

## Curriculum Vitae

### Personal information

First name(s) / Surname(s) Laura Letitia Darabant (Cret)  
 Telephone(s) 0264-401462  
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 E-mail Laura.Darabant@ethm.utcluj.ro

Nationality Romanian

Date of birth 20.09.1976

### Work experience

Dates February 2000 onward  
 Name and address of employer Tehnical University of Cluj-Napoca, Romania, [www.utcluj.ro](http://www.utcluj.ro)  
 Faculty of Electrical Engineering, [www.ie.utcluj.ro](http://www.ie.utcluj.ro)  
 Occupation or position held Associated professor (from 2008)  
 Main activities and responsibilities Teaching and research in Electrical Engineering (from 2000)

### Education and training

Dates 1. 2016  
 2. 2000-2007  
 3. 1999-2000  
 4. 1994-1999

Title of qualification awarded 1. Habilitation Thesis  
 2. PhD  
 3. Master degree  
 4. Engineer

Principal subjects/occupational skills 1. Habilitation Thesis: "Analysis and numerical modelling of electromagnetic field problems, with focus on biomedical engineering"  
 2. Biomedical Engineering; PhD Thesis: „Remarks on the study and optimization of the technique of magnetic stimulation of the nervous system”  
 3. Computer Aided Design;  
 4. General Electrotechnics , Electrical measurements

Name and type of organisation providing education and training 1. – 3. Technical University of Cluj-Napoca

### Personal skills and competences

Mother tongue(s) Romanian

Other language(s)

Self-assessment  
*European level (\*)*

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	

English	B2	B2	B2	B2	B2
French	B2	B2	B2	B2	B2

**B2 = intermediar plus (upper intermediate)**

## Didactic activity

Teaching Courses Electrotechnics – First year, Computer science (En) – Course and Laboratory,

Training Mobility University of Gent, Belgium (1998)  
Catholic University of Leuven, Belgium (1999)  
University of Jyvaskyla, Finland (2006)  
Medical University of Vienna, Austria (2006, 2007, 2008, 2009, 2010)

Institutional Projects  
(max 5 the most representative)

## Research

National Grants (max 5 the most representative)

1. Grant manager: Laura DARABANT. Grant CNCSIS type Pd, „*Theoretical And Experimental Research Regarding Magnetic Stimulation Of The Spinal Cord*”, Contract no. 179/09.08.2010, PD\_611/2010;
2. Grant manager: Laura CRET. CNCSIS Grant type Td, „*3D Software for the simulation of the electromagnetic stimulation of nerve fibers*”, Contract no. 33385/2004, CNCSIS Code 216;
3. Grant member: Laura CRET. PN2 Idei ID\_1024, Contract no. 344/2007, „*Mathematical Model For Investigating The Influence Of Ac Electromagnetic Pollution On Underground Metallic Gas Pipelines, With And Without Cathodic Protection, Placed Nearby A High Voltage Substation*”, Director: Prof. dr. ing. Emil Simion;
4. Grant member: Laura CRET. PN2 Idei ID\_1078 grant, Contract no. 342/2007, „*Neural Magnetic Stimulation: Research Concerning the Improvement of the Electrical Equipment Performances and Clinical Efficiency in Diagnostic and Treatment*”, Director: Prof. dr. ing. Radu CIUPA, Funding period: 2007-2010;
5. Grant member: Laura DARABANT. PARTNERSHIP Grant nr. 22122 from 01.10.2008, „*Intelligent prediction and diagnosis system, for preventing faults on energy cables*”, Director: dr. ing. Carmen Ligvay.

International Grants (max 5 the most representative)

1. **Team Member:** H2020\_EE\_2014\_CSA\_64977: *Meeting the Energy Professionals Skills*, 2015-2018;
2. **Team Member:** H2020, no. 696114 *Demand Response in Block of Buildings*, 2016-2019;
3. **Team Member:** H2020, no 815301, *REnewable COGeneration and storage technologies Integration for energy autonomous buildings (RE-COGNITION)*, 2019-2022;
4. **Team Member:** H2020, no 847132, *A holistic framework for Empowering SME's capacity to increase their energy efficiency (SMEmpower Efficiency)*, 2019-2022;
5. **Team Member:** H2020, no 894356, *Generate Energy Efficient Acting and Results at Small & Medium Enterprises*, 2020-2022.

Scientific publications 4 books, 95 papers

## Additional information

Awards [1] **2008** - 2<sup>nd</sup> Prize for Research Projects - Development in priority area: Informational Social Technologies - CEEEx No. 136/2006: Intelligent and active diagnosis and prediction of buildings with resistance structure in a complex polluted environment - DIRECTOR, accorded by the National Authority of Scientific Research ANCS.  
[http://www.mct.ro/img/files\\_up/1224076311lista-premii-cercetatori-2008.doc](http://www.mct.ro/img/files_up/1224076311lista-premii-cercetatori-2008.doc)  
[2] Award for research results (ISI papers), awarded by UEFISCSU  
**Laura DARABANT**, Mihaela PLESA, Dan Doru MICU, Denisa STET, Radu CIUPA, Adrian DARABANT, *Energy Efficient Coils for Magnetic Stimulation of Peripheral Nerves*, IEEE Transactions on Magnetism, vol. 45, no. 3, 2009, pp. 1690-1693

Membership of AGIR  
Professional Societies  
Other relevant activities

**Significant books published  
in the last 10 years (max 10)**

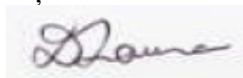
- [1] Dan Doru Micu, **Laura Darabant**, Denisa Stet, Mihaela Cretu, Andrei Ceclan, Levente Czumbil, *Teoria circuitelor electrice. Probleme*, UT Press, Cluj-Napoca, ISBN: 978-606-737-140-6, 2016  
[2] **Laura Darabant**, Mihaela Cretu, Denisa Stet, *Analiza numerica a circuitelor electrice*, UT Press, Cluj-Napoca, ISBN: 978-606-737-155-0, 2016  
[3] Denisa Stet, **Laura Darabant**, Mihaela Cretu, *Compatibilitate electromagnetica*, UT Press, Cluj-Napoca, ISBN: 978-606-737-172-7, 2016

**Significant papers published  
in the last 10 years (max 10)**

- [1] Rodica Creț, **Laura Darabant**, Dan D. Micu, Mihaela Pleșa, Antoniu Turcu, Denisa Stet, *Study of the factors that influence the effective permittivity of the dielectric mixtures*, Revue Roumaine d'Electrotechnique., 2011, vol 56, nr. 1, pg. 69-78;  
[2] **Dărăbant Laura**, Crețu Mihaela, Ciupa R. V., Micu D. D., Șteț Denisa, *Assessment of the Electric Field Induced in the Human Tissue during Magnetic Stimulation of the Spinal Cord*, COMPEL, 2012, vol. 31, nr. 4, pg. 1164-1172;  
[3] Stet Denisa, Dan D. Micu, Levente Czumbil, **Laura Darabant**, Andrei Ceclan, *Simulation of interferences between power lines and gas pipelines in unbalanced phase currents state*, COMPEL, 2012, vol. 31, nr. 4, pg. 1178-1189;  
[4] **Laura Darabant**, Mihaela Cretu, Adrian Darabant, *Magnetic Stimulation of the Spinal Cord: Experimental Results and Simulations*, IEEE Transactions on Magnetics, vol. 49, nr.5, 2013, pp. 1845-1848;  
[5] Mihaela Cretu, Radu V. Ciupa, **Laura Darabant**, *Evaluation of Spinal Cord Response During Magnetic Stimulation of the Lumbar Area*, Biomedical Engineering Journal online  
[6] Denisa STET, Levente CZUMBIL, Andrei CECLAN, Dan Doru MICU, **Laura DARABANT**, *Implementing nZEB Skills in Romanian High Education Curricula*, Proceedings - 2017 International Conference on Modern Power Systems, MPS 2017  
[7] Cretu, M., **Darabant, L.**, Racasan, A., *Modelling the Passive Behavior of the Nervous Cell. Influence of Electric Parameters Variation*. MEDITECH 2016, Cluj Napoca, ROMANIA  
[8] **Laura Darabant**, D. Stet, M Cretu, G. Cosovici, *ORCAD Implementation of a Frequency Response Function using Equivalent Circuits*, Advanced Topics in Electrical Engineering (ATEE), 2017  
[9] B. Bargauan; M. Crețu; O. Fati; A. Ceclan; **L. Darabant**; D. D. Micu; D. Șteț; L. Czumbil, *Energy Management System for the Demand Response in TUCN Buildings*, UPEC 2018, Glasgow, UK  
[10] **Laura Darabant**, Levente Czumbil, *Modeling the symmetrization of single phase receivers using OrCAD*. EPE 2018, Iasi, Romania  
[11] **Laura Darabant**, O. Pop, Cristina Vațavu, *Adaptive OrCAD Simulation Approach in Teaching Non Linear Devices*, , MPS 2019, Cluj-Napoca, Romania

Cluj-Napoca,

Name: Laura Letiția Dărăbant



Date: 10.11.2021