



**Mihaela Marilena Albu**  
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## EDUCATION

Habilitation, El. Engineering, **September 2016**

Ph.D. Electrical Engineering, "Politehnica" University of Bucharest, Romania, **January 1998**; Dissertation: *Transient Phenomena on HV aerial lines for distance protection design*, PhD Advisor: Prof. Arie A. Arie

Dipl. Eng. Power Engineering, "Politehnica" University of Bucharest, Romania, **1987** (equiv. MSc.); Thesis: *Algorithms for Digital Distance Protection*, Advisors: Prof. Mircea Eremia; Prof. Razvan Magureanu;

Overall GPA (equiv.): 9.98 (maximal 10); ranked **first nationwide** among 800 power engineering graduates -class of 1987;

## EMPLOYMENT

<b>Professor</b> Department of Electrical Engineering Politehnica University of Bucharest Department of Engineering taught in Foreign Languages – the German stream Politehnica University of Bucharest Department of Engineering – Electronics "1 Decembrie" University of Alba Iulia	Febr. 2002 –present  Oct. 1992 -present  Oct. 2008 – Oct. 2014  Oct. 2000 – Febr. 2002
<b>Associate Professor</b> Department of Electrical Engineering Politehnica University of Bucharest	Oct. 2000 – Febr. 2002
<b>Lecturer</b> Department of Electrical Engineering Politehnica University of Bucharest	Febr. 1998 – Oct. 2000
<b>Teaching Assistant</b> Department of Electrical Engineering Politehnica University of Bucharest	Oct. 1990 – Febr. 1998
<b>Power engineer trainee</b> The Enterprise for Energy T&D, Bucharest	Oct. 1987 – Oct. 1990
<b>Research associate</b> National Institute of Research in Electrical engineering, ICPE, Group 26 at "Politehnica" University of Bucharest	Oct. 1988 – July 1990
<b>Internships</b> Isalnita I Thermo Power Plant, Romania	July-August 1986

## CONSULTING

- **Independent expert H2020, InnovationFund and CEF Energy**, Brussels, **2014-2022**; **NCRD-PBSE** (Poland), **2018-2021**; **FP7 - ICT, Security, REGPOT**; **Energy projects**, Bruxelles, 2011-2017; **FP6 - Smart Grids Cluster** of research projects, Bruxelles, 2008- 2011; **HR4SR**, Bruxelles, 2015-2020; **EUROSTARS**, 2016-2017, 2020, 2021; **ERANETMED** 2015; **NEWFELPRO** - Intern. Fellowship Mobility Progr. for Experienced Researchers in Croatia, 2014; **ANVUR /CINECA** (Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca, Italia)- Evaluation of the Research Quality VQR 2011-2014, 2016-2017; **HubNet**, the Supergen Energy Networks Hub (UK), 2016; **ENERGY21**, Dublin, 2014; **Euramet, EMRP (EMPIR)** Calls for JRP and REG Proposals, 2009-2021; **ENERGIX** Program (Norway-India), Oslo, 2015; 2018-2020; **ERAfrica** Joint Call of Programme Owners, Call 2013; **CONCERT-Japan** Research and Innovation Joint Call 2012; **FWO** (Research Foundation Flanders), 2013, 2018; **NRC** (Research Council of Norway), 2013, 2021; The **Polish-Norwegian Research Program**, 2013; **CuBR** Joint Program, Poland, 2014, 2017; The **New Eurasia Foundation** Moscow, Russia, 2010-2013; **Russian Science Foundation**, 2015-2017;2020; **DESMI** Program, Research Promotion Foundation (RPF), the Republic of Cyprus - ICT Call, 2009; **RESTART** Program, RPF, the Republic of Cyprus, 2018; **NSF** (Bulgaria National Science Fund), 2008-2010; **INTAS** (INTAS Council of scientists, www.intas.org), 2004-2008; **GNSF** (Georgia Nat. Scien. Council), 2006-2018; **WIDESPREAD** -2020 **TWINNING**, 2019; **FONDECYT** (Chile), 2020; **CNCSIS- UEFISCDI**, Bucharest, 2003-2020;
- Member of the **ETIP SNET, WG1**: Reliable, Economic and Efficient Smart Grid System, 2017-2020
- Member of the Advisory boards of **FP7 - IDE4L** project, 2013-2016; **H2020 EriGrid** project, 2016-2019; **H2020 INTERPLAN** (INTEgrated opeRation PLAnning tool towards the Pan-European Network ) project 2017-2020; **EMPOWER** (INTEGRATED/0916/0035) 2019-2022; **STRATEGY** (Facilitating EU pre-Standardization process Through stReamlining and vAlidating inTeroperability in systems and procEdures involved in the crisis manaGement cYcle) 2021-2023;
- Member of **ERIGrid User Selection Panel** ('Connecting European Smart Grid Infrastructures'), H2020 project **2015-2019**
- Member of **UNI-SET Steering Committee** ('UNiversities in the SET-Plan'), FP7 project **2014-2017**
- **Moderator Smart Grids Session** at the SET Plan Conference on EU's Strategic Energy Technology Plan, Stockholm, Oct. 21-22, 2009;

- **Member WG5, PV in grids**, COST Action PEARL PV (CA16235) on “Performance and Reliability of Photovoltaic Systems: Evaluations of Large-Scale Monitoring Data”, 2018-2021.
- **MC member, Intellisis**: Intelligent Monitoring, Control and Security of Critical Infrastructure Systems, COST Action nr. IC0806, 2009-2013; Vice-Chair WG2: Reliable management and control of electric power systems;
- Member of the Advisory Board for **the Engineering Education Report**, a web-based platform for analysis of the impact of new technologies on engineering education, starting with 2011, available at <http://ohm.ieec.uned.es/eer/about.php>
- UPB contact person for the **IIE Network** (the Institute of Int. Education’s membership association).
- DAAD –Vorauswahl für die DAAD Stipendien im Bereich Ingenieurwissenschaften, **2009-2014**
- IBM/IEEE Smarter Planet Challenge (SPC) Student Competition review process: **2013, 2014, 2015**
- Romania- Fulbright Commission in Romania – Grants for Junior Fulbright, Senior Fulbright, Fulbright S&T Award, **2008-2020**;
- GE Leadership Program – Romania, **2008-2016**;
- IIE Scholarships in Science and Techn. Research, The King Abdullah University of Science and Technology (KAUST)
- Romanian Ministry of Education, the “Romania Fellowship”, Bucharest, **2007**
- **Host at UPB of Fulbright specialists**: dr. Reza Nekovei (2008-2009); James Dennison (2010-2011); dr. Viviana Vladutescu (2017-2018);
- IEEE Transactions on Power Delivery, editor, 2012-2015;
- IET Science, Measurements and Technology, Associate Editor, 2018-
- Sustainable Energy, Grids and Networks – SEGAN Journal (Elsevier), Editor, 2020-
- IEEE Joseph F. Keithley Award in Instrumentation & Measurement Committee, member, 2019-2022
- Member IEEE IMS TC 39, Measurements in Power Systems – 2016 Outstanding TC award
- Member *Comisia de Inginerie Electrica a Consiliului Național de Atestare a Titlurilor, Diplomelor si Certificatelor Universitare* (CNATDCU), 2020-2024
- Member of the Coordination Committee of the Electrical Engineering Doctoral School, UPB, 2020-
- Member of the Romanian Advisory Board for Research-Development and Innovation – CCCDI, 2021-2025
- Member of the EUA Council for Doctoral Education-Focus Group, 2022-

Participant in **Exchange Programs** – teaching and research - all fellowship obtained by competition.

Total time spent abroad: **30 months**

- T. H. Darmstadt- Germany (DAAD, on *measurement systems*), 1992
- T. U. Lingby – Denmark (Tempus, on *signal processing*), 1994
- SUPELEC Paris -France (Tempus, on *data acquisition*), 1994
- Herder Institute Leipzig – Germany (DAAD, on *German language*), 1995
- Politecnico di Torino -Italy (Tempus, on *nonlinear phenomena in power systems*), 1996
- T. U. Siegen - Germany (Tempus, on *Sensors and data acquisition*), 1996
- T. U. Eindhoven - The Netherlands (Nuffic, on *Power quality*), 1998
- I.N. Polytechnique Grenoble - France (Tempus, on *numerical methods and optimization*), 1999
- Graduate of the course [PI.61s]: Leadership Skills for Engineering and Science Faculty, MIT Professional Institute, 16-18 July 2007, Cambridge, MA.
- Arizona State University – U.S.A. (Fulbright Senior Fellow, on *power quality*), 2002-2003
- Arizona State University – U.S.A. (Fulbright Senior Fellow, on *synchronized measurements*), 2010

## LANGUAGES

First language: **Romanian**

Self-assessment

European level (\*)

**English**

**French**

**German**

**Italian**

	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
<b>English</b>	C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
<b>French</b>	C1	Proficient user	C2	Proficient user	B2	Independent user	B1	Independent user	B2	Independent user
<b>German</b>	B2	Independent user	C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user
<b>Italian</b>	B2	Independent user	B1	Independent user	A2	Basic user	A2	Basic User	A1	Basic user

## PROFESSIONAL MEMBERSHIP

- **CIGRE (Conseil International des Grands Réseaux Electriques)**, 2009- ; Study Committee N B5-41: member of WG: Investigation of possibilities to improve metering systems for billing purposes in substations, 2010-2018; member of SC6 2012-2016; member of WG B3.44: Substation servicing and supervision using mobile devices and smart sensing, 2015-; member CIGRE/IEEE C4/C2.62 Working Group (Advancements in Synchrophasor Measurement Applications), 2020-;
- **VDE (Verband der Elektrotechnik, Elektronik und Informationstechnik e.V.)**, 2010-; Energietechnik (ETG) si Mess- und Automatisierungstechnik (GMA);
- **IEEE (the Institute of Electronic and Electric Engineers)**, senior member; (**M’98, SM’08**); Vice-President Membership Development (2010-2011) and Technical Activities (2012-2013) of the Instr. and Meas. Society; Deputy President of the Romanian Power

Engineering Soc. Chapter (RO-PES). AdCom member the IEEE Instrumentation and Measurement Society, 2009-2016; IEEE IMS Romania Chapter Chair 2017-2019.

- **IEC, TC77/SC77A/WG9** Power Quality measurement methods, **2017-;** **TC 8/SC 8B/JWG 1** - General Planning, Design, Operation and Control of Microgrids, **2017-;** **TC 38/WG 55** - Uncertainty evaluation in the calibration of Instrument Transformers, **2018-;** **SyC LVDC/OF Open Forum 1** - Platform for open exchange of technologies, innovations, challenges in LVDC, **2018-;** **SyC LVDC/WG 1** - LVDC Standards for Electricity Access, **2018-;** **IEC TC8/JWG12**: System aspects of electrical energy supply-Requirements for frequency measurement used to control DER and loads) **2019- IEC TC8/JWG 9** - LVDC distribution, **2020 -;**
- **IRE (Romanian Power Engineers Society** - Asociatia inginerilor energeticieni din România), **2005-**
- **ASRO (Romanian Standards Association)**, **2008 -** ; member of CT140 (corresp. CLC/TC 57 & CEI/TC 57, Power systems management and associated information exchange EMS-SCADA); CT167 (corresp. IEC/PC 118; IEC/SC 8A; IEC/TC 115; IEC/TC 8; CLC/SR 115; CLC/SR 118; CLC/TC 8X, System aspects of electrical energy supply); CT24 (corresp. CLC/SR 66 & CEI/TC 66, Safety of measuring, control, and laboratory equipment). **Standardization Ambassador**, ASRO, Bucharest, **Oct. 2018;**
- **AGIR (Romanian Engineers Society - Asociatia Generala a Inginerilor din România)**, **2002 –**

## PUBLICATIONS AND TECHNICAL REPORTS

*7 Books & book chapters; 50 Refereed Archival Journal Publications; 150 Refereed Intern. Conf. Proc.; 50 Non-refereed Publications, mostly in Romanian; 15 Laboratory notes (UPB), in Romanian and German; more than 100 Technical Reports*

**ResearcherID A-5538-2010; h-index 11 (WoS), 20 (GoogleScholar), i10-index: 44 (GoogleScholar);**

## RESEARCH FUNDING

### Grants obtained by national/international competition, Project [co-]Director (recent)

- **CARDEA** (Towards a Europe-Wide Training and Networking Scheme for Research Managers), a HORIZON-WIDERA project coordinated by University College Cork, 2022-2026
- **Engineer your Future!**, financed by US Embassy, 2021-2022
- **EMERGE (Advanced Measurement Framework for Emerging Power Systems)**, **2021-2023**, PN-III-P4-ID-PCE2020-2, P.I. Mihaela Albu
- **I-GRETA (ERA-NET Energy Storage Solutions)**, **2020-2024**, *Intelligent FIWARE-based Generic Energy Storage Services for Environmentally Responsible Communities and Cities*, coordinated by RWTH Aachen University, Germany, UPB team leader dr. Mihaela Albu.
- **FISMEP (ERA Net Smart Grids Plus)**, **2017-2020**: Coordinated by RWTH Aachen University, Germany, the project aims to unlock Smart Grid Technologies and Services by means of a standardized software platform that can support interoperability. UPB team leader dr. Mihaela Albu.
- **DCNextEvE** a H2020 –MSCA (**2016-2018**) project (**Fellow dr. Irina Ciornei**) with the main purpose to design and analysis of novel methods for management and control of multiple building scale DC microgrids operating on a specific territory (region) and willing to share the same objective (coordinated distributed management). Host (UPB): dr. Mihaela Albu
- **NobelGrid**, a H2020 project (**2014-2018**) with the aim to develop, deploy and evaluate advanced tools and ICT services for energy DSOs cooperatives and medium-size retailers, enabling active consumers involvement and flexibility of the market; 21 partners from industry, academia and utilities; UPB team leader: dr. Mihaela Albu
- **REDESIGN ( ERASMUS+)**, **2016-2019**, an interdisciplinary project which aims is to bring together a group of experienced practitioners in diverse disciplines, such as electrical engineering, computer-assisted language learning, second language pedagogy, and ICT from different academic institutions and organizations across Europe to redesign parts of their courses to offer immersive, engaging, and collaborative learning experiences for students across different academic institutions. The project is coordinated by the University of Cyprus. UPB team leader dr. Mihaela Albu.
- **ActiveDGModel**, Active distribution networks. Parameters identification and function analysis using synchronized measurement systems PN-II-ID-PCE-2011-3-0693 , P.I. Mihaela Albu, 2012-2016.
- **SyncPower**, Synchronized measurement technology for a higher degree of monitoring and control in the power systems of Cyprus and Romania, Bilateral Research Program România-Cyprus, Project Directors M. Albu, E. Kyriakides, 2014-2015
- **Hybrid**, The formulation of the next generation state estimator by utilizing synchronized phasor measurements. Project financed by Cyprus Research Promotion Foundation. Project partners: University of Cyprus, UPB, Cyprus TSO, 2012-2014, UPB team leader dr. Mihaela Albu
- **SMART REGIONS**, Promoting smart metering best practices in EU, CIP-IEE-2009, consortium coordinator Jyväskylä Innovation Ltd., FI; UPB P.I. Mihaela Albu, 2010-2013.
- **WideView**, The use of telecommunications and GPS technology for the real-time wide-area monitoring and control of power systems, Project financed by Cyprus Research Promotion Foundation, Project partners: University of Cyprus, Arizona State University, UPB , Cyprus TSO, 2012-2013, UPB team leader dr. Mihaela Albu
- **EnergyMAD**, funded by the DERri FP7 project, Laboratory access for MicroDERLab team: Mihai Călin, Tiberiu Tudorache, Radu Porumb, Mihaela Albu (P.I.), 2012
- **VSYNCR**, Virtual synchronous machines for frequency stabilization in future grids with a significant share of decentralized generation, Proiect STREP FP6, coordonator Energy research Centre of Netherland (ECN); UPB P.I. Mihaela Albu, 2007-2011

- **ADVANCEDGRIDS**, Enabling the integration of wide area measurement systems in the electric power grids of Cyprus and Romania (Integrarea sistemelor de măsurare pe arii extinse în rețelele electrice din Cipru și România), Bilateral Research Programme Romania-Cipru, Principal Investigators M. Albu, E.Kyriakides, 2010-2011.
- **TAMPERE**, Advanced measurement solutions and parameter estimation techniques for active distribution networks, Grant CNCISIS IDEI 1402, P.I. Mihaela Albu, 2009-2011.
- **ENHIT**, Emerging technologies for power supply of high-tech buildings, National Research Project – PNCD II-Parteneriate nr. 21065/14.09.2007, Project co-ordinator M. Albu, 2007-2010

#### Grants obtained by international competition, member of project team (recent)

**S4G**, *Storage4Grid*, financed under H2020 Programme, topic LCE-01-2016, coord. Istituto Superiore Mario Boella, Italy, UPB Project Director **Mihai Sanduleac**, 2016-2019

**RE-SERVE**, *Renewables in a Stable Electric Grid*, financed under H2020 Programme, topic LCE-07-2016-2017, coord. Ericsson, Germany; UPB Project Director **Lucian Toma**, 2016-2019

**ITcity**, funded by ERA-NET LAC, coord. UPB Project Director **Ana Maria Dumitrescu**, 2017-2019

#### Personal honors and awards:

- Standardization *Ambassador*, ASRO, Bucharest, October 2018
- IEEE- Instrumentation and Measurement Society *Distinguished Lecturer*, Talk Title: High Reporting Rate Measurements for Smart[er] Grids, 2016-2022,
- *Third Prize*, World Energy Council, FOREN 2014, July 2014.
- *Best paper award* for 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, July 2013 (presented in the Session: “Best Papers on Network Analysis and Dynamic Performance”).
- *Senior Fulbright Fellow*, 2002-2003 and 2010 - Arizona State University
- Certificate of recognition, The IEEE Instrumentation and Measurement Society for *outstanding service to IEEE Transactions on Instrumentation and Measurement and Recognition as one of Transactions “Outstanding reviews 2010”*, “Outstanding reviews 2013”
- Second Prize – *the UPB Students’ Conference, Power Engineering Session*, Bucharest, May 1987,
- First Prize – *nationwide - the 18<sup>th</sup> National Students’ Conference, section Power Engineering*, for the work “*Digital Distance Protection*”, November 1986, Cluj, Romania;
- Second Prize – *the UPB Students’ Conference*, Bucharest, May 1986;
- First Prize – *the UPB Students’ Conference, section Power Engineering*, April 1985;
- *Several Prizes at Student competitions, 1983-1986 on Electrical engineering, Philosophy, Mathematics.*
- *Dean’s list, Politehnica University of Bucharest, 1985-1987*

#### Invited and ad-hoc presentations at international events (selection, recent):

- Mihaela Albu, **2022**, lecture on *Measurements in Smart Grids*, ATHENS network course on Smart Grids, UPB, Bucharest, 16 March 2022
- Mihaela Albu, **2022**, talk on *Measurements and models for PV integration in prosumers' environment*, Session „PV in the built environment”, at the COST Action PEARL PV's Conference Enabling the PV Terawatt Transition University of Twente, Enschede, The Netherlands, 15 March 2022 [online]
- Mihaela Albu, **2022**, talk on *High Reporting Rate Measurements for Smart[er] Grids*, 4th IEEE Intern. Conf. on Emerging Smart Computing & Informatics, Pune, India, 11th March 2022 [online]
- Mihaela Albu, **2021**, talk on *Modelling and Data Analytics in Smart Grids*, Measurement Challenges related to Smart Electricity Grids, (Session 2), 25 Nov. 2021
- Mihaela Albu, **2021**, invited talk on *[DC] Measurements and Quality of Service*, Webinar on Low Voltage Direct Current (LVDC) and DC Technologies: Potential applications for a clean energy transition, Directorate General for Energy, Brussels, 10 Nov. 2021
- Mihaela Albu, **2021**, Panel Discussion on *the Impact of Standardization on Digitalizing the Electricity Sector*, The Role of Standardization to Fostering the Digitalization of the Electricity Grid, EUROPEAN STANDARDIZATION EVENT, 3 Nov. 2021
- Mihaela Albu, **2021**, invited talk on *Measurements for Emerging Power Systems Control*, RDCAPE 2021, Amity University, Noida, India, 8 Oct. 2021
- Mihaela Albu, **2021**, invited talk on *High Reporting Rate Measurements for Smart[er] Grids*, 28<sup>th</sup> Annual Seminar on Automation, Industrial Electronics and Instrumentation (SAAEI2021) Ciudad Real, [online], 09 July 2021
- Mihaela Albu, **2021**, invited talk on *High Reporting Rate Measurements for Smart[er] Grids IEEE Malabar Subsection - 56<sup>th</sup> Talk of the Webinar Series*, [online], 24 June 2021
- Mihaela Albu, **2020**, invited talk on *Phasor Measurement Units and the Semantic Noise in State Estimators*, at Evolution of Power Systems - A Workshop in memory of Elias Kyriakides, [online], 22 oct. 2020
- Mihaela Albu, **2020**, webinar on *Measurements in the Emerging Power Systems: The Case of Phasor Measurement Units*, IEEE IMS Virtual Distinguished Lecturer Webinar Series, [online], 10 sept. 2020

- Mihaela Albu, **2020**, invited talk on *Measurement issues in emerging power grids*, Galveston Bay Section IEEE Joint Societies Chapter, [online], 17 July 2020
- Mihaela Albu, **2020**, invited talk on *Measurements and definitions relevant in electric power systems*, Amity University, [online], 02 June 2020
- Mihaela Albu, **2019**, invited talk on *Measurement for Smart[er] Grids. Teaching and Research at UPB*, 13th EURAMET Electricity and Magnetism contact persons meeting, Bucharest, 9 Oct. 2019
- Mihaela Albu, **2019**, invited talk on *Intelligent Measurement Systems for Smart[er] Grids*, Ogarev Mordovia State University, Saransk, Russia Federation, 11 Sept. 2019
- Mihaela Albu, **2019**, invited talk on *Measurements in [Electric] Power Systems*, the PMU Metrology Meeting at PNNL, Richland, WA, 23 April 2019
- Mihaela Albu, **2019**, invited talk on *Intelligent Measurement Systems for Smart[er] Grids Control*, ICACCP Conference, Sikkim Manipal Institute of Technology, Sikkim, India, 27 February 2019
- Mihaela Albu, **2019**, technical talk on *High Reporting Rate Measurements for Smart(er) Grids*, Indian Institute of Engineering Science and Technology, Shibpur, West Bengal, 01 March 2019
- Mihaela Albu, **2018**, technical talk on *Measurements and Models*, Universiti Teknologi Malaysia, Kuala Lumpur, 28 Nov. 2018
- Mihaela Albu, **2018**, *High Reporting Rate Measurements for Smart(er) Grids*, Keynote Speaker at the 5<sup>th</sup> International Conference on Smart Instrumentations, Measurements and Applications, Songkla, Thailand, 29 November 2018
- Mihaela Albu, **2018**, *The new role of measurements in emerging power systems*, Invited Lecture at DynPower Workshop, Winterthur, Switzerland, 17 September 2018
- Mihaela Albu, **2018**, panelist at *DC-hybrid grids support*, Directorate General for Energy, Brussels, 27 May 2018;
- Mihaela Albu, **2018**, *Future electricity grids: conflicting visions, common perspective*, Invited Lecture at SATEE 2018, Alba Iulia, 22 June 2018
- Mihaela Albu, **2017**, *High Reporting Rate Measurements for Smart(er) Grids*, Invited Lecture at the IEEE-RDCAPE Conference, Amity University Uttar Pradesh, Noida, India, 27 Oct. 2017
- Mihaela Albu, **2017**, *High Reporting Rate Measurements for Smart(er) Grids*, Invited Lecture at the 5<sup>th</sup> IEEE-ISEEE Conference, Technical University "Dunarea de Jos" Galati, 21 Oct. 2017
- Mihaela Albu, **2017**, *High Reporting Rate Measurements for Smart(er) Grids*, Technical Lecture Series, University of Manchester, 18 Sept. 2017
- Mihaela Albu, **2017**, *DC microgrids*, at "Relevance of electronic components and systems in the energy domain" – experts meeting, Brussels, 4<sup>th</sup> Sept. 2017
- Mihaela Albu, **2017**, *Embedding Intelligence in Future Grids conflicting visions, common perspective*, Fraunhofer IoT Innovation and Networking Days, Sankt Augustin, Germany, 22 May 2017
- Mihaela Albu, **2017**, *Future connectivity networks & mission-critical services in the energy sector - a measurement perspective at "5G and Energy"* – experts meeting, Brussels, 14<sup>th</sup> March 2017
- Mihaela Albu, **2016**, *Measurement technology and the new models in emerging power systems*, Outlook Session: Education for the future Energy systems, at the Universities in the SET-Plan (Uni-SET) 3<sup>rd</sup> energy clustering event, Bucharest, 24 Nov.2016.
- Mihaela Albu, Elias Kyriakides, **2016**, *The impact of measurements on power system state estimation*, Tutorial at the IEEE- I2MTC Conf., Taipei, 23 May 2016.
- Mihaela Albu, **2015**, *panelist session Materials for Power Train – Critical Technologies*, EuroCASE workshop: Innovation in Cooperation Airbus Group, Regional Electrical Aircraft Critical Technologies Review, Munich, 1<sup>st</sup> July 2015.
- Mihaela Albu, **2015**, *A Measurement Course and Laboratory for the Power Engineering undergraduate students at UPB*, Panel Undergraduate power engineering laboratories, PES GM Conference, Denver CO, 29 July 2015.
- Mihaela Albu, **2015**, *Measurement data aggregation in emerging power systems*, Tutorial at the IEEE- I2MTC Conf., Pisa, 10 May 2015.
- Mihaela Albu, **2014**, *Measurements, field testing and numerical simulation in power engineering*, tutorial at the 49th International Universities' Power Engineering Conference, UPEC'14, Cluj-Napoca, Romania, 2 Sept. 2014
- Mihaela Albu, **2014**, *Obtaining coherent information from measurements in smart grids*, tutorial at World Energy Council, FOREN 2014, July 2014
- Mihaela Albu, **2013**, *On the energy transfer in the emerging power systems: new models or better measurements?*, invited lecture at the 2013 IEEE Workshop on Integration of Stochastic Energy in Power Systems, Bucuresti, 7 November 2013
- Mihaela Albu, **2013**, *On Power Quality Assessment: accurate vs. meaningful*, Gerald T. Heydt, Festschrift, 13 October, Arizona State University, Tempe, AZ
- Mihaela Albu, **2013**, *Opportunities for updating the power quality standards following the large scale availability of synchronized measurements*, presented (co-author Ana Maria Dumitrescu) at the Workshop *Smart Grid: global standards for global market*, 11September 2013, Bucuresti
- Mihaela Albu, **2013**, *Measurements: A tool or a problem?*, invited lecture at NTUA, 19 September 2012, Athens
- Mihaela Albu, **2013**, *Extending OpenPDC into a versatile Data Concentrator for synchronized measurements*, presented (co-author Alexandru Nechifor) at Wide View - The use of telecommunications and GPS technology for the real-time wide-area monitoring and control of power systems Seminar, 11-16 March 2013, Nicosia, Cyprus



- Mihaela Albu, **2012**, *Showcasing new business for consumer based Smart metering services pre-conference seminar*, presented at Metering, Billing/ CRM Europe, Amsterdam, 8 October 2012
- Mihaela Albu, **2012**, *Grid measurements: a tool or a problem?*, tutorial presented at the INTELLICIS Workshop, Riga, Latvia, 11 September 2012

#### Invited presentations at national events (selection, recent):

- Mihaela Albu (org.), Radu Plamanescu, Stefan Gheorghe, **2019**, *Synchronized measurements in the FISMEP project*, at the IRE Workshop „Emerging energy systems and the use of synchronized measurements”, Bucharest, 13 June 2019
- Mihaela Albu, Mihai Sanduleac, Viorel Petre **2018**, *Self-consumption analysis using enhanced (NobelGrid) Smart meters*, at the IRE Workshop „Smart Meering for Smart Cities”, Bucharest, 27 June 2018
- Irina Ciornei, Mihaela Albu, **2017**, *Microgrids and cell-based energy systems (Microretele si sisteme de energie in conceptie celulara. Definitii, provocari, proiecte, perspective, in Romanian)*, at the Symposium “Tehnologii și arhitecturi ale sistemelor energetice ale viitorului”, Energy Committee of the Romanian Academy - CEAR, Bucharest, 14 Sept. 2017
- Mihaela Albu, Ana Maria Dumitrescu, **2016**, *The impact of the power systems modelling on the measurement chain*, Research Challenges in Intelligent Energy Systems - Mathematical Models and Applications -May 07 2016, Faculty of Applied Sciences, University Politehnica of Bucharest

#### Publications (selection, recent):

- ✚ M. Sanduleac, V. I. Ciornei, L. Toma, R. Plamanescu, A. -M. Dumitrescu and M. Albu, **2021**, "High reporting rate smart metering data for enhanced grid monitoring and services for energy communities," in *IEEE Transactions on Industrial Informatics*, 2021
- ✚ Radu Plamanescu; Ana-Maria Dumitrescu; Mihaela Albu; Siddharth Suryanarayanan, **2021**, A Hybrid Hilbert-Huang Method for Monitoring Distorted Time-Varying Waveforms, *Energies* 2021, 14(7), 1864;
- ✚ L. Toma, M-. Sanduleac, M-. Albu, C-. Diaconu, C-. Stanescu, **2020**, Frequency analysis in the Romanian power system under major grid disturbances, Proc. of the CIGRE Session 48, C4 – Power System Technical Performance PS2 / Modelling of the Future Grid Based on Lessons Learned from System Events, Paris, August 2020.
- ✚ E. S. N. Raju P. ; Alexandru Nechifor; Mihaela M. Albu; James Yu; Vladimir Terzija, **2020**, Development and Validation of a New Oscillatory Component Load Model for Real-time Estimation of Dynamic Load Model Parameters, *IEEE Transactions on Power Delivery*, 2020, Volume: 35, Issue: 2,
- ✚ Maliheh Haghgoo, Alberto Dognini, Thomas Storek, Radu Plamanescu, Ulrike Rahe, Stefan Gheorghe, Mihaela Albu, Antonello Monti and Muller Dirk, **2020**, Open Smart Energy Eco-System for the Future, Proc. of BEYOND2020, Gothenborg, November 2020
- ✚ Markos Asprou, Elias Kyriakides, Mihaela M. Albu, **2018**, Uncertainty Bounds of Transmission Line Parameters Estimated From Synchronized Measurements, *IEEE Trans. on Instr. and Measurement*, volume: 68 , Issue: 8 , Aug. 2019, ISSN 0018-9456.
- ✚ M. Sanduleac, João F. Martins, Irina Ciornei, Mihaela Albu, L. Toma, Vitor Fernão Pires, L. Hadjidemetriou and R. Sauba, **2018**, Resilient and Immune by Design Microgrids Using Solid State Transformers, *Energies* 2018, 11(12), 3377
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