Curriculum Vitae

Personal Details

Name:	Antonios X. Moronis
Date of Birth:	March 28th, 1967
Place of Birth:	Athens, Greece
Sex:	Male
Nationality:	Greek
Title:	Electrical Engineer, Ph.D., Professor at the University of West Attica
	Director of the Energy Applications and Energy Saving Systems Lab
Memberships:	Member of the Technical Chamber of Greece since 1990 (Member No. 57513)
Personal webpage link:	https://eee.uniwa.gr/el/index.php?option=com_content&view=article&id=165
Email:	amoronis@uniwa.gr

Academic Education

- 1995 PhD Diploma, Department of Electrical and Computer Engineering, National Technical University of Athens. Thesis title: '*Electronic Behavior of Solid Dielectrics under high, fast rising electric fields*'.
- 1990 Diploma in Electrical Engineering, Aristotle University of Thessaloniki, Greece.

Professional Experience

1. Academic

3/2018 to date: Member of the academic staff at the University of West Attica.

(Duration: 5 years and 10 months).

Professor at the Department of Electrical and Electronics Engineering. Director of the Energy Applications and Energy Saving Systems Lab.

- He has taught the following courses:
 - <u>Post-graduate courses (MSc level)</u> 'Optimization of Energy Efficiency in the Buildings Sector', 'Energy Mangement-Energy Audits' and 'Electrical Power Systems'
 - <u>Under-graduate courses</u> 'Electrical Circuits I', 'Building Energy Analysis', 'High Voltage Engineering II' and 'Electrical Grounding Systems'.

He is currently supervising one PhD thesis and several post-graduate theses at MSc level.

5/2001-3/2018: Member of the academic staff at the Technological Educational Institute (TEI) of Athens. (*Duration: 16 years and 9 months*).

Professor (2014-2018), Assoc. Professor (2006-2014) and Assistant Professor (2001-2006) at the Department of Energy Technology Engineering of the Faculty of Technological Applications.

He has taught the following courses:

- <u>Post-graduate courses (MSc level)</u>
 'High Voltage Engineering' and 'Electrical Power Systems'
- <u>Under-graduate courses</u> 'Electrical Networks Analysis', 'Measuring Systems', 'Electrical Machines', 'Electrical Installations' and 'Power Electronics'.

He has supervised over <u>35 theses</u> for the Degree in Energy Technology Engineering (4-year program) in topics including electrical grounding systems, electrical installations, maintenance and fault detection in electrical power systems and components, electrical power generation, energy management, etc.

In addition, he has supervised <u>14 postgraduate dissertations</u> for the MSc in Energy Program of TEI of Athens in collaboration with Heriot Watt University UK.

He has also co-supervised <u>2 PhD theses</u> in joint research of TEI Athens with Heriot Watt University of Edinburgh and the Brunel University of London, U.K. From the academic year 2007-2008 to date he has been an approved tutor of the Heriot Watt University of UK for the *'High Voltage Engineering'* module of the MSc in Energy postgraduate course which is organized by TEI of Athens in collaboration with the Heriot-Watt University of UK.

- 1997-2000: Tutor, Energy Technology Department, T.E.I. of Athens. <u>(Duration: 32 months).</u> He had been teaching the courses 'Technical Drawing', 'Electrotechnology', 'Measuring Systems' and 'Electrical Machines'.
- 1991-1994: Research Associate at the Electrical and Computer Engineering Department of the National Technical University of Athens (NTUA). (*Duration: 44 months*).
 Participation in joint projects between NTUA and the Public Power Corporation of Greece regarding High Voltage Insulation, Applications of Dielectrics, Air and SF₆ Circuit Breakers and Power Transformers. Also member of the scientific team of the National Technical University of Athens for the translation of 8415 electrotechnical terms in Greek language, under the framework of EU Multilingual Terms Base 'Eurodicautom', available on-line at the link http://iate.europa.eu/switchLang.do?success=mainPage&lang=en.

2. Non-academic

- 2000 Electrical Engineer, Athens Metro construction works, Ampelokipoi Station Control Room (*Duration: 2 months*).
- 1997-1999: Researcher at the R&D Center of Hellenic Army General Staff. (*Duration: 28 months*). Electrical Engineer, Hardware and Software Developer, in a project regarding the development of a modern aiming system for an anti-tank cannon of the Hellenic Army. This system comprised several especially designed hardware subsystems, like day and night vision, laser range finder, plane inclination meter and ballistic computer along with dedicated software in C++. He was assigned with the development and integration of the ballistic mathematical model, the design of hardware subsystems and the development of the software controlling the whole system (in C++). The research project was successfully completed with the construction of a lab prototype.
- 1996-1997: Research Assistant, R&D Center of Hellenic Army General Staff (during military service). Participation in scientific military research projects. (*Duration: 18 months*).
- 1992-1995: Engineer and IT Consultant at 'N. Papapostolou' Company specializing in Biomedical and Hospital Equipment. (*Duration: 43 months*). As a service engineer, he was specialized in modern medical diagnostic systems technology (bone mass, gamma cameras, ultrasonic systems etc.). During that period, he attended technical seminars organized by Philips, Netherlands, in the field of Nuclear Medicine and gamma camera technology.
- 1991-1992: Electrical Engineer at 'Geotechniki Ltd', Geodynamic Studies and Applications company. (Duration: 12 months). In the framework of the Rio-Antirrio bridge ^(*) construction project he was in charge of the study, design and installation of a fully integrated automatic data logging system for the triaxial testing units of the laboratory where the soil bed strength analysis had been carried out. This system was able to perform both static and dynamic tests on soil specimens.
 ^(*) Rion-Antirrion Bridge is the world's longest multi-span cable-stayed bridge and links northern Peloponnese to mainland Greece.

Administrative Positions

Most important positions:

2023 to date:	Head of the Department of Electrical and Electronics Engineering at the University of West Attica, Greece.
2018 to date:	Director of the Research Laboratory of Energy Applications and Energy Saving Systems at the Department of the Electrical and Electronics Engineering of the University of West Attica, Greece.
2019-2021:	Deputy Head of the Department of Electrical and Electronics Engineering at the University of West Attica, Greece.
2019-2022:	Member of the Technical Council of the University of West Attica.
2018-2019:	Deputy Director of the Electrical Power Systems Division at the Department of the Electrical and Electronics Engineering at the University of West Attica, Greece.
2013-2018:	Director of the Electrical Energy Engineering Division at the Energy Technology Engineering Department, TEI Athens.
2015-2018:	Director of the Research Laboratory of Energy Applications and Energy Saving Systems at the Faculty of Technological Applications, TEI Athens.
2008-2018:	Director of the Laboratory of Electrotechnical Applications and Measuring Systems of the Energy Technology Engineering Department, TEI Athens.
2006-2008:	Head of the Energy Technology Engineering Department, TEI Athens.
2014-2017:	Deputy Head of the Energy Technology Engineering Department, TEI Athens.
2008-2018:	Member of the Supervising Committee of the Postgraduate Program 'MSc in Energy' of the Energy Technology Department in collaboration with the Heriot-Watt University of UK.

Research Interests

His research interests include different topics such as Energy Savings and Energy Conservation in Buildings, Electro-hydrodynamic (Ehd) Flows in Fluid Dielectrics, Electrostatic Cooling, Electric Field Analysis in High Voltage Applications, High Voltage Engineering, Dielectrics and Electrical Insulation, Dielectric ageing, Dielectric Breakdown and Corona Discharges, Fault Diagnosis and Preventive Maintenance in Electrical Power System Components, Design and Analysis of Electrical Grounding Systems and Electrical Installations Technology.

Projects

20/2/2023 - 31/12/2025	Scientific Director of the program entitled ' <i>Application of KENAK regulation and KENAK</i> – <i>TEE software for conducting energy assessments in buildings</i> ' which is is organized by the Training & Lifelong Learning Center of the University of West Attica. This program aims in providing technical training to engineers interested in energy auditing in buildings and it is funded privately. This program is under progress.
1/3/2023- 24/7/2023	Scientific Director of the project entitled 'Electric and Magnetic Fields in High Voltage Transmission Lines, Substations and HVC-Switching, Conduction of Standard Measurements, Effects on Human Health, and overall correlation with the Corona Phenomenon', which has been funded by the Greek Independent Power Transmission Operator (IPTO).
1/12/2022- 15/2/2023	Scientific Director of the project entitled 'Study on the effect of the use of protective and working earthings on the protection of technical personnel in the event of a fault occurrence on a 20kV line due to a break in the overhead conductor of an 150kV transmission line and investigation of the reliability of repair sleeves on 150kV lines', which has been funded by the Greek Independent Power Transmission Operator (IPTO).
10/2019- 12/2022	Deputy Scientific Director of the project entitled 'Design, Installation, Operation, Maintenance, Handling, Repairing or Disassembly and Management of High Voltage Equipment containing SF_6 or other Fluorinated Gases', which has been organized in cooperation with the Greek Independent Power Transmission Operator (IPTO). IPTO- funded project related to the training and certification of personnel managing high voltage

equipment with SF_6 insulation, in accordance with the requirements of European Legislation (Regulations (EU) 517/2014 and (EU) 2015/2066).

- 27/6/2019-31/12/2019 Member of the research team at the project entitled 'Investigation of the optimal configuration of the electrical grounding system electrodes of the long high voltage dc link interconnection between Attica and the Island of Crete. This work has been funded by the Greek Independent Power Transmission Operator (IPTO) and it has been undertaken by the Energy Applications and Energy Saving Systems Lab, at the department of Electrical and Electronics Engineering of the University of West Attica.
- 1/12/2015-30/9/2017 Research associate at Athena Research & Innovation Center, at the EU project entitled 'Support Tool for Energy Efficiency Programs in Medical Centers – STEER'. This work is funded from the E.U. under the framework of MARIE SKŁODOWSKA-CURIE RESEARCH AND INNOVATION STAFF EXCHANGE (RISE) – EU Horizon 2020 (call H2020-MSCA-RISE-2014). In this project participated 6 countries (Greece, Italy, Germany, Spain, Poland, Israel), 5 universities and research centers (Milano Politecnico, Bayreuth Unviversity, University of Granada, Afeka College of Engineering Tel Aviv, Institute of Industrial Systems of the Athena Research Center) and 3 private sector companies (2 from Italy and 1 from Poland) and aimed to develop a methodology for calculating the energy consumption in large hospital complexes and evaluate their efficiency as well as proposing appropriate interventions and measures to improve the energy efficiency.
- 11/2016 –Scientific Director of a Training Program organized by the Energy Applications and
Energy Saving Systems Lab of the Department of Electrical and Electronic Engineering
of the University of West Attica, entitled 'KENAK software application for Energy
Performance Evaluation in Buildings'. This program aims in providing technical training
to engineers interested in energy auditing in buildings and it is funded privately.
- 1/1/2005 -Project Coordinator in the research project entitled 'Introduction of Modern Methodologies31/9/2007in Measuring and Simulating Power Earthing Systems, by the Use of up-to-date
Technologies', T.E.I. of Athens, Energy Technology Department. This work had been co-
funded from the E.U. and from the Greek Government under the framework of the
Education and Initial Vocational Training Program 'Archimedes II'.
- 1/2/2004 -Main Researcher in the research project entitled 'Application of Artificial Intelligence31/8/2006Techniques in Maintenance of Electric Power System Equipment', T.E.I. of Athens, Energy
Technology Department. This work had been co-funded from the E.U. and from the Greek
Government under the framework of the Education and Initial Vocational Training
Program 'Archimedes'.
- 1/5/2003 Member of the Scientific Committee of the Project entitled '*Reformation of the Program* 31/12/2004 of the Courses by the use of Information Technology, Courses through the Internet and Specialization by Distance Learning', T.E.I. of Athens, Energy Technology Department. This work is co-funded from the E.U. and from the Greek Government in the context of Action Line 'Promotion and improvement of education and vocational training in the framework of lifelong learning'.
- 1/7/1997 Researcher at the R&D Center of Hellenic Army General Staff. (*Duration: 28 months*).
 31/10/1999 Member of the main research team of a military research project entitled '*Modern Electronic Aiming System for PAO 106mm cannon*', regarding the development of a modern aiming system for an anti-tank cannon of the Hellenic Army.
- 1/5/1991 -
31/12/1991Research associate at the National Technical University of Athens for the E.U. program
'Inter-Active Terminology for Europe (IATE)' which is the inter-institutional terminology
database of the European Union, currently available on-line at the link
http://iate.europa.eu/switchLang.do?success=mainPage&lang=en.

Lectures in Seminars

2016-2022	Key speaker in a series of recurring seminars entitled ' <i>Training of Energy Auditors</i> ', held by the University of West Attica. These seminars provide training to qualified engineers for the Energy Performance Evaluation in Buildings (topics entitled ' <i>Energy Performance</i> <i>Upgrading Interventions in Buildings</i> ' and ' <i>Application of the Energy Performance</i> <i>Evaluation Software KENAK'</i>).
13/5/2017	Session Speaker in Patras Science Festival 2017, hosted at the Hellenic Open University, under the topic ' <i>International and National Standards, reference to the KENAK regulation, Implementation of EN 13790 Standard</i> ', regarding energy analysis in buildings.
1/12/1998 – 25/2/1999	Speaker in a series of lectures at the VTC Seminars 'Energy Saving Systems', 'Medical Center Installations' and 'Diagnostic Biomedical Systems', held at the Vocational Training Centre of the Athens General Hospital 'Evangelismos'.
25/11/1995	Invited speaker in the post-graduate seminar of the 8th National Conference of the Hellenic Ultrasound Society in Athens, with the subject 'Basic physics and principles of ultrasonic technology in medical diagnosis'.
9/6/1995	Speaker at the seminal organized by the Technical Chamber of Greece in cooperation with the Scientific Committee of Electrical Engineering and the Scientific Committee for the Application of Modern Technologies in Power Systems. The subject was <i>'Ionizing and non-ionizing radiations and their applications in biomedical technology'</i> .
1993	Speaker in the Vocational Training Center of the National Technical University of Athens at the program ' <i>Biomedical Engineering</i> ' with the subjects ' <i>Ultrasound Technology</i> ' and ' <i>Nuclear Medicine Applications – Gamma Camera</i> '.
1991-1993	Speaker in the Training Program of the National Technical University of Athens entitled 'Seminars in Electrical Power Systems for the Public Power Corporation Engineers', in the areas of: - Liquid and Solid Dielectrics and Insulation Applications - Power System Transformers

Seminar Attendance

- 2016 *'Protection of Electrical and Electronic Systems from Overvoltages'*, Professional Seminar Series from ELEMKO S.A., the leading Greek manufacturer of Electrical Earthing and Lightning Protection Systems.
- 2008 ECONAR Energy Systems Minnesota USA. One week series of seminars on *Geothermal Installations*. Certificates in *ECONAR GeoSource Installation and Operation* and *ECONAR GeoSource Service*.
- 1993 National Technical University of Athens, one week Comett Seminars in 'Characterizaion of Polymeric and Composite Materials'. Certificate of Attendance.
- 1991 Technical Chamber of Greece Series of technical seminars funded by the E.U. entitled '*Electro-Mechanical Applications: Energy in Industry, Renewable Energy Applications, Waste Treatment*' (150 hours in total). Certificate of Attendance.

Languages

- Greek (mother language)
- English (very good) Also holder of the First Certificate in English from Cambridge University (1983)
- German (basic)

Publications

(i) Theses

- 1. X. Moronis, 'Electronic Behavior of Solid Dielectrics under high, fast rising electric fields', *Ph.D. Thesis at the School of Electrical and Computer Engineering of the National Technical University of Athens*, 175 pages, 1995.
- 2. X. Moronis, 'Development of a fault diagnosis system for analog circuits and electronic components', *Electrical Engineering Diploma Thesis at the Electrical Engineering Department of the Aristotle University of Thessaloniki*, 110 pages, 1990.

(ii) Scientific Journals

- 1. V.T. Kontargyri, G.J. Tsekouras, J.M. Prousalidis, C.D. Tsirekis, K. Leontaritis, J.C. Alexandris, F.D. Kanellos, P.M. Deligianni, P.A. Kontaxis, **A.X. Moronis**: 'Comparison of Different Configurations for Shoreline Pond Electrode Station for HVDC Transmission Systems—Part I: Electric Field Study for Frames of Linear Electrode Arrangement Based on a Simplified Analytical Model', Applied Sciences (MDPI), vol. 13, issue 12, 2023.
- 2. G. J. Tsekouras, V.T. Kontargyri, J.M. Prousalidis, F. D. Kanellos, C.D. Tsirekis, K. Leontaritis, J.C. Alexandris, P.M. Deligianni, P.A. Kontaxis, A.X. Moronis: 'Alternative Simplified Analytical Models for the Electric Field, in Shoreline Pond Electrode Preliminary Design, in the Case of HVDC Transmission Systems', Energies (MDPI), vol. 15, issue 17, 2022.
- 3. G.J. Tsekouras, P.M. Deligianni, G.A. Vokas, **A. X. Moronis**, C. D. Tsirekis, A. D. Salis, C. N. Bolakis, *'An Optimal Design of a Small Photovoltaic Plant with Cost Minimization based on a Real Database of PV Panels and Inverters'*, WSEAS Transactions on Circuits and Systems, vol. 20, pp. 227-243, 2021.
- 4. E.D. Fylladitakis, **A.X. Moronis**, M. Theodoridis: "Analytical model for determination of the unipolar ionic saturation current during positive corona discharge for geometries comprising cylindrical emitter electrodes", *IEEE Transactions on Dielectrics and Electrical Insulation*, DOI: 10.1109/TDEI.2017.005773, Vol. 24, No.2, pp. 852-860, 2017.
- 5. E.D. Fylladitakis, **A.X. Moronis**, M.P. Theodoridis: "A Mathematical Model for Determining an Electrohydrodynamic Accelerator's Monopolar Flow Limit During Positive Corona Discharge", *IEEE Transactions on Plasma Science*, DOI: 10.1109/TPS.2017.2663778, Vol. 45, No.3, pp. 432-440, 2017.
- 6. E.D. Fylladitakis, **A.X. Moronis**, M.P. Theodoridis: 'Analytical Estimation Of The Electrostatic Field In Cylinder-plane And Cylinder-cylinder Electrode Configurations', *International Journal of Electrical and Computer Engineering (IJECE)*, ISSN: 2088-8708, Vol. 6, No.6, pp.358-375, 2016.
- 7. K.N. Kiousis, A.X. Moronis and E.D. Fylladitakis: 'Ionic wind generation during positive corona discharge in a wire-cylinder air gap', *International Journal of Engineering Science and Innovative Technology (IJESIT)*, ISSN: 2319-5967, Vol. 4, No. 1, pp.229-239, 2015.
- 8. A. X. Moronis, K.N. Kiousis, E. D. Fylladitakis and N. Simou: 'Determining the Unipolar Ionic Saturation Current in Parallel Wire-Cylinder Electrodes during Corona Discharge', *IEEE Trans. on Dielectrics and Electrical Insulation*, ISSN :1070-9878, Vol. 21, No. 3, pp.1035-1043, 2014.
- 9. Fylladitakis, E.D., Theodoridis, M.P., **Moronis, A.X.**: 'Review on the History, Research, and Applications of Electrohydrodynamics', *IEEE Transactions on Plasma Science*, ISSN 0093-3813, Vol. 42, No.2, pp.358-375, 2014.
- K. N. Kioussis, A. X. Moronis and W. G. Fruh, 'Positive corona discharge current in a thin wire-cylinder electrode configuration', *International Journal of Power and Energy Systems*, Vol. 34, No. 2, pp. 1-8, 2014.
- K.N. Kiousis, A.X. Moronis, W. G. Früh: 'Electro-hydrodynamic (ehd) thrust analysis in wire-cylinder electrode arrangement', *IOP Plasma Science and Technology*, ISSN 1009-0630, Vol.16, No.4, pp. 363-369, 2014.

- 12. E.D. Fylladitakis , **A.X. Moronis**, K.N. Kiousis: 'Design of a prototype EHD air pump for electronic chip cooling applications', *IOP Plasma Science and Technology*, ISSN 1009-0630, Vol.16, No.5, pp. 491-501, 2014.
- 13. E.D. Fylladitakis, **A.X. Moronis** and K.N. Kiousis: 'Experimental evaluation of a needle-to-grid EHD pump prototype for semiconductor cooling applications', *International Journal of Circuits, Systems and Signal Processing*, ISSN: 1998-4464, Vol.8, pp. 337-342, 2014.
- 14. P.G. Halaris, P.D. Bourkas, **A.X. Moronis**, S.A. Tsitsias, I. Tsitsoglou and C.G. Karagiannopoulos: 'Stressing the model of a solid-liquid dielectric through the application of High DC Voltage', *International Journal of Power and Energy Systems*, ISSN 1078-3466, Vol. 19, No. 1, pp. 23-27, 1999.
- A.X. Moronis, P. Bourkas, C. Karagiannopoulos, P. Halaris, E. Tsitsoglou and S. Tsitsias: 'Capacitance Change of a Metal Tip-Solid Polymeric Dielectric-Metal Plane Configuration, Under the Application of High Voltage Impulses', *International Journal of Power and Energy Systems*, ISSN 1078-3466, Vol. 15, pp.85-88, 1995.
- A.X. Moronis and P.D. Bourkas: 'Impact Ionization Effects at Interfaces Between Solid Dielectrics and Insulating Oil or Air, During High Voltage Pulse Applications', *Interface Science*, Springer, ISSN: 0927-7056, Vol. 2, No.3, pp. 281-287, 1995.
- 17. **A.X. Moronis**, P.D. Bourkas, C.T. Dervos and C.A. Kagarakis : 'A Program to Process the Experimental Measurements Connected with the Research of Breakdown and Prebreakdown Phenomena in Solid Polymeric Insulators', *International Journal of Power and Energy Systems*, ISSN 1078-3466, Vol. 14, No.3, pp.77-83, 1994.

(iii) Chapters in Books

- 1. K.N. Kiousis, **A.X. Moronis** and W.G. Fruh: 'Analysis of the Electric Field Distribution in a Wire-Cylinder Electrode Configuration', *Springer Lectrure Notes in Electrical Engineering*, Vol. 307 -*Computational Problems in Engineering*, ISBN: 978-3-319-03966-4, pp.77-92, 2014.
- (iv) International Conferences
- 1. C. Spyrou, P. Papageorgas, G. Vokas, A. Moronis, '*Techno-Economic Analysis of a Hybrid Power Supply System on a Telecom Site*', AIP (TMREE20) International Conf. Proceedings, Athens-Greece, June 25-27, 2307, 020052, 2020.
- 2. D. Barkas, S. Kaminaris, N. Manousakis, A. Moronis, C. Psomopoulos, '*Review on sensoring techniques for partial discharges detection in power transformers*', 30th CIGRE Conference 'Athens 2020'– Transmission & Distribution Challenges in Greece, 2-3 April, 2020.
- 3. M. Batou, G. J. Tsekouras, A. Moronis, 'Load estimation of a small autonomous island power system using k-means method', IEEE 3rd European Conference on Electrical Engineering & Computer Science (EECS 2019), Athens, Greece, December 28-30, DOI: 10.1109/EECS49779.2019.00024, pp. 60-65, 2019.
- 4. A.X. Moronis, '*The electrostatic field between parallel asymmetric cylindrical conductors*', IEEE International Conference on High Voltage Engineering and Application (ICHVE 2018), Athens, Greece, 10-13 September, 10.1109/ICHVE.2018.8641969, 2018.
- 5. A. Moronis, E. Fylladitakis, I. Raptis, '*Two-stage Cascaded EHD Air Pump Evaluation*', IEEE International Conference on High Voltage Engineering and Application (ICHVE 2018), Athens, Greece, 10-13 September, 10.1109/ICHVE.2018.8641845, 2018.
- A.X. Moronis, C. Koulamas, A. Kalogeras 'Validation of a monthly quasi-steady-state simulation model for the energy use in buildings`, Proceedings of the IEEE Conf. on Emerging Technologies and Factory Automation (ETFA) 2017, DOI: 10.1109/ETFA.2017.8247665, Limassol, Cyprus, Sept. 12-15, pp. 1-6, 2017.
- C. Koulamas; A. Moronis; A. Kalogeras; D. Liberanome 'Choosing measures for energy efficient hospital buildings', Proceedings of the IEEE Conf. on Emerging Technologies and Factory Automation (ETFA) 2017, DOI: 10.1109/ETFA.2017.8247666, Limassol, Cyprus, Sept. 12-15, pp. 1-7, 2017.

- 8. L.K. Kontos, **A.X. Moronis**, 'Evaluation of Energy Efficiency Measures in Tertiary Sector Buildings', EinB2016 5th International Conference "ENERGY in BUILDINGS 2016, ASHRAE, Greek Chapter, Athens, November 12, 2016.
- 9. A.X. Moronis, E.D. Fylladitakis, '*Experimental Evaluation of an Electrohydrodynamic CPU Cooling System Utilizing a Wire-Grid Electrode Configuration*', Proceedings of the International Conference 'Science in Technology' SCinTE 2015, ISBN: 978-960-98739-8-7, Athens, November 5-7, 2015.
- 10. E.D. Fylladitakis, **A.X. Moronis**, K.N. Kiousis, '*Evaluation of a single needle to grid EHD pump prototype for forced convection cooling applications*', Proceedings of the EUROPMENT AMCME 2013 International Conference, ISBN: 978-1-61804-200-2, Rhodes, July 16-19, pp. 282-287, 2013.
- K.N. Kiousis, A.X. Moronis, W.G. Fruh, 'Analysis of the Electric Field Distribution in a Wire-Cylinder Electrode Configuration', Proceedings of the EUROPMENT AMCME 2013 International Conference, ISBN: 978-1-61804-200-2, Rhodes, July 16-19, pp. 164-170, 2013.
- 12. E.D. Fylladitakis, **A.X. Moronis**, K.N. Kiousis, '*Evaluation of a single needle to grid EHD pump prototype for forced convection cooling applications*', Proceedings of the EUROPMENT AMCME 2013 International Conference, ISBN: 978-1-61804-200-2, Rhodes, July 16-19, pp. 282-287, 2013.
- K.N. Kiousis, A.X. Moronis, E.D. Fylladitakis, 'Finite Element Analysis Method for Detection of the Corona Discharge Inception Voltage in a Wire-Cylinder Arrangement', 6th WSEAS Int. Conference on FINITE DIFFERENCES, ELEMENTES, VOLUMES and BOUNDARY ELEMENTS (F-and-B '13), ISBN: 978-1-61804-184-5, Vouliagmeni, May 14-16, pp. 188-193, 2013.
- 14. K. N. Kiousis, **A. X. Moronis**, '*Modeling and Analysis of the Electric Field and Potential Distribution in a Wire-Cylinder Air Gap*', 7th WSEAS International Conference on COMPUTER ENGINEERING and APPLICATIONS, ISBN: 978-1-61804-150-0, Milan, January 9-11, pp. 35-40, 2013.
- 15. K. N. Kiousis, A. X. Moronis, '*Experimental Investigation of EHD Flow in Wire to Cylinder Electrode Configuration'*, Proceedings of the 10th IASTED European Conference on Power and Energy Systems, ISBN: 978-0-88986-883-0, Crete, June 22-24, pp. 21-26, 2011.
- F.E. Asimakopoulou, G.J. Tsekouras, I.F. Gonos, A.X. Moronis, I.A. Stathopulos, 'An Artificial Neural Network for Estimating the Ground Resistance', International Conference on Grounding and Earthing & 4th International Conference on Lightning Physics and Effects GROUND'2010 & 4th LPE, Proceedings, ISSN: 1983-2184, Salvador – Brazil, November 7th - 11th, p. 143, 2010.
- V. Kontargyri, C. Tsirekis, S. Kabanaros, A. Sakarellos, A. Moronis, N. Kolliopoulos, S. Kaminaris : 'An Expert System for Fault Diagnosis, Repairing and Maintenance of Electrical Machines', 6th WSEAS Int.Conf. on Applications of Electrical Engineering (AEE '07), ISBN: 978-960-8457-71-3, Istanbul, Turkey, May 27-29, pp. 166-171, 2007.
- S.D. Kaminaris, A.X. Moronis, N.I. Kolliopoulos, A.P. Sakarellos, V.T. Kontargyri, S.D. Kampanaros, I.F. Gonos: '*PTME – a new expert system application for Power Transformer Troubleshooting and Maintenance*', Proceedings of the 6th WSEAS Int. Conf. On Artificial Intelligence, Knowledge Engineering and Data Bases, ISBN: 978-960-8457-59-1, Corfu Island, Greece, February 16-19, pp. 52-57, 2007.
- 19. Gonos I.F., Kontargyri V.T., Stathopulos I.A., **Moronis A.X.**, Sakarellos A.P., Kolliopoulos. N.I.: *Determination of two layer earth structure parameters'*, Proceedings of the XVII International Conference on Electromagnetic Disturbances (EMD 2007), Bialystok, Poland, September 19-21, pp. 10.1-1 to 10.1-6, 2007.
- Gonos I.F., Moronis A.X., Stathopulos I.A.: 'Variation of Soil Resistivity and Ground Resistance during the Year', Proceedings of the 28th International Conference on Lightning Protection (ICLP 2006), ISBN 4-9902110-2-2, Kanazawa, Japan, September 18-22, pp. 740-744, 2006.
- D. Karolidis, A. Moronis, P. Prentakis, J. Rampias, M. Samarakou: '*E-Study: A Learning Environment*", Proceedings of the 2005 WSEAS International Conference on Engineering Education, ISBN: 960-8457-28-9, Athens Greece, July 8-10, pp. 309-314, 2005.
- Moronis A.X., Bourkas P.D., Dervos C.T., Kagarakis C.A. '*Electronic phenomena in solid dielectrics under high electric fields*', IEEE ISIE'95 International Symposium on Industrial Electronics, Proceedings, ISBN: 0-7803-7369-3, Vol. 2, pp. 919-923, 1995.

- 23. A. Moronis, P. Bourkas, C. Karagiannopoulos, P. Halaris, E.Tsitsoglou and S. Tsitsias: 'A Mathematical model for the overall equivalent capacitance change of a metal tip-solid polymeric dielectric-metal plane configuration, under the application of high impulse voltages', Proceedings of the Thirteendth International Conference on Modelling, Identification and Control (MIC '94), ISSN: 1025-8973, Grindelwald, Switzerland, pp. 232-234, 1994.
- 24. I. Tsitsoglou, P.D. Bourkas, C.G. Karagiannopoulos, A. Moronis et.al.: 'Dielectirc aging of the solidliquid combination insulator with alternating high voltage strain', Proceedings of the Thirteendth International Conference on Modelling, Identification and Control (MIC '94), ISSN: 1025-8973, Grindelwald, Switzerland, pp. 229-231, 1994.
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(v) National Conferences

Also <u>19</u> presentations in national Conferences with topics including Electrostatic Cooling Applications, Fault Diagnosis and Preventive Maintenance of Electrical Power System Equipment, Electrical Grounding Systems Analysis Models and Solid Dielectrics Testing.

Other

His published work has received 448 citations (source: Google Scholar).

He has been a reviewer of the following scientific journals:

- IEEE Transactions on Power Delivery ISSN: 0885-8977
- IEEE Transactions on Sensors ISSN: 1530-437X
- IEEE Transactions on Plasma Science ISSN: 0093-3813
- Journal of Electrostatics (Elsevier) ISSNQ 0304-3886
- Contributions to Plasma Physics (Wiley) ISSN: 1521-3986
- AIP Advances Physics of Plasmas (American Institute of Physics AIP Publishing LLC) ISSN 2158-3226
- Transactions on Information Science and Applications (WSEAS) ISSN: 1790-0832
- Journal Electrical and Electronic Engineering (JEEE) ISSN: 2329-1613

Computer Skills

- (i) Advanced User of the following Software Packages:
 - Microsoft Office (Word, Exel, Powerpoint, Visio)
 - Adobe Photoshop (Image Editing)
 - Engineering/Scientific Software:
 - Autodesk Autocad (CAD)
 - Rhino (3D modelling software)
 - Simplify3D (Slicer for 3D printing)
 - Schneider Electric Ecodial (Electrical Installations Design)
 - Matlab/Simulink (Technical Computing)
 - Mathsoft Mathcad (Advanced Mathematical Modeling and Calculations)
 - Mutlisim (Electronic Circuit Analysis Simulator)
 - FEMM (2D Finite Element Analysis for Electrostatic and Magnetostatic Problems)
 - Opera Multiphysics (2D/3D Finite Element Analysis for Multiphysics Problems)
 - TEE KENAK, official engineering software of the Greek State for the Energy Efficiency Classification of Buildings in Greece (introduced by the Technical Chamber of Greece and the Ministry of Environment and Energy)
- (ii) Programming Languages: C, C++, Assembly 80x86 (advanced)
- (iii) CMS: Joomla (very good)
- (iv) Logo Softcomfort software for Siemens Logo! PLCs (advanced)

Antonios.X. Moronis December 2023