

## **Academic Personnel Short Profile / Short CV**

University:	Frederick University
Surname:	Chasos
Name:	Charalambos
Rank/Position:	Associate Professor
School:	Engineering
Department:	Mechanical Engineering
Scientific Domain:	Internal Combustion EnginesSpecialization: Internal Combustion Engines with the aid of Computational Fluid Dynamics (CFD)

	Academic qualifications						
Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)			
PhD	2006	Imperial College of Science Technology and Medicine, University of London	Department of Mechanical Engineering	CFD simulation of direct-injection gasoline sprays.			
Diploma of Imperial College (DIC) in Mechanical Engineering	2006	Imperial College of Science Technology and Medicine, University of London	Department of Mechanical Engineering	CFD simulation of direct-injection gasoline sprays.			
Diploma in Mechanical 1997 Engineering		National Technical University of Athens	Department of Mechanical Engineering	Experimental investigation of the effects of the channel size for the mounting of measurement sensors on the indicative power of a marine Diesel engine.			

	Employment history in Academic Institutions/Research Centers					
Period of	employment	Employer	Location	Position		
From	То	Employer	Location	FOSITION		
March 2021	present	Frederick University	Nicosia	Associate Professor		
March 2016	February 2021	Frederick University	Nicosia	Assistant Professor		
February 2010	February 2016	Frederick University	Nicosia	Lecturer		
January 2009	January 2010	Cyprus Technical University	Limassol	Special Scientist		
October 2008	January 2010	Frederick University	Nicosia	Visiting Lecturer		

	Key <u>refereed</u> journal papers, monographs, books, conference publications etc.							
Ref. Number	Year	Title	Other authors	Journal and Publisher / Conference	Vol.	Pages		
1	2023	Spray injection and development realizations and investigations of the effect of droplets coalescence and recirculation on ensemble-averaged predicted data	-	DIPSI Workshop 2023 Droplet Impact Phenomena & Spray Investigations, Sant'Agostino Conference Room Via Fara, Università Degli Studi Di Bergamo, Italy, 16th June, 2023. (DOI: 10.13122/DIPSI2023)				
2	2019	CFD simulations of diesel multi-hole injector internal flow and spray jet	-	ILASS-Europe 2019, 29th European Conference on Liquid				

		development at increasing chamber pressure and temperature conditions		Atomization and Spray Systems. Paris, France, 2-4 September 2019.	
3	2018	Combustion simulations of different hydrocarbon content natural gas in constant volume chamber and direct-injection spark-ignition internal combustion engine	Loizou, N.I.,Vasiliou, J.A., Karagiorgis, G.N. and Christodoulou, C.N.	6 <sup>th</sup> International Conference on Renewable Energy Sources & Energy Efficiency – New Challenges. University of Cyprus, Nicosia, Cyprus, 1 – 2 November, 2018.	239 - 249
4	2017	CFD simulations of the diesel jet primary atomization from a multihole injector	-	ILASS-Europe 2017, 28 <sup>th</sup> European Conference on Liquid Atomization and Spray Systems. Valencia, Spain, 6-8 September 2017. http://dx.doi.org/10.4 995/ILASS2017.2017 .5040	
5	2016	CFD simulations of diesel injector flow and fuel jet for varying nozzle geometries	-	ILASS 2016, 27 <sup>th</sup> European Conference on Liquid Atomization & Spray Systems. Brighton, England, 4-7 September 2016.	
6	2016	Chapter 8: Diesel Internal Combustion Engine Emissions Measurements for Methanol-Based and Ethanol-Based Biodiesel Blends.	Karagiorgis, G.N. and Christodoulou, C.N.	Transportation and the Environment Assessments and Sustainability, Taylor and Francis Group,	

				June, 2016 (DOI: 10.1201/9781315365 886-13).		
7	2016	Vehicle natural gas internal combustion engine analysis and comparison with conventional gasoline engine	Vasiliou, J. A., Karagiorgis G. N. and Christodoulou, C. N.	5 <sup>th</sup> International Conference on Renewable Energy Sources & Energy Efficiency – New Challenges. Hilton Hotel, Nicosia, Cyprus, 5 – 6 May, 2016.		
8	2014	CFD simulation of the emerging liquid sheet from a high-pressure swirl injector at increasing injection pressures	-	ILASS 2014, 26 <sup>th</sup> European Conference on Liquid Atomization & Spray Systems. Bremen, Germany, 8-10 September 2014.		
9	2014	Emissions measurements of naturally- aspirated and turbo-charged Diesel internal combustion engines for various biodiesel blends	Karagiorgis, G.N. and Christodoulou, C.N.	International Journal of Sustainable Energy, DOI: 10.1080/14786451.2 014.895355		
10	2014	Technical and feasibility analysis of gasoline and natural gas fuelled vehicles	Karagiorgis, G.N. and Christodoulou, C.N.	AIMS Energy Journal	2	71-88

Research Projects						
Ref. Number	Date	Title	Funded by	Project Role		
1	Oct. 2023 to Oct. 2027	European Cooperation in Science and Technology (COST) Action CA22151, "Cyber-Physical systems and digital twins for the decarbonisation of energy-intensive industries (CYPHER)"	European Union	Member of the Management Committee of the Action		
2	Jan. 2023 - Dec. 2026	EU-CONEXUS Plus "European University for Smart Urban Coastal Sustainability"	European Union, European Universities 2022 Erasmus+	Member of the WP7 "Research to education"		
3	Oct. 2021 to Oct. 2025	COST Action CA20127, "Waste biorefinery technologies for accelerating sustainable energy processes (WIRE)"	European Union	Member of the Management Committee of the Action		
4	Mar. 2021 Feb. 2024	EU-CONEXUS "European University for Smart Urban Coastal Sustainability", EU- CONEXUS Research for Society (RFS)	European Union, HORIZON 2020 Programme - Science with and for Society	Member of the WP1-WG "Research Integrity Committee", and member of the WP4-WG "Research infrastructures and resources"		
5	Sept. 2019 to Aug. 2022	INTEGRATION OF INNOVATIVE GREEN TECHNOLOGIES ON EXISTING PUBLIC TRANSPORTATION BUSes for 5% to 30% FUEL SAVINGS (BUS-FUEL-SAVINGS)	RESTART 2016- 2020. Integrated Project, IПE	Senior Researcher		
6	March 2015 to April 2019	COST Action CM1404 "Chemistry of Smart Energy Carriers and Technologies (SMARTCATS)"	European Union	Member of the Management Committee of the Action		

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Ref. Number	Period	Organization	Title of Position or Service	Key Activities
1	March – November 2023	Ministry of Education, Culture, Sports and Youth, of the Republic of Cyprus	Scientific Director of the Team of Thematic for the Examination of Appointable Teachers in Secondary Technical Education for the "Engineering of Vehicles" specialization	Coordinate and review the examination subject matter and the preparation of the examination paper
2	August 2020 – April 2021	Ministry of Education, Culture, Sports and Youth, of the Republic of Cyprus	Scientific Collaborator in the Team of Edition for the secondary technical education School Manual "Vehicle Technology III"	Review of the Manual content
3	March – December 2019	Ministry of Education, Culture, Sports and Youth, of the Republic of Cyprus	Scientific Director of the Team of Thematic for the Examination of Appointable Teachers in Secondary Technical Education for the "Engineering of Vehicles" specialization	Coordinate and review the examination subject matter and the preparation of the examination paper
4	2014 – present	International Journal of Sustainable Energy	Reviewer	Review of scientific papers