LISTA DE LUCRĂRI

ISI Web of Science ID: **O-8898-2016**
Scopus Author ID: **25031243600**
ORCID: **0000-0002-7004-1874**

Teza de Doctorat

L. Czumbil: „Dezvoltarea unui Pachet Software Bazat pe Tehnici Moderne de Analiză a Fenomenelor de Interferență Electromagnetică dintre Liniile Electrice Aeriene și Conductele Metalice Învecinate" conducător științific *Prof.dr.ing.* Dan Ovidiu Micu, Facultatea de Inginerie Electrică, Universitatea Tehnică din Cluj-Napoca, susținut în Noiembrie **2012**

A. Cărți și capitole de cărți publicate

[A1] D. Șteț, D.D. Micu & **L. Czumbil**: *Analiza, Modelarea și Predicția Fenomenelor de Interferență Electromagnetică dintre Liniile Electrice de Înaltă Tensiune și Structurile Metalice Învecinate. Complemente de Matematici*, Ed. Mediamira, ISBN: 978-973-713-336-6, pag. 320 Cluj-Napoca, Romania, **2016**.

[A2] D.D. Micu, L. Dărăbant, D. Șteț, M. Crețu, A. Ceclan & **L. Czumbil**: *Teoria Circuitelor Electrice. Probleme*, Ed. U.T. Press, ISBN: 978-606-737-140-6, pag. 280, Cluj-Napoca, Romania, **2016**.

[A3] D.D. Micu, G.C. Christoforidis & **L. Czumbil**: „Artificial Intelligence Techniques Applied to Electromagnetic Interference Problems Between Power Lines and Metal Pipelines" in *Recurrent Neural Networks and Soft Computing*, Ed. InTech, ISBN: 978-953-51-0409-4, Ch. 12, pp. 253-274, Rijeka, Croatia, **2012**. Doi: 10.5772/37637

[A4] D.D. Micu, A. Ceclan, **L. Czumbil** & D. Csala: *Numerical Methods*, Ed. Mediamira, ISBN: 978-973-713-278-9, Cluj-Napoca, Romania, **2010**.

B. Articole publicate în Reviste ISI

[B1] M.S. Munteanu, **L. Czumbil**, D.D. Micu, Ş.F. Braicu, S. Nemeti & M. Pîslaru: „Measurement of Soil Resistivity in order to Determine the Buried Walls Trajectory", *Advances in Electrical and Computer Engineering (AECE)*, ISSN: 1582-7445, vol. 17, no. 1, pp. 103-108, **2017**. Doi: 10.4316/AECE.2017.01015, WOS: 000396335900015, **IF_2016 = 0.595**

[B2] D.D. Micu, G.C. Christoforidis & **L. Czumbil**: „AC Interference on Pipelines due to Double Circuit Power Lines: A detailed study", *Electric Power System Research*, ISSN: 0378-7796, vol. 103, pp. 1-8, **2013**. Doi: 10.1016/j.epsr.2013.04.008, WOS: 000322939700002, **IF_2016 = 2.688**

[B3] A. Ceclan, V. Ţopa, D.D. Micu, **L. Czumbil**, A. Şimon & O. Creţ: „Improved Framework for Monte Carlo Numerical Evaluations in Field Interference Problems", *International Journal of Applied Electromagnetics and Mechanics*, ISSN: 1383-5416, vol. 39, no. 1-4, pp. 693-698, **2012**. Doi: 10.3233/JAE-2012-1530, WOS: 000309602700096, **IF_2016 = 0.769** (conf. art.)

[B4] D.D Micu., **L. Czumbil**, G.C. Christoforidis, A. Ceclan & D. Şteţ: „Evaluation of Induced AC Voltages in Underground Metallic Pipeline", *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, ISSN: 0332-1649, vol. 31, no. 4, pp.1133-1143, **2012**. Doi: 10.1108/0332164121122737, WOS: 000308896700009, **IF_2016 = 0.487**

[B5] D. Şteţ, D.D. Micu, **L. Czumbil**, L. Dărăbant, & A. Ceclan: „Simulation of Interferences between Power Lines and Gas Pipelines in Unbalanced Phase Currents State", *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, ISSN: 0332-1649, vol. 31, no. 4, pp.1718-1189, **2012**. Doi: 10.1108/03321641211227447, WOS: 000308896700014, **IF_2016 = 0.487**

[B6] D.D. Micu, **L. Czumbil**, G.C. Christoforidis & E. Simion: „Neural Networks Applied in Electromagnetic Interference Problems", *Revue Roumain des Sciences Techniques, Serie Electrotechnique et Energetique*, ISSN: 0035-4066, vol. 57, no. 2, pp.162-171, **2012**. WOS: 000305202600006, **IF_2016 = 1.036**

[B7] D.D. Micu, **L. Czumbil**, G.C. Christoforidis & A. Ceclan: „Layer Recurrent Neural Network Solution for an Electromagnetic Interference Problem", *IEEE Transaction on Magnetics*, ISSN: 0018-9464, vol. 47, no. 5, pp. 1410-1413, May, **2011**. Doi: 10.1109/TMAG.2010.2091494, WOS: 000289909100138, **IF_2016 = 1.243**

C. Articole indexate ISI Proceedings (7 ca și prim autor)

[C1] D.D. Micu, B. Bârgăuan, A. Ceclan, D. Șteț, **L. Czumbil**, A. Cătinean & A. Polycarpou: „On a Demand Response Pilot Demonstration in the Technical University of Cluj-Napoca", *9th International Conference and Exposition on Electrical and Power Engineering (EPE)*, ISBN: 978-1-5090-6128-0, pp. 785-791, Iași, Romania, October 20-22, **2016**. Doi: 10.1109/ICEPE.2016.7781445 WOS: 000390706300155

[C2] **L. Czumbil**, D.D. Micu, D. Șteț & A. Ceclan: „A Neural Network approach for the Inductive Coupling between Overhead Power Lines and nearby Metallic Pipelines", *International Symposium on Fundamentals of Electrical Engineering (ISFEE)*, ISBN: 978-1-4673-9575-5, Bucharest, Romania, June 30 – July 02, **2016**. Doi: 10.1109/ISFEE.2016.7803231 WOS: 000392434400083

[C3] **L. Czumbil**, D.D. Micu, C. Munteanu, D. Șteț & B. Tomoioagă: „Optimal Design of the Pipeline Right-of-Way Nearby High Voltage Transmission Lines using Genetic Algorithms", *50th International Universities Power Engineering Conference (UPEC)*, ISBN: 978-1-4673-9682-0, Stoke on Trent, UK, September 01-04, **2015.** Doi: 10.1109/UPEC.2015.7339841 WOS: 000377369500082

[C4] J. Kim, **L. Czumbil** & H. Nouri: „Component Model Effect on Fast-Front Overvoltages in Gas Insulated Substations", *50th International Universities Power Engineering Conference (UPEC)*, ISBN:978-1-4673-9682-0, Stoke on Trent, UK, September 01-04, **2015.** Doi: 10.1109/UPEC.2015.7339833 WOS: 000377369500074

[C5] **L. Czumbil**, D.D. Micu, C. Munteanu & D. Șteț: „Optimization of Pipeline-Overhead Line Right-of-Way using Genetic Algorithms", *9th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, ISBN:978-1-4799-7514-3, pp. 531-534, Bucharest, Romania, May 07-09, **2015.** Doi: 10.1109/ATEE.2015.7133865 WOS: 000368159800100

[C6] D. Șteț, D.D. Micu, **L. Czumbil** & B. Manea: „Case Studies on Electromagnetic Interference between HVPL and Buried Pipelines", *International Conference and Exposition on Electrical and Power Engineering (EPE)*, ISBN: 978-1-4799-5849-8, pp. 231-236, Iași, Romania, October 16-18, **2014**. Doi: 10.1109/ICEPE.2014.6969903 WOS: 000353565300038

[C7] A. Ceclan, A. Holhos, D.D. Micu, S. Spinean, **L. Czumbil** & A. Andreotti: „Lightning Return Stroke Current Reconstruction for Vertical and Variable Channel Shape", *International Conference on Lightning Protection (ICLP),* ISBN: 978-1-4799-3544-4, pp. 1370-1375, Shanghai, China, October 11-18, **2014**. Doi: 10.1109/ICLP.2014.6973344 WOS: 000358572100260

[C8] **L. Czumbil**, D. Șteț, D.D. Micu, S.F. Braicu, B. Manea & S. Spinean: „Analysis of Induced Electromagnetic Perturbations in Electrical and Telecommunication Cables due to Lightning Currents", *49th International Universities Power Engineering Conference (UPEC)*,

ISBN: 978-1-4799-6556-4, Cluj-Napoca, Romania, September 02-05, **2014.** Doi: 10.1109/UPEC.2014.6934633 WOS: 000364087800039

[C9] D. Șteț, D.O. Micu, A. Ceclan, **L. Czumbil**, M. Munteanu, M. Crețu & A. Nicu: „Numerical Modelling of a Wind Farm Located in the South Area of Romania through Equivalent Electrical Circuits", *49th International Universities Power Engineering Conference, (UPEC)*, ISBN: 978-1-4799-6556-4, Cluj-Napoca, Romania, September 02-05, **2014.** Doi: 10.1109/UPEC.2014.6934634 WOS: 000364087800040

[C10] T.A. Papadopoulos, G.C. Christoforidis, D.D. Micu & **L. Czumbil:** „Medium-Voltage Cable Inductive Coupling to Metallic pipelines: A Somprehensive Study", *49th International Universities Power Engineering Conference, (UPEC)*, ISBN: 978-1-4799-6556-4, Cluj-Napoca, Romania, September 02-05, **2014.** Doi: 10.1109/UPEC.2014.6934713 WOS: 000364087800113

[C11] K. Vezer, A. Ceclan & **L. Czumbil**: „EMpower University Efficiency. Solutions Investigation within the Buildings of Technical University of Cluj-Napoca", *49th International Universities Power Engineering Conference, (UPEC)*, ISBN: 978-1-4799-6556-4, Cluj-Napoca, Romania, September 02-05, **2014.** Doi: 10.1109/UPEC.2014.6934632 WOS: 000364087800038

[C12] **L. Czumbil**, D.D. Micu, D. Șteț, G.C. Christoforidis & L. Ancăș: „HVPL Conductor Sag Influence on Induced Voltage Evaluation in Nearby Metallic Structures", *48th International Universities' Power Engineering Conference (UPEC)*, ISBN: 978-1-4799-3254-2, Dublin, Ireland, September 02-05, **2013**. Doi: 10.1109/UPEC.2013.6714945 WOS: 000333750100093

[C13] G.C. Christoforidis, D.D. Micu, T.A. Papadopoulos, **L. Czumbil** & C.C. Parisses: „Interference Analysis from Medium-Voltage Cables of Photovoltaic Plants to Metallic Pipelines", *48th International Universities' Power Engineering Conference (UPEC)*, ISBN: 978-1-4799-3254-2, Dublin, Ireland, September 02-05, **2013**. Doi: 10.1109/UPEC.2013.6715002 WOS: 000333750100150

[C14] **L. Czumbil**, D.D. Micu & F.I. Hathazi: „Operating Mode Prediction of a Microwave Heating System using Artificial Intelligence Techniques", *8th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, ISBN: 978-1-4673-5979-5, Bucharest, Romania, May 23-25, **2013**. Doi: 10.1109/ATEE.2013.6563455 WOS: 000332928500109

[C15] D. Șteț, **L. Czumbil** & L. Ancăș: „Investigation of Electromagnetic Interferences Issues", *8th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, ISBN: 978-1-4673-5979-5, Bucharest, Romania, May 23-25, **2013**. Doi: 10.1109/ATEE.2013.6563457 WOS: 000332928500111

[C16] D. Șteț, **L. Czumbil**, D.D. Micu & O. Miron: „Corossion Evaluation and Mitigation on Metallic Pipelines", *International Conference and Exposition on Electrical and Power Engineering (EPE)*, ISBN: 978-1-4673-1173-1, pp. 554-559, Iași, Romania, October 25-27, **2012**. Doi: 10.1109/ICEPE.2012.6463875 WOS: 000324685300097

[C17] D.D. Micu, **L. Czumbil**, A. Ceclan, L. Dărăbant, D. Şteţ & G.C. Christoforidis: „Electromagnetic Interferences Between HV Power Lines and Metallic Pipelines Evaluated with Neural Network Technique", *10th International Conference on Electrical Power Quality and Utilisation (EPQU)*, ISBN: 978-1-4244-5171-5, Lodz, Poland, September 15-17, **2009**. Doi: 10.1109/EPQU.2009.5318842 WOS: 000274778700024

[C18] **L. Czumbil**, D.D. Micu & A. Ceclan: „Artificial Intelligence Techniques Applied to Electromagnetic Interference Problems", *IFMBE Proceedings*, ISSN: 1680-0737, vol. 26, pp. 339-344, presented at *International Conference on Advancements of Medicicne and Health Care Throught Technology (MediTech)*, September 23-26, **2009**. Doi: 10.1007/978-3-642-04292-8_75 WOS: 000281139900075

[C19] D.D. Micu, **L. Czumbil**, A. Ceclan & L. Dărăbant: „Accurate Methods for Solving Electromagnetic Interference Problems between Power Lines and Underground Metallic Pipelines", *44th International Universities' Power Engineering Conference (UPEC)*, ISBN: 978-1-4244-6823-2, Glasgow, Scotland, September 01-04, **2009**. WOS: 000279099500020

[C20] A. Ceclan, C. Bărbulescu, D.D. Micu, D.O. Micu & **L. Czumbil**: „Magnetic Field Synthesis and Parameter Regularization by Fuzzy Inferencee Choice of Regularization Parameter by Fuzzy inference for Magnetic Field Synthesis", *Conference on Human System Interaction (HIS)*, ISBN: 978-1-4244-1542-7, pp. 390-393, Krakow, Poland, May 25-27, **2008**. Doi: 10.1109/HSI.2008.4581470 WOS: 000259867600072

[C21] A. Ceclan, C. Bărbulescu, D.D. Micu, D.O. Micu & **L. Czumbil**: „The Choice of Regularization Parameter by Fuzzy Inference for Magnetic Field Synthesis", *11th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM)*, ISBN: 978-142441544-1, pp. 71-76, Braşov, Romania, May 22-24, **2008**. Doi: 10.1109/OPTIM.2008.4602346 WOS: WOS:000258474200012

[C22] Cs. Szász & **L. Czumbil**: „Artificial Molecule Development Model for Genes Implementation in Bio-inspired Hardware Systems", *11th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM)*, ISBN: 978-1-4244-1544-1, pp. 15-20, Braşov, Romania, May 22-24, **2008**. Doi: 10.1109/OPTIM.2008.4602491 WOS: 000258474700003

D. Articole indexate în Baze de Date Internaţionale (7 ca şi prim autor)

[D1] B. Bârgăuan, O. Fati, A. Ceclan, D.D. Micu, D. Şteţ, **L. Czumbil** & P. Mureşan: „Demand Response on Blocks of Buildings – Romanian Pilot Site Innovation Project", *International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, June 6-9, **2017**. Doi: 10.1109/MPS.2017.7974433 (**IEEEXplore**)

[D2] D. Ştef, **L. Czumbil**, A. Ceclan, L. Dărăbant & D.D. Micu: „Implementing nZEB Skills in Romanian High Education Curricula", *International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, June 6-9, **2017**. Doi: 10.1109/MPS.2017.7974457 **(IEEEXplore)**

[D3] A. Ceclan, D.D. Micu, D. Ştef, **L. Czumbil**, P. Mureşan, B. Bârgăuan, D. Dranca & H. Pop: „Urban Energy Management - Cluj-Napoca Approach", *International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, June 6-9, **2017**. Doi: 10.1109/MPS.2017.7974432 **(IEEEXplore)**

[D4] Ş.F. Braicu, **L. Czumbil**, D.D. Micu, D. Ştef, A. Ceclan, E. Simion & H. Nouri: „Load Flow Analysis in a 110/20 kV Romanian Substation", *International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, June 6-9, **2017**. Doi: 10.1109/MPS.2017.7974421 **(IEEEXplore)**

[D5] **L. Czumbil**, Ş.F. Braicu, D.D. Micu, D. Ştef & A. Ceclan: „Analysis of Load Flow and Short-Circuit Issues in a Retrofitted 110/20 kV Romanian Substation", *14th International Conference on Engineering of Modern Electric Systems (EMES)*, Oradea, Romania, June 1-2, **2017**. Doi: 10.1109/EMES.2017.7980371 **(IEEEXplore)**

[D6] Ş.F. Braicu, **L. Czumbil**, D. Ştef & D.D. Micu: „Evaluation of the Electric and Magnetic Field Near High Voltage Power Lines", *IFMBE Proceedings*, ISSN: 1680-0737, vol. 59, pp. 141-146, presented at 5th *International Conference on Advancements of Medicine and Health Care through Technology (MEDITECH)*, Cluj-Napoca, Romania, October 12-15, **2016**. Doi: 10.1007/978-3-319-52875-5_32 **(Scopus)**

[D7] D.D. Micu, Ş.F. Braicu, **L. Czumbil** & D. Ştef: „Load flow and short-circuit analysis in a Romanian 110/20 kV retrofitted substation", *51th International Universities Power Engineering Conference, (UPEC)*, ISBN: 978-1-5090-4650-8, Coimbra, Portugal, September 06-09, **2016**. Doi: 10.1109/UPEC.2016.8114111 **(IEEEXplore)**

[D8] **L. Czumbil**, D.D. Micu, D. Ştef & A. Ceclan: „Inductive Coupling between Overhead Power Lines and nearby Metallic Pipelines. A Neural Network Approach", *Carpathian Journal of Electrical Engineering (CJEE)*, ISSN: 1843-7583, vol. 9, no. 1, pp. 29-44, **2015**. **(EBSCO, DOAJ)**

[D9] D. Ştef, D.D. Micu, **L. Czumbil** & E. Simion: „Numerical Evaluation of Self and Mutual Earth Return Impedances", *Carpathian Journal of Electrical Engineering (CJEE)*, ISSN: 1843-7583, vol. 8, no. 1, pp. 13-25, **2014.** **(EBSCO, DOAJ)**

[D10] M. Lingvay, & **L. Czumbil**: „Reactor Experimental pentru Studiul Proceselor Biochimice sub Acţiunea Câmpurilor Electrice", *EEA - Electrotehnica, Electronica, Automatica, (EEA Jurnal)*, ISSN: 1582-5175, Vol. 62, No. 3, pp. 84 – 89, July, **2014**. **(Scopus)**

[D11] A. Paşca, D.D. Micu & **L. Czumbil**: „Prediction of Operating Characteristics of Electrotechnical Devices using Artificial Neural Networks", *Journal of Electrical & Electronics Engineering*, ISSN: 1844-6035, Vol. 7, No. 1, pp. 131 - 136, May, **2014**. **(Scopus, EBSCO)**

[D12] **L. Czumbil**, D. Şteţ, D.D. Micu, V. Ţopa & L. Ancăş: „Induced Voltage and Current Computation for Different HVPL Operating Conditions", *International Symposium on Electromagnetic Compatibility, (EMC Europe)*, ISBN: 978-1-4673-0718-5, Rome, Italy, September 17-21, **2012**. Doi: 10.1109/EMCEurope.2012.6396842, (**IEEE*Xplore*, Scopus**)

[D13] D.D. Micu, **L. Czumbil**, M. Prsa & K. Kasas-Lazetic: „InterfStud Electromagnetic Interference Software - An Accurate Evaluation of Current Distribution in Soil and in Underground Pipelines", *International Symposium on Electromagnetic Compatibility, (EMC Europe)*, ISBN: 978-1-4673-0718-5, Rome, Iataly, September 17-21, **2012.** Doi: 10.1109/EMCEurope.2012.6396894, (**IEEE*Xplore*, Scopus**)

[D14] D. Şteţ, **L. Czumbil**, D.D. Micu, V. Ţopa & L. Ancăş: „Stream Gas Pipeline in Proximity of High Voltage Power Lines. Part I - Soil Resistivity Evaluation", *47th International Universities' Power Egineering Conference, (UPEC)*, ISBN: 978-1-4673-2854-8, London, UK, September 04-07, **2012**. Doi: 10.1109/UPEC.2012.6398445, (**IEEE*Xplore*, Scopus**)

[D15] **L. Czumbil**, D. Şteţ, D.D. Micu, V. Ţopa & L. Ancăş: „Stream Gas Pipeline in Proximitity of High Voltage Power Lines. Part II - Induced Voltage Evaluation", *47th Internatonal Universities' Conference on Power Energy, (UPEC)*, ISBN: 978-1-4673-2854-8, London, UK, September 04-07, **2012**. Doi: 10.1109/UPEC.2012.6398444, (**IEEE*Xplore*, Scopus**)

[D16] D.D. Micu, **L. Czumbil**, G.C. Christoforidis & T.A. Papadopoulos: „Semi-infinite Integral Implementation in the Development Steps of *InterfStud* Electromagnetic Interference Software", *47th International Universities' Power Egineering Conference, (UPEC)*, London, September 04-07, **2012**. Doi: 10.1109/UPEC.2012.6398640 (**IEEE*Xplore*, Scopus**)

[D17] O. Miron, D.D. Micu & **L. Czumbil**: „Stability Study Comparison of a MNA Matrix system in PEEC method", *47th International Universities' Power Egineering Conference, (UPEC)*, London, September 04-07, **2012**. Doi: 10.1109/UPEC.2012.6398682 (**IEEE*Xplore*, Scopus**)

[D18] **L. Czumbil**, G.C. Christoforidis, D.D. Micu, D. Şteţ, A. Ceclan & O. Pop: „A User-Friendly Software Application for Induced A.C. Interference Evaluation", *46th International Universities' Power Engineering Conference, (UPEC)*, ISBN: 978-3-8007-3402-3, Soest, Germany, September 05-08, **2011**. (**IEEE*Xplore***)

[D19] A. Ceclan, V. Ţopa, D.D. Micu, O. Miron & **L. Czumbil**: „Numerical Tools for Lightning Return Stroke Current Reconstruction by Electromagnetic Inverse Problem Formulation", *International Conference on Clean Electrical Power*, (*ICCEP)*, ISBN: 978-1-4244-8929-9, pp. 239-298, Ischia, Italy, June 11-13, **2011**. Doi: 10.1109/ICCEP.2011.6036299 (**IEEE*Xplore***)

[D20] **L. Czumbil**, D.D. Micu, G.C. Christoforidis, A. Ceclan & O. Miron: „User Friendly EMI Software for Induced A.C. Potential Evaluation", *8th International Conference on*

Computation in Electromagnetics, (CEM), Wroclaw, Poland, April 11-14, **2011**. Doi: 10.1049/cp.2011.0055. (**IEEE*Xplore***)

[D21] A. Ceclan, V. Ţopa, D.D. Micu & **L. Czumbil**: „On an Inverse Electromagnetic Procedure for Frequency and Spatial Reconstruction of the Lightning Return Stroke Current", *8th International Conference on Computation in Electromagnetics, (CEM)*, Wroclaw, Poland, April 11-14, **2011**. Doi: 10.1049/cp.2011.0054 (**IEEE*Xplore***)

[D22] O. Miron, D. Desideri, D.D. Micu, A. Maschio, A. Ceclan & **L. Czumbil**: „Estimation of an Equivalent Short Solenoid Model using Different Numerical Methods", *8th International Conference on Computation in Electromagnetics, (CEM)*, Wroclaw, Poland, April 11-14, **2011**. Doi: 10.1049/cp.2011.0025 (**IEEE*Xplore*,**)

[D23] **L. Czumbil**, D.D. Micu, A. Ceclan, D. Ştef & D.O. Micu: „Fuzzy Logic - Genetic Algorithm Method to Evaluate the Magnetic Vector Potential", *12th WSEAS International Conference on Mathematical Methods and Computational Techniques in Electrical Egineering, (MMACTEE)*, pp. 128-133, Timişoara, Romania, October 21-23, **2010**. (**Scopus**)

[D24] D.D. Micu, **L. Czumbil**, A. Polycarpou, A. Ceclan & L. Cîmpan: „Analysis of Electromagnetic Interference Problems Proposed to be through an Innovative Monte Carlo – Neural Network Method", *7th Mediterranean Conference and Exhibition on Power Generation, Transmission, Distribution and Energy Conversion, (MedPower)*, ISBN: 978-184919319-1, Agia Napa, Cyprus, November 07-10, **2010**. Doi: 10.1049/cp.2010.0939 (**IEEE*Xplore*, Scopus**)

[D25] D.D. Micu, **L. Czumbil**, G.C. Christoforidis & A. Ceclan: „Proposed Monte Carlo – Neural Network method for solving Electromagnetic Interference problems", *45th International Universities' Power Engineering Conference, (UPEC)*, ISBN: 978-1-4244-7667-1, Cardiff, Wales, August 31 – September 03, **2010**. (**IEEE*Xplore*, Scopus**)

[D26] A. Ceclan, D.D. Micu & **L. Czumbil**: „Lightning Return Stroke Current Spatial Reconstruction via Inverse Regularization", *45th International Universities' Power Engineering Conference, (UPEC)*, ISBN: 978-1-4244-7667-1, Cardiff, Wales, August 31 – September 03, **2010**. (**IEEE*Xplore*, Scopus**)

[D27] D.D. Micu. **L. Czumbil**, A. Ceclan, A. Mutu & D. Ştef: „ Layer Recurrent Neural Network Solution for an Electromagnetic Interference Problem", *14th Biennial IEEE Conference on Electromagnetic Field Computation, (CEFC)*, ISBN: 978-1-4244-7059-4, Chicago, USA, May 9-12, **2010**. Doi: 10.1109/CEFC.2010.5481648 (**IEEE*Xplore*, Scopus**)

[D28] A. Ceclan, D.D. Micu & **L. Czumbil**: „On a Return Stroke Lightning identification procedure by Inverse Formulation and Regularization", *14th Biennial IEEE Conference on Electromagnetic Field Computation, (CEFC)*, ISBN: 978-1-4244-7059-4, Chicago, USA, May 9-12, **2010**. Doi: 10.1109/CEFC.2010.5481473 (**IEEE*Xplore*, Scopus**)

[D29] D.D. Micu, **L. Czumbil**, A. Ceclan, E. Simion, D. Ştef & L. Cîmpan: „Neural Network Evaluation of Electromagnetic Interference between HV Power Lines and underground Metallic Pipelines", *Journal of Electrical and Electronics Engineering*, ISSN: 1844-6035, vol. 2, no. 1, pp. 73-78, **2009**. **(Scopus, EBSCO, DOAJ)**

[D30] D.D. Micu, **L. Czumbil**, A. Ceclan, S. Ardelean & E. Simion: „Software for Industrial Consumers Electrical Energy Tariff Optimal Selection", *Journal of Electrical and Electronics Engineering*, ISSN: 1844-6035, vol. 1, no. 1, pp. 90-94, **2008**. **(Scopus)**

E. Articole publicate în Reviste B+ (3 ca şi prim autor)

[E1] D. Ştef, **L. Czumbil** & D.D. Micu: „Electromagnetic Field Coupling Between OverHead Power Lines and Nearby Metallic Pipelines in Case of Direct Lightning", *Annals of the University of Craiova, Electrical Engineering series*, ISSN: 1842-4805, vol. 39, pp. 101-106, *10th International conference on Electromechanical and Power Systems (SIELMEN),* Chişinău, Rep. Moldova, October 8-9, **2015**.

[E2] **L. Czumbil**, D.D. Micu, D. Ştef & A. Ceclan: „Investigation into Tower Model Effect of Fast-Front Overvoltages in Transmission Lines", *Acta Electrotehnica*, ISSN: 1841-3323, vol. 56, no. 1-2, pp. 9-14, **2014**.

[E3] **L. Czumbil**, A. Ceclan, D.D. Micu, D. Ştef, M. Erchedi, S. Hanc, C. Martineac, I. Radu, & A. Demean: „On Some Mitigation Solutions for an Electromagnetic Interference Problem Analysis in Underground Cables", *Acta Electrotehnica*, ISSN: 1841-3323, vol. 54, no. 5, Special Issue: *Proccedings of the 5th International Conference on Modern Power Systems (MPS*), pp. 120-125, Cluj-Napoca, Romania, May 28-31, **2013.**

[E4] D. Ştef, **L. Czumbil**, M. Erchedi, S. Hanc & L. Ancăş: „Electromagnetic Interference Issues in Case of Metallic Structures", *Acta Electrotehnica*, ISSN: 1841-3323, vol. 54, no. 5, Special Issue: *Proccedings of the 5th International Conference on Modern Power Systems (MPS*), pp. 470-473, Cluj-Napoca, Romania, May 28-31, **2013.**

[E5] D.D. Micu, **L. Czumbil**, G.C. Christoforidis & D. Şteţ: „Software Application to Evaluate Inductive and Capacitive Couplings", *Buletinul AGIR*, ISSN: 2247-3548, vol. XVII, no. 3, Special Issue: *World Energy Systems. Towards Sustainable and Integrated Energy Systems*, pp. 117-122., Suceava, Romania, June 28-30, **2012**.

[E6] D. Ştef, D.D. Micu, **L. Czumbil** & L. Ancăş: „Effects of Power Line Conditions on Nearby Gas Pipelines", *Buletinul AGIR*, ISSN: 2247-3548, vol. XVII, no. 3, Special Issue: *World Energy Systems. Towards Sustainable and Integrated Energy Systems*, pp. 731-736., Suceava, Romania, June 28-30, **2012**.

[E7] A. Ceclan, V. Țopa, D.D. Micu & **L. Czumbil**: „Impact Evaluation of Direct Lightning Strike on a Tower", *Buletinul AGIR*, ISSN: 2247-3548, vol. XVII, no. 3, Special Issue: *World Energy Systems. Towards Sustainable and Integrated Energy Systems*, pp. 527-532., Suceava, Romania, June 28-30, **2012**.

[E8] **L. Czumbil**, D.D. Micu, G.C. Christoforidis, A. Ceclan & D. Ştef: „Hybrid Method for Induced AC Voltages Determination", *Acta Electrotechnica*, ISSN: 1841-3323, vol. 52, no. 5, Special Issue: *Proccedings of the 5th International Conference on Modern Power Systems, (MPS)*, pp. 116-120, Cluj-Napoca, Romania, May 17-20, **2011**.

[E9] A. Ceclan, D.O. Micu, **L. Czumbil**, D.D. Micu & E. Simion: „Numerical Monte Carlo Formulation of an Electromagnetic Interference Problem", *Acta Electrotehnica*, ISSN: 1841-3323, Special Issue: *Proccedings of the 2nd International Conference on Modern Power Systems, (MPS)*, pp. 273-277, Cluj-Napoca, Romania, November 12-14, **2008**.

[E10] A. Ceclan, D.D. Micu, E. Simion, **L. Czumbil**, A. Mutu & C. Boca: „On an Energy Efficiency Strategy for Romanian Water Companies", *Acta Electrotehnica*, ISSN: 1841-3323, Special Issue: *Proccedings of the 2nd International Conference on Modern Power Systems, (MPS)*, pp. 273-277, Cluj-Napoca, Romania, November 12-14, **2008**.

[E11] A. Ceclan, D.D. Micu, **L. Czumbil**, D.O. Micu & E. Simion: „On a Monte Carlo Approach of Interference Problems", *Buletinul Institutului Politehnic din Iasi Sectia: Electrotehnica, Energetica, Electronica*, ISSN: 1223-8139, vol. LIV, no. 5, pp. 251-257, **2008**.

[E12] F. Szombatfalvi-Torok, E. Simion, A. Ceclan, D.D. Micu & **L. Czumbil**: „On Some Measurements of Energy Quality in The National Electrical Power Grid - Part I", *Buletinul Institutului Politehnic din Iasi Sectia: Electrotehnica, Energetica, Electronica*, ISSN: 1223-8139, vol. LIV, no. 5, pp. 193-199, **2008**.

[E13] F. Szombatfalvi-Torok, E. Simion, A. Ceclan, D.D. Micu, D. Ştef & **L. Czumbil**: „On Some Measurements of Energy Quality in The National Electrical Power Grid - Part II", *Buletinul Institutului Politehnic din Iasi Sectia: Electrotehnica, Energetica, Electronica*, ISSN: 1223-8139, vol. LIV, no. 5, pp. 199-205, **2008**.

F. Lucrări prezentate la Conferințe Internaționale (3 ca și prim autor)

[F1] **L. Czumbil**, D.D. Micu, Ș.F. Braicu & D. Ștef: „Load Flow and Short-Circuit Analysis in a Romanian 110/20 kV Retrofitted Substation", *51st International Universities' Power Engineering Conference, (UPEC)*, Coimbra, Portugal, September 6-9, **2016**.

[F2] **L. Czumbil**, J. Kim & H. Nouri: „Investigation into Transient SFO, FFO, VFTO Overvoltage Characteristics for Typical Gas Insulated Substations", *International Conference on Power Systems Transient (IPST)*, Cavtat, Croatia, June 15-18, **2015**.

[F3] D.D. Micu, **L. Czumbil**, Ş.F. Braicu, & S. Hanc: „Electromagnetic Field Distribution Around High Voltage Power Lines", *17th International Symposium Power Electronics (Ee2013)*, Novi Sad, Serbia, October 30 – November 1, **2013**.

[F4] D.D. Micu, G.C. Christoforidis, T.A. Papadopoulos, **L. Czumbil** & D. Ştef: „Accurate Iterative Algorithm to Evaluate Induced Current Densitiesand Earth Impedances of Overhead and Buried Conductors in Electromagnetic Interference Problems", *15th Biennial IEEE Conference on Electromagnetic Field Computation, (CEFC)*, Oita, Japan, November 11-14, **2012**.

[F5] D. Ştef, **L. Czumbil**, D.D. Micu & L. Ancăş: „Investigation of Electromagnetic Interferences on Metallic Pipelines - Induced Voltage Evaluation and Mitigation Techniques", *15th Biennial IEEE Conference on Electromagnetic Field Computation, (CEFC)*, Oita, Japan, November 11-14, **2012**.

[F6] D.D. Micu, G.C. Christoforidis & **L. Czumbil**: „Analytical Difficulties in the Interfstud Software Development", *10th International Conference on Applied Electromagnetics, (PES)*, ISBN: 978-86-6125-042-2, Nis, Serbia, September 25-29, **2011**.

[F7] **L. Czumbil**, D.D. Micu, A. Ceclan, E. Simion & D. Ştef: „Induced A.C. Potential Evaluation Based on a Hybrid Method", *6th International Conference on electrical and power engineering*, (*EPE)*, Iaşi, Romania, October 28-30, **2010.**

[F8] D. Ştef, E. Simion, D.D. Micu, L. Dărăbant, **L. Czumbil** & A. Ceclan: „Electromagnetic Interference Study Based On Professional Software", *6th International Conference on electrical and power engineering*, (*EPE)*, Iaşi, Romania, October 28-30, **2010.**

[F9] A. Ceclan, V. Ţopa, D.D. Micu, **L. Czumbil &** D. Ştef: „On a New Procedure of Harmonic Regularization Applied in Return Stroke Current Identification", *6th International Conference on electrical and power engineering*, (*EPE)*, Iaşi, Romania, October 28-30, **2010.**

[F10] D. Ştef, D.D. Micu, A. Ceclan, **L. Czumbil**, C. Fărcaş, L. Dărăbant & R. Creţ: „Nonlinear Model for Corrosion of Metallic PipelineSubjected to Alternating Voltage (AV)", *Joint MMDE- IEEE ROMSC International Conference*, Iaşi, Romania, June 6-8, **2010**.

[F11] D.D. Micu, **L. Czumbil**, A. Ceclan, L. Cîmpan, L. Dărăbant & D. Ştef: „Artificial Intelligence Techniques Applied in Electromagnetic Interference Problems", *International Conference on Electromagnetic Fields, Health and Environment, (EHE)*, Sao Paulo, Brazil, November 17-19, **2009**.

[F12] D. Ştef, D.D. Micu, E. Simion, L. Dărăbant, A. Ceclan & **L. Czumbil**: „The Study Of Electromagnetic Interferences Between HV Power Lines And Buried Structures Using CDEGS

Software", *The 6th International Workshop of Electromagnetic Compatibility (CEM)*, Constanța, Romania, November 12-14, **2009.**

[F13] D.D. Micu, A. Ceclan & **L. Czumbil**: „Inductive Coupling Problems Solved with Special Interpolation Methods", *10th International Conference on Optimization and Inverse Problems in Electromagnetism, (OIPE)*, Ilmenau, Germany, September. 14-17, **2008**.

[F14] A. Ceclan, D.O. Micu, **L. Czumbil** & D.D. Micu: „Monte Carlo Inverse Formulation of an Electromagnetic Interference Problem", *10th International Conference on Optimization and Inverse Problems in Electromagnetism, (OIPE)*, Ilmenau, Germany, September. 14-17, **2008**.

[F15] D.D. Micu, A. Ceclan, D.O. Micu, **L. Czumbil**, D. Şteţ & E. Simion: „A New Approach of Interference Problems via Monte Carlo Inverse Simulation", *7th International Conference Study and Control of Corrosion in the Perspective of Sustainable Development of Urban Distribution Grids, (URBCORR)*, ISBN: 978-606-521-032-5, pp. 226-230, Băile Felix, Romania, June 15-27, **2008**.

[F16] A. Ceclan, D.D. Micu, D.O. Micu & **L. Czumbil**: „On an Inverse Approach of Monte Carlo Simulation Interference Problem", *Symposium of Theoretical Electrical Engineering, (SNET)*, ISBN: 978-606-521-045-5, pp. 230-234, Bucharest, Romania, June 5-7, **2008**.

[F17] D.D. Micu, A. Ceclan, **L. Czumbil** & E. Simion: „Regularization of Ill Conditioned Spline Interpolation Method Applied in Electromagnetic Interference Problems", *13th Biennial IEEE Conference on Electromagnetic Field Computation, (CEFC)*, Athens, Greece, May 11-15, **2008**.

[F18] C. Szász, V. Chindriş & **L. Czumbil**: „Network Communication Strategy in Embryonic Systems with FPGA-based Hardware", *IEEE SMC International Conference on Distributed HumanMachine Systems, (DHMS)*, ISBN: 978-80-01-04028-7, pp. 468-473, Athens, Greece, March 9-12, **2008**.

[F19] A. Ceclan, D.D. Micu, A. Pop, & **L. Czumbil**: „Scripts of Power Factor Correction", *9th International Conference Engineering of Modern Electric Systems, (EMES)*, pp. 141-144, Oradea, Romania, May 24-26, **2007**.

G. Citări în articole cotate ISI sau ISI Proceedings

[G1] O. Coufal: „Current Density in Two Parallel Cylindrical Conductors and their Inductance", *Electrical Engineering*, ISSN:0948-7921, vol. 99, no. 2, pp. 519-523, June, **2017.** DOI: 10.1007/s00202-016-0378-1 WOS:000401692600006 {**[D16]**}

[G2] L. Dărăbant, D. Şteţ, M. Creţu & G. Cosovici: „ORCAD Implementation of a Frequency Response Function using Equivalent Circuits", *10th International Symposium on Advanced Topics*

in Electrical Engineering (ATEE), ISBN: 978-1-5090-5160-1, pp. 103-106, Bucharest, Romania, March 23-25, **2017**. DOI: 10.1109/ATEE.2017.7905165 WOS: 000403399400021 {**[B7]**}

[G3] R. Porumb, Ş. Gheorghe, G. Darie & T. Boboc: „Analysis of Power Quality Issues Raised by PV Generation and e-Parking Storage Capacities in UPB Smart Grid Environment", *10th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, pp. 802-807, Bucharest, Romania, March 23-25, **2017**. DOI: 10.1109/ATEE.2017.7905113 WOS: 000403399400156 {**[B5]**}

[G4] M. Ouadah, O. Touhami, R. Ibtiouen, M.F. Benlamnouar & M. Zergoug: „Corrosive effects of the electromagnetic induction caused by the high voltage power lines on buried X70 steel pipelines", *International Journal of Electrical Power & Energy Systems (IJEPES)*, ISSN: 0142-0615 vol. 91, pp. 34–41, **2017**. Doi: 0.1016/j.ijepes.2017.03.005 WOS: 000405879300004 **{[B2]}**

[G5] G. Lucca: „Electromagnetic Interference from Power Lines on Pipelines: Influence of Pipe Insulating Coating Degradation", *International Transactions on Electrical Energy Systems*, ISSN: 2050-7038, vol. 26, no. 12, pp. 2699-2712, December, **2016**. Doi: 10.1002/etep.2229 WOS: 000393838000011 **{[B2],[B4],[B7]}**

[G6] G. Serițan, I. Tristiu, O. Ceaki & T. Boboc: „Power Quality Assessment for Microgrid Scenarios", *International Conference and Exposition on Electrical and Power Engineering (EPE)*, ISBN:978-1-5090-6128-0, pp. 723-727, Iași, Romania, October 20-22, **2016**. Doi: 10.1109/ICEPE.2016.7781434, WOS: 000390706300144 **{[C15]}**

[G7] R. Porumb, D. Apetrei & E. Macsim: „Knowledge-Based Decisions in Smart Grids", *International Conference and Exposition on Electrical and Power Engineering (EPE)*, ISBN:978-1-5090-6128-0, pp. 733-737, Iași, Romania, October 20-22, **2016**. Doi: 10.1109/ICEPE.2016.7781436, WOS: 000390706300146 **{[C15]}**

[G8] G. Lucca: „Electromagnetic Interference at Power Frequencies: Shielding Factor Related to an Urban Environment", *IET Science Measurement & Technology*, ISSN: 1751-8822, vol. 10, no. 6, pp. 614-620, September, **2016**. Doi: 10.1049/iet-smt.2016.0016 WOS: 000383470600010 **{[B2],[B4],[B7]}**

[G9] M. Shaban, M.A. Salam, S.P. Ang & W. Voon: „Induced Sheath Voltage in Power Cables: A Review", *Renewable & Sustainable Energy Reviews*, ISSN: 1364-0321, vol. 62, pp. 1236-1251, September, **2016**. Doi: 10.1016/j.rser.2016.05.032 WOS:000379270600088 {**[C15]**}

[G10] S. Haifeng, W. Pei, C. Haojing, A. Xiancang, E. Tianlong, S. Bonian, Z. Rongrong, L. Zhihong & W. Chunfeng: „Study on Electromagnetic Influence of 750kV AC Transmission Lines on Multiple Buried Pipelines", *Asia-Pacific International Symposium on Electromagnetic Compatibility (APEMC)*, ISBN:978-1-4673-9494-9, pp. 31-34, Shenzhen, China, May 17-21, **2016**. Doi: 10.1109/APEMC.2016.7522725 WOS: 000390842100009 {**[D15]**}

[G11] O. Pop, R. Fizeşan, A. Taut & E. Ceuca: „Influence of Switching Frequency on Active and Reactive Load Power of Resonant Converters", *39th International Spring Seminar On Electronics Technology (ISSE)*, ISBN:978-1-5090-1389-0, pp. 328-331, Pilsen, Czech Republic, May 18-22, **2016**. Doi: 10.1109/ISSE.2016.7563214 WOS: 000387089800064 {**[B5]**}

[G12] M. Creţu, A. Dărăbant & R.V. Ciupa: „Magnetic Stimulation of the Spinal Cord: Evaluating the Characteristics of an Appropriate Stimulator", *Artificial Organs*, ISSN: 0160-564X, vol. 39, no. 10, pp. 841-848, October, **2015.** Doi: 10.1111/aor.12617 WOS: 000363330200008 {**[C15]**}

[G13] T. Micu, D.O. Micu & D. Ştef: „A Geometrical Method for Conducting Spheres in Electrostatic Field", *Revue Roumaine des Sciences Techniques Serie Electrotechnique et Energetique*, ISSN: 0035-4066, Vol. 60, No. 4, pp. 345-354, October, **2015**. (link) WOS: 000380570500061 {**[B6]**}

[G14] M. Nassereddine, J. Rizk, A. Hellany & M. Nagrial: „Transmission Steel Poles Novel Arrangement to Control the Pole EPR under Substation Fault", *Australasian Universities Power Engineering Conference (AUPEC)*, ISBN: 978-1-4799-8725-2, Wollongong, Australia, September 27-30, **2015**. DOI: 10.1109/AUPEC.2015.7324790 WOS: 000376680000004 {**[B2]**}

[G15] M. Creţu & D.D. Micu: „Improved Coil Design for Repetitive Magnetic Stimulation of the Spinal Cord", *COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, ISSN: 0332-1649, vol. 34, no. 4, pp. 1043-1053, **2015.** DOI: 10.1108/COMPEL-10-2014-0253 WOS: 000359046300004 {**[C15]**}

[G16] M.X. Lu, D.Z. Tang, Y.X. Du & L. Zhang: „Investigation on Corrosion of Zinc Ribbon under Alternating Current", *Corrosion Engineering Science And Technology*, ISSN: 1478-422X, vol. 50, no. 3, pp. 256-263, May, **2015**. Doi: 10.1179/1743278215Y.0000000010 WOS: 000353583200014 {**[B2]**}

[G17] M. Nassereddine, J. Rizk, A. Hellany & M. Nagrial: „Induced Voltage Behavior on Pipelines Due to HV AC Interference under Broken OHEW", *10th IEEE Conference on Industrial Electronics and Applications (ICIEA)*, ISBN:978-1-4799-8389-6, pp. 2044 - 204, Auckland, New Zealand, June 15-17, **2015**. Doi: 10.1109/ICIEA.2015.7334451 WOS: 000377208900378 {**[B2]**}

[G18] L. Dărăbant, M. Creţu, D. Rafiroiu & R.V. Ciupa: „Evaluating the Efficiency of Stimulators used in Magnetic Stimulation of the Spinal Cord", *9th International Symposium on Advanced Topics in Electrical Engineering, (ATEE)*, ISBN: 978-1-4799-7514-3, Bucharest, Romania, May 7-9, **2015**. Doi: 10.1109/ATEE.2015.7133779 WOS:000368159800050 {**[D23], [C15]**}

[G19] D. Tang, Y. Du, M. Lu, S. Chen, Z. Jiang & L. Dong: „Study on Location of Reference Electrode for Measurement of Induced Alternating Current Voltage on Pipeline", *International*

Transactions On Electrical Energy Systems, ISSN: 2050-7038, Vol. 25, No. 1, pp. 99-119, January, **2015.** Doi: 10.1002/etep.1827 WOS: 000347731300007 {**[B2]**}

[G20] M. Izadi, M.Z.A. Ab Kadir & M. Hajikhani: „An Algorithm for Evaluation of Lightning Electromagnetic Fields at Different Distances with respect to Lightning Channel", *Mathematical Problems in Engineering*, ISSN: 1024-123X, **2014**. Doi: 10.1155/2014/925463 WOS: 000345384100001 {**[D27]**}

[G21] T. Micu, D.O. Micu & D. Șteț: „A Geometrical Method for Finding the Image Charges for Two Orthogonally Conducting Spheres", *International Symposium on Fundamentals of Electrical Engineering, (ISFEE)*, Bucharest, Romania, November 28-29, **2014**. DOI: 10.1109/ISFEE.2014.7050593 WOS: 000380570500061 (**IEEEXplore**) {**[B6]**}

[G22] M. Nassereddine, A. Hellany, J. Rizk & M. Nagrial: „Optical Ground Wire (OPGW) Jointing and Safety Risk Assessment: Earthing Requirements", *49th International University Power Engineering Conference (UPEC)*, Cluj-Napoca, Romania, September 2-5, **2014**. DOI: 10.1109/UPEC.2014.6934792 WOS: 000364087800184 {**[B2]**}

[G23] O.A. Pop: „Analysis and Simulation of Quasi-Resonant Inverter for Induction Heating Applications", *49th International University Power Engineering Conference (UPEC)*, ISBN: 978-147996557-1, Cluj-Napoca, Romania, September 2-5, **2014**. DOI: 10.1109/UPEC.2014.6934831 WOS: 000364087800219 {**[B4], [B5]**}

[G24] O. Ceaki, R. Vatu, N. Golovanov, R. Porumb & G. Seritan: „Analysis of the Grid-Connected PV Plants behavior with FACTS Influence", *49th International University Power Engineering Conference (UPEC)*, ISBN: 978-147996557-1, Cluj-Napoca, Romania, September 02-05, **2014**. DOI: 10.1109/UPEC.2014.6934822 WOS: 000364087800211 {**[B5]**}

[G25] R. Vatu, O. Ceaki, N. Golovanov, R. Porumb & G. Seriţan: „Analysis of Storage Technologies within Smart Grid Framework", *49th International University Power Engineering Conference (UPEC)*, ISBN: 978-147996557-1, Cluj-Napoca, Romania, September 02-05, **2014**. DOI: 10.1109/UPEC.2014.6934823 WOS: 000364087800212 {**[C15]**}

[G26] A. Novitskiy, I. Konotop & D. Westermann: „Interactions by the Use of Common Pylons for EHV Transmission Lines and Electric Railroad Catenary System", *9th International Electric Power Quality and Supply Reliability Conference, (PQ)*, pp. 315-322, Rakvere, Estonia, June 11-13, **2014**. Doi: 10.1109/PQ.2014.6866833 WOS: 000345736800054 {**[B2]**}

[G27] A.Z. El Dein: „Parameters Affecting the Charge Distribution along Overhead Transmission Lines' Conductors and their Resulting Electric Field", *Electric Power Systems Research*, ISSN: 0378-7796, Vol. 108, pp. 198-210, March, **2014**. Doi: 10.1016/j.epsr.2013.11.011 WOS: 000331509700021 {**[B4],[B7]**}

[G28] M. Crețu & R.V. Ciupa: „Magnetic Coil Design for Evaluating the Response of the Spinal Cord during Magnetic Stimulation", *8th International Conference and Exposition on*

Electrical and Power Engineering (EPE), ISBN:978-1-4799-5849-8, pp. 237-240, Iasi, Romania, October 16-18, **2013**. WOS:000353565300039 {**[C15]**}

[G29] A.Z. El Dein: „Calculations of the Charge Distribution along Multi-Overhead Transmission Lines' Conductors", *IET Generation Transmission & Distribution*, ISSN: 1751-8687, vol. 7, no. 10, pp. 1116-1122, **2013**. Doi: 10.1049/iet-gtd.2012.0630 WOS: 000337954100007 {**[B4]**,**[B7]**}

[G30] O.E Gouda, A.Z. El Dein & M.A.H. El-Gabalawy: „Effect of Electromagnetic Field of Overhead Transmission Lines on the Metallic Gas Pipe-Lines", *Electric Power Systems Research*, ISSN: 0378-7796, vol. 103, pp. 129-136, **2013**. Doi: 10.1016/j.epsr.2013.05.002 WOS: 000322939700016 {**[B4]**}

[G31] A.Z. El Dein: „Effect of the Variation of the Charge Distribution Along Multi-Overhead Transmission Lines' Conductors on the Calculation Method of Ground Surface Electric Field", *International Journal Of Electrical Power & Energy Systems*, ISSN: 0142-0615, vol. 51, pp. 255-264, **2013**. Doi: 10.1016/j.ijepes.2013.03.011 WOS: 000318837000027 {**[B4]**,**[B7]**}

[G32] L. Dărăbant, M. Crețu & A. Dărăbant: „Magnetic Stimulation of the Spinal Cord: Experimental Results and Simulations", *IEEE Transactions On Magnetics*, ISSN: 0018-9464, vol. 49, no. 5, pp. 1845-1848, **2013**. Doi: 10.1109/TMAG.2013.2242877 WOS: 000319076200075 {**[B7]**,**[D24]**}

[G33] R.A. Radu, D.O. Micu, A. Ceclan, C. Bărbulescu & S. Kilyeni: „Recent Advances on the Influence of Power Transformers Inrush Current over the Optimization of Medium Voltage Feeder Protection", *48th International Universities' Power Engineering Conference (UPEC)*, Dublin, Ireland, September 2-5, **2013**. DOI: 10.1109/UPEC.2013.6714928 WOS: 000333750100076 {**[D14]**}

[G34] D.P. Cristian, A. Simo, C. Bărbulescu & S. Kilyeni: „PSO based Transmission Network Expansion", *48th International Universities' Power Engineering Conference (UPEC)*, Dublin, Ireland, September 2-5, **2013**. DOI: 10.1109/UPEC.2013.6714958 WOS: 000333750100106 {**[D20]**}

[G35] M. Izadi, M.Z.A Ab Kadir, M.T Askari, & M.Hajikhani: „Evaluation of Lightning Current using Inverse Procedure Algorithm", *International Journal of Applied Electromagnetics and Mechanics*, ISSN: 1383-5416, vol. 41, no. 3, pp. 267-278, **2013**. DOI: 10.3233/JAE-121611 WOS: 000316719400006 {**[D27]**}

[G36] D.P. Cristian, R. Teslovan, C. Bărbulescu, S. Kilyeni & A. Simo: „PSO based OPF Algorithm", *EuroCon*, ISBN: 978-1-4673-2232-4, pp. 1235-1243, Zagreb, Croatia, July 01-04, **2013**. Doi: 10.1109/EUROCON.2013.6625138 WOS: 000343135600180 {**[B7]**}

[G37] L. Dărăbant, M. Crețu & C. Aciu: „Analysis of the Activation of Spinal Nerves during Magnetic Stimulation of the Lumbar Area", *8th International Symposium on Advanced Topics in*

Electrical Engineering, (ATEE), ISBN: 978-1-4673-5979-5, Bucharest, Romania, May 23-25, **2013**. WOS: 000332928500082 {**[B4],[D24]**}

[G38] M. Crețu, R.V. Ciupa & T. Crețu: „Assessment of the Electric Field Generated by Multilayered Coils during MS", *8th International Symposium on Advanced Topics in Electrical Engineering, (ATEE)*, ISBN: 978-1-4673-5979-5, Bucharest, Romania, May 23-25, **2013**. WOS: 000332928500090 {**[D24]**}

[G39] O. Pop, A. Taut, A. Grama & E. Ceuca: „Analysis and Simulation of LCLR Converters", *36th International Spring Seminar on Electronics Technology (ISSE)*, ISBN: 978-1-4799-0036-7, pp. 286-289, Alba Iulia, Romania, May 8-12, **2013**. Doi: 10.1109/ISSE.2013.6648258 WOS: 000374113900054 {**[B4]**}

[G40] D.O Micu & G. De Mey: „Green's Function of Potential Problems in Lens Shaped Geometries", *Revue Roumain des Sciences Techniques, Serie Electrotechnique et Energetique*, ISSN: 0035-4066, vol. 58, no. 1, pp.35-42, **2013**. WOS: 000319367500004 {**[B6]**}

[G41] M. Izadi, M.Z.A Ab Kadir, C. Gomes, V. Cooray & J. Shoene: „Evaluation of Lightning Current and Velocity Profiles along Lightning Channel using Measured Magnetic Flux Density", *Progress in Electromagnetics Research*, ISSN: 1559-8985, vol. 130, pp. 473-492, **2012**. DOI: 10.2528/PIER12060612 WOS: 000308582900023 {**[D27]**}

H. Citări în Baze de Date Internaționale

[H1] P. Czarnywojtek & W. Machczyński: „Wave Propagation Effects Induced in Transmission Pipelines by EMI from Power Lines", *Electrical Engineering*, ISSN: 0948-7921, pp. 1-9, October, **2017**. DOI: 10.1007/s00202-017-0646-8 **(Scopus)** {**[B4],[D20]**}

[H2] D. Rabah, H.A. Chafik & S.A. Bessedik: „Electrostatic and Electromagnetic Effects of HV Overhead Power Line on Above Metallic Pipeline", *5th International Conference on Electrical Engineering - Boumerdes (ICEE-B)*, ISBN: 978-1-5386-0686-5, Boumerdes, Algeria, October 29-31, **2017**. DOI: 10.1109/ICEE-B.2017.8192088 **(IEEEXplore) {[C16]**

[H3] X. Li, R. Huang, J. Yu & X. Zhu: „Interference Analysis of Pipeline Due to a Nearby High Voltage Transmission Line in Different Locations", *2nd International Conference on Artificial Intelligence and Engineering Applications (AIEA)*, ISBN: 978-1-60595-485-1, pp. 397-401, September 23-24, **2017**. DOI: 10.12783/dtcse/aiea2017/14959 **(Google Scholar)** {**[B5]**}

[H4] I. Lingvay, O. Tănăsescu, L. Radermacher, A.T. Matei, D. Lingvay & A.M. Borș: „High Performance Electrical Insulation Elements for Gas Installations", *EEA - Electrotehnica,*

Electronica, Automatica, ISSN: 1582-5175, vol. 65, no. 3, pp. 5-10, July, **2017**. (**Scopus**) {**[B2], [B3],[B4],[B5],[C2],[C5],[C6],[C10],[C13],[C16]**}

[H5] R. Porumb, T. Leonida, N. Golovanov, C. Toader & S. Popescu: „The Neutral Conductor Load in the Low Voltage Intelligent Microgrids", *International Conference on Modern Power Systems (MPS),* Cluj-Napoca, Romania, June 6-9, **2017**. DOI: 10.1109/MPS.2017.7974470 (**IEEEXplore**) {**[B5]**}

[H6] M. Crețu, L. Dărăbant & A. Ceclan: „Power Factor Compensation using ORCAD Simulation. A New Approach in Teaching Electrical Engineering", *International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, Romania, June 6-9, **2017**. DOI: 10.1109/MPS.2017.7974426 (**IEEEXplore**) {**[B6]**}

[H7] C. Mateescu, A. Caramitu, D. Marin & N. Butoi: „Methanogens Stimulation in Electric Fields for Frequencies in Range of 0.1-500 Hz", *EEA - Electrotehnica, Electronica, Automatica*, ISSN: 1582-5175, vol. 65, no. 1, pp. 67-71, **2017**. (**Scopus**) {**[D10]**}

[H8] T.A. Papadopoulos, A. Chrysochos, D.I. Doukas, G.K. Papagiannis & D.P. Labridis: „Induced Voltages and Currents: Overview and Evaluation of Simulation Models and Methodologies", *10th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion, (MedPower)*, Belgrade, Serbia, November 06-09, **2016**. DOI: 10.1049/cp.2016.1023 (**Scopus, IEEEXplore**) {**[B4]**}

[H9] M. Crețu, L. Dărăbant & A. Răcășan: „Modelling the Passive behavior of the Nervous Cell. Influence of Electric Parameters Variation", *IFMBE Proceedings*, ISSN: 1680-0737, vol. 59, pp. 159-164, presented at *5th International Conference on Advancements of Medicine and Health Care through Technology (MEDITECH)*, Cluj-Napoca, Romania, October 12-15, **2016**. Doi: 10.1007/978-3-319-52875-5_36 (**Scopus**) {**[C10]**}

[H10] N. Wang, L. Zhang, Y. Shi, R. Lai, H. Huang & Q. Xie: „Simulation Study of Electromagnetic Influence from UHVDC Transmission Line on Buried Oil/Gas Pipeline", *Gaoya Dianqi/High Voltage Apparatus*, ISSN: 1001-1609, vol. 52, no. 10, pp. 124-129, October, **2016**. DOI: 10.13296/j.1001-1609.hva.2016.10.021 (**Scopus**) {**[B4], [D12]**}

[H11] F. Cao, X. Meng, Y. Liao, R. Li & B. Zhang: „Circuit Model and Application for Influence of DD Ground Electrode on Buried Metal Pipelines", *Dianwang Jishu/Power System Technology*, ISSN: 1000-3673, vol. 40, no. 10, pp. 3258-3264, October, **2016**. DOI: 10.13335/j.1000-3673.pst.2016.10.046 (**Scopus**) **[D14]**}

[H12] D. Lipcinski, D. Lingvay, E. Radu & A. Voina: „Extremely Low Frequency Controlled Voltage Supply for Microbiological Studies", *Electrotehnica, Electronica, Automatica (EEA Jurnal),* ISSN: 1582-5175, vol. 64, no. 1, pp. 89-96, March, **2016**. (**Scopus**) {**[D10]**}

[H13] A.A. Ponnle, K. Adedeji, B.T. Abe & A.A Jimoh: „Variation in Phase Shift of Multi-Circuits HVTLs Phase Conductor Arrangements on the Induced Voltage on Buried Pipeline: A Theoretical Study", *Progress in Electromagnetics Research B*, ISSN: 1937-6472, vol. 69, pp. 75-86, **2016**. DOI: 10.2528/PIERB16062308 **(Scopus)** {**[B2],[B4]**}

[H14] J. Zhang, X. Wen, W. Li, H. Lu & Y. Liu: „Analysis of Electromagnetic Interference Effects on Gas Pipelines due to a Nearby Parallel UHV Transmission Line", *Lecture Notes in Electrical Engineering*, ISSN: 1876-1100, vol. 334, pp. 441-447, **2015**. DOI: 10.1007/978-3-319-13707-0_48 **(Scopus)** {**[C15]**}

[H15] E. Radu, D. Lipcinski, N. Tănase & I. Lingvay: „The Influence of the 50 Hz Electric Field on the Development and Maturation of Aspergillus Niger", *Electrotehnica, Electronica, Automatica (EEA Jurnal),* ISSN: 1582-5175, vol. 63, no. 3, pp. 68-74, **2015**. **(Scopus)** {**[D10]**}

[H16] D. Kemp, D. Arellano & S. Finneran: „Examination of Grounding Methodologies for HVAC Induction on Buried Pipelines", *NACE - International Corrosion Conference Series,* ISSN: 0361-4409, Dallas, USA, March 15-19, **2015**. **(Scopus)** {**[B2]**}

[H17] B. Micu, C. Micu, A. Andercou & N. Constantea: „Artificial intelligence applied in diagnostic and treatment of Dukes C colorectal cancer", *IFMBE Proceedings*, vol. 44, pp. 57-62, *International Conference on Advancements of Medicine and Health Care through Technology, (MEDITECH)*, ISBN: 978-331907652-2, Cluj-Napoca, Romania, June 5-7, **2014**. Doi: 10.1007/978-3-319-07653-9_12 **(Scopus)** {**[B6],[B7]**}

[H18] M. Nassereddine, J. Rizk, A. Hellany & M. Nagrial:„AC Interference Study on Pipeline: OHEW Split Factor Impacts on the Induced Voltage", *Journal of Electrical Engineering*, ISSN: 1582-4594, vol. 14, no. 1, pp. 132-137, **2014**. (link) **(Scopus)** {**[B7]**}

[H19] R. Feldt, M. Staron, E. Hult & T. Liljegren: „Supporting Software Decision Meetings: Heatmaps for Visualising Test and Code Measurements", *39th EUROMICRO Conference on Software Engineering and Advanced Applications (SEAA)*, ISBN: 978-076955091-6, pp. 62-69, Santander, Spain, September 4-6, **2013**. Doi: 10.1109/SEAA.2013.61 **(IEEEXplore, Scopus)** {**[B2]**}

[H20] R. Rizzo: „Direct Current Smart Micro-grids for Distributed Generation with Renewable Sources", *Leonardo Electronic Journal of Practices and Technologies*, ISNN: 1583-1078, vol. 12, no. 22, pp. 27-42, **2013**. **(Scopus, DOAJ)** {**[D19],[B7]**}

[H21] A. Andreotti, D. Assante, R. Rizzo & A. Pierno: „Characteristic Impedance of Periodically Grounded Power Lines", *Leonardo Electronic Journal of Practices and Technologies*, ISNN: 1583-1078, vol. 12, no. 22, pp. 71-82, **2013**. **(Scopus, DOAJ)** {**[B7],[D19]**}

[H22] O. Coufal: „On Resistance and Inductance of Solid Conductors", *Journal of Engineering*, ISSN: 2314-4904, vol. 2013, Article ID: 526072, **2013**. DOI: 10.1155/2013/526072 **(Scopus)** {**[B7]**}

[H23] J. Swaminathan Suvikar Samraj & J. Sivadasan: „Investigation of Electromagnetic Interference due to High Voltage Line", *International Conference on Circuits, Power and Computing Technologies (ICCPCT)*, ISBN: 978-1-4673-4921-5, pp. 310-314, Nagercoil, India, March 20-21, **2013**. DOI: 10.1109/ICCPCT.2013.6528980 **(IEEEXplore, Scopus)** {**[B7]**}

[H24] T.O. Cujbă & C.D. Popa: „Considerations regarding Application of the Fourier theorem to Numerical Relays of Power Transformers", *Journal of Electrical and Electronics Engineering*, ISSN: 1844-6035, vol. 4, no. 1, pp. 43-48, **2011**. **(Scopus, EBSCO)** {**[D29]**}

[H25] A. Seffrin & A. Biedermann: „Cellular-Array Implementations of Bio-Inspired Self-Healing Systems: State of the Art and Future Perspectives", *Lecture Notes in Electrical Engineering*, ISBN: 978-364216766-9, vol. 78, pp. 151-170, **2010**. DOI: 10.1007/978-3-642-16767-6_8. **(Scopus)** {**[C22]**}

I. Citări

[I1] X. Li, R. Huang, J. Yu & X. Zhu: „Interference Analysis of Pipeline Due to a nearby High Voltage Transmission Line in Different Locations", *2nd International Conference on Artificial Intelligence and Engineering Applications (AIEA 2017)*, ISBN: 978-1-60595-485-1, pp. 397-4017, Guilin, China, September 23-24, **2017**. DOI: 10.2528/PIERB1610304 {**[B5]**}

[I2] A.A. Ponnle, K. Adedeji, B.T. Abe & A.A Jimoh: „Variation in Phase Shift of Phase Arrangements on Magnetic Field Underneath Overhead Double-Circuit HVTLS: Field Distribution and Polarization Study", *Progress in Electromagnetics Research M*, ISSN: 1937-8726, vol. 56, pp. 157-167, **2017**. DOI: 10.2528/PIERB1610304 {**[B2]**, **[B4]**}

[I3] M. Ouadah, O. Touhami, R. Ibtiouen, A. Bouzida, S. Bouyegh, D. Allou & A. Haddad: „Pipelines Corrosion Due to the Electromagnetic Pollution caused by the High Voltage Power Lines", *Proceedings of Engineering and Technology (PET)*, vol. 17, pp. 97-101, Special Issue: 4eme Conference Internationale des Energies Renouvelables (CIER-2016), Hammamet, Tunisia, December 20-22, **2016**. {**[B2]**}

[I4] I. Lingvay: „Electromagnetic Pollution Of The Biosphere. The Biological Effects of 0.5 ÷ 200 Hz Electromagnetic Fields", *17th International Conference on Energetics and Electrical Engineering (ENELKO)*, pp. 78-83, Cluj-Napoca, Romania, October 6-9, **2016**. {**[D10]**}

[I5] G. Durrenberger: „Kriechstrome. Stand des Wiessnes", Forschungsstiftung Strom und Mobilkommunikation, Zurich, Switzerland, March **2016**. DOI: 10.13140/RG.2.1.2312.8722 {**[C12]**,**[D12]**}

[I6] N.M.K. Abdel-Gawad, A.Z. El Dein & M. Magdy: „Calculation of Induced Voltages on Buried Gas Pipeline Near to H.V.T.L in Multi-Layer Soil", *17th International Middle East Power System Conference (MEPCON),* Mansoura, Egypt, December 15-17, **2015**. {**[B2]**}

[I7] M.W. Ahmed: „Estimation of Real Traffic Radiated Emissions from Electric Vehicles in terms of the Driving Profile using Neural Network", PhD thesis, University of Alcala, Higher Polytechnics Scool, Madrid, Spain, **2013**. {**[D27]**}

Data: 05.01.2018

As.dr.ing. Levente CZUMBIL

LISTA CELOR MAI RELEVANTE 10 LUCRĂRI

[1] M.S. Munteanu, **L. Czumbil**, D.D. Micu, Ş.F. Braicu, S. Nemeti & M. Pîslaru: „Measurement of Soil Resistivity in order to Determine the Buried Walls Trajectory", *Advances in Electrical and Computer Engineering (AECE)*, ISSN: 1582-7445, vol. 17, no. 1, pp. 103-108, **2017**. Doi: 10.4316/AECE.2017.01015, WOS: 000396335900015, **IF_2016 = 0.595**

[2] **L. Czumbil**, D.D. Micu, D. Ştef & A. Ceclan: „A Neural Network approach for the Inductive Coupling between Overhead Power Lines and nearby Metallic Pipelines", *International Symposium on Fundamentals of Electrical Engineering (ISFEE)*, ISBN: 978-1-4673-9575-5, Bucharest, Romania, June 30 – July 02, **2016**. Doi: 10.1109/ISFEE.2016.7803231 WOS: 000392434400083

[3] D.D. Micu, G.C. Christoforidis & **L. Czumbil**: „AC Interference on Pipelines due to Double Circuit Power Lines: A detailed study", *Electric Power System Research*, ISSN: 0378-7796, vol. 103, pp. 1-8, **2013**. Doi: 10.1016/j.epsr.2013.04.008, WOS: 000322939700002, **IF_2016 = 2.688**

[4] **L. Czumbil**, D.D. Micu, C. Munteanu & D. Ştef: „Optimization of Pipeline-Overhead Line Right-of-Way using Genetic Algorithms", *9th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, ISBN:978-1-4799-7514-3, pp. 531-534, Bucharest, Romania, May 07-09, **2015.** Doi: 10.1109/ATEE.2015.7133865 WOS: 000368159800100

[5] J. Kim, **L. Czumbil** & H. Nouri: „Component Model Effect on Fast-Front Overvoltages in Gas Insulated Substations", *50th International Universities Power Engineering Conference (UPEC)*, ISBN:978-1-4673-9682-0, Stoke on Trent, UK, September 01-04, **2015.** Doi: 10.1109/UPEC.2015.7339833 WOS: 000377369500074

[6] **L. Czumbil**, D. Ştef, D.D. Micu, S.F. Braicu, B. Manea & S. Spinean: „Analysis of Induced Electromagnetic Perturbations in Electrical and Telecommunication Cables due to Lightning Currents", *49th International Universities Power Engineering Conference (UPEC)*, ISBN: 978-1-4799-6556-4, Cluj-Napoca, Romania, September 02-05, **2014.** Doi: 10.1109/UPEC.2014.6934633 WOS: 000364087800039

[7] D. Ştef, D.D. Micu, **L. Czumbil**, L. Dărăbant, & A. Ceclan: „Simulation of Interferences between Power Lines and Gas Pipelines in Unbalanced Phase Currents State", *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, ISSN: 0332-1649, vol. 31, no. 4, pp.1718-1189, **2012**. Doi: 10.1108/03321641211227447, WOS: 000308896700014, **IF_2016 = 0.487**

[8] **L. Czumbil**, D.D. Micu & F.I. Hathazi: „Operating Mode Prediction of a Microwave Heating System using Artificial Intelligence Techniques", *8th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, ISBN: 978-1-4673-5979-5, Bucharest, Romania, May 23-25, **2013**. Doi: 10.1109/ATEE.2013.6563455 WOS: 000332928500109

[9] D.D. Micu, **L. Czumbil**, G.C. Christoforidis & E. Simion: „Neural Networks Applied in Electromagnetic Interference Problems", *Revue Roumain des Sciences Techniques, Serie Electrotechnique et Energetique*, ISSN: 0035-4066, vol. 57, no. 2, pp.162-171, **2012**. WOS: 000305202600006, **IF_2016 = 1.036**

[10] D.D. Micu, **L. Czumbil**, G.C. Christoforidis & A. Ceclan: „Layer Recurrent Neural Network Solution for an Electromagnetic Interference Problem", *IEEE Transaction on Magnetics*, ISSN: 0018-9464, vol. 47, no. 5, pp. 1410-1413, May, **2011**. Doi: 10.1109/TMAG.2010.2091494, WOS: 000289909100138, **IF_2016 = 1.243**

Data: 09.01.2018

As.dr.ing. Levente CZUMBIL

LISTA CONTRACTELOR DE CERCETARE

A. Director de Contracte

[A1] Proiect Intern UTCN CI2017_IE_3: „*Soluții Eficiente de Modelare și Proiectare a Coridoarelor Complexe HVAC/HVDC de Transport și Distribuție a Energiei Electrice*", **Nr. 1987/12.07.2017**, Proiect Intern de Cercetare, Dezvoltare şi Inovare Competiţia 2017 – Teme strategice de cercetare pentru echipe tinere tip 1.2, Universitatea Tehnică din Cluj-Napoca, **2017-2018**. (Buget: 20000 RON)

[A2] Bursă Post-Doc POSDRU/159/1.5/S/137516, Contract de cercetare **PARTING**, „*Ofertarea în Mediul Industrial a unor Soluții Moderne de Modelare, Predicție și Proiectare, cu Performanță Maximă, în Vederea Reducerii Impactului Curenților de Dispersie asupra Structurilor Metalice Supra și Subterane*", Universitatea Tehnică din Cluj-Napoca, **2014-2015**.

B. Membru în Proiecte câștigate prin Competiții Naționale/Internaționale

[B1] Membru în ***„DR-BOB – Demand Response in Block of Buildings"***, proiect finanțat prin programul de inovare **HORIZON 2020** al Uniunii Europene, în temeiul acordului **H2020-EE-2015-2-RIA, No. 696114/2016**, echipa de cercetare a Universității Tehnice din Cluj-Napoca, **2016-2018**.

[B2] Membru în ***„MEnS – Meeting of Energy Skills"***, proiect finanțat prin programul de inovare **HORIZON 2020** al Uniunii Europene, în temeiul acordului **H2020-EE-2014-3-MU No. 649773/2014**, echipa de cercetare a Universității Tehnice din Cluj-Napoca, **2015-2017**.

[B3] Membru în **CNCSIS PN-II-RU-TE-253/09.08.2010:** "*Soluții de modelare, predicție și proiectare, cu maxim de performanță, pentru reducerea impactului curenților de dispersie asupra conductelor metalice subterane de transport gaz*", **2010-2012**.

[B4] Membru în **CNCSIS PNCDI II 22122/2008:** „*CABDIAG: Sisteme de predicție și diagnoză inteligentă pentru creșterea siguranței în exploatare a rețelelor electrice de distribuție, prin prevenirea avariilor la cablurile de energie*", **2008-2010**.

[B5] Membru în **CEEX, nr. X2C37/2006**: „*ICEMECOS - Impactul câmpurilor electromagnetice de natură antropică asupra ecosistemelor*", **2006-2009**.

C. Membru în Contracte de Cercetare cu Terţii

[C1] **Membru** în **Primăria Cluj-Napoca nr. 99457/09.03.2016**, "*Serviciu de Management Energetic la Nivelul Orașului Cluj-Napoca*", obținut de ***Universitatea Tehnică din Cluj-Napoca*** (nr. intern 99457/09.03.2016), de la ***Primăria Municipiului Cluj-Napoca*** România, **2016**. (Buget: 12501 RON)

[C2] **Membru** în **Servelect nr. 77/08.12.2016**, "Studii Privind Prognoza CPT în Rețelele de Distribuție a Energiei pentru anul 2017", obținut de ***Universitatea Tehnică din Cluj-Napoca*** (nr. intern 33047/08.12.2016), de la ***S.C. Servelect S.R.L.***, Cluj-Napoca, România, **2016-2017**. (Buget: 24000 RON)

[C3] **Membru** în **Teloptica nr. 76/09.12.2016**, "Bilant Electroenergetic", obținut de ***Universitatea Tehnică din Cluj-Napoca*** (nr. intern 33048/08.12.2016), de la ***Teloptica S.R.L.***, Cluj-Napoca, România, **2016**. (Buget: 6765 RON)

[C4] **Membru** în **UTI Grup nr. 10/07.10.2016**, "Raport de Audit Energetic - Evaluarea Eficienței Energetice", obținut de ***Universitatea Tehnică din Cluj-Napoca*** (nr. intern 23927/07.10.2015), de la ***Teloptica S.R.L.***, Cluj-Napoca, România, **2016**. (Buget 46380 RON)

[C5] **Membru** în "*Development of the Insulation Coordination and Grounding Analysis Technology for the Gas Insulated Substations*", obținut de ***University West of England***, Bristol, UK, de la ***Hyundai Heavy Industries Co., Ltd.***, Ulsan, South Korea, **2014-2015**.

[C6] **Membru** în **ROMATSA nr. 3423/17.12.2012:**: "*Protecția Echipamentelor de la obiectivele DSNA Cluj și DR București Secția PNA/CNS Cluj la Supratensiuni și Impilsuri Eletromagnetice cauzate de Trăsnete în Liniile de Electroalimentare și Circuitele Vocale și de Date.*", obținut de ***Universitatea Tehnică din Cluj-Napoca*** de la ***Romatsa***, Romania, **2013-2014**.

[C7] **Membru** în **ENERGOBIT No. 44/2012**: "*Interferențe Electromagnetice Induse în Ecranele unor Linii Electrice în Cablu*", obținut de ***Universitatea Tehnică din Cluj-Napoca*** de la ***Energobit***, Cluj-Napoca, Romania, **2012**.

[C8] **Membru** în **TRANSGAZ nr. 27/2010**: "Studiul Coroziunii Conductelor de Transport Gaze Naturale, aflate sub Influența Liniilor Electrice Aeriene cu Tensiuni mai mari de 110 kV și Metode de Reducere. Studiu de caz.", obținut de ***Universitatea Tehnică din Cluj-Napoca*** de la ***Transgaz S.A.***, Mediaș, Romania, **2011-2012**.

[C9] **Membru** în **TRANSGAZ nr. 4/2011**: "Studiul Coroziunii Conductelor de Transport Gaze Naturale, aflate sub Influența Liniilor Electrice Aeriene cu Tensiuni mai mari de 110 kV și Metode de Reducere. Măsurători in Situ și Validare Soft", obținut de ***Universitatea Tehnică din Cluj-Napoca*** de la ***Transgaz S.A.***, Mediaș, Romania, **2011-2012**.

Date: 05.01.2018 *As.dr.ing.* Levente CZUMBIL