


PERSONAL INFORMATION

	Mihaela CREȚU
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WORK EXPERIENCE

2018-onwards.	Associate Professor - Technical University of Cluj-Napoca, Faculty of Electrical Engineering, Cluj-Napoca, Romania Courses: Modern Techniques of Numerical Modelling of the Electrical and Electronics Circuits, Electromagnetics, Electrotechnics
Oct.2013-Oct.2018	Lecturer – Technical University of Cluj-Napoca, Faculty of Electrical Engineering, Cluj-Napoca, Romania Course: Electrotechnics, Theoretical and Practical Work of Theory of Electric Circuits and Electromagnetics
Oct.2013-Oct.2008	Assistant Professor - Technical University of Cluj-Napoca, Faculty of Electrical Engineering, Cluj-Napoca, Romania Theoretical and Practical Work of Theory of Electric Circuits and Electromagnetics
Oct.2004-Oct.2008	PhD Researcher Technical University of Cluj-Napoca, Faculty of Electrical Engineering, Cluj-Napoca, Romania Research topic: Electromagnetism applied in magnetic stimulation of the human tissue

EDUCATION

2004 - 2012	PhD in Electrical Engineering - Technical University of Cluj-Napoca PhD Thesis: <i>Considerations regarding the study of the magnetic functional stimulation over the spinal cord</i> Doctor's degree -Excellent
	Bachelor in Economics - (average 9) Babes-Bolyai University, Cluj-Napoca Competences: Accounting and Economic Data Processing
2004-2005	Master in Electrical Engineering - Computer Aided Design in Electrical Engineering - (average 10) Technical University of Cluj-Napoca Competences: Complements of mathematics in electrical engineering, Programming environments, Numerical modeling of the electromagnetic field, Electromagnetic compatibility
	Bachelor in Electrical Engineering - (average 9) Technical University of Cluj-Napoca Competences: Electromagnetics and Electrostatics, Electric Circuits, Electrical measurements, Electrical machines, Sensors and transducers, Electrical Installations

RESEARCH WORK/PROJECTS

2004-pres.	<p>Implementation team member in 6 research grants won by international competitions</p> <ul style="list-style-type: none"> ➤ Bilateral grant Romania-Austria, no. 224/2009, Functional Stimulation of the Spinal Cord ➤ Bilateral grant Roamania-Norway, no. 28.407/26.05.2017, Enhancing the Transfer of Research and Development Methods in Energy-Related Clusters ➤ H2020-LC-SC3-2018-2019-2020/H2020-LC-SC3-EE-2018 - <i>A holistic framework for Empowering SME's capacity to increase their energy efficiency</i>, 847132-SMEmPower Efficiency-2019-2022, https://smempower.com/ ➤ H2020-LC-SC3-2018-2019-2020/H2020-LC-SC3-2018-RES - <i>Renewable Cogeneration and Storage Technologies Integration for energy Autonomous Buildings</i>, 815301-RE-COGNITION-2019-2022 https://re-cognition-project.eu/ ➤ HORIZON 2020 – EE-2016 – REP 696114 DR-BOB: <i>Demand Response in Blocks of Buildings</i>, 2016-2019, http://www.dr-bob.eu/ ➤ HORIZON 2020-EE-2014-CSA - <i>Meeting the energy professional skills</i>, 649773-MENs, 2014-2017, http://www.mens-nzeb.eu/en/ <p>Project Manager – 3 research grants obtained by national competitions</p> <ul style="list-style-type: none"> ➤ CNCSIS TD 283: <i>Contributions to the Theoretical and Experimental Study of Functional Magnetic Stimulation</i>, 2007-2008 ➤ CNCSIS MC 102: <i>Numerical Calculus of Binary Dielectric Mixtures Permittivity with Inclusions of Different Geometrical Shapes and Sizes</i>, 2007 ➤ Post-Doctoral Scholarship PARTING”, POSDRU/159/1.5/S/137516: <i>Research on the efficient design of a magnetic stimulator used to activate the spinal cord</i>, 2014-2015 <p>Implementation team member in 8 research grants won by national competitions and 2 projects for industry</p>
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RESEARCH WORK/PAPERS

<ul style="list-style-type: none"> ➤ 6 - Scientific books (2 first author) ➤ Author and co-author of over 100 scientific papers: <ul style="list-style-type: none"> • 8 - ISI Thomson Journals Q1, Q2, Q3; • 22 - ISI Thomson Proceedings; • 32- indexed in IEEExplore, Scopus • others - indexed in other data bases or published in Romanian B+Journals <p>Reviewer at International ISI Journals (6)</p>
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RESEARCH/TEACHING- SHORT STAGES (selection)

<p>March 2004 – May 2004 SOCRATES-ERASMUS Scholarship, Stuttgart University, Germany, 19-27 of March 2006 Rehabilitation Engineering Course, University of Jyväskylä, Finland, 2008/2009 Biomedical Engineering, Medical University of Vienna, Austria, 2007 – Aristotle University of Salonic, Greece; 2014-University of Porto, Portugal; 2018 - The University of North Carolina at Charlotte, USA, 2019 – University of Bristol, UK;</p>

AWARDS

2019	<p><i>Best European Energy Service Project granted to Technical University of Cluj-Napoca & Cluj-Napoca City Municipality - by EU Commission - Brussels – February 2019 (LCMN – team award)</i></p>
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2018	<i>AEE Regional Award for Institutional Energy Management Association - by Association of Energy Engineers (AEE) on World Energy Engineering Congress – Charlotte, USA – October 2018 (LCMN – team award)</i>
2015	<i>Romanian Energy Award – Special Jury Award (LCMN – team award)</i>
2008	<i>2nd Prize for Research Projects - CEEEx No. 136/2006: Intelligent and active diagnosis and prediction of buildings in a complex polluted environment (team award)</i>
2009-2021	<p>National prizes awarded by National Authority of Scientific Research - for <i>ISI Journal papers</i>:</p> <ul style="list-style-type: none"> ➤ 2009 - PN-II-RU-PRECISI-2009-2 for: <i>Energy Efficient Coils for Magnetic Stimulation of Peripheral Nerves</i>, IEEE Transactions on Magnetics Journal ➤ 2015 - PN-II-RU-PRECISI-2015-3 for: <i>Magnetic Stimulation of the Spinal Cord: Evaluating the Characteristics of an Appropriate Stimulator</i>, Artificial Organs Journal ➤ 2021 - PN-III-P1-1.1-PRECISI-2021-63504 for: <i>Modelling and evaluation of the Baseline Energy Consumption and the Key Performance Indicators in Technical University of Cluj-Napoca buildings within a Demand Response programme: a case study</i>, IET Renewable Power Generation Journal

PERSONAL SKILLS

Mother tongue(s) Romanian

English	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
	Very well	Very well	Very well	Very well	Very well
Certificate of Language Proficiency/Department of Modern languages and Communication. Level B2					
French	Very well	Very well	Good	Good	Good

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- Good communication skills gained through my experience of didactic activity (I teach seminars and practical work of Electric Circuits Theory, Electromagnetic Field Theory)
- Ability to communicate in written and oral discourse, gained during participation and presentations to different national and international conferences

Organisational skills

- Supervising students during their practical work or diploma projects
- Good organizer, initiative sense, gained as a member in organizing committee for scientific conferences (MediTech 2007, 2009, 2011, UPEC 2014)

Job-related skills

- Good knowledge and command of equipment and electrical devices used in Electrotechnics;
- Advanced knowledge in computer language and different software's: specialized programmes in modelling and computing of the electromagnetic field, analysis and projections of the electric circuits, numerical calculus programmes.

Computer skills

- Advanced knowledge of using Microsoft Office (Word, Excel)
- Knowledge and command of different specialized programs of the electromagnetic field calculus (ANSOFT Maxwell, COMSOL), modelling of electric circuits (ORCAD, PSPICE, EMTP), mathematical calculus (MATHCAD, MATLAB) and design (AUTOCAD)
- ANSYS Courses - Certificate of Attendance, No. 389/15.03.2008, Technical University of Cluj-Napoca, Sheffield University U.K. and ANSYS, Inc. Romanian Channel Partner, INAS S.A., Craiova

Other skills

- Team Work: Member of the research team in several research grants
- Intercultural skills: Working with foreign students, attending of courses in our country or abroad (Technical University of Vienna, during the Cooperation Bilateral programme Romania-Austria, Technical University of Salonic, Stuttgart University, Jyvaskyla University, Finland)
- Analytical mind
- Evaluation and improvement spirit.

Driving licence

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ADDITIONAL INFORMATION

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Associate Professor
Mihaela CREȚU

