

INFORMATII PERSONALE

	Cosmin Darab
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EXPERIENTA PROFESIONALA

2017-pres.	Sef lucrari – Universitatea Tehnica din Cluj-Napoca, Facultatea de Inginerie Electrica, Departamentul de Electroenergetica si Management.
	Cursuri: Materiale Electrotehnice, Instalatii electrice in vehicule. Laboratoare: Introducere in ingineria electrica, Grafica asistata de calculator, Materiale electrotehnice, Instalatii electrice in vehicule.
2016-2017	Asistent – Universitatea Tehnica din Cluj-Napoca, Facultatea de Inginerie Electrica, Departamentul de Electroenergetica si Management.
	Laboratoare: Introducere in ingineria electrica, Grafica asistata de calculator, Materiale electrotehnice.
2013-2016	Administrator - SC Formet Impex SRL, B-dul Muncii Nr.18, Cluj-Napoca, Romania
	Activitati Manageriale; Domeniu Activitate: Automatizari industriale.
2008-2013	Administrator - SC Alcraft SRL, Str. Sesului, Nr.17, Cluj-Napoca, Romania
	Activitati Manageriale; Domeniu Activitate: Automatizari industriale.

EDUCATIE SI FORMARE

2010 - 2013	Doctorat in Ingineria sistemelor – Universitatea Tehnica din Cluj-Napoca
	<i>Activitati de cercetare in Ingineria Sistemelor</i>
2009 - 2010	Master in Administrarea Afacerilor – Universitatea Babes Bolyai, Cluj, Romania
	Competente: Administrarea Afacerilor
2004 - 2009	Diploma de inginer automatist - Universitatea Tehnica din Cluj-Napoca
	Facultatea de Automatizari si Calculatoare

PROIECTE DE CERCETARE (MEMBRU)

2014 - pres.	- REnewable COGeneration and storage techNologies IntegraTion for energy autONomous buildings (RE-COGNITION) - H2020-LC-SC3-2018-2019-2020/H2020-LC-SC3-2018-RESTwoStages / Project no. 815301 - Holistica impactului surselor regenerabile de energie asupra mediului si climei (HORESEC), PN-III-P1-1.2-PCCDI-2017-0404 / 31PCCDI/2018 - Robust fractional order event-based control for optimised resource allocation in complex cyber-physical closed loop systems, PN-III-P1-1.1-TE-2016-1396, TE 65/2018 - Strategii de conducere bazate pe tehnici de control avansat pentru optimizarea performantelor statiilor de epurare a apelor uzate si reducerea consumurilor energetice – CASEAU, PCCA2013, nr. 274/2014. - Sistem pentru monitorizarea eficienței și optimizarea funcționării procesului de aerare din treapta biologică cu nămol activ a stațiilor de epurare a apelor uzate, PN3-1- Cec-Inov. 66/2017. - Dezvoltarea și validarea unui sistem de control optimal multivariabil pentru treapta biologică a stațiilor de epurare a apelor uzate, 201 CI/2018.
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ACTIVITATE DE DISEMINARE

1. Cîrstea, S.D.; Moldovan-Teslios, C.; Cîrstea, A.; Turcu, A.C.; Darab, C.P. Evaluating Renewable Energy Sustainability by Composite Index. Sustainability 2018, 10, 811.
2. Beleiu, H.G.; Beleiu, I.N.; Pavel, S.G.; Darab, C.P. Management of Power Quality Issues from an Economic Point of View. Sustainability 2018, 10, 2326.
3. Beleiu, H.G.; Maier, V.; Pavel, S.G.; Birou, I.; Pică, C.S.; Dărab, P.C. Harmonics Consequences on Drive Systems with Induction Motor. Appl. Sci. 2020, 10, 1528.
4. Cosmin Dărab, Ruben Crișan, Ioan Nașcu, Modeling and robust control of pH neutralisation process, Automation Computers Applied Mathematics, vol 20 (2011), <http://www.acam.ro>.
5. Cosmin Dărab, Ruben Crișan, Grigore Vlad, Ioan Nașcu, „An approach for industrial wastewater treatment process”, Environmental Legislation, Safety Engineering and Disaster Management 9th edition, ELSEDIMA 2012, <http://www.elsedima.conference.ubbcluj.ro>, vol.5, issue 2, pag.234-238.
6. Grigore Vlad, Ruben Crișan, Bogdan Mureșan, Ioan Nașcu, Cosmin Dărab, Development and Application of a Predictive Adaptive Controller to a Wastewater Treatment Process, 2010 IEEE International Conference on Automation, Quality and Testing, Robotics AQTR 2010, THETA 17th edition, ISBN 978-1-4244-6722-8, May 28-30 2010, Cluj-Napoca, Romania, <http://www.aqtr.ro>.
7. R. Both, E.-H. Dulf, A. O. Neaga, C. P. Dărab, Robust Control of the 15N Isotope Separation Column, IEEE 7th International Symposium on Applied Computational Intelligence and Informatics SACI 2012, 24-26 May, Timișoara, Romania, ISBN : 978-1-4673-1012-3, DOI: 10.1109/SACI.2012.6249969.
8. Ruben Crișan, Cosmin Dărab, Ioan Nașcu, „Wastewater treatment plant identification with pseudorandom binary sequence signals”, Environmental Legislation, Safety Engineering and Disaster Management 9th edition, ELSEDIMA 2012, <http://www.elsedima.conference.ubbcluj.ro>.
9. Cosmin Darab, Antoniu Turcu, Internal model control for MPPT of a solar PV system, International Conference on Modern Power Systems (MPS), 2017, DOI: 10.1109/MPS.2017.7974464, Electronic ISBN: 978-1-5090-6565-3.
10. Cosmin Darab; Antoniu Turcu; S. Stefanescu; A. Botezan; Constantin Pica; Sorin Pavel; Sarah Abdourraziq, ”Robust control of MPPT of a PV cell”, Electromechanical and Power Systems (SIELMEN), 2017, ISBN: 978-1-5386-1846-2.
11. Sarah Abdourraziq; Mohamed Amine Abdourraziq; Cosmin Darab, ” Photovoltaic water pumping system application in Morocco”, 2017 International Conference on Electromechanical and Power Systems (SIELMEN), DOI: 10.1109/SIELMEN.2017.8123331, Electronic ISBN: 978-1-5386-1846-2.
12. M. A. Abdourraziq; S. Abdourraziq; M. Maaroufi; Mouhayedine Tlemcani; Cosmin Darab, ”

Experimental results of photovoltaic emulator systems”, 2017 International Conference on Electromechanical and Power Systems (SIELMEN), DOI: 10.1109/SIELMEN.2017.8123329, Electronic ISBN: 978-1-5386-1846-2.

13. M. A. Abdourraziq; S. Abdourraziq; M. Maaroufi; Cosmin Darab; Cosmin Darab, ” An improved fuzzy slide mode control applied to PV systems”, 2017 International Conference on Electromechanical and Power Systems (SIELMEN), DOI: 10.1109/SIELMEN.2017.8123330, Electronic ISBN: 978-1-5386-1846-2.

14. Sarah Abdourraziq; Mohamed Amine Abdourraziq; Cosmin Darab, ” Maximum power point tracking applied to PV systems under partial shading conditions”, 2017 International Conference on Electromechanical and Power Systems (SIELMEN), Pages: 286 – 290, DOI: 10.1109/SIELMEN.2017.8123334, Electronic ISBN: 978-1-5386-1846-2.

15. Dărab Cosmin, Hodrea Ramona, Ruben Crișan, Ioan Nașcu, ” Modeling and Internal Model Control Strategy of pH Neutralization Process”, 20th Telecommunications Forum, pp. 1579-1582, WOS:000316626800372, ISBN:978-1-4673-2984-2.

16. Cosmin Dărab, Ruben Crișan, Nașcu Ioan, ” Modeling and validation of nonlinear time-varying pH industrial processes”, IEEE International Conference on Automation, Quality and Testing, Robotics, 2012, pp. 114-117, WOS:000400227100020, ISBN:978-1-4673-0702-4.

17. Hodrea Ramona, Nascu Ioan, Cosmin Dărab, ” Modeling of Drug Delivery in General Anesthesia”, 20TH TELECOMMUNICATIONS FORUM (TELFOR),pp.891-894, DOI: 10.1109/TELFOR.2012.6419351, WOS:000316626800212.

18. Birs Isabela; Nascu Ioana; Darab Cosmin; Nascu Ioan, ” Modelling and calibration of a conventional activated sludge wastewater treatment plant”, IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), pp.257-262, WOS:000390997900043, ISBN:978-1-4673-8690-6.

19. Pop Cristina Ioana; Ionescu Clara, De Keyser Robin; Dulf Eva; Valean Honoriu; Neaga Adrian; Darab Cosmin, ” An Alternative EPSAC Based Control Strategy for Multivariable Time Delay Processes”, IEEE International Conference on Automation, Quality and Testing, Robotics, 2012, pp. 150-155, WOS:000400227100027, ISBN:978-1-4673-0702-4.

20. Crisan Ruben, Andrei Trombitas, Nascu Ioan, Darab Cosmin, ” Wastewater Treatment Plant in a milk processing factory”, IEEE International Conference on Automation, Quality and Testing, Robotics, 2012, pp.612-615, WOS:000400227100111, ISBN:978-1-4673-0702-4.

INFORMATII SUPLIMENTARE

2016-pres.	Reviewer (Energies, Applied Science, International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, Springer).
2014-pres.	Membru of <i>IEEE, EnergyCPD</i> .

SATGII DE PREGATIRE

2017	University of Technology of Belfort-Montbéliard (UTBM) - Research Institute FEMTO-ST (UMR CNRS)
2018	Energy - Galileo Master Certificate (GMC)

LANGUAGE SKILLS

Limba Materna Alte limbi	Romanian				
	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	B1	C1
German	A2	A2	A2	A2	A2

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

COMUNICARE

Abilitati de comunicare dobandite prin:

- Activitati de predare
- Activitati de indrumare studenti
- Participari la conferinte internationale
- Activitati de cercetare in echipe
- Stagii de pregatire in strainatate.

ABILITATI DE UTILIZARE SOFTURI DEDICATE

Specialized Software Packages:

- Autocad, Matlab, Python, C++, Visual C, Pascal

ALTE INFORMATII

- Driver license B-category, Soccer player (junior – local team), Volleyball player (1991- 1994), Diver, Boat license – marine.

November, 2024

Cosmin Darab