

PERSONAL INFORMATION

Anca Miron



21st Unirii Street, Cluj-Napoca, 400417, Romania

+40264401451 +40744494508

Anca.Miron@enm.utcluj.ro, anca_ra@yahoo.com

<https://users.utcluj.ro/~ancamiron/>

Sex Female | Date of birth 03/01/1982 | Nationality Romanian

JOB

Associate Professor
Power Systems and Management Department
Electrical Engineering Faculty
Technical University of Cluj-Napoca

WORK EXPERIENCE

Oct. 2016-present

Associate Professor

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Power Systems and Management Department, 28th Memorandumului Street, 400114, Cluj-Napoca, Romania, www.utcluj.ro

- Teaching activity:
Expert systems in energy engineering – course, laboratory and project lessons
Applications of artificial intelligence in energy management – course and laboratory lessons
The use of electrical energy – course, laboratory and project lessons
- Research activity:
UTCN research project manager and member of research contracts.

Business or sector: Education and research

2012-2016

Lecturer

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Power Systems and Management Department, 28th Memorandumului Street, 400114, Cluj-Napoca, Romania, www.utcluj.ro

- Teaching activity:
Expert systems in energy engineering – course and laboratory lessons
Applications of artificial intelligence in energy management – laboratory and project lessons
The use of electrical energy – laboratory lessons
- Research activity:
Member of contracts with third parties

Business or sector: Education and research

2008 - 2012

Assistant Professor

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Power Systems and Management Department, 28th Memorandumului Street, 400114, Cluj-Napoca, Romania, www.utcluj.ro

- Teaching activity:
Applications of artificial intelligence in energy management – laboratory and project lessons
The use of electrical energy, Energy management, Computer-aided graphics and technical drawing – laboratory lessons
- Research activity:
Member of research contracts and with third parties

Business or sector: Education and research

2007 - 2008

Assistant lecturer

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Power Systems and Management Department, 28th Memorandumului Street, 400114, Cluj-Napoca, Romania, www.utcluj.ro

- Teaching activity:
Utilizări ale energiei electrice– aplicații de laborator
- Research activity:
Member in research contracts and with third parties

EDUCATION AND TRAINING

Jul. 2010 – Apr. 2013

Postdoctoral studies in Electrical Engineering

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Cluj-Napoca

- "Power quality in modern electrical distribution networks"
- International visibility of research and good publishing practices
- Strategy for developing scientific papers publishable in international scientific journals

Oct. 2006 – Sept. 2009

PhD in Electrical Engineering

ISCED 8

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Cluj-Napoca

- "Transmission of conducted electromagnetic disturbances in power systems"
- Applied research methodology
- Higher mathematics

Oct. 2006 – Jul. 2007

Advanced studies in Industrial Energy Engineering

ISCED 7

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Cluj-Napoca

- "Program for calculating power losses in electrical distribution networks"
- Applications of fuzzy systems in energy
- Modeling and simulation of energy systems
- Modern energy conversion systems

Oct. 2001 – Jul. 2006

Engineer in Electrical Engineering (Industrial Energy Engineering)

ISCED 6

Technical University of Cluj-Napoca, Electrical Engineering Faculty, Cluj-Napoca

- "Software for determining losses in low voltage networks operating in unbalanced non-sinusoidal regime".
- The use of Electrical Energy
- Electrical installations
- Application of artificial intelligence in energy engineering
- Electrical energy management
- Power quality

PERSONAL SKILLS

Mother tongue(s)

Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B2	B2	B2	B1
Language proficiency certificate. Level B2					
Italian	A2	A1	A2	A1	A1
A2					

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 acquired through teaching-learning-evaluation activities (course, seminar, project, laboratory);
 - Good communication skills acquired through the conception, drafting and presentation of scientific works at national and international scientific events;
 - Good communication skills acquired by coordinating diploma and dissertation works;
 - Good communication skills acquired through research internships in the country and abroad;
 - Good communication skills acquired by coordinating activities carried out in national and international research projects and contracts;
 - Good communication skills acquired through the drafting and technical editing of scientific works, books, research reports, project proposals and contracts, review of scientific articles;
 - Good communication skills acquired as a year tutor for energy major students.

- Organisational / managerial skills**
- Good organizational skills acquired by organizing teaching-learning-evaluation activities;
 - Good organizational/managerial skills acquired by organizing study visits;
 - Good managerial skills acquired by conducting research internships in the country and abroad;
 - Good managerial skills acquired by coordinating and managing activities within research projects and contracts;
 - Good organizational/managerial skills acquired by participating in the activities carried out as a member of the graduation and master's admission committees;
 - Good organizational/managerial skills acquired by participating in the organization of national and international conferences (IEECYR2013, MPS 2013, MPS 2011, APS 2026).

- Job-related skills**
- Good knowledge of the disciplines: Use of electrical energy, Expert systems in energy and Applications of artificial intelligence in energy management;
 - Skills and competences in modeling modern electrical power systems (operating regimes influenced by electromagnetic disturbances);
 - Competencies in design and fundamental research in energy engineering;
 - Theoretical and practical technical skills and abilities in the field of electrical and energy engineering (experimental measurements, analysis and interpretation of experimental results; design, preparation, analysis of case studies, preparation of reports on research phases, etc.);
 - Didactic skills (design and application of own teaching strategies and methods in accordance with the contents of the disciplines and types of activities; own evaluation strategies and methods, etc.);
 - Skills and competences in developing algorithms and computer programs to solve problems associated with energy systems;
 - Skills and competences in modelling and developing applications of artificial intelligence techniques dedicated to problems associated with energy systems.

- Computer skills**
- Good knowledge of the Microsoft Office software package:
- Word; Excel; Access; Power Point.
- Good knowledge of the programming languages C, C++, object-oriented programming, graphics (LabVIEW), Python, Prolog and Clisp;
- Good knowledge of specialized programs in:
- mathematical calculation: Mathcad;
 - design: AutoCad;
 - simulation and modelling of electrical circuits: MATLAB - Simulink.

- Other skills**
- Technical skills and abilities in the field of energy engineering research.
- Dedicated pedagogical module and studies in pedagogical psychology.

Driving licence B

ADDITIONAL INFORMATION

- Publications**
- Over 95 publications from which 10 books and 21 articole Wos (ISI). The most significant 10 works:
1. Anca Miron, M. Chindriș, *Transmiterea perturbațiilor electromagnetice conduse în sistemele electroenergetice*, Editura Casa Cărții de Știință, Cluj-Napoca, 2009, ISBN: 978-973-133-478-3
 2. Anca Miron, M. Chindriș, A. Cziker, *Software tool for real-time power quality analysis*, AECE,

- Advances in Electrical and Computer Engineering, Vol. 3, No. 4, 2013, pp. 125 – 132, ISSN: 1582 – 7445, DOI: 10.4316/AECE.2013.04021
3. Anca Miron, M. Chindriș, Andreas Sumper, *Monitoring Power Quality in Microgrids Based on Disturbances Propagation Algorithms*, INTERDISCIPLINARY RESEARCH IN ENGINEERING: STEPS TOWARDS BREAKTHROUGH INNOVATION FOR SUSTAINABLE DEVELOPMENT, Book Series: Advanced Engineering Forum, Vol. 8-9, pp. 127-138, DOI: 10.4028/www.scientific.net/AEF.8-9.127
 4. Anca Miron, M. Chindriș, A. Cziker, *Utilizarea inteligenței artificiale în identificarea perturbațiilor electromagnetice*, Revista Energetica, anul 57, nr. 4/2009
 5. A. Miron, A. C. Cziker, Ș. Ungureanu, H. G. Beleiu and C. P. Dărab, *Reactive Power Compensation at Industrial Consumers: Romanian Study Case*, 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Iasi, Romania, 2022, pp. 101-106, doi:10.1109/EPE56121.2022.9959800;
 6. Beleiu, HG; Pavel, SG; Birou, IMT ; Miron, Anca; Darab, PC; Sallah, M, *Effects of voltage unbalance and harmonics on drive systems with induction motor*, *Journal of Taibah University of Science* (Impact factor 3,45; Citation indicator 1,18), Volume 16, Issue 1, Page 381-391, DOI:10.1080/16583655.2022.2064670, Published DEC 31 2022, Indexed 2022-04-27, WOS:000783990700001;
 7. A. Miron, A. C. Cziker, C. P. Dărab, Ș. Ungureanu and H. G. Beleiu, "Reactive Power Compensation at Consumers Using Fuzzy Logic Control," 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 1-6, doi: 10.1109/MPS58874.2023.10187471;
 8. Miron, A.; Cziker, A.C.; Beleiu, H.G., *Fuzzy Control Systems for Power Quality Improvement—A Systematic Review Exploring Their Efficacy and Efficiency*. *Applied Sciences - Basel*. 2024, 14, 4468. <https://doi.org/10.3390/app14114468>, WOS:001245470000001;
 9. Miron Anca, Cziker A.C., Ungureanu S., *Fuzzy logic controller for regulating the indoor temperature*, 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp.1-6, doi: 10.1109/MPS52805.2021.9492595, WOS: 000941563300038.
 10. Anca Miron, A.C. Cziker, H.C. Bogariu, *Flicker's sources identification using a case-based reasoning prototype*, 2019 54th International Universities Power Engineering Conference (UPEC), Proceedings Paper, WOS:000619338200115

Projects

- 7 research projects won through competitions and 8 contracts with third parties, 4 of which are:
- *Transmission of conducted electromagnetic disturbances in power systems*, Contract TD-216/17.09.08, CNCIS, Ministerul Educației, Cercetării și Tineretului, Autoritatea Națională pentru Cercetare
 - *Adaptive system for ensuring energy quality, by correcting the electrical parameters of low voltage networks, integrable in networks SMART GRID - (SAMGRID)*, Grant PN-II-PT-PCCA-2013-4-1003
 - *Intelligent device for avoiding parallel resonances when switching capacitive compensators in unbalanced and harmonically polluted three-phase networks*, Contract nr. 703PED/2022, Cod proiect: PN-III-P2-2.1-PED-2021-4309, coordonator proiect conf.dr.ing. Băloi Alexandru, Universitatea Politehnica Timișoara.
 - *Complete technological algorithm, computer-assisted, for the design and construction of earthing points according to optimal criteria*, Contract nr. 114PED/2025, Cod proiect: PN-IV-P7-7.1-PED-2024-1377, Acronim proiect: OPTIM-EGR, Perioada de desfășurare: 06-05-2025 - 06-05-2027, Director proiect: Conf.dr.ing. Horia G. Beleiu, Universitatea Tehnică din Cluj-Napoca
 - *Postdoctoral Fellowship - Power Quality in Modern Distribution Networks*, Postdoctoral Fellowship, Contract POSTDRU/89/1.5/S/53603, project co-financed by Fondul Social European prin Programul Operațional Sectorial pentru Dezvoltarea Resurselor Umane 2007-2013.

Conferences

- Participation in over 35 conferences, including:
- 2024 International Conference on Development and Application Systems (DAS), Suceava, Romania;
 - 2023 IEEE International Smart Cities Conference (ISC2), Bucharest, Romania;
 - EPE 2020 - Proceedings of the 2020 11th International Conference and Exposition on Electrical And Power Engineering, Iași, România;
 - 54th International Universities Power Engineering Conference (UPEC), 2019, București, România;
 - 49th International Universities Power Engineering Conference, UPEC 2014, 2-5 sept. 2014, Cluj-Napoca, Romania
 - 5th International Conference on Modern Power Systems, MPS 2013, 28-31 of May, 2013, Cluj-Napoca, Rmania
 - 21st International Symposium on Power Electronics, Electrical Drivers, Automation and Motion, SPEEDAM 2012, June 20 – 22, 2012, Sorrento, Italia

Seminars	▪ April 2011, 4D-PostDoc seminar "Technological development in a sustainable economy" ▪ March 2012, 4D-PostDoc seminar "Research challenges for sustainable development" ▪ February 2013, 4D-PostDoc seminar "INTERIN 2013 – Interdisciplinary Research in Engineering Steps towards Breakthrough Innovation for Sustainable Development"
Citations	79 citations in WoS, and 91 citations BDI ISI Web of knowledge H-index = 5 Google scholar H-index = 10 Scopus H – index = 8
Research internships	▪ June 2007, Politecnica di Milano, Milan, Italy ▪ June July 2012, Universitat Politecnica de Catalunya, Barcelona, Spain
Memberships	IEEE, Alianța Națională Universitară pentru Energie Nucleară
Reviewer of specialized journals	WoS (ISI) – Electronics Letters, Sustainability, Energies, IET Renewable Power Generation, Applied Energy, IET Generation, Transmission & Distribution, Renewable and Sustainable Energy Reviews, Applied Sciences, Electricity, Mathematics. BDI - Wind, Engineering Science and Technology, an International Journal (Elsevier).

Cluj-Napoca
June 2026

Assoc. Prof. PhD. Eng. Anca Miron