



## Academic Personnel Short Profile / Short CV

<b>University:</b>	Frederick University
<b>Surname:</b>	Chasos
<b>Name:</b>	Charalambos
<b>Rank/Position:</b>	Associate Professor
<b>School:</b>	Engineering
<b>Department:</b>	Mechanical Engineering
<b>Scientific Domain:</b>	Internal Combustion Engines- Specialization :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 Engineering	1997	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	To			
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 refereed journal papers, monographs, books, conference publications etc.

Ref. Number	Year	Title	Other authors	Journal and Publisher / Conference	Vol.	Pages
1	2019	CFD simulations of diesel multi-hole injector internal flow and spray jet development at increasing chamber pressure and temperature conditions	-	ILASS-Europe 2019, 29th European Conference on Liquid Atomization and Spray Systems. Paris, France, 2-4 September 2019.		
2	2018	Combustion simulations of different hydrocarbon content natural gas in constant volume chamber and direct-	Loizou, N.I., Vasiliou, J.A., Karagiorgis, G.N. and Christodoulou, C.N.	6 <sup>th</sup> International Conference on Renewable Energy Sources & Energy		239 - 249

		injection spark-ignition internal combustion engine		Efficiency – New Challenges. University of Cyprus, Nicosia, Cyprus, 1 – 2 November, 2018.		
3	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. <a href="http://dx.doi.org/10.4995/ILASS2017.2017.5040">http://dx.doi.org/10.4995/ILASS2017.2017.5040</a>		
4	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.		
5	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: 10.1201/9781315365886-13).		
6	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.		
7	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.		
8	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: 10.1080/14786451.2014.895355		
9	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
10	2013	Gasoline direct injection internal injector flow CFD simulations for various bioethanol blends	Karagiorgis, G.N. and Christodoulou, C.N.	ILASS 2013, 25 <sup>th</sup> European Conference Liquid Atomization & Spray Systems. Chania, Crete, Greece, 1-4 September 2013.		

<b>Research Projects</b>				
<b>Ref. Number</b>	<b>Date</b>	<b>Title</b>	<b>Funded by</b>	<b>Project Role</b>
1	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, IPE	Senior Researcher
2	March 2015 to April 2019	European Cooperation in Science and Technology (COST) Action CM1404 "Chemistry of Smart Energy Carriers and Technologies" (SMARTCATS)	European Union	Member of the Management Committee of the Action

<b>Academic Consulting Services and/or Participation in Councils / Boards/ Editorial Committees</b>				
<b>Ref. Number</b>	<b>Period</b>	<b>Organization</b>	<b>Title of Position or Service</b>	<b>Key Activities</b>
1	2014 – present	International Journal of Sustainable Energy	Reviewer	Review of scientific papers
2	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
3	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