

## Academic Personnel Short Profile / Short CV

<b>University:</b>	Frederick University
<b>Surname:</b>	Papadakis
<b>Name:</b>	Antonis
<b>Rank/Position:</b>	Associate Professor
<b>School:</b>	Engineering
<b>Department:</b>	Electrical Engineering, Computer Engineering and Informatics
<b>Scientific Domain:</b>	Renewables and High Voltage Systems - Specialization: Modeling and Measurement of High Voltage Electromagnetic Fields Plasmas and Photovoltaics in Power Systems Applications

### Academic qualifications

Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)
PhD	2004	University of Cambridge	DECEI	PhD in Modelling of Gas Discharges using Finite Elements: Incorporation of Navier-Stokes equations
BSc	1999	University of Warwick	DECEI	Experimental modelling of the jumping ring device

### Employment history in Academic Institutions/Research Centers

Period of employment		Employer	Location	Position
From	To			
2016	Today	Frederick University	Nicosia, Cyprus	Associate Professor
2007	2016	Frederick University	Nicosia, Cyprus	Assistant Professor
2004	2007	University of Cyprus	Nicosia, Cyprus	PostDoctoral Fellow

Key refereed journal papers, monographs, books, conference publications etc.						
Ref. Number	Year	Title	Other authors	Journal and Publisher / Conference	Vol.	Pages
1	2020	An Experimental Study of Co-Axial Dielectric Barrier Discharge for Ozone Generation	G. P. Panta, D. P. Subedi, H. B. Baniya A. P. Papadaki and S. Dhungana	Journal of Nepal Physical Society	6	84-89
2	2019	Peer-to-peer energy trading in micro/mini-grids for local energy communities: A review and case study of Nepal	Ashish Shrestha, Rajiv Bishwokarma, Anish Chapagain, Sandesh Banjara, Shanta Aryal, Bijen Mali, Rajiv Thapa, Diwakar Bista, Barry P Hayes, Antonis Papadakis, Petr Korba	IEEE Access	7	13191-131928
3	2019	Comparative Study of Different Approaches for Islanding Detection of Distributed Generation Systems	A. Shrestha, R. Katte, M. Dachhepatic, B. Mali, R. Thapa, A. Singh, D. Bista, B. Adhikary, A. Papadakis and R. K. Maskey	Applied Systems Innovation	2	25
4	2020	Development of a comprehensive Matlab/Simulink based Model for high-efficiency 2nd generation photovoltaic (PV) modules	M. N. Shaikh, Q. Zafar	Current Nanoscience	16	568-577
5	2019	A study of electromagnetic light propagation in perovskite based solar cell via computational modelling approach	M. N. Shaikh, Q. Zafar	Bulletin of Materials Science	42:169	1-7

6	2013	Streamer propagation in non- uniform gaps at ambient atmospheric air pressures	-	Journal of Plasma Physics, Cambridge University Press	79	87-96
7	2012	Experimental measurement, analysis and prediction of electric and magnetic fields in open type air substations	Nicolaou C.P., Razis P.A., Kyriakou G.A., Sahalos J.N	ELSEVIER, Electric Power Systems Research	90	42-54
8	2012	Numerical analysis of the heating effects of an atmospheric air dielectric barrier discharge	-	IEEE Transactions on Plasma Science	40	811-820
9	2010	Measurements and predictions of electric and magnetic fields from power	Nicolaou C.P., Razis P.A., Kyriakou G.A., Sahalos J.N.	ELSEVIER, Electric Power Systems Research	81	1107-1116
10	2005	Numerical modelling of gas discharges leading to plasma production	Georghiou G.E., Morrow R., Metaxas A.C.	IOP Journal of Physics D: Applied Physics	38	R303-R328

### Exhibitions

Ref. Number	Date	Topic	International / Local	Location	Role in Exhibition
1	2019	Dubai Presentation as part of REALISATION-CLOUD-GPU	International	Dubai	Presenter

### Research Projects

Ref. Number	Date	Title	Funded by	Project Role
1	2024-2026	REAI Live Simulation of LASER beam propagation in SATellite communication using Artificial Intelligence (REALISATION-LASERSAT-AI)	European Space Agency	Project Coordinator

2	2024-2026	REAI Live Simulation for monitoring and control of □INVERTERS of small PVs	RIF	Financial Coordinator and Researcher
3	2024-2026	DUAL_USE/0922/005	RIF	Researcher
4	2023 - 2024	REAI Live Simulation of OIL SPILLS using Graphical Processing Units and Artificial Intelligence (AI)	RIF	Project Coordinator
5	2023 - 2025	REAI Live Simulation of GREEN technologies in the CLOUD	RIF	Project Coordinator
6	2022 -2023	REALISATION-COMPRESSIBLE-GPU-AI	RIF	Project Coordinator
7	2021 - 2021	GPU-REAI Live Simulation-COVID19	RIF	Project Coordinator
8	2019 - 2020	Lattice Boltzmann GPU REAI Live Simulation	RIF	Project Coordinator
9	2019 - 2021	KYAMOS REAI Live Simulation services - CLOUD computing on GPU	RIF	Project Coordinator
10	2018 - 2019	IDEA Incubator/Accelerator program	Bank of Cyprus	Project Coordinator
11	2019	Exchange of PhD students and academic staff between Pakistan and Frederick University	Erasmus+	Author and Scientific Coordinator
12	2019	Cyprus models for Galaxies and their Nuclear Spectra	ESA	Scientific Coordinator
13	2018	CSRC Teaming Phase 1 Project	Horizon 2020	Scientific Coordinator for Frederick University
14	2008	Participation in the EURATOM project	Hellenic Association of Euratom	Scientific Coordinator
15	2008	Participation in the EURATOM project	Hellenic Association of Euratom	Scientific Coordinator
16	2007	CMS ECAL Power electronics data acquisition system	Cyprus Research Promotion Foundation	Project Coordinator

17	2007	Numerical Algorithm for the calculation of the missing energy of the dead crystals of the ECAL at CMS	Cyprus Research Promotion Foundation	Project Coordinator
18	2005	Development and Commercialization of Reliable Person Recognition Systems Using a Novel Dactyloscopic Technology Able to Positively Identify Live Fingers	Incubator Programme of the Republic of Cyprus	Scientific Coordinator
19	2005	Calibration and control of the Very Front Electronics (VFE) modules of the Electromagnetic Calorimeter of the CMS experiment	Cyprus Research Promotion Foundation	Scientific Coordinator
20	2005	Control and monitoring of electromagnetic spectrum	Cyprus Research Promotion Foundation	Team Member

<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	2020	MEDPOWER 2020	Scientific Advisory Committee Member	To review papers and chair session for the conference
2	2007-2017	ETEK	Registration of Electrical Engineers	To register all electrical engineers to the occupation
3	2007	CIGRE	Assistant Treasurer	To assist in the dealing of the financials of GIGRE Cyprus
4	2014-2016	ETEK	Deputy Head	ETEK Collaboration with academic institutions
5	2014	ETEK	Electrical Engineering Expert	Conducted expert opinion in flash over related issues between the Electricity Authority of Cyprus and a land owner

6	2012-2014	ETEK	Member of e-government committee	Advice the government on e-government related issues on behalf of ETEK
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<b>Awards / International Recognition</b>			
<b>Ref. Number</b>	<b>Date</b>	<b>Title</b>	<b>Awarded by:</b>
1	20-22 Feb. 2011, Cambridge, UK	Best paper award for the 2nd WSEAS International Conference on PLASMA-FUSION NUCLEAR PHYSICS (IPLAFUN '11) for the paper: "Papadakis A.P., Metaxas A.C. "Optimum mesh dependent diffusion coefficient proof from high to low order upwind schemes utilized in plasma discharges", Recent Researches in Communications, Automation, Signal Processing, Nanotechnology, Astronomy and Nuclear Physics, 20-22 Feb. 2011, Cambridge, UK"	WSEAS International Conference

<b>Other Achievements</b>			
<b>Ref. Number</b>	<b>Date</b>	<b>Title</b>	<b>Key Activities:</b>
1	20-21/9/2018	Chairman of the DEMSEE 2018 International Conference	Chairing and organising the conference
2	25-26/9/2015	Co-Chairman of the DEMSEE 2018 International Conference	Chairing and organising the conference