

ELIAS KYRIAKIDES, PhD, CEng, FIET, SMIEEE

Department of Electrical and Computer Engineering
and

KIOS Research and Innovation Center of Excellence

University of Cyprus

P.O. Box 20537, 1678 Nicosia, Cyprus

Tel: +357 - 22892291, Fax: +357 - 22893455

E-mail: elias@ucy.ac.cy

Home page: <http://www.kios.ucy.ac.cy/elias>

EDUCATION

Ph.D. Electrical Engineering, Arizona State University, Tempe, AZ, Dec. 2003

Specialization: Electric Power Engineering

Received the 'Palais Outstanding Doctoral Student Award' (best doctoral graduate of the year)

Dissertation: Innovative Concepts for On-line Synchronous Generator Parameter Estimation

Overall GPA: 4.0/4.0

M.S. Electrical Engineering, Arizona State University, Tempe, AZ, Dec. 2001

Specialization: Electric Power Engineering

Thesis: On-line Estimation of Synchronous Generator Parameters Using a Visual Platform

Overall GPA: 4.0/4.0

B.S. Electrical Engineering (High Honors), Illinois Institute of Technology, Chicago, IL, May 2000

Received the Alumni Association award (ranked first among all Spring 2000 graduates)

Overall GPA: 4.0/4.0

Diploma, Electrical Engineering, Higher Technical Institute, Nicosia, Cyprus, June 1996

Diploma Project: Fault Level Calculations for Protection of Power System Components

Received the Presidential award (ranked first among all 1996 graduates)

Weighted average: 90.9%

EMPLOYMENT

Associate Professor

Department of Electrical and Computer Engineering

University of Cyprus, Nicosia, Cyprus

Feb. 2015-present

Adjunct Professor

Department of Electrical, Computer, and Energy Engineering

Arizona State University, Tempe, AZ, USA

July 2009-present

Assistant Professor

Department of Electrical and Computer Engineering

University of Cyprus, Nicosia, Cyprus

May 2009-Jan. 2015

Lecturer

Department of Electrical and Computer Engineering

University of Cyprus, Nicosia, Cyprus

Aug. 2005-Apr. 2009

Visiting Lecturer

Department of Electrical and Computer Engineering

University of Cyprus, Nicosia, Cyprus

Sep. 2004-July 2005

Faculty Research Associate

Jan. 2004-July 2004

Arizona State University, Tempe, AZ USA

Research on parameter estimation of synchronous generators, state estimation techniques and power quality indices in distribution networks.

Research Associate

Aug. 2000-Dec. 2003

Arizona State University, Tempe, AZ USA

Research in the field of state estimation and synchronous machine parameter identification, as part of a PSERC and NSF funded project. Development of magnetic saturation models for synchronous generators. Development of an observer for the estimation of damper currents in a round rotor synchronous generator.

Senior Scholar in Physics

Aug.-Dec. 1999

Academic Resource Center, Illinois Institute of Technology, Chicago, IL, USA

Directed and organized the activities of the Physics tutors of the ARC, coordinated tutoring sessions, and tutored students in physics at the freshman and sophomore levels.

Mathematics tutor

Aug.-Dec. 1999

Academic Resource Center, Illinois Institute of Technology, Chicago, IL, USA

Tutored students in Math or Math related subjects for all undergraduate levels.

Design and inspection engineer

May-Oct. 1997

Worked as a member of the tender-evaluation committee for the construction of the Paphos military airport base; supervised and inspected the workers constructing the electricity network.

Second lieutenant of the Cyprus National Guard (Engineering Corps)

July 1996-June 1998

In charge of a platoon of soldiers and of the machinery-vehicle department of the camp as part of a compulsory military service. Served as an instructor throughout the duty, having classes of 15 to 70 soldiers at a time.

Internships

CYEMS Co. Ltd, Nicosia, Cyprus

Apr.-June 1996

Electricity Authority of Cyprus, Nicosia, Cyprus

Jan.-May 1996

RWTH Aachen University, Aachen, Germany (Research Assistant)

July-Sep. 1995

A&P Paraskevaides Ltd., Nicosia, Cyprus

July-Aug. 1994

CONSULTING

1. Cyprus Energy Regulatory Authority (Development of a year-ahead unit commitment/economic dispatch tool) (2017).
2. Cyprus Transmission System Operator (Development of a tool for the calculation of the long run marginal cost of energy for the Cyprus power system) (2017-2018).
3. Cyprus Police (Laboratory analysis) (undisclosed details) (Apr. 2010-June 2011)
4. Department of Electrical and Mechanical Services, Ministry of Communications and Works, Republic of Cyprus (Forensic investigation of fire allegedly caused by a 66 kV transmission line in the "Saittas" forest fire) (July-Dec. 2007).

SIGNIFICANT LEADERSHIP ACTIVITIES

1. **Vice-Chair**, Department of Electrical and Computer Engineering (Sep. 2016-present)
2. **Chair** of the IEEE Cyprus Section Committee (Jan. 2018 – present).
3. **Appointed Member** of the COST Scientific Committee (May 2015-present)
4. **Chair** of the Cyprus Chapter of the IEEE Power and Energy Society (PES), May 2012-Dec. 2017. (Received the IEEE PES High Performing Chapter Award in 2012, 2014, 2015, and 2016, and the 2015 Region 8 Chapter of the Year Award)

5. **Director** of the Interdepartmental School of Engineering “Energy technologies and sustainable design” program, University of Cyprus (June 2014-May 2016)
6. **Action Chair** of ESF-COST Action IC0806: Intelligent Monitoring, Control and Security of Critical Infrastructure Systems (IntelliCIS) (May 2009 – May 2013) (34 countries) (<http://www.intellicis.eu>)

PART A: RESEARCH

RESEARCH INTERESTS

Wide area monitoring and control of power systems; synchronized measurements in power systems; power system operations; dynamic modeling of system components; stability and operation of renewable energy sources connected to the power grid.

PROFESSIONAL MEMBERSHIPS

Senior Member of the Institute of Electrical and Electronic Engineers (IEEE) (S'00, M'04, SM'09)

Fellow of the Institution of Engineering and Technology (IET) (formerly Institute of Electrical Engineers (IEE)) (M'04, F'18)

Chartered Engineer (CEng) of the Institution of Engineering and Technology (IET) (2015)

Member of the IEEE Power and Energy Society (PES) (2000)

Member of the IEEE Industry Applications Society (IAS) (2009)

Member of the IEEE Computational Intelligence Society (CIS) (2010)

Member of the IEEE Instrumentation and Measurement Society (IMS) (2011)

Member of the IEEE Standards Association (SA) (2011)

Member of CIGRE (International Council on Large Electric Systems) (2006)

Member of ETEK (Technical Chamber of Cyprus) (1998)

Member of the Cyprus Association of Electrical Engineers) (2011)

Member of the Tau Beta Pi (TBPi) Engineering Honorary Society (1998)

Member of the International Network for Engineering Education and Research (INEER) (2004)

PUBLICATIONS AND TECHNICAL REPORTS¹

A. Books

1. A. Stratigea, E. Kyriakides, and C. Nicolaides (Eds.), *Smart Cities in the Mediterranean - Coping with Sustainability Objectives in Small and Medium-sized Cities and Island Communities*, Springer 2017 (ISBN: 987-3-319-54557-8).
2. R. Setola, V. Rosato, E. Kyriakides, and E. Rome (Eds.), *Managing the Complexity of Critical Infrastructures: A Modelling and Simulation Approach*, Springer, 2017) (ISBN: 978-3-319-51042-2).
3. E. Kyriakides, S. Suryanarayanan, and V. Vittal (Eds.), *Electric power engineering research and education – A festschrift for Gerald T. Heydt*, Power Electronics and Power Systems, New York: Springer, 2015 (ISBN: 978-3-319-17189-0).
4. E. Kyriakides and M. Polycarpou (Eds.), *Intelligent Monitoring, Control, and Security of Critical Infrastructure Systems*, Studies in Computational Intelligence, Berlin: Springer-Verlag, 2015 (ISBN: 978-3-662-44159-6).

B. Conference Proceedings

1. C. G. Panayiotou, G. Ellinas, E. Kyriakides, and M. M. Polycarpou (Eds.), *Critical Information Infrastructures Security: Revised Selected Papers*, CRITIS 2014, Switzerland: Springer, 2016 (ISBN: 978-3-319-31663-5).

¹ Names in *italics* indicate students or post-doctoral fellows that published while working under my supervision

C. Book chapters

1. I. Ciornei, C. Heracleous, M. Kiriakou, D. Eliades, C. Constantinou and E. Kyriakides, “Test system for mapping interdependencies of critical infrastructures for intelligent management in smart cities,” in *Smart Cities in the Mediterranean Coping with Sustainability Objectives in Small and Medium-sized Cities and Island Communities*, Springer, pp. 355-377, Eds. A. Stratigea, E. Kyriakides, and C. Nicolaidis, ISBN: 987-3-319-54557-8, 2017.
2. A. di Pietro, C. Liberto, N. Flourentzou, E. Kyriakides, I. Pothof, and G. Valenti, “Physical simulators of critical infrastructures,” Chapter 4 in *Managing the Complexity of Critical Infrastructures: A Modelling and Simulation Approach*, Springer, pp. 63-84, Eds. R. Setola, V. Rosato, E. Kyriakides, and E. Rome, ISBN: 978-3-319-51042-2, 2017.
3. M. G. Simões, R. Roche, E. Kyriakides, S. Suryanarayanan, B. Blunier, K. McBee, P. Nguyen, P. Ribeiro, and A. Miraoui, “Comparison of smart grid technologies and progress in the USA and Europe” in *Smart Grid Applications and Developments*, Springer-Verlag, pp. 221-238, Eds. D. Mah, P. Hills, V. Li, and R. Balme, ISBN 978-1-4471-6280-3, Oct. 2014.
4. I. Ciornei and E. Kyriakides, “Stochastic solutions for the unit commitment of power systems with wind power generation,” Chapter 6 in *Renewable Energy: Economics, Emerging Technologies and Global Practices*, Hauppauge, NY: Nova Science Publishers, Inc., pp. 91-109, Ed. A. Poulikkas, 2013.
5. G. Milis, E. Kyriakides, and A. Hadjiantonis, “Electrical power system protection and interdependencies with ICT,” in *Telecommunications Economics*, Berlin: Springer, vol. 7216, pp. 216–228, Eds. A. Hadjiantonis and B. Stiller, 2012.
6. B. Singh, S. N. Singh, and E. Kyriakides, “Intelligent control of power electronic systems for wind turbines,” Chapter 10 in *Wind Power Systems: Applications of Computational Intelligence*, Springer Book Series on Green Energy and Technology, Berlin: Springer-Verlag, pp. 255-295, Eds. L. Wang, C. Singh, and A. Kusiak, June 2010.
7. E. Kyriakides and M. Polycarpou, “Short term electric load forecasting: a tutorial,” Chapter 16 in *Trends in Neural Computation*, Berlin: Springer-Verlag, pp. 391-418, Eds. K. Chen and W. Lipo, 2007.

D1. Refereed Archival Journal Publications

1. L. Zacharia, L. Hadjidemetriou, and E. Kyriakides, “Integration of renewables into the wide area control scheme for damping power oscillations,” *IEEE Transactions on Power Systems*, pp. 1-8 (accepted Mar. 2018).
2. Z. Ali, N. Christofides, L. Hadjidemetriou, E. Kyriakides, Y. Yang, and F. Blaabjerg, “Three-phase phase-locked loop synchronization algorithms for grid-connected renewable energy systems: A review,” *Renewable & Sustainable Energy Reviews*, pp. 1-32, (accepted Mar. 2018).
3. Z. Ali, N. Christofides, L. Hadjidemetriou, and E. Kyriakides, “Design of an advanced PLL for accurate phase angle extraction under grid voltage harmonics/interharmonics and DC offset,” *IET Power Electronics*, pp. 1-18 (accepted Dec. 2017).
4. J. Quirós-Tortós, P. Demetriou, M. Panteli, E. Kyriakides, and V. Terzija, “Intentional Controlled Islanding and Risk Assessment: A Unified Framework,” *IEEE Systems Journal*, pp. 1-10 (accepted Nov. 2017).
5. A. Kyriacou, P. Demetriou, C. Panayiotou, and E. Kyriakides, “Controlled islanding solution for large-scale power systems,” *IEEE Transactions on Power Systems*, vol. 33, no. 2, pp. 1591-1602, Mar. 2018.

6. Z. Ali, N. Christofides, L. Hadjidemetriou, and E. Kyriakides, "A new MAF based $\alpha\beta$ EPMAFPLL for grid connected RES with improved performance under grid faults," *Electric Power Systems Research*, vol. 154, pp. 130-139, Jan. 2018.
7. L. Hadjidemetriou, Y. Yang, E. Kyriakides, and F. Blaabjerg, "A synchronization scheme for single-phase grid-tied inverters under harmonic distortion and grid disturbances," *IEEE Transactions on Power Electronics*, vol. 32, no. 4, pp. 2784-2793, Dec. 2017.
8. Y. Tofis, Y. Yiasemi, and E. Kyriakides, "A plug and play selective load shedding scheme for power systems," *IEEE Systems Journal*, vol. 11, no. 4, pp. 2864-2871, Dec. 2017.
9. P. Demetriou, M. Asprou, J. Quiros-Tortos, and E. Kyriakides, "Dynamic IEEE test systems for transient analysis," *IEEE Systems Journal*, vol. 11, no. 4, pp. 2108-2117, Dec. 2017.
10. M. Asprou and E. Kyriakides, "Identification and estimation of erroneous transmission line parameters using PMU measurements," *IEEE Transactions on Power Delivery*, vol. 32, no. 6, pp. 2510-2519, Dec. 2017.
11. M. Panteli, P. Mancarella, D. N. Trakas, E. Kyriakides, and N. D. Hatziargyriou, "Metrics and quantification of operational and infrastructure resilience in power systems," *IEEE Transactions on Power Systems*, vol. 32, no. 6, pp. 4732-4742, Nov. 2017.
12. M. Asprou, S. Chakrabarti, and E. Kyriakides, "A two-stage state estimator for dynamic monitoring of power systems," *IEEE Systems Journal*, vol. 11, no. 3, pp. 1767-1776, Sep. 2017.
13. L. Hadjidemetriou, P. Papadopoulos, E. Kyriakides, and M. Polycarpou, "Robust fault detection, isolation, and accommodation of current sensors in grid tied inverters," *IEEE Transactions on Industry Applications (Special Issue on Fault Diagnosis of Electric Machines, Power Electronics and Drives)*, vol. 53, no. 3, pp. 2852-2861, May 2017.
14. Y. Tofis, S. Timotheou, and E. Kyriakides, "Minimal load shedding using the swing equation," *IEEE Transactions on Power Systems*, vol. 32, no. 3, pp. 2466-2467, May 2017.
15. Z. Achillides and M. G. Danikas and E. Kyriakides, "Partial discharge modeling and induced charge concept: comments and criticism of Pedersen's model and associated measured transients," *IEEE Transactions on Dielectrics and Electrical Insulation*, vol. 24, no. 2, pp. 1118-1122, Apr. 2017.
16. Y. Yiasemi, I. Ciornei, M. Asprou, and E. Kyriakides, "A near real time loss allocation methodology based on the power system states," *IET Generation, Transmission and Distribution*, vol. 11, no. 5, pp. 1243-1250, Mar. 2017.
17. L. Hadjidemetriou, E. Kyriakides, Y. Yang, and F. Blaabjerg, "A synchronization method for single-phase grid-tied inverters," *IEEE Transactions on Power Electronics*, vol. 31, no. 3, pp. 2139-2149, Mar. 2016.
18. L. Hadjidemetriou, E. Kyriakides, Y. Yang, and F. Blaabjerg, "A robust synchronization to enhance the power quality of renewable energy systems," *IEEE Transactions on Industrial Electronics*, vol. 62, no.8, pp. 4858-4868, Aug. 2015.
19. L. Hadjidemetriou, F. Blaabjerg, and E. Kyriakides, "An adaptive tuning mechanism for phase-locked loop algorithms for faster time performance of interconnected renewable energy sources," *IEEE Transactions on Industry Applications*, vol. 51, no. 2, pp. 1792-1804, Mar. 2015.
20. M. Asprou, E. Kyriakides, and M. Albu, "The effect of variable weights in a WLS state estimator considering instrument transformer uncertainties," *IEEE Transactions on Instrumentation and Measurement*, vol. 63, no. 6, pp. 1484-1495, June 2014.
21. C. Abbey, D. Cornforth, N. Hatziargyriou, K. Hirose, G. Platt, A. Kwasinski, E. Kyriakides, L. Reyes, and S. Suryanarayanan, "Powering through the storm: Microgrids operation for more efficient disaster recovery," *IEEE Power and Energy Magazine*, vol. 12, no. 3, pp. 67-76, May 2014.

22. L. Hadjidemetriou, F. Blaabjerg, and E. Kyriakides, "A new hybrid PLL for interconnecting renewable energy systems to the grid," *IEEE Transactions on Industry Applications*, vol. 49, no. 6, pp. 2709-2719, Nov. 2013.
23. I. Ciornei and E. Kyriakides, "Recent methodologies and approaches for the economic dispatch of generation in power systems," *International Transactions on Electrical Energy Systems*, vol. 23, no. 7, pp. 1002-1027, Oct. 2013.
24. Z. Achillides, E. Kyriakides, and G. Georgiou, "Partial discharge modeling: an improved capacitive model and associated transients along medium voltage distribution cables," *IEEE Transactions on Dielectrics and Electrical Insulation*, vol. 20, no. 3, pp. 770-781, June 2013.
25. C. Hadjistassou, E. Kyriakides, and J. Georgiou, "Designing high efficiency segmented thermoelectric generators," *Energy Conversion and Management*, vol. 66, pp. 165-172, Feb. 2013.
26. M. G. Simões, R. Roche, E. Kyriakides, S. Suryanarayanan, B. Blunier, K. McBee, P. Nguyen, P. Ribeiro, and A. Miraoui, "A comparison of smart grid technologies and progresses in Europe and the U.S.," *IEEE Transactions on Industry Applications*, vol. 48, no. 4, pp. 1154-1162, Aug. 2012.
27. A. Kamilaris, Y. Tofis, C. Bekara, A. Pitsillides, and E. Kyriakides "Integrating web-enabled energy-aware smart homes to the smart grid," *International Journal on Advances in Intelligent Systems*, vol. 5, no. 1, pp. 15-31, June 2012.
28. I. Ciornei and E. Kyriakides, "Impact of variable generation on the dispatch operation in isolated power systems," *International Journal on Electronics and Electrical Engineering*, vol. 6, pp. 66-73, Mar. 2012.
29. I. Ciornei and E. Kyriakides, "A GA – API solution for the economic dispatch of generation in power system operation," *IEEE Transactions on Power Systems*, vol. 27, no. 1, pp. 233-242, Feb. 2012.
30. I. Ciornei and E. Kyriakides, "Hybrid ant colony-genetic algorithm (GA-API) for global continuous optimization," *IEEE Transactions on Systems, Man, and Cybernetics: Part B: Cybernetics*, vol. 42, no. 1, pp. 234-245, Feb. 2012.
31. G. Valverde, E. Kyriakides, G. T. Heydt, and V. Terzija, "Non-linear estimation of synchronous machine parameters using operating data," *IEEE Transactions on Energy Conversion*, vol. 26, no. 3, pp. 831-839, Sep. 2011.
32. G. Valverde, S. Chakrabarti, E. Kyriakides, and V. Terzija, "A constrained formulation for hybrid state estimation," *IEEE Transactions on Power Systems*, vol. 26, no. 3, pp. 1102-1109, Aug. 2011.
33. S. Chakrabarti, E. Kyriakides, G. Ledwich, and A. Ghosh, "Inclusion of PMU current phasor measurements in a power system state estimator," *IET Generation, Transmission, and Distribution*, vol. 4, no. 10, pp. 1104-1115, Sep. 2010.
34. M. Albu, E. Kyriakides, G. Chicco, M. Popa, and A. Nechifor, "Online monitoring of the power transfer in a DC test grid," *IEEE Transactions on Instrumentation and Measurement*, vol. 59, no. 5, pp. 1104-1118, May 2010.
35. S. Chakrabarti, E. Kyriakides, T. Bi, D. Cai, and V. Terzija, "Measurements get together," *IEEE Power and Energy Magazine*, pp. 15-23, Mar. 2010 (in special issue: *Smart Grid... Putting it All Together*, 2010 reprint journal from PES, among six articles selected for reprint from all 2009 articles).
36. S. Chakrabarti, E. Kyriakides, and M. Albu, "Uncertainty in power system state variables obtained through synchronized measurements," *IEEE Transactions on Instrumentation and Measurement*, vol. 58, no. 8, pp. 2452-2458, Aug. 2009.
37. S. Chakrabarti and E. Kyriakides, "PMU measurement uncertainty considerations in WLS state estimation," *IEEE Transactions on Power Systems*, vol. 24, no. 2, pp. 1062-1071, May 2009.
38. S. Chakrabarti, E. Kyriakides, T. Bi, D. Cai, and V. Terzija, "Measurements get together," *IEEE Power and Energy Magazine*, vol. 7, no. 1, pp. 41-49, Jan. 2009.

39. S. Chakrabarti, E. Kyriakides, and D. G. Eliades, "Placement of synchronized measurements for power system observability," *IEEE Transactions on Power Delivery*, vol. 24, no. 1, pp. 12-19, Jan. 2009.
40. Z. Achillides, G. E. Georghiou, and E. Kyriakides, "Partial discharges and associated transients: the induced charge concept versus capacitive modeling," *IEEE Transactions on Dielectrics and Electrical Insulation*, vol. 15, no. 6, pp. 1507-1516, Dec. 2008.
41. I. Ciornei, C. Nemes, and E. Kyriakides, "The future hybrid renewable power system and its generation dispatch," *Energetica Journal*, vol. 9, pp. 1-8, Sep. 2008.
42. S. Chakrabarti and E. Kyriakides, "Optimal placement of phasor measurement units for power system observability," *IEEE Transactions on Power Systems*, vol. 23, no. 3, pp. 1433-1440, Aug. 2008.
43. E. Kyriakides, M. M. Albu, and G. T. Heydt, "Identification of the standard parameters of a steam-turbine generator using wavelet denoising," *Journal of Electric Power Components and Systems*, vol. 35, no. 10, pp. 1145-1159, Oct. 2007.
44. E. Kyriakides and G. T. Heydt, "Calculating confidence intervals in parameter estimation: a case study," *IEEE Transactions on Power Delivery*, vol. 21, no. 1, pp. 508-509, Jan. 2006.
45. E. Kyriakides, G. T. Heydt, and V. Vittal, "On-line parameter estimation of round rotor synchronous generators including magnetic saturation," *IEEE Transactions on Energy Conversion*, vol. 20, no. 3, pp. 529-537, Sep. 2005.
46. N. Logić, E. Kyriakides, and G. T. Heydt, " L_p state estimators for power systems," *Journal of Electric Power Components and Systems*, vol. 33, no. 7, pp. 699-712, July 2005.
47. E. Kyriakides, S. Suryanarayanan, and G. T. Heydt, "State estimation in power engineering using the Huber robust regression technique," *IEEE Transactions on Power Systems*, vol. 20, no. 2, pp. 1183-1184, May 2005.
48. E. Kyriakides, G. T. Heydt, and V. Vittal, "On-line estimation of synchronous generator parameters using a damper current observer and a graphic user interface," *IEEE Transactions on Energy Conversion*, vol. 19, no. 3, pp. 499-507, Sep. 2004.
49. E. Kyriakides and R. G. Farmer, "Modeling of damping for power system stability analysis," *Journal of Electric Power Components and Systems*, vol. 32, no. 8, pp. 827-837, Aug. 2004.
50. E. Kyriakides and G. T. Heydt, "Estimation of synchronous generator parameters using an observer for damper currents and a graphical user interface," *Journal of Electric Power Systems Research*, vol. 69, no. 1, pp. 7-16, Apr. 2004.
51. S. Suryanarayanan and E. Kyriakides, "An on-line portal for collaborative learning and teaching for power engineering education," *IEEE Transactions on Power Systems*, vol. 19, no. 1, pp. 73-80, Feb. 2004.
52. E. Kyriakides and G. T. Heydt, "An observer for the estimation of synchronous generator damper currents for use in parameter identification," *IEEE Transactions on Energy Conversion*, vol. 18, no. 1, pp. 175-177, Mar. 2003.

D2. Refereed Archival Journal Publications (submitted)

1. L. Zacharia, M. Asprou, and E. Kyriakides, "The impact of measurement errors and delays on wide area control of power systems," *IEEE Transactions on Power Systems*, pp. 1-8 (submitted Apr. 2018).
2. P. Demetriou, J. Quirós-Tortós, and E. Kyriakides, "When to island for blackout prevention," *IEEE Systems Journal*, pp. 1-8 (submitted Mar. 2018).

3. Z. Ali, N. Christofides, L. Hadjidemetriou, and E. Kyriakides, "A multi-functional distributed generation control scheme for improving the grid power quality," *IET Power Electronics*, pp. 1-14 (submitted Mar. 2018).
4. A. Kotsonias, M. Asprou, L. Hadjidemetriou, and E. Kyriakides, "A PMU based method for monitoring active low voltage distribution grids," *IEEE Transactions on Smart Grid (Special Section on Theory and Application of PMUs in Power Distribution Systems)*, pp. 1-2 (extended abstract submitted Feb. 2018, accepted Apr. 2018).
5. P. Demetriou, M. Asprou, and E. Kyriakides, "A real-time controlled islanding and restoration scheme based on estimated states," *IEEE Transactions on Power Systems*, pp. 1-8 (submitted Feb. 2018).
6. M. Asprou, E. Kyriakides, and M. Albu, "Uncertainty bounds of transmission line parameters estimated from synchronized measurements," *IEEE Transactions on Instrumentation and Measurement*, pp. 1-8 (submitted Feb. 2018, revised and resubmitted May 2018 and July 2018).
7. N. Flourentzou, P. Kolios and E. Kyriakides, "Optimizing patient-to-hospital allocations considering the available energy recourses during a large-scale disaster," *Journal of Urban Technology*, pp. 1-31 (submitted Dec. 2017).

E1. Refereed International Conference Proceedings

1. G. T. Heydt, M. Al-Muhaini, and E. Kyriakides, "Large scale desalination as a cost effective, controlled electric load resource," *50th North American Power Symposium (NAPS) Proceedings*, Fargo, ND, pp. 1-5, Sep. 2018 (accepted July 2018).
2. L. Zacharia, A. Kyriacou, L. Hadjidemetriou, E. Kyriakides, C. Panayiotou, B. Azzopardi, N. Martensen, N. Borg, "Islanding and resynchronization procedure of a university campus microgrid," *International Conference on Smart Energy Systems and Technologies (SEST 2018)*, Sevilla, Spain, pp. 1-6, Sep. 2018 (accepted July 2018).
3. A. Bintoudi, L. Zyglakis, A. Tsolakis, D. Ioannidis, M. Al-Hashem, S. Al-Agtash, L. Hadjidemetriou, L. Zacharia, E. Kyriakides, and C. Demoulias, "An improved decentralised coordinated control scheme for microgrids with AC-coupled units," *International Conference on Smart Energy Systems and Technologies (SEST 2018)*, Sevilla, Spain, pp. 1-6, Sep. 2018 (accepted July 2018).
4. M. Asprou and E. Kyriakides, "Denoising of PMU measurements for accurate calculation of transmission line parameters," *IEEE Power and Energy Society General Meeting*, Portland, OR, USA, pp. 1-5, Aug. 2018 (accepted Feb. 2018).
5. M. Asprou and E. Kyriakides, "Identification and estimation of erroneous transmission line parameters using PMU measurements," *IEEE Power and Energy Society General Meeting*, Portland, OR, USA, pp. 1-8, Aug. 2018 (accepted Mar. 2018).
6. L. Hadjidemetriou, L. Zacharia, E. Kyriakides et al., "Design factors for developing a university campus microgrid," *IEEE 5th International Energy Conference (ENERGYCON)*, Limassol, Cyprus, pp. 1-6, June 2018.
7. D. Monoyios, L. Hadjidemetriou, L. Zacharia, and E. Kyriakides, "Cost-effective optimization for an energy efficient design of electrical installations of buildings," *IEEE 5th International Energy Conference (ENERGYCON)*, Limassol, Cyprus, pp. 1-6, June 2018.
8. L. Tziovani, P. Kolios, L. Hadjidemetriou, and E. Kyriakides, "Energy scheduling in non-residential buildings integrating battery storage and renewable solutions," *IEEE 5th International Energy Conference (ENERGYCON)*, Limassol, Cyprus, pp. 1-6, June 2018.

9. Z. Ali, N. Christofides, L. Hadjidemetriou, and E. Kyriakides, "Photovoltaic Reactive Power Compensation Scheme: An Investigation for the Cyprus Distribution Grid," *IEEE 5th International Energy Conference (ENERGYCON)*, Limassol, Cyprus, pp. 1-6, June 2018.
10. Z. Ali, L. Hadjidemetriou, N. Christofides, and E. Kyriakides, "A harmonic neutralization reference generator for fast and accurate mitigation of grid voltage harmonics affecting current controllers," *43rd Annual Conference of the IEEE Industrial Electronics Society (IECON 2017)*, Beijing, China, pp. 1-6, Nov. 2017.
11. Z. Ali, N. Christofides, L. Hadjidemetriou, and E. Kyriakides, "Diversifying the role of distributed generation grid side converters for improving the power quality of distribution networks using advanced control techniques," *IEEE Energy Conversion Congress and Expo (ECCE 2017)*, Cincinnati, Ohio, USA, pp. 1-5, Oct. 2017.
12. L. Zacharia, M. Asprou, and E. Kyriakides, "Investigation of the factors influencing wide area control," *IEEE Power and Energy Society General Meeting*, Chicago, IL, USA, pp. 1-5, July 2017.
13. M. Asprou, and E. Kyriakides, "The effect of PMU measurement delays on a linear state estimator: centralized vs decentralized," *IEEE Power and Energy Society General Meeting*, Chicago, IL, USA, pp. 1-5, July 2017.
14. L. Hadjidemetriou, and E. Kyriakides, "Accurate and efficient modelling of grid tied inverters for investigating their interaction with the power grid," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-4, June 2017.
15. L. Zacharia, L. Hadjidemetriou, and E. Kyriakides, "Cooperation of wide area control with renewable energy sources for robust power oscillation damping," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-4, June 2017.
16. P. Demetriou, A. Kyriacou, E. Kyriakides, and C. Panayiotou, "System splitting strategy considering power system restoration," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-4, June 2017.
17. Y. Tofis, S. Timotheou, and E. Kyriakides, "An optimal load shedding analytical approach," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-2, June 2017.
18. E. Polykarpou, M. Asprou, and E. Kyriakides, "Dynamic load modelling using real time estimated states," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-4, June 2017.
19. I. Ciornei, L. Hadjidemetriou, M. Albu, M. Sanduleac, and E. Kyriakides, "Analytical derivation of PQ indicators compatible with control strategies for DC microgrids," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-3, June 2017.
20. Z. Ali, N. Christofides, L. Hadjidemetriou, and E. Kyriakides, "Performance enhancement of MAF based PLL with phase error compensation in the pre-filtering stage," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-6, June 2017.
21. Z. Ali, N. Christofides, L. Hadjidemetriou, and E. Kyriakides, "An advanced current controller with improved performance and complexity under abnormal grid conditions," *IEEE PowerTech 2017*, Manchester, United Kingdom, pp. 1-6, June 2017.
22. L. Hadjidemetriou, L. Zacharia, and E. Kyriakides, "Flexible power control scheme for interconnected photovoltaics to benefit the power quality and the network losses of the distribution grid," *IEEE International Future Energy Electronics Conference (ECCE Asia)*, Kaohsiung, Taiwan, pp. 1-6, June 2017.
23. L. Hadjidemetriou, N. Flourentzou, and E. Kyriakides, "Energy management controller of a resilient micro-grid for critical buildings," *52nd ESReDA Conference*, Kaunas, Lithuania, pp. 1-12, May 2017.
24. M. Asprou, E. Kyriakides, and M. Albu, "The effect of PMU measurement chain quality on line parameter calculation," *International Instrumentation and Measurement Technology Conference (I²MTC 17)*, Torino, Italy, pp. 1-6, May 2017.

25. P. Demetriou, A. Kyriacou, E. Kyriakides, and C. Panayiotou, "Applying exact MILP formulation for controlled islanding of power systems," *51st International Universities Power Engineering Conference (UPEC 2016)*, Coimbra, Portugal, pp. 1-6, Sep. 2016.
26. M. Asprou, E. Kyriakides, and M. Albu, "Bad data detection considering the accuracy of instrument transformers," *IEEE Power and Energy Society General Meeting*, Boston, MA, USA, pp. 1-5, July 2016.
27. L. Zacharia, M. Asprou, and E. Kyriakides, "Design of a data delay compensation technique based on a linear predictor for wide-area measurements," *IEEE Power and Energy Society General Meeting*, Boston, MA, USA, pp. 1-5, July 2016.
28. S. Rao, D. Ramirez, H. Braun, J. Lee, C. Tepedelenlioglu, E. Kyriakides, D. Srinivasan, J. Frye, S. Koizumi, Y. Morimoto, and A. Spanias, "An 18 kW solar array research facility for fault detection experiments," *18th Mediterranean Electrotechnical Conference (MELECON 2016)*, Limassol, Cyprus, pp. 1-5, Apr. 2016.
29. E. Polykarpou and E. Kyriakides, "Parameter estimation for measurement-based load modeling using the Levenberg-Marquardt algorithm," *18th Mediterranean Electrotechnical Conference (MELECON 2016)*, Limassol, Cyprus, pp. 1-6, Apr. 2016.
30. L. Hadjidemetriou, G. Nicolaou, D. Stavrou, and E. Kyriakides, "Low-cost real-time monitoring of a laboratory scale power system," *18th Mediterranean Electrotechnical Conference (MELECON 2016)*, Limassol, Cyprus, pp. 1-6, Apr. 2016.
31. L. Hadjidemetriou, A. Charalambous, P. Demetriou, and E. Kyriakides, "Dynamic modeling of IEEE test systems including renewable energy sources," *18th Mediterranean Electrotechnical Conference (MELECON 2016)*, Limassol, Cyprus, pp. 1-6, Apr. 2016.
32. M. Asprou, E. Kyriakides, A. Dumitrescu, and M. Albu, "The impact of PMU measurement delays and a heterogenous communication network on a linear state estimator," *18th Mediterranean Electrotechnical Conference (MELECON 2016)*, Limassol, Cyprus, pp. 1-6, Apr. 2016.
33. L. Hadjidemetriou, Y. Yang, E. Kyriakides, and F. Blaabjerg, "A synchronization scheme for single-phase grid-tied inverters under harmonic distortion and grid disturbances," *The Applied Power Electronics Conference and Exposition (APEC 2016)*, Long Beach, CA, USA, pp. 1-8, Mar. 2016.
34. G. Milis, M. Asprou, E. Kyriakides, C. Panayiotou, and M. Polycarpou, "Semantically-enhanced configurability in state estimation structures of power systems," *Computational Intelligence Applications in Smart Grid (CIASG 2015)*, Cape Town, South Africa, pp. 1-6, Dec. 2015.
35. Y. Yang, L. Hadjidemetriou, F. Blaabjerg, and E. Kyriakides, "Benchmarking of phase locked loop based synchronization techniques for grid-connected inverter systems," *9th International Conference on Power Electronics – ECCE Asia*, Seoul, Korea, pp. 1-8, June 2015.
36. P. Mavroeidis, E. Kyriakides, and V. Kirincic, "The effect of branch parameter errors on voltage stability enhancement schemes," *50th International Universities Power Engineering Conference (UPEC 2015)*, Stoke-on-Trent, United Kingdom, pp. 1-6, Sep. 2015.
37. M. Asprou and E. Kyriakides, "Estimation of transmission line parameters using PMU measurements," *IEEE Power and Energy Society General Meeting*, Denver, CO, USA, pp. 1-5, July 2015.
38. L. Hadjidemetriou, P. Demetriou, and E. Kyriakides, "Investigation of different fault ride through strategies for renewable energy sources," *IEEE PowerTech 2015*, Eindhoven, The Netherlands, pp. 1-6, June 2015.
39. G. Pieri, M. Asprou, and E. Kyriakides, "Load pseudomeasurements in distribution system state estimation," *IEEE PowerTech 2015*, Eindhoven, The Netherlands, pp. 1-6, June 2015.

40. P. Demetriou, L. Hadjidemetriou, A. Kyriacou, E. Kyriakides, and C. Panayiotou, "Real-time identification of coherent generator groups," *IEEE PowerTech 2015*, Eindhoven, The Netherlands, pp. 1-6, June 2015.
41. M. Asprou and E. Kyriakides, "The effect of time-delayed measurements on a PMU-based state estimator," *IEEE PowerTech 2015*, Eindhoven, The Netherlands, pp. 1-6, June 2015.
42. L. Hadjidemetriou, M. Asprou, P. Demetriou, and E. Kyriakides, "Enhancing power system voltage stability through a centralized control of renewable energy sources," *IEEE PowerTech 2015*, Eindhoven, The Netherlands, pp. 1-6, June 2015.
43. M. Jha, S. Chakrabarti, and E. Kyriakides, "Estimation of the rotor angle of a synchronous generator by using PMU measurements," *IEEE PowerTech 2015*, Eindhoven, The Netherlands, pp. 1-6, June 2015.
44. S. Vagropoulos, L. Hadjidemetriou, A. G. Bakirtzis, and E. Kyriakides, "Assessment of electric losses minimization in commercial facilities through combined EV charging and PV generation operation," 9th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MedPower 2014), pp. 1-7, Athens, Greece, Nov. 2014.
45. V. Kirincic, M. Asprou, P. Mavroeidis, and E. Kyriakides, "The effect of branch parameter errors to voltage stability indices," 9th International Conference on Critical Information Infrastructures Security (CRITIS), Limassol, Cyprus, pp. 122-134, Oct. 2014.
46. L. Hadjidemetriou, E. Kyriakides, Y. Yang and F. Blaabjerg, "Power quality improvement of single-phase photovoltaic systems through a robust synchronization method," *IEEE Energy Conversion Congress and Exhibition (ECCE 2014)*, Pittsburgh, PA, USA, pp. 1-8, Sep. 2014.
47. P. N. Mavroeidis and E. Kyriakides, "Probabilistic approaches to power system security assessment," *International Universities' Power Engineering Conference (UPEC2014)*, Cluj-Napoca, Romania, Sep. 2014.
48. Y. Tofis, Y. Yiasemi, E. Kyriakides, and K. Kansala, "Adaptive frequency control application for a real autonomous islanded grid," *IEEE Power and Energy Society General Meeting*, Washington DC, USA, pp. 1-5, July 2014.
49. M. Asprou, E. Kyriakides, and S. Chakrabarti, "The use of a PMU-based state estimator for tracking power system dynamics," *IEEE Power and Energy Society General Meeting*, Washington DC, USA, pp. 1-5, July 2014.
50. D. Stavrou, L. Hadjidemetriou, E. Kyriakides, and C. Panayiotou, "Low-cost interface platform for controlling a real-time system," *IEEE Hellenic Student Branch Conference (HSBC)*, Nicosia, Cyprus, pp. 1-2, Nov. 2013.
51. K. Dongare, S. Chakrabarti, and E. Kyriakides, "Power system state estimation considering real-time equivalents of the external networks," *IEEE PES Innovative Smart Grid Technologies Asia 2013 (ISGT Asia 2013)*, Bangalore, India, pp. 1-6, Nov. 2013.
52. L. Hadjidemetriou, E. Kyriakides, and F. Blaabjerg, "Synchronization of grid-connected renewable energy sources under highly distorted voltages and unbalanced grid faults," *The 39th Annual Conference of the IEEE Industrial Electronics Society (IECON 2013)*, Vienna, Austria, pp. 1-6, Nov. 2013 (**best paper award in Power Quality session**).
53. L. Hadjidemetriou, E. Kyriakides, and F. Blaabjerg, "A grid side converter current controller for accurate current injection under normal and fault ride through operation," *The 39th Annual Conference of the IEEE Industrial Electronics Society (IECON 2013)*, Vienna, Austria, pp. 1-6, Nov. 2013.
54. M. Asprou, Y. Yiasemi, E. Kyriakides, S. Stavrinos, A. G. Petoussis, M. Michael, and Y. Ioannou, "Application of synchronized measurement technology in the Cyprus power transmission system," *2nd International Energy Conference on Power Options for the Eastern Mediterranean Region (POEM 2013)*, Nicosia, Cyprus, pp. 1-6, Oct. 2013 (**invited paper**).

55. I. Ciornei, P. Mavroeidis, G. Pieri, and E. Kyriakides, "From sensors and measurements to data and applications in power systems" 2nd *International Energy Conference on Power Options for the Eastern Mediterranean Region (POEM 2013)*, Nicosia, Cyprus, pp. 1-7, Oct. 2013 (**invited paper**).
56. L. Hadjidemetriou, F. Blaabjerg, and E. Kyriakides, "An adaptive phase-locked loop algorithm for faster fault ride through performance of interconnected renewable energy sources," *IEEE Energy Conversion Congress and Exhibition (ECCE 2013)*, Denver, CO, USA, pp. 1-8, Sep. 2013.
57. Y. Tofis, Y. Yiasoumi, and E. Kyriakides, "A plug and play, approximation-based, selective load shedding mechanism for the future electrical grid," *8th International Conference on Critical Information Infrastructures Security (CRITIS)*, Amsterdam, The Netherlands, pp. 1-10, Sep. 2013.
58. M. Calin, A. M. Dumitrescu, M. Asprou, E. Kyriakides, and M. Albu, "Measurement data aggregation for active distribution networks," *2013 IEEE International Workshop on Applied Measurements for Power Systems (AMPS)*, Aachen, Germany, pp. 144-149, Sep. 2013.
59. M. Asprou, E. Kyriakides, and M. Albu, "The effect of instrument transformer accuracy class on the WLS state estimator accuracy," *IEEE Power and Energy Society General Meeting*, Vancouver, Canada, pp. 1-5, July 2013 (**Best paper award; presented in the session: "Best Papers on Network Analysis and Dynamic Performance"**).
60. M. Vardikar, S. Chakrabarti, and E. Kyriakides, "Transformation of measurements for using external network equivalents in state estimation," *IEEE Power and Energy Society General Meeting*, Vancouver, Canada, pp. 1-5, July 2013.
61. M. Asprou and E. Kyriakides, "Estimation of line parameters using the hybrid state estimator," *IEEE PowerTech 2013*, Grenoble, France, pp. 1-6, June 2013.
62. Y. Yiasemi, I. Ciornei, M. Asprou, and E. Kyriakides, "Impact of loss calculation on different loss allocation procedures," *IEEE PowerTech 2013*, Grenoble, France, pp. 1-6, June 2013.
63. P. Demetriou, J. Q. Tortós, E. Kyriakides, and V. Terzija, "On implementing a spectral clustering controlled islanding algorithm in real power systems: achievements and challenges," *IEEE PowerTech 2013*, Grenoble, France, pp. 1-6, June 2013.
64. Y. Tofis, L. Hadjidemetriou, and E. Kyriakides, "An intelligent load shedding mechanism for maintaining frequency stability," *IEEE PowerTech 2013*, Grenoble, France, pp. 1-5, June 2013.
65. L. Hadjidemetriou and E. Kyriakides, "The performance of a new hybrid PLL in an interconnected renewable energy system under fault ride through operation," *Power Options for the Eastern Mediterranean Region (POEM 2012)*, Limassol, Cyprus, pp. 1-7, Nov. 2012. Also published in *Conference Papers in Energy*, vol. 2013, pp. 1-10, May 2013.
66. C. Hadjistassou, J. Georgiou, and E. Kyriakides, "Improving vehicle fuel economy using thermoelectric devices," *Power Options for the Eastern Mediterranean Region (POEM 2012)*, Limassol, Cyprus, pp. 1-6, Nov. 2012.
67. L. Hadjidemetriou, F. Blaabjerg, and E. Kyriakides, "A new hybrid PLL for interconnecting renewable energy systems to the grid," *IEEE Energy Conversion Congress and Exhibition (ECCE 2012)*, Raleigh, NC, USA, pp. 1-8, Sep. 2012.
68. M. Asprou, E. Kyriakides, and M. Albu, "The effect of parameter and measurement uncertainties on hybrid state estimation," *IEEE Power and Energy Society General Meeting*, San Diego, CA, USA, pp. 1-7, July 2012.
69. M. Asprou, I. Ciornei, and E. Kyriakides, "A real-time innovative scheme for power losses calculation," *2012 IEEE PES PowerAfrica Conference and Exposition*, Johannesburg, South Africa, pp. 1-8, July 2012.
70. M. Asprou, A. M. Hadjiantonis, I. Ciornei, G. Milis, and E. Kyriakides, "On the complexities of interdependent infrastructures for wide area monitoring systems," *2012 IEEE Workshop on*

- Complexity in Engineering (COMPENG 2012)*, Aachen, Germany, pp. 1-6, June 2012 (**invited paper**).
71. M. Albu, E. Kyriakides, I. M. Florea, and A. M. Dumitrescu, "Analysis of distribution grids: state estimation using model uncertainties," *2nd IEEE International Workshop on Applied Measurements for Power Systems (AMPS 2011)*, Aachen, Germany, pp. 1-4, Sep. 2011.
 72. M. G. Simões, R. Roche, E. Kyriakides, A. Miraoui, B. Blunier, K. McBee, S. Suryanarayanan, P. Nguyen, and P. Ribeiro, "Smart-grid technologies and progress in Europe and the USA," *2011 IEEE Energy Conversion Congress and Exposition (ECCE)*, Phoenix, AZ, USA, pp. 1-8, Sep. 2011.
 73. G. Valverde, E. Kyriakides, and V. Terzija, "A non-linear approach for on-line parameter estimation of synchronous machines," *17th Power Systems Computation Conference (PSCC 2011)*, Stockholm, Sweden, paper no. 189, pp. 1-7, Aug. 2011.
 74. G. Valverde, E. Kyriakides, G. T. Heydt, and V. Terzija, "On-line parameter estimation of saturated synchronous machines," *IEEE Power and Energy Society General Meeting*, Detroit, MI, USA, paper no. 0344, pp. 1-6, July 2011.
 75. M. Asprou and E. Kyriakides, "Enhancement of hybrid state estimation using pseudo flow measurements," *IEEE Power and Energy Society General Meeting*, Detroit, MI, USA, paper no. 1022, pp. 1-7, July 2011.
 76. M. Asprou and E. Kyriakides, "Optimal PMU placement for improving hybrid state estimation accuracy," *IEEE PowerTech 2011*, Trondheim, Norway, pp. 1-7, June 2011.
 77. M. Asprou and E. Kyriakides, "State estimator accuracy improvement using synchronized measurements," *3rd International Conference on Renewable Energy Sources and Energy Efficiency*, Nicosia, Cyprus, paper no. 138, pp. 1-9, May 2011.
 78. C. Hadjistassou, J. Georgiou, and E. Kyriakides, "Designing hybrid photovoltaic – thermoelectric energy systems," *3rd International Conference on Renewable Energy Sources and Energy Efficiency*, Nicosia, Cyprus, paper no. 123, pp. 1-9, May 2011.
 79. M. Asprou and E. Kyriakides, "A constrained hybrid state estimator including pseudo flow measurements," *7th Mediterranean Conference on Power Generation, Transmission, Distribution, and Energy Conversion (MedPower 2010)*, Ayia Napa, Cyprus, paper no. 109, pp. 1-6, Nov. 2010.
 80. B. Singh, E. Kyriakides, and A. M. Michaelides, "Efficient identification of synchronous machine parameters through the finite elements method," *7th Mediterranean Conference on Power Generation, Transmission, Distribution, and Energy Conversion (MedPower 2010)*, Ayia Napa, Cyprus, paper no. 115, pp. 1-8, Nov. 2010.
 81. E. Dialynas, L. Daoutis, T. Diagoupis, E. Kyriakides, C. Toufexis, and I. Charalambous, "Technical requirements of distributed generation facilities and their impact on the operational performance of isolated power systems," *7th Mediterranean Conference on Power Generation, Transmission, Distribution, and Energy Conversion (MedPower 2010)*, Ayia Napa, Cyprus, pp. 1-9, Nov. 2010.
 82. M. Albu, D. Creanga, A. Nechifor, M. Popa, E. Kyriakides, and C. Caciuleanu, "A laboratory-scale DC microgrid. Layout and functionality," *Smart Applications and Technologies for Electronic Engineering*, pp. 1-7, Sep. 2010.
 83. S. Chakrabarti, E. Kyriakides, G. Ledwich, and A. Ghosh, "A comparative study of the methods of inclusion of PMU current phasor measurements in a hybrid state estimator," *IEEE Power Engineering Society General Meeting*, Minneapolis, MN, USA, paper 2010GM0376, pp. 1-7, July 2010.
 84. E. Kyriakides and G. T. Heydt, "Synchronized measurements in power system operation: international trends and research," *IEEE Power Engineering Society General Meeting*, Minneapolis, MN, USA, (panel chair paper), pp. 1-3, July 2010.

85. K. Lin, E. Kyriakides, G. T. Heydt, N. Logić, and B. Singh, "Experience with synchronous generator parameter identification using a Kalman filter," *IEEE Power Engineering Society General Meeting*, Minneapolis, MN, USA, paper 2010GM0847, pp. 1-7, July 2010.
86. B. Singh, E. Kyriakides, and S. N. Singh, "Intelligent control of grid connected unified doubly-fed induction generator," *IEEE Power Engineering Society General Meeting*, Minneapolis, MN, USA, paper 2010GM1100, pp. 1-7, July 2010.
87. M. Polycarpou, G. Ellinas, E. Kyriakides, and C. Panayiotou, "Intelligent health monitoring of critical infrastructure systems," *Proc. IEEE Complexity in Engineering (COMPENG)*, Rome, Italy, Feb. 2010.
88. I. Ciornei and E. Kyriakides, "Dispatch challenges in isolated power systems with large wind penetration: the Cyprus power system case," *Conference on the promotion of Distributed Renewable Energy Sources in the Mediterranean region (DISTRES)*, Nicosia, Cyprus, paper # 154, pp. 1-7, Dec. 2009.
89. A. Andreou and E. Kyriakides, "Why go offshore?" *Conference on the promotion of Distributed Renewable Energy Sources in the Mediterranean region (DISTRES)*, Nicosia, Cyprus, paper #155, pp. 1-4, Dec. 2009.
90. P. Prodromou and E. Kyriakides, "Design, implementation, and performance monitoring of a hydrogen fuel cell prototype," *Renewable Energy Sources and Energy Efficiency Conference (RESEE)*, Nicosia, Cyprus, pp. 1-11, Oct. 2009.
91. B. Singh, S. N. Singh, and E. Kyriakides, "Computational intelligence based control of DFIG used for wind turbines," *Nordic Wind Power Conference (NWPC'2009)*, Bornholm, Denmark, pp. 1-7, Sep. 2009.
92. I. Ciornei and E. Kyriakides, "Heuristic solution for the nonconvex dispatch of generation in power systems with high wind power share," *IEEE Power Engineering Society General Meeting*, Calgary, Canada, paper 09GM0764, pp. 1-7, July 2009.
93. E. Kyriakides and G. T. Heydt, "Synchronized measurements in power system operation: international practices and research issues," *IEEE Power Engineering Society General Meeting*, Calgary, Canada, (panel chair paper), paper 09GM0221, pp. 1-3, July 2009.
94. I. Ciornei and E. Kyriakides, "Efficient hybrid optimization solution for the economic dispatch with nonsmooth cost function," *IEEE PowerTech 2009*, Bucharest, Romania, paper 262, pp. 1-7, June 2009.
95. S. Chakrabarti, E. Kyriakides, G. Valverde, and V. Terzija, "State estimation including synchronized measurements," *IEEE PowerTech 2009*, Bucharest, Romania, paper 292, pp. 1-5, June 2009.
96. S. Suryanarayanan and E. Kyriakides, "Cyber-enabled smart electric distribution systems," *National Workshop on New Research Directions for Future Energy Cyber-Physical Systems (CPS)*, Baltimore, Maryland, USA, pp. 1-3, June 2009.
97. M. Albu, A. Nechifor, M. Popa, M. Marin, A. Caciuleanu, and E. Kyriakides, "Communication among measurement and control units in a DC microgrid," *17th International Conference on Control Systems and Computer Science*, Bucharest, Romania, pp. 1-6, May 2009.
98. M. Albu, G. Chicco, E. Kyriakides, G. Nicolaou, A. Nechifor, A. Chirilă, and I. Deaconu, "Development of a DC network for monitoring power transfer," *International Instrumentation and Measurement Technology Conference (I²MTC 09)*, Singapore, pp. 1-6, May 2009.
99. S. Chakrabarti, G. K. Venayagamoorthy, and E. Kyriakides, "PMU placement for power system observability using binary particle swarm optimization," *Australasian Universities Power Engineering Conference (AUPEC 2008)*, Sydney, Australia, paper P-191, pp. 1-5, Dec. 2008.

100. I. Ciornei and E. Kyriakides, "Generation dispatch of the future hybrid renewable power system in a deregulated energy market environment," *International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe (DEMSEE08)*, paper no. 136, Nicosia, Cyprus, pp. 1-8, Sep. 2008.
101. Z. Achillides, E. Kyriakides, and G. Georgiou, "Partial discharges and induced transients along medium voltage distribution cables," *International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe (DEMSEE08)*, Nicosia, Cyprus, paper no. 139, pp. 1-6, Sep. 2008.
102. S. Chakrabarti and E. Kyriakides, "An Optimal Hybrid Energy System for a Typical Home in Cyprus," *International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe (DEMSEE08)*, Nicosia, Cyprus, paper no. 138, pp. 1-7, Sep. 2008.
103. M. Markou, E. Kyriakides, and M. Polycarpou, "24-hour ahead short term load forecasting using multiple MLP," *International Workshop on Deregulated Electricity Market Issues in South-Eastern Europe (DEMSEE08)*, Nicosia, Cyprus, paper no. 137, pp. 1-6, Sep. 2008.
104. Z. Achillides, G. Georgiou, and E. Kyriakides, "A theoretical analysis of the capacitive modelling and the induced charge concept in partial discharges," *XVII International Conference on Gas Discharges and their Applications (GD2008)*, Cardiff, Wales, pp. 1-4, Sep. 2008.
105. I. Ciornei, C. Nemes, and E. Kyriakides, "The future hybrid renewable power system and its generation dispatch," *WESC 2008 - International World Energy System Conference*, Iasi, Romania, pp. 1-8, June 2008.
106. S. Chakrabarti and E. Kyriakides, "Formulation of the PMU placement problem in an integer quadratic programming framework," *International Conference on Power Systems (ICPS – 2007)*, Bangalore, India, pp. 1-4, Dec. 2007.
107. S. Chakrabarti and E. Kyriakides, "Placement of phasor measurement units for state estimation with voltage stability considerations," *Australasian Universities Power Engineering Conference (AUPEC 2007)*, Perth, Australia, pp. 38-42, Dec. 2007.
108. I. Ciornei and E. Kyriakides, "A multi-agent genetic algorithm for the solution of the economic dispatch problem," *3rd International Conference on Energy and Environment (CIEM 2007)*, Bucharest, Romania, pp. 115-123, Nov. 2007.
109. S. Chakrabarti, D. Eliades, E. Kyriakides, and M. Albu, "Measurement uncertainty considerations in optimal sensor deployment for state estimation," *IEEE International Symposium on Intelligent Signal Processing (WISP 2007)*, Madrid, Spain, pp. 1-6, Oct. 2007.
110. S. Chakrabarti and E. Kyriakides, "Grid-connected hybrid energy system for a typical home in Cyprus," *Renewable Energy Sources and Energy Efficiency Conference*, Nicosia, Cyprus, pp. 1-9, Sep. 2007.
111. S. Chakrabarti and E. Kyriakides, "Optimal placement of phasor measurement units for state estimation," *The IASTED International Conference on Power and Energy Systems (EuroPES 2007)*, Palma de Mallorca, Spain, pp. 1-6, Aug. 2007.
112. E. Kyriakides, J. W. Stahlhut, and G. T. Heydt, "A next generation alarm processing algorithm incorporating recommendations and decisions on wide area control," *IEEE Power Engineering Society General Meeting*, Tampa, FL, USA, pp. 1-5, June 2007.
113. J. W. Stahlhut, G. T. Heydt, and E. Kyriakides, "A comparison of local vs. sensory, input-driven, wide area reactive power control," *IEEE Power Engineering Society General Meeting*, Super Session "Vision 2020", Tampa, FL, USA, pp. 1-7, June 2007.
114. Z. Achillides, E. Kyriakides, G. E. Georgiou, and A. Kyprianou, "A comparison of matched filter and wavelet transforms for the detection of partial discharges in high voltage cables," *5th Mediterranean IEE Conference and Exhibition on Power Generation, Transmission, and Distribution (MedPower '06)*, Eilat, Israel, pp. 1-6, Nov. 2006.

115. E. Kyriakides, M. M. Albu, and G. T. Heydt, "Denoising techniques for on-line parameter identification," *Conference on Scientific Computing in Electrical Engineering, SCEE '06*, Sinaia, Romania, paper # A107, pp. 1-2, Sep. 2006.
116. E. Kyriakides, "A comprehensive algorithm for the estimation of synchronous generator parameters," *XVII International Conference on Electric Machines (ICEM 2006)*, Chania, Greece, pp. 1-6, Sep. 2006.
117. J. W. Stahlhut, G. T. Heydt, and E. Kyriakides, "Innovative sensory concepts for power systems," *38th North American Power Symposium (NAPS) Proceedings*, Carbondale, IL, pp. 397-404, Sep. 2006.
118. E. Kyriakides and S. Suryanarayanan, "Surveys-Based Assessment of International Power Engineering Education Programs" (panel paper), *IEEE Power Engineering Society General Meeting*, Montreal, Canada, pp. 1-4, June 2006.
119. E. Kyriakides and G. T. Heydt, "Estimation of synchronous machine parameters from on-line measurements considering magnetic saturation," *4th Mediterranean IEE Conference and Exhibition on Power Generation, Transmission, and Distribution (MedPower '04)*, Lemesos, Cyprus, pp. 1-7, Nov. 2004.
120. E. Kyriakides and G. T. Heydt, "Damper winding representation and magnetic saturation in synchronous generator modeling," *35th North American Power Symposium (NAPS) Proceedings*, Rolla, MO, pp. 522-529, Oct. 2003.
121. N. Logić, E. Kyriakides, and G. T. Heydt, " L_p state estimators for power systems," *34th North American Power Symposium (NAPS) Proceedings*, Tempe, AZ, pp. 48-52, Oct. 2002.
122. E. Kyriakides and G. T. Heydt, "A graphical user interface for synchronous machine parameter identification," *33rd North American Power Symposium (NAPS) Proceedings*, College Station, TX, pp. 112-119, Oct. 2001.
123. E. Kyriakides and G. T. Heydt, "Synchronous machine parameter estimation using a visual platform," *IEEE Power Engineering Society Summer Meeting*, Vancouver, Canada, vol. 3, pp. 1381-1386, July 2001.

E2. Refereed International Conference Proceedings (submitted)

1. A. Kotsonias, L. Hadjidemetriou, M. Asprou, and E. Kyriakides, "Conventional weighted least squares state estimation for monitoring low voltage distribution grids," *6th International Conference on Renewable Energy Sources & Energy Efficiency (RESEE2018)*, Nicosia, Cyprus, pp. 1-8, Nov. 2018 (paper submitted June 2018).
2. L. Tziouvani, P. Kolios, L. Hadjidemetriou, and E. Kyriakides, "Profit maximization and lifetime enhancement for a photovoltaic-storage inverter system," *6th International Conference on Renewable Energy Sources & Energy Efficiency (RESEE2018)*, Nicosia, Cyprus, pp. 1-10, Nov. 2018 (paper submitted June 2018).
3. P. Demetriou, A. Kyriacou, E. Kyriakides, and C. Panayiotou, "Controlled islanding of power systems considering voltage stability constraints," *Mediterranean Conference on Power Generation, Transmission, Distribution, and Energy Conversion (MedPower 2018)*, Dubrovnic, Croatia, pp. 1-2, Nov. 2018 (abstract submitted Mar. 2018).

F. Non-refereed Publications/Newspaper/Magazine articles

1. M. Asprou, E. Kyriakides, and M. Albu, "On the measurement chain in hybrid state estimation," IEEE Smart Grid Newsletter, July 2014.
2. S. Suryanarayanan and E. Kyriakides, "Microgrids: An emerging technology to enhance power system reliability," IEEE Smart Grid Newsletter, Mar. 2012. Selected to be published in the *IEEE Smart Grid Newsletter Compendium 2015*, issue 1: Smart Grid: The Next Decade as one of the "best of the best insightful articles" among 200+ articles (one selected for each sub-domain of the IEEE Smart Grid).
3. E. Kyriakides, "Twelve propositions for the reduction of the cost of electric energy," *Phileleftheros* (Φιλελεύθερος) newspaper, Sep. 5, 2011.
4. E. Kyriakides, "Foundational changes are required in the area of electric energy," *Kathimerini* (Καθημερινή) newspaper, Aug. 26, 2011.
5. E. Kyriakides and S. Suryanarayanan, "Microgrids: A new solution to combat reduced power reliability," *Xaravgi* (Χαρავγή) (5/8) and *Politis* (Πολίτης) (7/8) newspapers (in Greek), Aug. 2011.
6. E. Kyriakides, "Smart electricity grids and human dumbness," *Kathimerini* (Καθημερινή) (26/7) and *Simerini* (Σημερινή) (31/7) newspapers (in Greek), July 2011.
7. E. Kyriakides, "Power quality assessment in active distribution networks," *Ipsipetis Magazine* (in Greek), vol. 31, pp. 22-24, June 2010.
8. E. Kyriakides, "Wind energy: prospects and capabilities," *Oikoenehmérowsh magazine* (in Greek), vol. 4, pp. 12-16, Dec. 2008.
9. E. Kyriakides and G. Ellinas, "ASIMO, Texnopleyssi, and the growth of technology in Cyprus," *Phileleftheros and Maxi newspapers* (in Greek), June 3, 2007.
10. E. Kyriakides and G. Georgiou, "Quality of life: Electromagnetic fields and dangers for the human health," *The Consumer* (Ο Καταναλωτής) (in Greek), vol. 113, May 2005.
11. E. Kyriakides and G. Georgiou, "Electromagnetic fields in modern society - Part I: Is there a health hazard?" *Phileleftheros newspaper* (in Greek), Feb. 10, 2005.
12. G. Georgiou and E. Kyriakides, "Electromagnetic fields in modern society - Part II: Current guidelines and standards," *Phileleftheros newspaper* (in Greek), Feb. 10, 2005.
13. E. Kyriakides and M. Yiapatos, "Electromagnetic fields: Do they have an effect on our lives and health after all?" *Higher Technical Institute monthly newspaper*, Mar. 1995.

G. Other Publications/Guides

1. E. Kyriakides, "A guide on PowerWorld Simulator," Nov. 2006.
2. E. Kyriakides, "Guide for technical writing and presentations in Engineering," (in Greek), Sep. 2004.
3. E. Kyriakides, "Electromagnetic interference shielding," Chapter 9 in *Methods of Alleviating Power Quality Problems*, Power Systems Engineering Research Center, Arizona State University, May 2001.
4. E. Kyriakides and P. Sirisooriya, "Reliability issues in deregulated power systems," Chapter 16 in *Consequences of Deregulation of the Electric Power Industry*, Power Systems Engineering Research Center, Arizona State University, Dec. 2000.

PATENTS

1. E. Kyriakides and Z. Achillides, "A renewable energy storage and conversion method," European Patent No.2497181, Jan. 2018.
2. E. Kyriakides and Z. Achillides, "A renewable energy storage and conversion method," U.S. Patent No. 8,803,344, Aug. 12, 2014.
3. E. Kyriakides and G. T. Heydt, "System and method of estimating synchronous generator parameters," United States Patent 20050137834, disclosed Dec. 17, 2004.

TECHNICAL REPORTS

1. E. Kyriakides, M. Asprou, and M. Albu, "Synchronized measurement technology for a higher degree of monitoring and control in the power systems of Cyprus and Romania," Final Report, Cyprus Research Promotion Foundation, Feb. 2016.
2. E. Kyriakides and P. Mavroeidis, "Enhancement of power system integrity and stability using novel sensing technologies," Final Report, Cyprus Research Promotion Foundation, May 2015.
3. E. Kyriakides and M. Asprou, "The formulation of the next generation state estimator by utilizing synchronized phasor measurements," Final Report, Cyprus Research Promotion Foundation, Dec. 2014.
4. E. Kyriakides and M. Asprou, "The use of telecommunications and GPS technology for the real-time wide-area monitoring and control of power systems," Final Report, Cyprus Research Promotion Foundation, Sep. 2014.
5. E. Kyriakides, "Intelligent monitoring, control and security of critical infrastructure systems, Final Evaluation Report, European Science Foundation – COST, May 2013.
6. E. Kyriakides and M. Albu, "Enabling the integration of wide area measurement systems in the electric power grids of Cyprus and Romania," Final Report, Cyprus Research Promotion Foundation, June 2012.
7. S. K. Hadjistassou and E. Kyriakides, "From virtual worlds to virtual engineering classrooms: emerging virtual learning experiences in engineering and English as a second language," Final Report, Cyprus Research Promotion Foundation, June 2011.
8. A. M. Michaelides and E. Kyriakides, "Development of an advanced electric generator design tool for the power engineering industry," Final Report, Cyprus Research Promotion Foundation, May 2011.
9. E. Kyriakides and M. Albu, "Power quality assessment in active distribution networks," Final Report, Cyprus Research Promotion Foundation, Mar. 2010.
10. G. T. Heydt, K. Lin, and E. Kyriakides, "Synchronous generator and excitation system parameter estimation using phasor measurement unit data," Final Report, Salt River Project, May 2010.
11. E. Kyriakides, "System security enhancement through massively deployed sensors," Final Report, Cyprus Research Promotion Foundation, June 2008.
12. E. Kyriakides et al., "Estimation of synchronous generator parameters from on-line measurements," Final Report, Power Systems Engineering Research Center (PSERC), Apr. 2005.
13. E. Kyriakides, "Innovative concepts for on-line synchronous generator parameter estimation," Ph.D. Dissertation, Dept. of Electrical Engineering, Arizona State University, Dec. 2003.
14. E. Kyriakides, "Innovative concepts for on-line synchronous generator parameter estimation," Ph.D. Comprehensive Examination report, Dept. of Electrical Engineering, Arizona State University, Mar. 2003.

15. E. Kyriakides, "Design and implementation of a power flow algorithm in MATLAB using linked lists and sparse matrix storage," Dept. of Electrical Engineering, Arizona State University, Tempe, AZ, Dec. 2002.
16. G. T. Heydt and E. Kyriakides, "Identification and tracking of parameters for a large synchronous generator," Final Project Report, Power Systems Engineering Research Center (PSERC), Publication 02-18, Apr. 2002.
17. E. Kyriakides, "On-line estimation of synchronous generator parameters using a visual platform," Ph.D. Qualifying Examination report, Dept. of Electrical Engineering, Arizona State University, Apr. 2001.
18. E. Kyriakides, "Fault level calculations for protection of power system components," Diploma Project, Dept. of Electrical Engineering, Higher Technical Institute, Nicosia, Cyprus, June 1996.
19. E. Kyriakides, "Optimization of the Conductor Size of Inductive Furnaces using Neural Networks," Final Report, Dept. of Electrical Machines, University of Aachen, Aachen, Germany, Sep. 1995.

RESEARCH FUNDING

Research grants

Total funding (Kyriakides' share): €4 525 372

Total funding for projects participating as PI or co-PI: €30 353 218

Note: The amount for the TEAMING project (~40M euro is not calculated in the above amounts)

A. Ongoing projects

1. An Integrated Platform for Increased FLEXibility in smart TRANSMission grids with STORAge Entities and large penetration of Renewable Energy Sources (FLEXITRANSTORE), H2020. UCY Principal Investigator: Elias Kyriakides. Amount: €17 million. Amount for UCY: €843,125. Nov. 2017-Oct. 2021.
2. Enhanced rooftop PV integration through kinetic storage and wide area monitoring (ENHANCE), SOLAR-ERA.NET through the Research Promotion Foundation, KOINA/SOLAR-ERA.NET/0215/06. Principal Investigator: Elias Kyriakides. Amount: €31,675. Amount for UCY: €74,560. Apr. 2017-Mar. 2020.
3. KIOS Research and Innovation Center of Excellence for Intelligent Systems and Networks (KIOS CoE), Horizon2020, European Commission. Coordinator: Marios Polycarpou. Role: co-PI. Amount: €15 million plus €25 million co-funding from the Cyprus government and the industry. Mar. 2017-Feb. 2024.
4. Redesigning educational curricula and digitally afforded collaborations to promote multimodal learning experiences (REDESIGN), Erasmus+. Principal Investigators: Elias Kyriakides and Stella Hadjistassou. Amount: €28 504. Amount for UCY: €76 699. Nov. 2016-Oct. 2019.
5. Design, development and demonstration of a future-proof active smart micro-grid system (3D-MicroGrid), Euro-Mediterranean Cooperation Through ERANET (ERANETMED), KOINA/ERANETMED/1114. Coordinator: German Jordanian University (Jordan). UCY Principal Investigator: Elias Kyriakides (Leader for WP4). Amount for UCY: €100 000 (total project EU contribution: €907 604), Nov. 2016-Oct. 2019.
6. Improvement of master-level education in the field of physical sciences in Belarusian universities (Physics), Capacity Building in Higher Education - Erasmus+, Education, Audiovisual and Culture Executive Agency (EACEA). Coordinator: Riga Technical University (Latvia). UCY Principal Investigators: Elias Kyriakides and Stella Hadjistassou. Amount for UCY: €65 710 (total project EU contribution: €660 576), Oct. 2015- Oct. 2018.

B. Completed projects

7. A next generation grid side converter with advanced control and power quality capabilities (PV2GRID), SOLAR-ERA.NET through the Research Promotion Foundation, KOINA/SOLAR-

- ERA.NET/0114/02. Principal Investigator: Elias Kyriakides. Amount: €197,589. Amount for UCY: €87,500. Mar. 2015-Feb. 2018.
8. Critical infrastructure preparedness and resilience research network (CIPRNet), Network of Excellence, Call: FP7-SEC-2012-1, 7th Framework Programme, European Commission. Coordinator: Fraunhofer – Institute for Intelligent Analysis and Information Systems (Germany). UCY Principal Investigator: Elias Kyriakides (Leader for WP8). Amount for UCY: €607 600 (total project EU contribution: € 569 842), Mar. 2013-Feb. 2017.
 9. KIOS Research Center of Excellence for Intelligent Systems and Networks, H2020-WIDESPREAD-2014-1-FPA, Horizon2020, European Commission. Coordinator: Marios Polycarpou. Role: co-PI. Amount: €417 000, June 2015-May 2016.
 10. Synchronized measurement technology for a higher degree of monitoring and control in the power systems of Cyprus and Romania (SyncPower), Research Promotion Foundation, Program of Bilateral Cooperation between Cyprus and Romania, ΔΙΑΚΡΑΤΙΚΕΣ/KY-POY/0713. Principal investigators: Elias Kyriakides (Cyprus partner) and Mihaela Albu (Romanian partner). Amount for UCy: €25 000. May 2014-Dec. 2015.
 11. Enhancement of power system integrity and stability using novel sensing technologies (STABILITY), Research Promotion Foundation, ΠΡΟΣΕΛΚΥΣΗ/NEOS/0311/34. Principal Investigator: Elias Kyriakides. Amount: €100 000, Sep. 2012-Mar. 2015.
 12. KIOS Research Center for Intelligent Systems and Networks, Strategic Infrastructure Projects Action of the “New Infrastructure” Programme, Research Promotion Foundation, ΝΕΑ ΥΠΟΔΟΜΗ/ΣΤΡΑΤΗΓΙΚΗ/0308/26. Principal Investigators: Marios Polycarpou, Christos Panayiotou, Elias Kyriakides, George Ellinas, Julius Georgiou, Maria Michael and Costas Pitris. Amount: €100 000, Sep. 2010-June 2015.
 13. The formulation of the next generation state estimator by utilizing synchronized phasor measurements (HYBRID), Research Promotion Foundation, ΠΙΕΝΕΚ/0311/42. Principal Investigator: Elias Kyriakides. Amount: €87 500, Apr. 2012-Sep. 2014.
 14. The use of telecommunications and GPS technology for the real-time wide-area monitoring and control of power systems (WideView), Research Promotion Foundation, ΤΠΕ/ΟΠΙΖΟ/0311(BIE)/20. Principal Investigator: Elias Kyriakides. Amount: €139 901, Mar. 2012-July 2014.
 15. Intelligent Monitoring, Control and Security of Critical Infrastructure Systems (IntelliCIS), COST Action IC0806 (European Cooperation in the field of Scientific and Technical Research), European Science Foundation. Principal investigators: Elias Kyriakides (Chair), Marios Polycarpou, Christos Panayiotou, George Ellinas and Maria Michael. Amount: €529 860, May 2009-May 2013.
 16. Synchronized measurements in power systems for improved security, monitoring and control (WiFi-POWER), Research Committee, University of Cyprus. Principal investigator: Elias Kyriakides. Amount: €88 000, Apr. 2010-July 2012.
 17. Enabling the integration of wide area measurement systems in the electric power grids of Cyprus and Romania (ADVANCEDGRIDS), Research Promotion Foundation, Program of Bilateral Cooperation between Cyprus and Romania, KY-POY/0609/16. Principal investigators: Elias Kyriakides (Cyprus partner) and Mihaela Albu (Romanian partner). Amount for UCy: €24 990, Amount for UPB: €25 000), Apr. 2010-May 2012.
 18. A zero CO₂ emissions electricity generation prototype (ZeroCO₂), Financial Mechanism of the European Economic Area. Principal investigator: Elias Kyriakides. Amount: €776 392, Dec. 2008-Apr. 2011.
 19. Development of an advanced electric generator design tool for the power engineering industry (OPERA), Research Promotion Foundation, ΕΦΑΡΜ/0308/09. Principal investigators: Elias Kyriakides (UCy) and Alexandros Michaelides (Electromagnetic Valley Ltd.). Amount: €156 768. UCy budget: €21 740, Dec. 2008-Mar. 2011.
 20. From virtual worlds to virtual engineering classrooms: emerging virtual learning experiences in engineering and English as a second language (VIRTUALWORLDS), Research Promotion Foundation, ΑΝΘΡΩ/0308(BIE)/03. Principal investigators: Elias Kyriakides and Stella Hadjistassou. Amount: €99 958, Dec. 2008-Feb. 2011.

21. Nonlinear modeling and parameter estimation of synchronous machines using online measurements (MACHINES), Research Committee, University of Cyprus. Principal investigator: Elias Kyriakides. Amount: CYP 20 000 (€34 800), Nov. 2007-Feb. 2010.
22. Power quality assessment in active distribution networks (PQACTNET), Research Promotion Foundation, Program of Bilateral Cooperation between Cyprus and Romania, KY-POY/0407/01. Principal investigators: Elias Kyriakides (Cyprus partner) and Mihaela Albu (Romanian partner). Amount for UCy: CYP 8 803 (€15 040), (UPB amount: €2 500), Dec. 2007-Dec. 2009.
23. Electric load forecasting using neural networks (ΠΗΛΦΟΡ), Research Promotion Foundation, TEXNO/0506/22. Principal investigators: Elias Kyriakides and Marios Polycarpou. Amount: CYP 84 375 (€144 163.25), Dec. 2006-Oct. 2009.
24. System security enhancement through massively deployed sensors (SENSORS), Program of Research Cooperation with Distinguished Overseas Scientists, Research Promotion Foundation, Call ΠΔΕ/0505/06. Principal investigator: Elias Kyriakides. Amount: CYP 80 000 (€136 688.10), Dec. 2005-Mar. 2008.

Industrial funding

Funding received from the following entities to conduct specific research projects or applied (industrial research).

1. Electricity Authority of Cyprus, Nicosia, Cyprus
2. Cyprus Transmission System Operator, Nicosia, Cyprus
3. Cyprus Energy Regulatory Authority, Nicosia, Cyprus

Other funding received (non-competitive)

1. Start-up funding for research equipment, Research Committee, University of Cyprus, Jan. 2007. Principal investigator: Elias Kyriakides. Amount: CYP 43 000 (€73 469.86)
2. Socrates/Erasmus 2005-2015 Action 2.2 – Teaching Staff Mobility Grant, Contract number TS6/05. Principal investigators: Elias Kyriakides (University of Cyprus) and Mihaela Albu (University Politehnica of Bucharest).

HONORS AND AWARDS

Personal honors and awards

- Elected Fellow of “The Institution of Engineering and Technology” (IET), February 2018.
- Awarded the status of Chartered Engineer (CEng) by The Institution of Engineering and Technology (IET), June 2015.
- 2nd Prize in the *Cyprus Entrepreneurship Competition* for “*Cynergy: Commercialization of a Patented Invention for Electricity Conversion from dc to ac*”, June 2010.
- Elevated to Senior Member of the Institute of Electrical and Electronics Engineers (IEEE), July 2009
- Featured in the Spring 2008 Alumni newsletter as a distinguished EE alumnus, Arizona State University, 2008
- Who’s Who in Science and Engineering, 10th edition, 2008, Marquis, New Providence, NJ
- Who’s Who in America, 61st edition, 2007, Marquis, New Providence, NJ
- Palais Outstanding Doctoral Student Award, Electrical Engineering Department, Arizona State University, May 2004

- “Preparing Future Faculty Program” mentorship appreciation certificate (for mentoring Dr. Siddharth Suryanarayanan, an ASU graduate), Graduate College, Arizona State University, Apr. 2004
- Third prize in the IEEE student poster-paper session and contest for the paper entitled "On-line identification of generator and exciter parameters," Winter Meeting of the IEEE Power Engineering Society, New York, NY, USA, Jan. 28, 2002
- Academic Scholarship for graduate studies, Cyprus State Scholarship Authority, 2001 and 2002
- Graduate academic scholarship (GAS), Arizona State University, 2000-2001, 2001-2002, 2002-2003
- Alumni association award for the best overall performance among all graduating students at the Illinois Institute of Technology, Illinois Institute of Technology, May 2000
- First prize in IIT100 student vehicle design contest (*a contest of speed and power for student designed model cars*), Illinois Institute of Technology, Apr. 2000
- Dean’s list, Illinois Institute of Technology, Dec. 1998, May 1999, Dec. 1999, May 2000
- Partial CASP/Fulbright scholarship for undergraduate studies in the United States, Sep. 1997
- Presidential award for the best overall performance among all graduating students at the Higher Technical Institute, Higher Technical Institute, June 1996
- Prize for the best overall performance in the Electrical Engineering department, Higher Technical Institute, June 1996
- Prize for academic excellence by Peoples-Coffee Grinding Co Ltd., Higher Technical Institute, May 1996
- Prize for the best performance in Electronic and Telecommunication Engineering by Hellenic Enterprises, Higher Technical Institute, Mar. 1995
- Prize for continuing excellent academic performance by Cyprus Petroleum Refinery Limited (CPRL), Higher Technical Institute, Mar. 1994 (Renewed for three consecutive years until graduation)

Student honors and awards

- Undergraduate student Andreas Kotsonias received the 1st prize from the Department of Electrical and Computer Engineering at the University of Cyprus for his diploma thesis (June 2015).
- Undergraduate student Christos Yianni received the 1st prize from the Department of Electrical and Computer Engineering at the University of Cyprus for his diploma thesis (June 2014).
- Undergraduate student Ioannis Yiannaki received the 1st Honorable Mention in the “Research Contest for Undergraduate Students” organized by the Cyprus Research Promotion Foundation for his senior year diploma project (Sep. 2013).
- Undergraduate student Ioannis Yiannaki received the 2nd prize from the Department of Electrical and Computer Engineering at the University of Cyprus for his diploma thesis (June 2013).
- Ph.D. student Markos Asprou received the “2013 IEEE Instrumentation and Measurement Society Graduate Fellowship Award,” IEEE I&M Society, May 2013 (USD 15000).
- Undergraduate students Christos Frantzeskou and Charalambos Charalambous received the 1st prize from the Department of Electrical and Computer Engineering at the University of Cyprus for their diploma thesis (June 2012).
- Undergraduate student Giorgos Tourourou received the 3rd prize in the “Research Contest for Undergraduate Students” organized by the Cyprus Research Promotion Foundation for his senior year diploma project (Mar. 2011).
- Undergraduate student Yiannis Paparistodemou received the 1st prize from the Department of Electrical and Computer Engineering at the University of Cyprus for his diploma thesis (June 2010).
- MBA students Constantinos Pyrkettis, Andreas Chrysafis, and Elena Ioannidou received the 1st prize by the Department of Public and Business Administration, University of Cyprus, for their Applied Business Project: Commercialization of the E-ject project (Mar. 2010).
- Undergraduate student Minas Stavrinides received the 1st honorable mention (4th place) in the “Research Contest for Undergraduate Students” organized by the Cyprus Research Promotion Foundation for his senior year diploma project (July 2009).

- Undergraduate student Minas Stavrinides received the 1st prize from the Department of Electrical and Computer Engineering at the University of Cyprus for his diploma thesis (June 2009).
- Undergraduate student George Nicolaou received the best undergraduate paper award at the *International Instrumentation and Measurement Technology Conference (I²MTC 09)* in Singapore, for a student-only paper co-authored with A. Nechifor, M. Popa and M. Marin, and entitled: “Online measurements and control of a laboratory scale DC grid” (May 2009).
- Undergraduate student Philippos Prodromou, received the 2nd prize in the “Research Contest for Undergraduate Students” organized by the Cyprus Research Promotion Foundation for his senior year diploma project (Sep. 2008).
- Undergraduate student Philippos Prodromou, received the 1st prize from the Department of Electrical and Computer Engineering at the University of Cyprus for his diploma thesis (June 2008).
- Undergraduate student Alkisti Kalopetridi, received the 4th prize in the “Research Contest for Undergraduate Students” organized by the Cyprus Research Promotion Foundation for her senior year diploma project (July 2007).

Collective honors and awards

- Received the IEEE PES High Performing Chapter Award in 2016 for the Cyprus Chapter of the IEEE Power and Energy Society (PES), while being its Chair (June 2017).
- Received the IEEE PES High Performing Chapter Award in 2015 for the Cyprus Chapter of the IEEE Power and Energy Society (PES), while being its Chair (Apr. 2016).
- Received the Region 8 Chapter of the Year Award (Small and Medium Chapters) in 2015 for the Cyprus Chapter of the IEEE Power and Energy Society (PES), while being its Chair (Mar. 2016).
- Received the IEEE PES High Performing Chapter Award in 2014 for the Cyprus Chapter of the IEEE Power and Energy Society (PES), while being its Chair (July 2014).
- Received the IEEE PES High Performing Chapter Award in 2012 for the Cyprus Chapter of the IEEE Power and Energy Society (PES), while being its Chair (July 2012).

Best paper awards

- Article selected as one of the “best of the best insightful articles” of the IEEE Smart Grid Newsletter. Re-published in the *IEEE Smart Grid Newsletter Compendium 2015*, issue 1: Smart Grid: The Next Decade. Article title: Microgrids: An emerging technology to enhance power system reliability. Authors: S. Suryanarayanan and E. Kyriakides.
- Best paper award in Power Quality session at the 39th Annual Conference of the IEEE Industrial Electronics Society (IECON 2013). Paper title: Synchronization of grid-connected renewable energy sources under highly distorted voltages and unbalanced grid faults. Authors: L. Hadjidemetriou, E. Kyriakides, and F. Blaabjerg. Vienna, Austria, Nov. 2013.
- Best paper award at the IEEE Power and Energy Society General Meeting (PES GM 2013). Paper title: The effect of instrument transformer accuracy class on the WLS state estimator accuracy. Authors: M. Asprou, E. Kyriakides, and M. Albu. Vancouver, Canada, July 2013.

STUDENT ADVISING

A1. Current Ph.D. students:

1. Marina Elenkova (admitted Sep. 2018). Estimation of system inertia.
2. Anastasis Charalambous (admitted Sep. 2018). Modeling of storage in electricity distribution networks.
3. Fivos Therapontos (admitted Jan. 2018). TBD
4. Lysandros Tziovani (admitted Jan. 2018). Optimization of power system operation processes.
5. Andreas Kotsonias (admitted Jan. 2018). Wide area monitoring and control of distribution networks.

6. Lazaros Zacharia (admitted Sep. 2014). Wide area control of power systems (passed Qualifying Examination)
7. Elena Polykarpou (admitted Jan. 2014). Load modeling (passed Qualifying Examination)

A2. Ph.D. dissertations completed:

1. Yiannis Tofis (admitted Sep. 2010). Enhancing the primary frequency reserves with advanced underfrequency load shedding schemes, June 2018.
2. Panayiotis Demetriou (admitted Sep. 2012). A real-time solution for intentional controlled islanding and restoration of power systems, Dec. 2017. Now a Research Associate at the KIOS Research Center, University of Cyprus.
3. Lenos Hadjidemetriou (admitted Sep. 2010). Synchronization and control methods for advancing the Grid Side Converter of renewable energy sources, June 2016. Now a Research Associate at the KIOS Research Center, University of Cyprus.
4. Markos Asprou (admitted Sep. 2009). Real-time monitoring of power systems through a hybrid state estimator using synchronized measurements, June 2015. Now a Research Associate at the KIOS Research Center, University of Cyprus.
5. Zenonas Achillides (admitted Sep. 2005), (co-advisor: G. Georgiou). Partial discharge modeling and associated transients along medium voltage distribution cables, Dec. 2012. Now a Senior Engineer at the Electricity Authority of Cyprus.
6. Irina Ciornei (admitted Jan. 2006). Novel hybrid optimization methods for the solution of the economic dispatch of generation in power systems, Dec. 2011. Now a Marie-Curie Fellow at the University Politehnica of Bucharest.

B1. Current M.Sc. students²:

1. Ioannis Papayiannis. Categorization of consumer loads in Cyprus.
2. Daniel Sourianos. Intelligent buildings.

B2. M.Sc. theses completed:

1. Lysandros Tziouvani. Long term unit commitment and economic dispatch for the power system of Cyprus.
2. Theodoros Kaskiris[#]. Optimization of break points and connection of renewable energy sources in medium voltage distribution networks, July 2017.
3. Georgia Pieri. Load pseudomeasurements in distribution system state estimation, Dec. 2015.
4. Constantinos Metallinos. Short term electric load forecasting using computational intelligence techniques, Dec. 2014.
5. Christos Selearis. Design of a wind generator with a doubly fed induction machine – behavior during short circuits and voltage dips, Dec. 2014.
6. Demetra Panonidou[#] (student in the Mechanical Engineering department). A tri-generation system for the campus of the University of Cyprus, June 2014.
7. Philippos Prodromou. Optimal reactive power allocation for the Cyprus electric power system, June 2013. Now an Engineer at the Cyprus Transmission System Operator.
8. Theodora Kakoulli. Net metering between locally generated electricity and the electricity consumption in residential establishments, June 2013.
9. Elena Nathanael. Calculation of electric parameters of underground cables, June 2013.
10. Yiasoumis Yiasemi. Benchmarking of a wind turbine model and impact of a wind farm on a power system, June 2012. Now an Air Traffic Controller at the Civil Aviation Authority.
11. Chrysostomos Georgiou. Power quality problems and solutions, June 2012. Now a Mechanical Engineer at a private firm.
12. Artemis Milidoni. An electricity generation system for a cow farm, using fuel cells, June 2012.

² Students marked with a # are/were enrolled in the interdepartmental School of Engineering program on “Energy Technologies and Sustainable Design”.

13. Iakovos Yiakoumi. The use of pumped storage for the exploitation of reserve energy from wind farms and thermal stations in the isolated system of Cyprus, June 2012. Now a Technician at the Electricity Authority of Cyprus
14. Anastasios Tsimouris. A digital platform for induction motor parameter estimation from standstill frequency response tests, June 2012.
15. Demetris Parpounas. Induction machine parameter estimation using field tests over a digital platform, June 2012.
16. Costas Constantinides. Power quality in an autonomous hybrid system of renewable energy sources, Dec. 2011. Now a Captain at the Cyprus National Guard.
17. Evis Nicolaidis (co-advisor: C. A. Charalambous). Voltage stability in power systems with wind energy penetration, Dec. 2010. Now a Technician at the Electricity Authority of Cyprus.
18. Michalis Michael. Desalination and renewable energy sources in Cyprus: Techno-economic analysis, June 2010. Now an Electrical Engineer at the Department of Electrical and Mechanical Services, Ministry of Communications and Works.
19. Antonia Pantagou (co-advisor: G. Ellinas). Evaluation of fault location algorithms in power distribution networks, Dec. 2009. Now a Physics High School teacher.
20. Nikitas Lamprou (co-advisor: G. Ellinas): Power flow analysis of radial distribution networks, June 2009. Now an Assistant Engineer at the Electricity Authority of Cyprus.

C. M.Eng. projects completed (individual M.Eng. projects removed from curriculum after 2014):

1. Eirini Kelogrigori[#]: Technical and economic analysis of an actual solar thermal system at Alassa in Cyprus, Dec. 2015.
2. Giorgos Nicolaou[#]: Low-cost real-time monitoring of a laboratory scale power system, June 2015.
3. Marios Philippou[#]: Tool for viability analysis of photovoltaic power plants, June 2015 (student in the Civil and Environmental Engineering Department).
4. Andria Dionysiou[#]: Energy efficiency calculations and certification for the “Green Park” School of Engineering building, Dec. 2014.
5. Chrysanthos Marouchos[#]: Zero energy buildings, Dec. 2014.
6. Orthodoxia Mitsi[#]: Design of a residential unit with nearly zero energy consumption, June 2014.
7. Kalia Chatzilampi[#]: Energy storage technologies, June 2014 (student in the Civil and Environmental Engineering Department).
8. Chrystala Patsali[#]: Developing solar air-conditioning in Cyprus, June 2014.
9. Marina Tsangaridou[#]: Design of a 150 kW photovoltaic park, Dec. 2013.
10. Constantina Rousia[#]: Experimental application of energy efficiency measures in a household, Dec. 2013.
11. Kyriakos Nicolaou[#]: Life-cycle of photovoltaics, Dec. 2013.
12. Marina Papadouri[#] and Christina Spyrou[#]: Technical and economic analysis of a solar thermal power plant in Cyprus, June 2013.
13. Andreas Soleas[#]: Superconductivity and its applications in power system cables, Feb. 2013.
14. Tryfon Andreou[#]: Technical, economic, and environmental evaluation of an anaerobic station for the processing of pig manure for electricity generation, Dec. 2013.
15. Elena Polykarpou: Dynamic state estimation, June 2012.
16. Andreas Hadjigiakoumis: Effects of connecting photovoltaic systems on distribution lines, June 2012.
17. Chrystala Ioannou: Earthing systems, Dec. 2012.
18. Andreas Stylianou: Technical and economic analysis of an autonomous residence based on hybrid electricity generation systems, Dec. 2012.

D1. Current B.Sc. diploma theses students:

1. Xenios Economides: TBD, academic year 2018-2019.
2. Maria Kazamia: TBD, academic year 2018-2019.
3. Andreas Theodorou: Design and development of a smart controller board, academic year 2018-2019.

4. Petros Hatzikkos: Very short term forecasting of PV generation based on real time measurements of indicative PV sample clusters, academic year 2017-2018.
5. Marios Nicolaou: Data processing of synchronized phasor measurements, academic year 2017-2018.
6. Constantina Pezounou: Effects of high penetration of photovoltaic systems on the low voltage distribution network, academic year 2017-2018.
7. Antonis Marinou: Effects of high penetration of photovoltaic systems on the low voltage distribution network, academic year 2017-2018.
8. Christodoulos Agrotis: Modeling of renewable energy systems, academic year 2017-2018.
9. Yiannis Mavros: Stability analysis with the integration of renewable energy sources, academic year 2017-2018.
10. Charalambia (Charis) Charalambous: Short term forecasting of photovoltaic generation, academic year 2017-2018.

D2. B.Sc. diploma theses completed:

1. Eirini Prastiti: Wind farm connected to a weak grid, academic year 2016-2017.
2. Georgia Christodoulou: Synchronization methods for renewable energy systems, academic year 2016-2017.
3. Yiannis Papayiannis: Short term forecasting of the Cyprus wind parks generation, academic year 2016-2017.
4. Eleni Krekou: Power system stability through local control of generators, academic year 2016-2017.
5. Kyriakos Kyriakou: Impact of photovoltaic penetration in low voltage distribution networks, academic year 2016-2017.
6. Andreas Pallis: Design of a novel power system toolbox, academic year 2015-2016.
7. Aimilios Charalambous: Design of a power converter for grid connection of photovoltaic systems, academic year 2015-2016.
8. Thanasis Constantinou: A low-cost real-time laboratory-level monitoring system for power systems, academic year 2015-2016.
9. Fivos Therapontos: Design and development of a medium voltage distribution system for the City of «undisclosed», academic year 2015-2016.
10. Andreas Kotsonias: Design of a power electronic converter for grid integration of renewable energy sources, academic year 2014-2015 (1st prize, ECE Department, 2015).
11. Lysandros Tziouvani: Parameter estimation of steam turbine and governor parameters, academic year 2014-2015.
12. Anastasis Charalambous: Dynamic modeling of IEEE test systems including renewable energy sources, academic year 2014-2015.
13. Fivos Voskarides: Dynamic modeling of IEEE test systems including renewable energy sources, academic year 2014-2015.
14. Andreas Potamitis: Load modeling, academic year 2013-2014.
15. Christos Yianni: Design and construction of a hydrogen generation system for improving combustion in internal combustion engines, academic year 2013-2014 (1st prize, ECE Department, 2014).
16. Elena Loizou: Dispatch of aggregated distributed generation, academic year 2013-2014.
17. Andreas Piroccas: Experimental control of single and three phase inverter using a microcontroller, academic year 2013-2014.
18. Christina Stylianou (co-advisor: C. A. Charalambous): Net metering, academic year 2013-2014.
19. Marios Constantinou: Distributed generation models: Photovoltaics, academic year 2013-2014.
20. Constantinos Metallinos: Short term electric load forecasting, academic year 2013-2014.
21. Ioannis Yiannaki: Design of a self-sustained, distributed electric grid of the city of Famagusta, academic year 2012-2013 (2nd prize, ECE Department, 2013).
22. Constantinos Michael: Design and simulation of a microgrid, academic year 2012-2013.
23. Nektarios Iosif: Energy audit of a commercial enterprise, academic year 2012-2013.

24. Nicholas Diomedous: What reactive power is and how a shunt inductor explains its physical entity and changes its amplitude in a power system, academic year 2011-2012.
25. Christos Frantzeskou: Design, simulation, and construction of a low cost, axial flux, permanent magnet wind turbine, academic year 2011-2012 (1st prize, ECE Department, 2012).
26. Charalambos Charalambous: Design, simulation, and construction of a low cost, axial flux, permanent magnet wind turbine, academic year 2011-2012 (1st prize, ECE Department, 2012).
27. Sotiris Christou: Economic dispatch and unit commitment in the Cyprus power system, academic year 2011-2012.
28. Angelos Hadjiantonis: Design of a pumped storage system in Cyprus, academic year 2011-2012.
29. Anastasis Kouskoullis: Design and construction of an electrolysis device using variable electric energy through power electronics, academic year 2011-2012.
30. Panayiotis Demetriou: Green campus, academic year 2010-2011.
31. Thanasis Kaoullas: Modeling of the medium voltage distribution grid of the City of Larnaca and reduction of losses, academic year 2010-2011.
32. Antreas Elia: Modeling of the medium voltage distribution grid of the City of Larnaca and reduction of losses, academic year 2010-2011.
33. Tryfon Andreou: Construction of an equivalent representation of a village microgrid including a wind farm,” academic year 2010-2011.
34. Yiannis Paparistodemou: Smart load management in distribution networks, academic year 2009-2010 (1st prize, ECE Department, 2010).
35. Elena Polykarpou: Pumped hydro storage in the power system of Cyprus, academic year 2009-2010.
36. Panayiotis Hadjipaschalis: Technical/economic analysis of a hybrid system for meeting the electric load in a typical Cyprus house, academic year 2009-2010.
37. Giorgos Tourourou: Design and development of a software tool for smart control of loads in electric power systems, academic year 2009-2010 (3rd prize, Research Promotion Foundation national competition for undergraduate research, 2011).
38. Minas Stavrinides: Design of a solar thermal power station using concentrated solar thermal dish systems/stirling engine for the village of Agia Barbara in the Paphos District, academic year 2008-2009 (1st prize, ECE Department, 2009 and 4th prize, Research Promotion Foundation national competition for undergraduate research, 2009).
39. Markos Asprou: Fault location detection on transmission lines using synchronized phasor measurements, academic year 2008-2009.
40. Andreas Andreou: Off-shore wind farms, academic year 2008-2009.
41. George Nikolaou: Power quality issues in ac and dc networks, academic year 2008-2009.
42. Andry Euthimiou: Distribution network operation with renewable energy penetration, academic year 2008-2009.
43. Anastasios Tsimouris: Techno-economic evaluation of a desalination plant supported by renewables, academic year 2008-2009.
44. Andreas Hadjigiakoumis (co-advisor: M. Polycarpou): Fault location in power system transmission lines, academic year 2008-2009.
45. Constantinos Herakleous (co-advisor: C. Panayiotou): Obstacle detection below transmission lines, academic year 2008-2009.
46. Alma Balan (University Politehnica of Bucharest) (co-advisor: M. Albu): Power quality assessment for distribution systems with large share of distributed generation, academic year 2007-2008.
47. Philippos Prodromou: Design, implementation and performance monitoring of a hydrogen fuel cell prototype, academic year 2007-2008 (1st prize, ECE Department and 2nd prize, Research Promotion Foundation national competition for undergraduate research, 2008).
48. Costas Constantinides: Investigation of the effects of wind power penetration in an electric power transmission system, academic year 2007-2008.
49. Leonidas Maurikiou (co-advisor: J. Georgiou): Integration of renewable energy sources in networks with distributed generation and microgrids, academic year 2007-2008.
50. Alexis Mansour (co-advisor: J. Georgiou): Design, simulation and analysis of a hybrid energy system for a typical poultry farm in Cyprus, academic year 2007-2008.

51. Nikolas Nikolaou: Design and construction of a portable hydro generator, academic year 2006-2007.
52. Alkisti Kalopetridi: Techno-economic analysis of types and configurations of conductors for the optimization of the transmission system of Cyprus, academic year 2006-2007 (4th prize, Research Promotion Foundation national competition for undergraduate research, 2007).
53. Steve Lanuzo, Georgina Nuñez, Mike Napier, and Augustine Marin (senior group project) (co-advisor with G. T. Heydt, at Arizona State University): Design and construction of a model car using fuel cell technology, academic year 2003- 2004.

E. Other advising

Constantinos Pyrkettis, Andreas Chrysafis, and Elena Ioannidou (MBA students) (technical advisor) (Academic advisors: H. Vladimirou and N. Nicolaou): Business plan: Commercialization of the E-ject project, academic year 2008-2009 (received the 1st prize for their Applied Business Project).

POST-DOCTORAL FELLOWS

1. Dr. Panayiotis Demetriou (Jan. 2018 – present). Power system dynamics
2. Dr. Lenos Hadjidemetriou (June 2016-present). Synchronization of renewable energy sources with the power grid.
3. Dr. Markos Asprou (June 2015-present). Wide area monitoring and control in power systems
4. Dr. Nikolas Flourentzou (Mar. 2013-present). Critical infrastructure protection
5. Dr. Irina Ciornei (Feb. 2012 – June 2016). Economic dispatch and unit commitment in electric power systems. Now a Marie-Curie Fellow at University Politehnica of Bucharest.
6. Dr. Petros Mavroeidis (May 2013 – May 2015). Power system stability using synchronized measurements
7. Dr. Constantinos Hadjistassou (May 2010-Apr. 2013), (co-advisor: J. Georgiou). Improving the performance of hybrid photovoltaic/thermal solar systems. Now a Lecturer at the University of Nicosia.
8. Dr. Bharat Singh Rajpurohit (Apr. 2009-Oct. 2010). Development of machine models and parameter estimation. Now an Assistant Professor at the Indian Institute of Technology, Mandi, India.
9. Dr. Markos Markou (Nov. 2006-Oct. 2009), (co-advisor: M. Polycarpou). Electric load forecasting using computational intelligence
10. Dr. Saikat Chakrabarti (Oct. 2006-July 2008). Sensor placement in power system networks for system security enhancement. Now an Associate Professor at the Indian Institute of Technology, Kanpur, India.
11. Dr. Jonathan Stahlhut (Jan. 2006-Dec. 2007), (co-advisor: G. T. Heydt). System security enhancement through massively deployed sensors. Now a Consultant at POWER Engineers, Inc., Tempe, AZ, USA.

SHORT TERM VISITORS

1. Dr. Vedran Kirincic, RITEH University of Rijeka, 23 Feb. – 21 May 2014.
2. Stelios Vagropoulos, Aristotle University of Thessaloniki (Ph.D. student), 1 Oct. – 19 Oct. 2012.
3. Mihai Calin, University Politehnica of Bucharest (Ph.D. student), 2 Apr. – 27 June 2012.
4. Gustavo Valverde Mora, University of Manchester (Ph.D. student), 25 Mar. – 26 Apr. 2010.

SEMINARS PRESENTED

1. **On-line Estimation of Synchronous Generator Parameters**, University of Cyprus, Nicosia, Cyprus, Sep. 15, 2004.
2. **Damper Winding Representation and Magnetic Saturation in Synchronous Generator Modeling**, Arizona State University, Tempe, AZ, USA, Sep. 23, 2003.
3. **Theory and Applications of Wiener and Kalman Filters**, Arizona State University, Tempe, AZ, USA, May 1, 2003.
4. **Observers in Synchronous Machine Parameter Identification**, Arizona State University, Tempe, AZ, USA, May 20, 2002.

INVITED PRESENTATIONS:

1. **New technologies for monitoring the electric power grid and optimal integration of renewable energy for enhancing the system stability**, Cyprus Employers & Industrialists Federation (OEB), Nicosia, Cyprus, May 9, 2018.
2. **New technologies and new prospects for the integration of renewable energy in the power system grid**, Israel Sustainable Energy Society Annual Meeting, Tel Aviv, Israel, Oct. 16, 2017.
3. **Towards real time monitoring of electric power systems**, Aalborg University, Aalborg, Denmark, Sep. 15, 2016.
4. **A proposal for integration of large scale pumped storage systems in Cyprus**, University of Cyprus, Nicosia, Cyprus, Nov. 25, 2015.
5. **Experience from the IC0806 COST Action**, COST Information Day, Cyprus Research Promotion Foundation, Nicosia, Cyprus, Feb. 4, 2015.
6. **COST Framework**, The European Landscape of Research Funding: Achievements in FP7 and Prospects in Horizon 2020, STOA-COST Workshop, European Parliament, Brussels, Belgium, Sep. 24, 2013.
7. **Critical Infrastructure Monitoring, Control, and Security**, *International Sea Security Conference and Exposition (CYPNaval 2013)*, Nicosia, Cyprus, May 29, 2013.
8. **A zero CO2 emissions electricity generation prototype**, Signing of the Programme Agreements under the EEA and Norway Financial Mechanisms (Planning Bureau, Republic of Cyprus and Norwegian Ministry of Foreign Affairs), Nicosia, Cyprus, Dec. 5, 2012.
9. **Electric energy: new technologies and new prospects**, “Free University” public lecture series, Skali Aglantzias, Nicosia, Cyprus, Apr. 4, 2012 (broadcasted live on CyBC First Radio Program).
10. **Towards a truly synchronous power grid**, IEEE International Conference on Smart Measurements for Future Grids, Bologna, Italy, Nov. 14, 2011 (**keynote speech**)
11. **Intelligent monitoring, control and security of critical infrastructure systems (COST Action IntelliCIS)**, COST Networking Meeting, Cyprus Research Promotion Foundation, Nicosia, Cyprus, Sep. 13, 2011.
12. **Preparing a proposal for the 7th Framework Programme (FP7)**, Europe Week, European Office Cyprus, Nicosia, Cyprus, May 4, 2009.
13. **Active distribution grids and the smart networks of the future**, (with Mihaela Albu), Romania & Cyprus – Information Society: A Mini-Guide to advance i2010, Nicosia, Cyprus, Oct. 31, 2008.
14. **Power system stability with “intermittent” renewable generation and the need for storage in isolated systems**, Workshop on addressing regulations on storage technologies for increasing the penetration of intermittent energy sources (STORIES), Nicosia, Cyprus, May 8, 2008.
15. **An overview of research projects in power engineering at the University of Cyprus**, Dept. of Electrical and Computer Engineering, Democritus University of Thrace, Xanthi, Greece, Mar. 31, 2008.
16. **Estimation of synchronous generator parameters from on-line measurements (Estimarea parametrilor generatoarelor sincrone din măsurătorile online)**, University Politehnica of Bucharest, Bucharest, Romania, Mar. 23, 2006.
17. **Estimation of synchronous generator parameters from on-line measurements**, Intercollege, Nicosia, Cyprus, Feb. 10, 2005.

18. **On-line estimation of synchronous generator parameters**, University of Cyprus, Nicosia, Cyprus, June 1, 2004.
19. **Parameter identification of synchronous generators: A state estimation application**, Keynote Presentation, IEEE Phoenix Section Luncheon, Phoenix, AZ, USA, Mar. 11, 2004.
20. **Innovative concepts for on-line estimation of synchronous generator parameters**, University of Edinburgh, Edinburgh, Scotland, Aug. 20, 2003.

INVITED PRESENTATIONS AT ELECTRIC UTILITIES/TSOs

1. **Towards real time monitoring of electric power systems**, Transelectrica (Romanian Transmission System Operator), Bucharest, Romania, Nov. 17, 2015.
2. **Synchronized measurements and hybrid state estimators**, Electricity Authority of Cyprus, Nicosia, Cyprus, Sep. 17, 2010
3. **Synchronous generator parameter estimation using a Kalman Filter and synchronized measurements** (with Gerald T. Heydt and Kang Lin), Salt River Project (SRP), Phoenix, AZ, USA, Aug. 19, 2009.
4. **Unit commitment and economic dispatch in a deregulated energy market**, Electricity Authority of Cyprus, Nicosia, Cyprus, Sep. 18, 2006.
5. **Parameter estimation for round rotor synchronous generators** (with Gerald T. Heydt), Arizona Public Service Headquarters, Phoenix, AZ, USA, Apr. 10, 2003.
6. **Identification of synchronous generator parameters** (with Gerald T. Heydt), Arizona Public Service Headquarters, Phoenix, AZ, USA, Mar. 21, 2002.
7. **On-line estimation of synchronous generator parameters using a visual platform** (with Gerald T. Heydt), Arizona Public Service Headquarters, Phoenix, AZ, USA, Mar. 22, 2001.

CONFERENCE PRESENTATIONS

1. **A real-time innovative scheme for power losses calculation**, *2012 IEEE PES PowerAfrica Conference and Exposition*, Johannesburg, South Africa, July 2012.
2. **On the complexities of interdependent infrastructures for wide area monitoring systems**, *2012 IEEE Workshop on Complexity in Engineering (COMPENG 2012)*, Aachen, Germany, June 2012.
3. **Efficient identification of synchronous machine parameters through the finite elements method**, *7th Mediterranean Conference on Power Generation, Transmission, Distribution, and Energy Conversion (MedPower 2010)*, Ayia Napa, Cyprus, Nov. 2010.
4. **Experience with synchronous generator parameter identification using a Kalman filter**, *IEEE Power Engineering Society General Meeting*, Minneapolis, MN, USA, July 2010.
5. **State estimation including synchronized measurements**, *PowerTech 2009*, Bucharest, Romania, July 2009.
6. **Placement of phasor measurement units for state estimation with voltage stability considerations**, *Australasian Universities Power Engineering Conference (AUPEC 2007)*, Perth, Australia, Dec. 2007.
7. **A next generation alarm processing algorithm incorporating recommendations and decisions on wide area control**, *IEEE Power Engineering Society General Meeting*, Tampa, FL, USA, June 2007.
8. **A comparison of matched filter and wavelet transforms for the detection of partial discharges in high voltage cables**, *5th Mediterranean IEE Conference and Exhibition on Power Generation, Transmission, and Distribution (MedPower '06)*, Eilat, Israel, Nov. 16, 2006.
9. **A comprehensive algorithm for the estimation of synchronous generator parameters**, *XVII International Conference on Electric Machines (ICEM 2006)*, Chania, Greece, 2-5 Sep., 2006.
10. **Surveys-based assessment of international power engineering education programs**, *IEEE Power Engineering Society General Meeting*, Montreal, Canada, June 2006.
11. **Estimation of synchronous machine parameters from on-line measurements considering magnetic saturation**, *4th Mediterranean IEE Conference and Exhibition on Power Generation, Transmission, and Distribution (MedPower'04)*, Lemesos, Cyprus, Nov. 17, 2004.

12. **Extended estimation of synchronous generator parameters**, Industry Advisory Board (IAB) Meeting, Scottsdale, AZ, USA, Dec. 11, 2003 (poster presentation).
13. **Damper winding representation and magnetic saturation in synchronous generator modeling**, 35th North American Power Symposium, Rolla, MO, USA, Oct. 21, 2003.
14. **Extended estimation of synchronous generator parameters**, Industry Advisory Board (IAB) Meeting, Atlanta, GA, USA, Dec. 12, 2002.
15. **Extended estimation of synchronous generator parameters**, Industry Advisory Board (IAB) Meeting, Atlanta, GA, USA, Dec. 11, 2002 (poster presentation).
16. **L_p state estimators for power systems**, 34th North American Power Symposium, Tempe, AZ, USA, Oct. 15, 2002.
17. **Extended estimation of synchronous generator parameters**, Industry Advisory Board (IAB) Meeting, Schenectady, NY, USA, May 30, 2002 (poster presentation).
18. **On-line identification of generator and exciter parameters**, IEEE Power Engineering Society Winter Meeting, New York, NY, USA, Jan. 28, 2002 (poster presentation).
19. **A graphical user interface for synchronous machine parameter identification**, 33rd North American Power Symposium, College Station, TX, USA, Oct. 14, 2001.
20. **Synchronous machine parameter estimation using a visual platform**, IEEE Power Engineering Society Summer Meeting, Vancouver, Canada, July 2001.

PROFESSIONAL TRAINING

Master Class on Modelling, Simulation and Analysis of Critical Infrastructures, Paris, France, Apr. 24-25, 2014.

PART B: TEACHING

COURSES TAUGHT

All course material available online at: <http://www.eng.ucy.ac.cy/elias/ECE000> (replace 000 with the three-digit course number). The parenthesis after the course title contains the semester and year taught.

ECE 100 – Introduction to Technology (F04, F05)

First semester required introductory course. Serves as a link of the incoming students to the University and the Department. Topics include: SI units, circuit elements and simple circuits, binary numbers, gates, MATLAB, ethics, report writing, and system design.

ECE 205 – Electronic Circuits and Networks I (S05, S06)

Second year required course. Basics of electronic circuits, operational amplifiers, diodes, BJT transistors, MOSFETs, small signal analysis, dc and ac operation.

ECE 340 – Power Engineering (S06-S10, S12-S18)

Third year required course for Electrical Engineering students. Introduction to power engineering principles, single phase and three phase networks, magnetic circuits, transformers, per unit system and power factor correction, synchronous machines, induction machines, and dc machines.

ECE 341 – Electric Machines Laboratory (S14)

Third year elective laboratory for Electrical Engineering students. Laboratory exercises on single phase and three phase networks, transformers, synchronous machines, induction machines, and dc machines.

ECE 442 – Power System Analysis (F06-F10)

Fourth year elective course. Provides fundamental knowledge on the understanding of power system analysis. The students acquire basic analytical skills to perform analysis of systems. Review of phasors, complex power and balanced three phase circuits; symmetrical components; per unit system; transformers and per unit sequence models; transmission line modeling; power flow solution techniques; symmetrical faults; bus impedance and admittance matrices; power system stability; practical projects to understand the theoretical aspects of the course.

ECE 445 – Power Systems: Generation and Control (S07-S10)

Fourth year elective course. Provides the basics of power system generation and control. Economic dispatch, unit commitment, automatic generation control. Dynamic and linear programming applied to solve power system problems. Overview of steam and hydroelectric units, fuel scheduling, production costing, generation control, state estimation, and power flow.

ECE 680 – Power System Analysis (F06-F14, F16, F17)

Post-graduate course. Basic and advanced concepts of power system analysis. Develop analytical skills to perform analysis of power systems. Analyze balanced and unbalanced systems using symmetrical components. Study transformers and per unit sequence models, transmission line modeling, power flow solution techniques, symmetrical faults, bus impedance and admittance matrices, power system stability.

ECE 681 – Power System Operation and Control (S07, S09, S10, S12-S14, S16-S18)

Post-graduate course. Provides the basics of power system generation, operation, and control. Economic dispatch, optimal power flow, unit commitment, automatic generation control. Dynamic and linear programming applied to solve power system problems. Production costing and fuel scheduling. State estimation in power engineering. Deregulation, restructuring, and auctions.

COURSE DEVELOPMENT

Self-designed syllabi and self-developed instructional material in Electrical Engineering courses offered for the first time at the University of Cyprus

ECE 100 – Introduction to Technology

ECE 205 – Electronic Circuits and Networks I

ECE 340 – Introduction to Power Engineering

ECE 341 – Electrical Power Engineering Laboratory (including a laboratory manual) (with Lenos Hadjidemetriou)

ECE 442 – Power System Analysis
ECE 445 – Power Systems: Generation and Control
ECE 680 – Power System Analysis
ECE 681 – Power System Operation and Control

SHORT COURSES AND TUTORIALS DEVELOPED AND PRESENTED

1. **The impact of measurements on power system state estimation**, with M. Albu, 2016 IEEE International Instrumentation and Measurement Technology Conference (I²MTC), Taipei, Taiwan, May 23, 2016.
2. **A Tutorial on Synchronous Machines, Synchronous Condensers, and State Estimation Basics** (presented to power engineering industry and faculty), with G. T. Heydt, PSERC Industry Advisory Board Meeting, Scottsdale, AZ, USA, Dec. 12, 2003.
3. **Synchronous Machines and Synchronous Condensers** (one-day short course), with G. T. Heydt and S. Kalsi, Tennessee Valley Authority (TVA), Chattanooga, TN, USA, Sep. 19, 2003.

OTHER TEACHING

1. Instructor for the course “Polytechnic and Technical Professions” of the “Pre-Service Training for Prospective High School Teachers,” The Cyprus Pedagogical Institute (F07, F08, F09, F10, F11, F12).
2. Instructor for the course “Technology” of the “Pre-Service Training for Prospective High School Teachers,” The Cyprus Pedagogical Institute (F07, F08, F09, F10).

PART C: SERVICE

PROFESSIONAL ACTIVITIES

Editorial Activities

Editor, "IEEE Transactions on Sustainable Energy," IEEE (Sep. 2015-present)
Associate Editor, "IEEE PES Letters," IEEE (Sep. 2015-present)
Associate Editor, "IEEE Systems Journal," IEEE (Mar. 2014-present)
Editorial Board Member, "International Journal of Electrical Power & Energy Systems (JEPE)", (June 2016-present)
Editorial Board Member, "IEEE Transactions on Power Delivery," IEEE, Special issue on "Innovative Research Concepts for Power Delivery Engineering" (2016)
Area Editor, "Simulation Modelling Practice and Theory" journal, Elsevier (2007-2011) (handled 37 manuscripts)
Editorial Board Member, "The Open Electrical and Electronic Engineering Journal (OEEE)" (2007- 2010)

Reviewer:

On a regular basis:

IEEE Transactions on Power Systems (2003-present)
IEEE Transactions on Energy Conversion (2007-present)
IEEE Transactions on Power Delivery (2003-present)
IEEE Power Engineering Society Letters (2003-present)
IEEE Transactions on Smart Grid (2011-present)
IEEE Transactions on Education (2004-present)
IEEE Transactions on Instrumentation and Measurement (2008-present)
IET Proceedings on Generation, Transmission and Distribution (2006-present)
Electric Power Components and Systems (2009-present)
Electric Power Systems Research (2010-present)
International Transactions on Electrical Power (2009-present)

Occasional/Past:

IEEE Transactions on Neural Networks and Learning Systems (2012)
IEEE Instrumentation and Measurement Magazine (2011)
IEEE Computational Intelligence Magazine (2011)
IEEE Transactions on Industry Applications (2007)
International Journal of Energy Technology and Policy, Special Issue on Power Electronics for Distributed and Co-Generation (2004)
International Journal of Energy Technology and Policy, Special Issue on Reactive Compensation for Wind Farms (2004)
IEEE Transactions on Control Systems Technology (2004)
IEEE Transactions on Education, Judge for best paper award during 2003 (2004)
IEEE Potentials magazine (2003-2006)
Arabian Journal of Science and Engineering (AJSE) (2003)

Reviewer for conferences such as: IEEE PES General Meeting (2009, 2013, 2015, 2016), IEEE PES PowerTech Conference (2009, 2011, 2015), IEEE PES Innovative Smart Grid Technologies (ISGT), IEEE Mediterranean Electrotechnical Conference (MELECON 2004, 2015, 2016), Power Systems Computation Conference (PSCC 2016), 16th International Conference on "Intelligent Systems Application to Power Systems" (ISAP'11), 2010 North American Power Symposium (NAPS), IEEE Power Systems Conference and Exposition (PSCE 2006), EUROCON 2005, 44th International Universities' Power Conference (UPEC 2009), 2010 IEEE International Symposium on Circuits and Systems (ISCAS 2010), MedPower (2008, 2010, 2012, 2016).

INTERNATIONAL COMMITTEE MEMBERSHIPS

Appointed Member of the COST Scientific Committee (May 2015-present)

Member of the Steering Committee, Conference on Critical Information Infrastructures Security (CRITIS), 2015-present.

CONFERENCE ORGANIZATION AND CHAIRING*Leadership positions*

1. **General Chair**, IEEE International Energy Conference (ENERGYCON 2018), Limassol, Cyprus, June 3-7, 2018.
2. **General Co-Chair**, 18th IEEE Mediterranean Electrotechnical Conference (MELECON 2016), Limassol, Cyprus, Apr. 18-20, 2016.
3. **General Co-Chair**, 1st Euro-Mediterranean Conference and Exhibition on Smart Urban Development and Blue Growth Opportunities for Cities, Communities and Islands in the Mediterranean Basin (SmartBlueCity 2016), Limassol, Cyprus, Apr. 14-16, 2016.
4. **Track Chair**, Electric Power Systems and Renewable Energy Sources Track, 18th IEEE Mediterranean Electrotechnical Conference (MELECON 2016), Limassol, Cyprus, Apr. 18-20, 2016 (88 manuscripts).
5. **General Co-Chair**, 9th International Conference on Critical Information Infrastructures Security (CRITIS 2014), Limassol, Cyprus, Oct. 13-15, 2014.
6. **Chair and organizer**, Second IntelliCIS Training School, ESF-COST Action IC0806, Aachen, Germany, Mar. 4-8, 2013.
7. **Program Chair**, ESF-COST Action IntelliCIS (organizing two workshops per year): Limassol, Cyprus (Sep. 2009); Budapest, Hungary (May 2010); Novi Sad, Serbia (Sep. 2010); Vilanova i la Geltrú, Spain (June 2011); Milan, Italy (Sep. 2011); Bucharest, Romania (May 2012); Riga, Latvia (Sep. 2012); Aachen, Germany (Mar. 2013).
8. **Chair and organizer**, First IntelliCIS Training School, ESF-COST Action IC0806, Varna, Bulgaria, Oct. 10-13, 2011.
9. **Chair**, “Synchronized measurements in power system operation: International trends and research,” IEEE PES General Meeting 2010, Minneapolis, MN, USA, July 2010. Panel session proposed by Elias Kyriakides and Gerald T. Heydt; sponsored by the IEEE PES Power Engineering Education Committee (PEEC).
10. **Local Arrangements Chair**, International Conference on Artificial Neural Networks (ICANN 2009), Limassol, Cyprus, Sep. 14-17, 2009.
11. **Chair**, “Synchronized measurements in power system operation: International practices and research issues,” IEEE PES General Meeting 2009, Calgary Canada, July 2009. Panel session proposed by Elias Kyriakides and Gerald T. Heydt; co-sponsored by the IEEE PES Power Engineering Education Committee (PEEC) and the IEEE Working Group on Dynamic Measurements.
12. **Co-chair and panelist**, “Roadmap to the future of power engineering research, education and career,” IEEE PES General Meeting 06, Montreal Canada, June 2006. Panel session proposed by Elias Kyriakides and Siddharth Suryanarayanan; sponsored by the IEEE PES Power Engineering Education Committee (PEEC).

Other major contributions

13. **Member of the Program Committee**, 2nd International Conference on Smart Energy Systems and Technologies (SEST 2019), Porto, Portugal, Sep. 2019.
14. **Member of the Program Committee**, 59th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON2018), Riga, Latvia, Nov. 2018.
15. **Member of the Technical Program Committee**, 1st IEEE International Conference on Smart Grid Synchronized Measurements and Analytics (SGSMA), College Station, TX, USA, May 21-23, 2019.
16. **Member of the International Technical Committee**, IEEE PES Innovative Smart Grid Technologies Conference (ISGT), Sarajevo, Bosnia and Herzegovina, October 21-25, 2018.

17. **Member of the Program Committee**, 13th International Conference on Critical Information Infrastructures Security (CRITIS 2018), Kaunas, Lithuania, Sep. 24-26, 2018.
18. **Member of the Program Committee**, 2018 International Symposium on INnovations in Intelligent SysTems and Applications (INISTA), Thessaloniki, Greece, July 3-5, 2018.
19. **Member of the Technical Program Committee**, IEEE International Workshop on Applied Measurements for Power Systems (AMPS 2017), Liverpool, UK, Sep. 20-22, 2017.
20. **Member of the Program Committee**, 12th International Conference on Critical Information Infrastructures Security (CRITIS 2017), Lucca, Italy, Oct. 9-13, 2017.
21. **Member of the International Technical Committee**, 7th IEEE PES International Conference on Innovative Smart Grid Technologies (ISGT Europe 2017), Torino, Italy, Sep. 2017.
22. **Member of the Program Committee**, 2017 International Symposium on INnovations in Intelligent SysTems and Applications (INISTA), Gdynia, Poland, July 3-5, 2017.
23. **Member of the Technical Committee**, IEEE 2016 International Conference on Power and Renewable Energy (ICPRE2016), Shanghai, China, Oct. 2016.
24. **Member of the Program Committee**, 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON2016), Riga, Latvia, Oct. 2016.
25. **Member of the International Advisory Committee**, The 10th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MEDPOWER 2016), Belgrade, Serbia, Nov. 6-9, 2016.
26. **Member of the Program Committee**, 11th International Conference on Critical Information Infrastructures Security (CRITIS 2016), Paris, France, Oct. 10-12, 2016.
27. **Member of the Program Committee**, 2016 Clemson University Power Systems Conference, Clemson, SC, USA, Mar. 2016.
28. **Member of the International Scientific Committee**, 5th International Conference on Renewable Energies and Energy Efficiency, Nicosia, Cyprus, May 5-6, 2016.
29. **Member of the Program Committee**, 2016 International Symposium on INnovations in Intelligent SysTems and Applications (INISTA), Sinaia, Romania, Aug. 2-5, 2016.
30. **Member of the Technical Program Committee**, 3rd International Workshop on Computational Energy Management in Smart Grids (CEMiSG 2016), Vancouver, Canada, July 2016.
31. **Member of the Program Committee**, Europe and the Mediterranean Towards a Sustainable Built Environment, Malta, Mar. 16-18, 2016.
32. **Member of the Technical Program Committee**, 2015 IEEE Symposium Series on Computational Intelligence: IEEE Symposium on Computational Intelligence Applications in Smart Grid (CIASG), Cape Town, South Africa, Dec. 7-10, 2015.
33. **Member of the Program Committee**, XXV International Conference on Information, Communication and Automation Technologies (ICAT 2015), Sarajevo, Bosnia and Herzegovina, Oct. 29-31, 2015.
34. **Member of the Scientific Committee**, 56th Annual Conference of Riga Technical University (RTUCON2015), Riga, Latvia, Oct. 2015.
35. **Member of the Program Committee**, 10th International Conference on Critical Information Infrastructures Security (CRITIS 2015), Berlin, Germany, Oct. 5-7, 2015.
36. **Member of the Program Committee**, XXIV International Conference on Information, Communication and Automation Technologies (ICAT 2015), Sarajevo, Bosnia and Herzegovina, Oct. 30-Nov. 1, 2015.
37. **Member of the Technical Program Committee**, 37th International Telecommunications Energy Conference (INTELEC 2015), Namba, Osaka, Japan, Oct. 18-22, 2015.
38. **Member of the Program Committee**, 2015 Clemson University Power Systems Conference, Clemson, SC, USA, Mar. 2015.
39. **Member of the Technical Program Committee**, 2014 IEEE International Conference on Computational Intelligence and Virtual Environment for Measurement Systems and Applications (IEEE CIVEMSA 2014), Ottawa, ON, Canada, May 5-7, 2014.
40. **Member of the Technical Program Committee**, 1st International Workshop on Computational Energy Management in Smart Grids (CEMiSG 2014), Beijing, China, July 2014.
41. **Member of the Scientific Committee**, 2nd Hellenic IEEE Student Branches Congress (HSBC2013), Nicosia, Cyprus, 1-3 Nov. 2013.

42. **Chair of the invited session** on “The use of data for power system monitoring and control,” 2nd International Energy Conference on Power Options for the Eastern Mediterranean Region (POEM 2013), Nicosia, Cyprus, Oct. 7, 2013.
43. **Member of the Scientific Committee**, Power Options for the Eastern Mediterranean Region (POEM 2012), Nicosia, Cyprus, 7-8 Oct. 2013.
44. **Member of the Program Committee**, 2013 IEEE International Conference on Computational Intelligence and Virtual Environment for Measurement Systems and Applications (IEEE CIVEMSA 2013), Milan, Italy, July 15-17, 2013.
45. **Member of the Program Committee**, Power Options for the Eastern Mediterranean Region (POEM 2012), Limassol, Cyprus, 19-21 Nov. 2012.
46. **Member of the Program Committee**, The 8th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MEDPOWER 2012), Cagliari, Italy, Oct. 1-3, 2012.
47. **Technical program co-chair**, 2012 IEEE Workshop on Environmental, Energy, and Structural Monitoring Systems (EESMS), Perugia, Italy, Sep. 28, 2012.
48. **Member of the Program Committee**, 11th International Conference on Environment and Electrical Engineering (EEEIC 2012), Italy, May 2012.
49. **Member of the Technical Program Committee**, 1st IEEE International Conference on Smart Measurements for Future Grids, Bologna, Italy, Nov. 14-16, 2011 (**IEEE PES Society Representative**).
50. **Technical program co-chair**, 2011 IEEE Workshop on Environmental, Energy, and Structural Monitoring Systems (EESMS), Milan, Italy, Sep. 28, 2011.
51. **Member of the International Technical Steering Committee**, 16th International Conference on “Intelligent Systems Application to Power Systems” (ISAP’11), Hersonissos, Crete, Greece, Sep. 2011.
52. **Member of the Program Committee**, 10th International Conference on Environment and Electrical Engineering (EEEIC 2011), Rome, Italy, May 2011.
53. **Member of the Program Committee**, Symposium on Computational Intelligence Applications in Smart Grid (CIASG) at the IEEE SSCI 2011, Paris, France, Apr. 11-15, 2011.
54. **Technical program co-chair**, 2010 IEEE Workshop on Environmental, Energy, and Structural Monitoring Systems (EESMS), Taranto, Italy, Sep. 9, 2010.
55. **Member of the Scientific Committee**, MedPower 2010, Agia Napa, Cyprus, Nov. 7-10, 2010.
56. **Member of the Program Committee**, 4th International Symposium on Communications, Control and Signal Processing (ISCCSP 2010), Limassol, Cyprus, Mar. 3-5, 2010.
57. **Member of the Scientific Committee**, Conference on the Promotion of Distributed Renewable Energy Sources in the Mediterranean Region, Nicosia, Cyprus, Dec. 11, 2009.
58. **Member of the Scientific Committee**, Renewable Energy Sources and Energy Efficiency Conference, Nicosia, Cyprus, 23-24 Oct. 2009.
59. **Member of the Program Committee**, MedPower 08, Greece, Nov. 2008.
60. **Member of the Local Organizing Committee**, International Workshop on Deregulated Electricity Market Issues in South Eastern Europe (DEMSEE 2008), Nicosia, Cyprus, Sep. 2008.
61. **Member of the Program Committee**, MedPower 06, Israel, Nov. 15-17, 2006.

Miscellaneous contributions

62. **Chair**, Session on Applications of Synchronized Measurements, 2012 IEEE PES General Meeting, San Diego, USA, July 2012.
63. **Chair**, Session on Renewable Energy, 2012 IEEE PES PowerAfrica Conference and Exposition, Johannesburg, South Africa, July 2012.
64. **Chair**, Session on Intelligent Complex Infrastructures, 2012 IEEE Workshop on Complexity in Engineering (COMPENG 2012), Aachen, Germany, June 2012.
65. **Chair**, Session on Renewable Energy Sources, 2nd International Conference on Renewable Energy Sources and Energy Efficiency, Nicosia, Cyprus, Oct. 2009.
66. **Chair**, Session on System Analysis and Automation, International Workshop on Deregulated Electricity Market Issues in South Eastern Europe (DEMSEE 2008), Nicosia, Cyprus, Sep. 2008.
67. **Chair**, Session on Power System Planning, MedPower’04, Lemesos, Cyprus, Nov. 17, 2004.

68. **Moderator and co-chair**, Session on Power Markets, 34th North American Power Symposium 2002, Tempe, AZ, USA, Oct. 15, 2002.
69. **Co-chair**, Session on Power Quality, 34th North American Power Symposium 2002, Tempe, AZ, USA, Oct. 14, 2002.
70. **Selection committee member (judge)**, student paper contest for the 34th North American Power Symposium, Tempe, AZ, USA, Oct. 2002.

PARTICIPATION IN EVALUATION PANELS AND EVALUATOR FOR RESEARCH/BUSINESS PROPOSALS

1. **Technical Evaluator**, Programme for development of novel products and services, Ministry of Energy, Commerce, Industry and Tourism, Republic of Cyprus, Sep. 2016.
2. **Expert Reviewer**, Natural Sciences and Engineering Research Council of Canada, Call for Strategic Projects, June 2016.
3. **Evaluator**, Israeli Ministry of Science, Technology and Space, Call for Project Proposals (Czech-Israel Cooperative Scientific Research), Mar. 2016.
4. **External Reviewer**, ERC Advanced Grant Call 2015 (H2020), Dec. 2015.
5. **Evaluator** of proposals, call for research proposals on Renewable Energies, Water Resources and their connections for the Mediterranean Region, ERANETMED (FP7), July 2015.
6. **Evaluator** of proposals, call for post-doctoral fellowships, Research Foundation – Flanders (FWO), Belgium, Apr. 2015.
7. **Evaluator** of proposals, call for Smart Grid, The Netherlands Organisation for Scientific Research (NWO), Sep. 2013.
8. **Evaluator** of proposals, call for “Measures to Attract Leading Scientists to Russian Educational Institutions”, New Eurasia Foundation, Russia (through International Bureau of the German Ministry of Education and Science), Oct. 2011.
9. **Panel member**, proposal evaluations for the General Secretariat for Research and Technology, Ministry of Education, Lifelong Learning and Religious Affairs, Greece, May and June 2010.
10. **Evaluator** of post-doctoral proposals, Estonian Science Foundation (ETF), 2009.
11. **Expert evaluator of proposals for the business incubator program**, Ministry of Commerce, Industry and Tourism, Republic of Cyprus, July 2004-Dec. 2007.

APPRAISALS AND EVALUATIONS OF EDUCATIONAL PROGRAMS

1. **Evaluator** of Program of Study of Master in Science in Electrical Engineering of the Department of Electrical Engineering of Frederick University, for registration of graduates as members of the Technical Chamber of Cyprus, (two-member committee) (appointed by the Technical Chamber of Cyprus), July 2009.
2. **Evaluator** of Program of Study in Electric Power Engineering of the Department of Electrical Engineering and Information Technologies of the Cyprus University of Technology, for registration of graduates as members of the Technical Chamber of Cyprus, (two-member committee) (appointed by the Technical Chamber of Cyprus), June 2009.
3. **Evaluator** of Program of Study in Electric Power Engineering of the Department of Electrical Engineering of Frederick University, for registration of graduates as members of the Technical Chamber of Cyprus, (three-member committee) (appointed by the Technical Chamber of Cyprus), June 2008.
4. **External evaluator** of “Master of Science program in Energy” at the Frederick Institute of Technology (three-member committee) (appointed by the Ministry of Education and Culture), May 2007.

EXTERNAL PARTICIPATION IN RESEARCH PROJECTS

Member of the expert group “Grid management in isolated systems and approaches to integrate distributed generation” for the FP6 European Commission project “Isolated power systems: Knowledge and technology sharing: Distributed generation, grid and demand management”.

OTHER PROFESSIONAL ACTIVITIES

1. Advisor of the IEEE PES Student Chapter at the University of Cyprus, Nov. 2011 – present.
2. Founding member of the “KIOS Research Center for Intelligent Systems and Networks” at the University of Cyprus. Aided in attracting long-term industry funding for the support of the Center.
3. Mentor of the IEEE Student Branch at the University of Cyprus, Mar. 2005-present.

DEPARTMENTAL SERVICE

1. Vice-Chair (September 2016-present)
2. Erasmus Coordinator (June 2016-present)
3. Member of the “Erasmus Committee” (June 2013 – Sep. 2014)
4. Member of the “Post-graduate Studies Committee” (Sep. 2008 – Nov. 2010 and Sep. 2012-Sep. 2014).
5. Member of the “Erasmus Committee” (Apr. 2011 – Sep. 2012)
6. Member of the “Publications Committee” (Sep. 2008 – Nov. 2010).
7. In charge (along with G. Ellinas) of the planning of the 2nd annual robotics competition for high school students (Texnopleysi), May 2007.
8. In charge (along with G. Ellinas) of the planning of the visit of the humanoid robot ASIMO of HONDA to Cyprus, May 2007.
9. Member, Organizing committee for the 1st annual robotics competition for high school students (Texnopleysi), Apr. 2006.
10. Member of the “Undergraduate Studies Committee” (Dec. 2005- Aug. 2008).
11. Member of the “Webpage Design, Development, and Maintenance Committee,” (Dec. 2005- Aug. 2008).
12. Various presentations to high school students visiting the ECE department.
13. Member of the ad-hoc committee on examining the requirements for proposing a Master of Science program in English in the department (Nov. 2005 – May 2006).
14. Member of the ad-hoc committee on the formation of interdepartmental research groups (Nov. 2005 – Mar. 2007).
15. Chair of the committee on “Faculty promotions and awards” (Oct. 2005 – Mar. 2007).

SCHOOL SERVICE

1. Member of the Academic Council of the KIOS Research and Innovation Center of Excellence (July 2014-present)
2. **Director** of the Interdepartmental School of Engineering “Energy technologies and sustainable design” program (June 2014-May 2016).
3. Member of the School of Engineering post-graduate committee for the “Energy technologies and sustainable design” M.Sc./M.Eng. program (Oct. 2008-present).
4. Member of the ad-hoc committee (one representative per department) on designing and proposing an M.Sc./M.Eng. interdepartmental program in “Energy technologies and sustainable design” (Mar. 2008-Sep. 2008).

UNIVERSITY SERVICE

Member of the “Innovation” Committee (Feb. 2018-present)

Member of the “Student Life and Student Matters” Senate Committee (Mar. 2009 – Feb. 2011)

OTHER ACTIVITIES/SERVICE

Career Resource Advisor, 2011 International Job Fair for Students, IEEE PES General Meeting, Detroit, Michigan, USA, July 27, 2011

MEMBER OF EXTERNAL COMMITTEES

1. **Chair** of the IEEE Cyprus Section Committee (Jan. 2018 – present).
2. **Member**, Working Group for the Design and Technology high school curriculum, Ministry of Education and Culture, Republic of Cyprus (2016-2017)
3. **Vice-Chair** of the IEEE Cyprus Section Committee (Mar. 2014 – Dec. 2017).
4. **Member** of the IEEE Computational Intelligence Society Intelligent Systems Applications Technical Committee (IEEE CIS ISATC) (Jan. 2013-present)
5. **Chair** of the IEEE Systems Council Technical Committee on Critical Infrastructures (Sep. 2012-present)
6. **Vice-Chair** of the IEEE PES PEEC subcommittee on University Education (Aug. 2012-Dec. 2014).
7. **Chair** of the Cyprus Chapter of the IEEE Power and Energy Society (PES) (May 2012-Dec. 2017).
8. **Secretary** of the IEEE Cyprus Section Executive Committee (Mar. 2012 – Feb. 2014).
9. **Member** of the IEEE Computational Intelligence Society Task Force on Smart Grid (Nov. 2010-present)
10. **Member** of the IEEE Systems Council Technical Committee on Critical Infrastructures (Aug. 2010-Aug. 2012)
11. **Secretary** of the IEEE PES PEEC subcommittee on University Education (Aug. 2010-July 2012).
12. **Chair** of the committee on “Academic Institutions in Cyprus” of the Technical Chamber of Cyprus (ETEK) (May 2010-Dec. 2011).
13. **Treasurer** of the IEEE Cyprus Section Executive Committee (Feb. 2010 – Mar. 2012).
14. **Member** of the committee on “Academic Institutions in Cyprus” of the Technical Chamber of Cyprus (ETEK) (Jan. 2010-May 2010).
15. **Secretary** of the CIGRE National Committee of Cyprus (Nov. 2008 – present).
16. **Member** of the Provisional National Steering Committee of the Cyprus Section of CIGRE (International Council on Large Electric Systems) (July 2008 – Oct. 2008).
17. **Educational Activities Officer**, IEEE Cyprus Section Committee (Feb. 2008 – Jan. 2010).
18. **Member** of the IEEE Cyprus Section Executive Committee (Feb. 2008 – Jan. 2010).
19. **Member** of the IEEE PES Power Engineering Education Committee (PEEC) (June 2006-present).
20. **Vice Chair** of the Research Committee of the Technical Chamber of Cyprus (ETEK) (Jan. 2006-Dec. 2009).
21. **Member** of the technical committee on Electrical engineering of the “Cyprus Organization for Standardization” (CYS) (representing the University of Cyprus) (Jan. 2005-present).

MEMBER OF INTERNAL Ph.D. DISSERTATION COMMITTEES

1. Antonis Lazari, “Life-cycle loss evaluation and total ownership cost of transformers in vertically-integrated and decentralized energy systems integrating renewable energy sources,” Ph.D. Dissertation, Department of Electrical and Computer Engineering, University of Cyprus, Feb. 2016 (committee member) (advisor: C. A. Charalambous).
2. Minas Patsalides, “PV system models for distribution grids in the presence of high PV penetration levels,” Ph.D. Dissertation, Department of Electrical and Computer Engineering, University of Cyprus, May 2015 (committee member) (advisor: G. Georgiou).

3. Demetris Eliades, “Fault diagnosis and security monitoring in water distribution systems,” Ph.D. Dissertation, Department of Electrical and Computer Engineering, University of Cyprus, Mar. 2011 (committee member) (advisor: M. Polycarpou).

MEMBER/EXAMINER OF EXTERNAL Ph.D. DISSERTATION COMMITTEES

1. Zunaib Ali, “Diversifying the role of RES with advanced converter functionalities and performance for improved grid support and operation, Department of Electrical Engineering, Frederick University, Cyprus, June 2018 (external committee member).
2. Zhaoyang Jin, “Static and dynamic state estimation of power systems,” School of Electrical and Electronic Engineering, The University of Manchester, United Kingdom, Apr. 2018 (external examiner).
3. Dimitris Trakas, “Assessment and reinforcement of electric power system resiliency,” Ph.D. Dissertation, School of Electrical Engineering, National Technical University of Athens, Athens, Greece, Mar. 2018 (external committee member).
4. Roberto Bonfigli, “Machine learning approaches for non-intrusive load monitoring,” Ph.D. dissertation, Universita Politecnica delle Marche, Italy, January 2018 (external examiner).
5. Imran Sharieff Mohammed, “Synchrophasor assisted voltage stability assessment and control,” Ph.D. dissertation, Indian Institute of Technology Ropar, India, August 2017 (external examiner).
6. Abdullah Alsubaie, “Improving critical infrastructure resilience with application to power distribution networks,” Ph.D. dissertation, University of British Columbia, Vancouver, Canada, July 2016 (external examiner).
7. Mahmud Trainba, “Estimation of the developed overvoltages at the entrance of an HV/MV substation,” Ph.D. dissertation, City University London, London, United Kingdom, Apr. 2016 (external examiner).
8. Marco Pau, “State estimation in electrical distribution networks,” Ph.D. dissertation, University of Cagliari, Cagliari, Italy, Mar. 2015 (external examiner).
9. Anatolijs Zabašta, “Development of computer control methods and approaches for critical infrastructure interdependencies analysis,” Ph.D. Dissertation, Riga Technical University, Riga, Latvia, June 2014 (external examiner).
10. Nicolaos Manousakis, “State estimation techniques and synchronized phasor measurements placement in electric power systems,” Ph.D. Dissertation, School of Electrical Engineering, National Technical University of Athens, Athens, Greece, Apr. 2013 (external committee member).
11. Marco Lixia, “IEEE 1588 synchronization in distributed measurement systems for electric power networks,” Ph.D. Dissertation, Dept. of Electrical and Electronic Engineering, University of Cagliari, Cagliari, Italy, Feb. 2012 (external examiner).
12. V. Gomathi, “Distributed service models for power system state estimation,” Ph.D. Dissertation, Anna University, Chennai, India, Nov. 2011 (external examiner).

MEMBER OF INTERNAL M.Sc. THESIS COMMITTEES

1. Panayiotis Constantinou, “Hybrid solar geothermal system of an office complex,” M.Sc. thesis, Department of Mechanical and Manufacturing Engineering, School of Engineering Energy Technologies and Sustainable Design program, University of Cyprus, May 2014 (committee member) (advisor: K. Tsiftes).
2. Marios Kyriakou, “Risk evaluation and sensor placement for disinfection by products in water distribution systems,” M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, May 2014 (committee member) (advisor: M. Polycarpou).
3. Georgios Frangou, “Investigation of over-voltage transients caused by direct lightning strikes on photovoltaic systems,” M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, Dec. 2012 (committee member) (advisor: C. A. Charalambous).
4. Christos Kallonas, “Design and evaluation of a grounding grid for a photovoltaic park,” M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, Dec. 2012 (committee member) (advisor: C. A. Charalambous).

5. Panayiotis Panagi, "Design of an FET oscillator at 10 GHz," M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, May 2012 (committee member) (advisor: S. Iezekiel).
6. Alexandros Nikolaidis, "Assessment of renewable energy sources integration in transmission systems," M.Sc. thesis, School of Engineering Energy Technologies and Sustainable Design program, University of Cyprus, May 2012 (committee member) (advisor: C. A. Charalambous).
7. Andreas Andreou, "Calculation of cost of losses of power and energy in transmission lines," M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, May 2012 (committee member) (advisor: C. A. Charalambous).
8. Andreas Razis, "Power-aware provisioning for unicast and multicast connections in backbone optical networks with arbitrary mesh topologies," M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, May 2012 (committee member) (advisor: G. Ellinas).
9. Andreas Andreou, "Anaerobic co-digestion of cow manure with barley straw and low hectolitic weight barley seeds taken as crop residues from seed production center," M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, Dec. 2011 (committee member) (advisor: C. Pitris).
10. George Kourtis, "The integration of renewable energy sources in the Cyprus power system – A simulation study," M.Sc. thesis, Department of Electrical and Computer Engineering, University of Cyprus, Sep. 2010 (committee member) (advisor: C. Hadjicostis).

MEMBER OF EXTERNAL THESIS COMMITTEES

Michalis Pakkos, "Development of a software package as a new tool for computational analysis and design of electrical installations," M.Sc. thesis, Frederick University, June 2009 (committee member)

CONTRIBUTIONS TO POWER ENGINEERING EDUCATION

Co-founder and administrator of PowerSurf, a search engine dedicated to the enhancement of the education of electric power engineers around the world. Available: <http://enpub.eas.asu.edu/powersurf>

TELEVISION, RADIO AND NEWSPAPER INTERVIEWS/PUBLICITY

1. Radio interview, "Good morning Pafos" radio show, Topic: "The FLEXITRANSTORE H2020 project and the integration of renewable energy," Radio Pafos, Jan. 31, 2018.
2. Television appearance, "House in the Nature" television show, Topic: "Wind energy," Cyprus Broadcasting Corporation, Oct. 15, 2017.
3. The PV2Grid project, Interview in Phileleftheros newspaper, Mar. 2016.
4. Integration of renewable energy into the grid, radio interview, The Cyprus News Digest (online), Feb. 12, 2016
5. Electric energy: new technologies and new prospects, CyBC First Radio Program (live broadcast) within the "Free University" public lecture series at Skali Aglantzias, Apr. 4, 2012.
6. Television appearance, "Syn Plin" show, Topic: "Renewable energy sources and energy strategy," Cyprus Broadcasting Corporation, Sep. 16, 2011 (live panel discussion)
7. Radio interview, "The Wednesday Visitor," UCy Voice, Aug. 10, 2011.
8. Radio interview, "Smart Grids," Cyprus Broadcasting Corporation, First Program, Aug. 2, 2011.
9. Article about wind turbine installation at the "Renewable Energy, Storage Technologies and Energy Conversion" laboratory at Yeri. Simerini newspaper, Oct. 29, 2010.
10. Television appearance and news footage in the main news about the wind turbine installation. Sigma TV, Oct. 30, 2010.