

## Curriculum Vitae

## Academic Profile

### Personal information

**Surname / First name** **Christofides Nicholas**

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**Address** Ektoros 27, 1046, Pallouriotissa, Nicosia, Cyprus

**Nationality** Cypriot

**Birth date** 26 July 1975

### Education

**Dates** Sep 2000 – Dec 2003

**Title of qualification awarded** PhD in Electrical Power Engineering

**Name of awarding institution** University of Manchester, Institute of Science and Technology (UMIST), Manchester, UK

**Key features** Project involved the collection of partial discharge (PD) data from distribution substations and testing on various substation equipment. Advanced understanding of PD in substation environments and the attempt to detect and locate PD activity on paper insulated MV cables based on the correlation of practical and simulation work.

**Dates** Sep 1999 – Sep 2000

**Title of qualification awarded** MSc in Electrical Power Engineering

**Name of awarding institution** University of Manchester, Institute of Science and Technology (UMIST), Manchester, UK

**Key features** Location of Partial Discharges in a Distribution Power Transformer. Being a hazard and a threat either due to insulation failure or due to prolonged and consistent activity, PDs can be fatal to the life of the transformer. The economic penalties associated with a transformer's sudden or even expected failure impose the necessity of a method for detecting and locating PD activity.

**Dates** Sep 1996 – June 1999

**Title of qualification awarded** BEng (2<sup>nd</sup> Class Hons. div. I) in Electronic and Electrical Engineering

**Name of awarding institution** The University of Birmingham, Birmingham, UK

**Key features** Programme comprehensively covered the foundations of Electronic and Electrical Engineering covering subjects in the following areas: Digital Electronics, Analogue Electronics, Semiconductors, Communication Systems, Power Systems, Computer Programming

### Work experience

**Dates** Dec 2007 – Present

**Employer Name** Frederick University

**Occupation or position(s) held** Lecturer, Electrical Engineering Department

**Main activities and responsibilities** Areas of teaching include Electrical Installation Regulations, Electrical Power Systems, Electrical Principles and Electrical Machines

**Dates** Oct 2006 – Nov 2007

**Employer Name** Frederick Institute of Technology

**Occupation or position(s) held** 2006 – Lecturer, Electrical Engineering Department

**Main activities and responsibilities** Areas of teaching: Electrical Principles, Electrical Machines and Electrical Power Systems

Dates	Sept 2004 – Sept 2006
Employer Name	Americanos College, Nicosia, Cyprus
Occupation or position(s) held	Head, Computer Science Department Assistant Professor, Computer Science Department
Main activities and responsibilities	Amongst teaching duties, faculty evaluations were performed involving class observations, final examination and course outline assessment. Registration of students and participation in the academic and research committees were also amongst the main duties
Dates	Jan 2005 – Present
Employer Name	SP Sunpower, Nicosia, Cyprus
Occupation or position(s) held	Consultant Electrical Engineer
Main activities and responsibilities	Carrying out feasibility studies for grid-connected and stand-alone photovoltaic systems
<b>Professional Organizations</b>	The IET - Member ETEK (Cyprus Scientific and Technical Chamber) - Member Registered as Electrical Engineer with the Electromechanical Service, Ministry of Communications and Works, Republic of Cyprus
<b>Awards</b>	Institution of Electrical Engineers (IEE) financial aid award for overseas post graduate students (£1250) during academic year 2001 / 02
<b>Professional Contribution</b>	Certified government specialist for the energy efficiency categorisation of residential and non-residential buildings Licensed engineer in conducting electrical installation studies and electrical installation inspections Speaker in educational programmes/seminars organised by the Cyprus Scientific and Technical Chamber
<b>Service to the Institute<sup>11</sup></b>	Preparation of Cyprus Electricity Authority exams for assistant electrical engineers and technicians, exams organized and marked by Frederick University, July, October 2009 and March 2010 Actively participating in the procedure of Frederick University evaluation by ETEK. Member of various departmental committees
<b>Projects</b>	
Duration and Funding	<b>2014-2016</b> - Life-long Learning Program - Erasmus Multilateral Projects: Funding: €533k
Title	European Islands Continue Education on Resources Efficiency Virtual Gateway
Role and Contribution	partner
Duration and Funding	<b>COST ACTION ES1002</b>
Title	Weather Intelligence for Renewable Energies
Role and Contribution	<b>member</b>
Duration and Funding	<b>2009 – 2012</b> Research Promotion Foundation. Total Funding: €140k
Title	Wave energy converter mechanism by transmitting reciprocating, variable amplitude and direction wave motion into uni-rotational motion
Role and Contribution	Role: Researcher. The basic objective of this project is to develop a high efficiency WEC, incorporating a novel and patented mechanism that allows capturing and subsequently converting, all of the entire exploitable wave energy, which by nature is unpredictable, irregular and random. Involvement is related to the assessment of the efficiency of the mechanism
Duration and Funding	<b>2006 – 2009 Present:</b> Research Promotion Foundation. Total Funding: CYP 89,997
Title	New materials for performance enhancement of solar cells
Role and Contribution	Role: Researcher. The project aims to investigate, examine and test new materials used in the manufacturing of solar cells that would enhance their performance. Direct involvement in this project will be during the testing of the proposed solar cells, the evaluation and comparison with current technology and practise.

## Publications

Doctoral Thesis    On-line Partial Discharge Monitoring in Belted Paper-Insulated Medium Voltage Cables

MSc Thesis    Location of Partial Discharges in a Distribution Power Transformer

### Representative Publications

- C. Charalambous, N. Kokkinos, N. Christofides, "Topological Assessment for External Lightning Protection and Earthing Designs in Large Scale Solar Applications", IEEE transactions on Electromagnetic Compatibility, April 2014, PP 427-434, vol.56,issue 2
- S. Polykarpou, N. Christofides, "Generating electricity utilizing excess water pressure within the water Supply network using a hydro-electric generator", DEMSEE 2014, Cyprus
- B. Pokhrel, N. Christofides, "Investigation of a model for solar power prediction from photovoltaic systems in Cyprus", DEMSEE 2014, Cyprus
- N. Kokkinos, N. Christofides, C. Charalambous , "A Simulation Tool to Assess the Lightning Induced Over-Voltages on dc Cables of Photovoltaic Installations" , ICLP 2014, Shanghai, China, Paper No. 424
- N. Kokkinos, N. Christofides, C. Charalambous, "Lightning Protection Practise for Large-Extended Photovoltaic Installations" , ICLP 2012, Vienna, Austria (paper No. 279)
- N. Christofides, S. Kyprianou, "Feasibility Study of a 150kWp Photovoltaic Park in Cyprus", DEMSEE 2010, Cyprus (Paper No. 183)
- N. Christofides, I. Cotton, "Partial discharge propagation in belted paper power cables", DEMSEE 2008, Cyprus (Paper No. 125)
- N. Christofides, "Renewable Energy Sources: An Overview Of The Legislative Framework And Practice Adopted In Cyprus Following European Union Strategies And Directives", The Cyprus Journal of Sciences, 2006, Vol. 4, pages 79-90
- I. Cotton V. O'Donnell, N. Christofides, , "Limitations in Application of On-Line and Off-Line PD Measurement Systems, CIREN, Turin, Italy, 2005
- N. Christofides, I. Cotton, "Partial discharge propagation in belted paper power cables", International Symposium on High Voltage Engineering (ISH) 2003, Delft, Netherlands, conference proceedings