Research Team Member of the Research Program "Study for the development of appropriate technologies for the management of olive mill solid and liquid by-products, sewage sludge, alternative solid fuel and petroleum coke", 2013</li> </ol>	
<p><b>Distinctions:</b></p>	<ol style="list-style-type: none"> <li>1. &gt; 350 Citations (Scopus) και &gt; 500 (GoogleScholar)</li> <li>2. Reviewer for &gt; 15 highly-respected international scientific journals</li> <li>3. Scientific Committee Member and Session Chairman of a wide number of international and national congresses/conferences/symposia</li> <li>4. Evaluator of several research proposals</li> </ol>	