



### Academic Personnel Short Profile / Short CV

<b>University:</b>	Cyprus University of Technology
<b>Surname:</b>	Aristidou
<b>Name:</b>	Petros
<b>Rank/Position:</b>	Lecturer
<b>Faculty:</b>	School of Engineering and Technology
<b>Department:</b>	Electrical Engineering, Computer Engineering and Informatics Department
<b>Scientific Domain: *</b>	My research interests include power and energy system informatics, control and operation of hybrid dynamical systems, and modelling and simulation of large-scale power systems.

### Academic qualifications (list by highest qualification)

Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)
Ph.D. in Engineering Sciences	2010-2015	University of Liege	Electrical engineering	
Diploma in Electrical and Computer Engineering (5 year curriculum)	2005-2010	National Technical University of Athens	Electrical and computer engineering	

## Employment history in Academic Institutions/Research Centers – List by the three (3) most recent

Period of employment		Employer	Location	Position
From	To			
January 2020	Present	Cyprus University of Technology	Limassol, Cyprus	Lecturer
September 2016	December 2019	University of Leeds	Leeds, UK	Lecturer
August 2015	August 2016	Swiss Federal Institute of Technology (ETH Zürich),	Zürich, Switzerland	Postdoctoral Researcher

## Journal Publications

Ref #	Year	Title	Other Authors	Journal	Vol	Pages
16	2020	Active distribution grids offering ancillary services in islanded and grid-connected mode	S. Karagiannopoulos, J. Gallmann, M. G. Vayá, P. Aristidou, and G. Hug	IEEE Transactions on Smart Grid		
15	2020	A robust coordinated expansion planning model for wind farm-integrated power systems with flexibility sources using affine policies	S. Dehghan, N. Amjady, and P. Aristidou	IEEE Systems Journal		
14	2019	Online estimation of power system inertia using dynamic regressor extension and mixing	J. Schiffer, P. Aristidou, and R. Ortega	IEEE Transactions on Power Systems		
13	2019	Tdnetgen: An open-source, parametrizable, large-scale, transmission, and distribution test system	N. Pilatte, P. Aristidou, and G. Hug	IEEE Systems Journal		

12	2019	Lqr-based adaptive virtual synchronous machine for power systems with high inverter penetration	U. Markovic, Z. Chu, P. Aristidou, and G. Hug	IEEE Transactions on Sustainable Energy		
11	2019	Data-driven local control design for active distribution grids using off-line optimal power flow and machine learning techniques	S. Karagiannopoulos, P. Aristidou, and G. Hug	IEEE Transactions on Smart Grid		
10	2019	Stabilising control strategy for cyber-physical power systems	E. Ekomwenrenren, H. Alharbi, T. Elgorashi, J. Elmighani, and P. Aristidou	IET Cyber-Physical Systems: Theory Applications		
9	2018	Industrial recommendation of modeling of inverter-based generators for power system dynamic studies with focus on photovoltaic	K. Yamashita, H. Renner, S. Martinez Villanueva, G. Lammert, P. Aristidou, J. Carvalho Martins, L. Zhu, L. David Pabon Ospina, and T. Van Cutsem	IEEE Power and Energy Technology Systems Journal		
8	2017	Hybrid approach for planning and operating active distribution grids	S. Karagiannopoulos, P. Aristidou, and G. Hug	IET Generation, Transmission & Distribution		
7	2017	Contribution of Distribution Network Control to Voltage Stability: A Case Study	P. Aristidou, G. Valverde and T. Van Cutsem	IEEE Transactions on Smart Grid		
6	2016	Co-simulation of electromagnetic transients and phasor models: A relaxation approach	F. Plumier, P. Aristidou, C. Geuzaine, and T. Van Cutsem	IEEE Transactions on Power Delivery		
5	2016	Active management of low-voltage networks for mitigating overvoltages due to photovoltaic units	F. Olivier, P. Aristidou, D. Ernst, and T. Van Cutsem	IEEE Transactions on Smart Grid		
4	2016	Prospects of a new dynamic simulation software for real-time applications on the Hydro-Quebec system	P. Aristidou, S. Lebeau, L. Loud, and T. Van Cutsem	CIGRE Science & Engineering		

3	2016	Power system dynamic simulations using a parallel two-level Schur-complement decomposition	P. Aristidou, S. Lebeau, and T. Van Cutsem	IEEE Transactions on Power Systems		
2	2015	A parallel processing approach to dynamic simulations of combined transmission and distribution systems	P. Aristidou and T. Van Cutsem	International Journal of Electrical Power & Energy Systems		
1	2014	Dynamic simulation of large-scale power systems using a parallel Schur-complement-based decomposition method	P. Aristidou, D. Fabozzi, and T. Van Cutsem	IEEE Transactions on Parallel and Distributed Systems		

## Research Projects

Ref #	Date	Title	Funded By	Project Role*
1	2019-2020	"Towards resilience and sustainability in islanded energy systems"	EPSRC	Principal Investigator
2	2018-2021	"Creating Resilient Sustainable Microgrids through Hybrid Renewable Energy Sys-tems,"	EPSRC	Co-Principal Investigator
3	2018-2019	"Optimal Dispatch of Virtual Power Plant using Cyber-Physical Controller for Real-Time EMS"	Royal Society	Co-Principal Investigator

**Academic Consulting Services and/or Participation in Councils / Boards/ Editorial Committees.  
(Last 5 years)**

<b>Ref. #</b>	<b>Period</b>	<b>Organization</b>	<b>Title of Position or Service</b>	<b>Key Activities</b>
1	2018-now	CIGRE	Member of the JWG on “Impact of Low Inertia Network on Protection and Control “	
2	2014-2018	CIGRE/CIREN	Member of the JWG on “Modelling and dynamic performance of inverter-based generation in power system transmission and distribution studies”	
3	2014-2016	IEEE	Member of the WG on “Contribution to Bulk System Control and Stability by Distributed Energy Re-sources connected at Distribution Networks”	

## Awards / International Recognition

Ref. Number	Date	Title	Awarded by:
1	2019	High Quality Paper awards (two) for papers 'Interval-Based Adaptive Inertia and Damping Control of a Virtual Synchronous Machine' and 'Data-driven Control Design Schemes in Active Distribution Grids: Capabilities and Challenges'	EEE PES 2019 PowerTech
2	2018	Outstanding Technical Report Award for the IEEE report on 'Contribution to Bulk System Control and Stability by Distributed Energy Resources Connected at Distribution Network'	IEEE PES
3	2017	High Quality Paper award for paper 'Stability Performance of Power Electronic Devices with Time Delays'	IEEE PES 2017 PowerTech
4	2014	Best Paper student award for paper 'Parallel Computing and Localization Techniques for Faster Power System Dynamic Simulations'	CIGRE 2014 Conference
5	2013	High Quality Paper award for paper 'Dynamic Simulations of Combined Transmission and Distribution Systems using Decomposition and Localization',	IEEE PES 2013 PowerTech
6	2012	Technical Chamber of Greece award, granted to the top students graduated from all Engineering schools in Greece	Technical Chamber of Greece
7	2010	Thomaideion award, granted to the top 3 students graduating from the School of Electrical and Computer Engineering at the National Technical University of Athens	National Technical University of Athens
8	2010	Grigoris Farakos award, granted to the top 3 students in Energy, graduating from the School of Electrical and Computer Engineering and the School of Mechanical Engineering at the National Technical University of Athens	National Technical University of Athens