


DEPARTMENT OF CHEMICAL ENGINEERING – UNIVERSITY OF WESTERN MACEDONIA

Name and Surname:	Konstantinos Kalogiannis	
Specialization/Position:	Chemical Engineer, Assistant Professor (Department of Chemical Engineering of UOWM)	
Short CV:	<ul style="list-style-type: none"> • Catalytic pyrolysis of biomass and organic solid wastes toward biofuels and renewable chemicals of high added value. • Wastes valorisation for fuels and chemicals via thermochemical processes (end of life tires, plastic wastes). • Biomass fractionation and conversion to transportation fuels, fine chemicals and food additives. • Catalytic reaction engineering, design of novel processes and experimental units. • Biorefineries and novel bio-based materials. 	
Publications 2013-2018 (up to 5)	<ol style="list-style-type: none"> 1. The Consistency of Yields and Chemical Composition of HTL Bio-Oils from Lignins Produced by Different Preprocessing Technologies, Halleraker, H.V., Kalogiannis, K., Lappas, A., Rafael C. A. Castro, Ines C. Roberto, Solange I. Mussatto, S.I., Barth, T., Energies, 15(13), 4707, 2022 2. Novel trends in the thermo-chemical recycling of plastics from WEEE containing brominated flame retardants, Charitopoulou, M.A., Kalogiannis, K.G., Lappas, A.A., Achilias, D.o.S., Environmental Science and Pollution Research, pp. 59190–59213, 28(42), 2021 3. Production of omega-3 fatty acids from the microalga cryptocodium cohnii by utilizing both pentose and hexose sugars from agricultural residues, Asimakopoulou, G., Karnaouri, A., Staikos, S., Kalogiannis, K.G., Lappas, A.A., Topakas, E., Fermentation, 7(4), 219, 2021 4. Conversion of organosolv pretreated hardwood biomass into 5-hydroxymethylfurfural (HMF) by combining enzymatic hydrolysis and isomerization with homogeneous catalysis, Dedes, G., Karnaouri, A., Marianou, A.A., Kalogiannis, K.G., Lappas, A.A., Topakas, E., Biotechnology for Biofuels, 14(1), 172, 2021 <p>Hydrodeoxygenation of phenol and biomass fast pyrolysis oil (bio-oil) over Ni/WO₃-ZrO₂ catalyst, Zerva, C., Karakoulia, S.A., Kalogiannis, K.G., ...Papayannakos, N., Triantafyllidis, K.S., Catalysis Today, pp. 57–67, 366, 2021</p>	
Research Projects 2013-2018 (up to 5)	<ol style="list-style-type: none"> 1. Coordinator – Scientific responsible 2020 – 2023: AMALTHYA by GSRT (National) (Project budget: 1.000.000 €) AMALTHYA brings together 3 research organizations and 1 private company from Greece with the ambition to develop a holistic biorefinery scheme that converts agro and food industry residues and wastes into functional food supplements that can add significant nutritional and economic value to food products. 2018 – 2021: NoWasteBioTech by HFRI (Project budget: 225.000 €) NoWasteBioTech is an ambitious interdisciplinary project aiming to convert low value agricultural and forestry residues to high added value chemicals and food additives such as omega-6 fatty acids, lactic acid, prebiotics and functional phenolic monomers and oligomers from biomass wastes. 	
Distinctions:	1.	