

Personal information

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URL for personal	https://danmicu.ro/		
website: https://entrec.utcluj.ro/docs/main_core/Micu%20Dan/LL_Micu		<u>cu_Dan.pdf</u>	

Education

Year	Faculty/department - University/institution - Country
2014	Habilitation – Electrical Engineering - Technical University of Cluj-Napoca, Romania
2004	Ph.D. in Electrical Engineering - Technical University of Cluj-Napoca, Romania
2003	Bachelor in Mathematics - (average 9.52) Babes-Bolyai University, Cluj-Napoca, RO
1999	Master in Power Systems - (average 10) Technical University of Cluj-Napoca, Romania
1998	Bachelor in Power Systems - (average 9,92) Technical University of Cluj-Napoca, RO

Positions - current and previous

(Academic sector/research institutes/industrial sector/public sector/other)

Year	Job title – Employer - Country	
2015-pres.	Professor - Technical University of Cluj-Napoca, Faculty of Electrical Enginnering, Cluj-Napoca, RO	
2024-pres.	Director - Electrotechnics and Mesurements Department, Technical University of Cluj-Napoca,	
	Faculty of Electrical Enginnering, Cluj-Napoca, RO	
Mar. 2023-	Part-time Professor – Beijing Jiaotong University, School of Renewable Energy, Beijing, China	
June 2023		
Aug.2022-	Fulbright Fellow – Professor – University of Florida, Electrical and Computer Engineering, USA	
Dec.2022		
Mar. 2022–	Part-time Professor – Beijing Jiaotong University, School of Renewable Energy, Beijing, China	
June 2022		
Mar. 2021–	Part-time Professor – Beijing Jiaotong University, School of Renewable Energy, Beijing, China	
June 2021		
Mar. 2020–	Part-time Professor – Beijing Jiaotong University, School of Renewable Energy, Beijing, China	
June 2020		





Part-time Professor – Beijing Jiaotong University, School of Renewable Energy, Beijing, China	
- Fulbright Fellow – Professor – University of Florida, Electrical and Computer Engineering, USA	
Associate Professor - Technical University of Cluj-Napoca, Faculty of Electrical Enginnering	
Scientific Expert – Managerial Agency of Scientific Research, Inovation and Technological	
Transfer, Bucharest-Ministry of Education and Research, Romania	
Lecturer - Technical University of Cluj-Napoca, Faculty of Electrical Enginnering, RO	
Assistant - Technical University of Cluj-Napoca, Faculty of Electrical Enginnering, RO	
PhD Researcher - Vrije Universitiet Brussels, Electrical and Computer Engineering, Brussels, BE	

Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. List the most relevant.)

Year	Project title - Role – Funder – Budget – link to project webpage	
Academic sector grants: Project Manager - 8 research grants obtained by international competitions		
2023-	Smart Grid-Efficient Interactive Buildings, 101123238/2023- EVELIXIA, HORIZON-CL5-2022-D4-02,	
2027	Total budget: 8.189.865 EUR; TUCN budget: 360.437 EUR, <u>https://build-up.ec.europa.eu/en/resources-</u>	
	and-tools/links/evelixia-project	
2021-	Holistic Green Airport, 101036871 – OLGA, HORIZON: H2020-LC-GD-5-1-2020, Total budget:	
2026	25.364.993 EUR; TUCN budget: 758.437 EUR, <u>www.olga-project.eu</u>	
2019-	Renewable Cogeneration and Storage Technologies Integration for energy Autonomous Buildings	
2022	815301-RE-COGNITION, HORIZON: H2020-LC-SC3-2018-2019-2020/H2020-LC-SC3-2018-	
	RESTwoStages, Total budget: 4.990.000 EUR; TUCN budget: 221.250 EUR, https://re-cognition-	
	project.eu/	
2019-	A holistic framework for Empowering SME's capacity to increase their energy efficiency, 847132-	
2022	SMEmPower Efficiency, HORIZON: H2020-LC-SC3-2018-2019-2020/H2020-LC-SC3-EE-2018, Total	
	budget: 1.998.750 EUR, TUCN budget: 171.875 EUR, https://smempower.com/	
2020-	Generate energy efficient acting and Results at small & medium enterprises, 894356–GEAR@SME,	
2022	HORIZON: H2020-LC-SC3-2018-2019-2020 / H2020-LC-SC3-EE-2019, Total budget: 1.993.227 EUR;	
	TUCN budget: 56.593 EUR, <u>https://www.gearatsme.eu/</u>	
2016-	Demand Response in Blocks of Buildings, 696114 - DR-BOB, HORIZON: H2020-EE-2014-2015/H2020-	
2019	EE-2015-2-RIA, Total budget: 4.274.499 EUR, TUCN budget: 241.687 EUR	
	https://cordis.europa.eu/project/id/696114	
2015-	Meeting the energy professional skills, 649773-MENs, HORIZON: H2020-EE-2014-CSA, Total budget:	
2017	1.478.160 EUR; TUCN budget: 55.842 EUR, <u>https://cordis.europa.eu/project/id/649773</u>	
2016-	Enhancing the Transfer of Research and Development Methods in Energy-related Clusters from Norway	
2017	to Romania, 28.407/26.05.2017 SEE-MarketUptake, EEA and Norway grants	
Academic sector grants: Project Manager - 7 research grants obtained by national competitions (selection)		
2020-	Pachet integrat de surse regenerabile pentru clădiri autonome PN-III-P3-3.6-H2020-2020-0121;	
2021	Contract nr. 44/2021:	



2020-	Cadru holistic pentru creșterea eficienței energetice în IMM-uri PN-III-P3-3.6-H2020-2020-0121;	
2021	Contract nr. 42/2021	
2010-	Modeling, prediction and design solutions, with maximum performance, to reduce the impact of	
2013	dispersion currents on underground metal gas transport pipelines, CNCSIS TE 34/09.08.2010	
2006-	Impact of anthropic electromagnetic fields on ecosystems – ICEMECOS, CEEX, nr. X2C37/2006	
2008	(Project manager TUCN partner)	
2004-	Electromagnetic devices design optimisation based on electromagnetic field synthesis in inaccessible	
2006	inhomogeneous environments, CNCSIS AT_224	
Academic sector grants: Team Member - 10 research grants obtained by european competitions (selection)		
2023-	Renewable Energy-based Positive Homes - RENplusHOMES, HORIZON-CL5-2022-D4-01-02, Total	
2026	budget: 5.999.987 EUR, TUCN budget: 463.187 EUR, https://renplushomes.eu/	
2022-	Energy Transition audits towards decarbonization, 101076424/2022 – EnTRAINER, HORIZON:	
2025	LIFE-2021-CET-AUDITS, Total budget: 1.842.112 EUR, TUCN budget: 283.179 EUR	
	https://entrainer-project.eu/	
2021-	Sun coupled innovative Heat pumps - SUNHorizon, HORIZON: H2020-LC-SC3-2018-RES, Total	
2023	budget: 8.999.815 EUR, TUCN budget: 145.268 EUR, <u>https://sunhorizon-project.eu/</u>	
2021-	Design and development of an Energy Efficiency Management and Control System with cost-	
2023	effective solutions for residential and educational buildings –332783 DOITSMARTER	
	EEA and Norway grants, Total budget: 542.400 EUR, TUCN budget: 167.000 EUR	
	https://entrec.utcluj.ro/doitsmarter/	
2022-	Empowering energy efficiency awareness through a holistic educational approach -346660	
2023	ENERGEIA, EEA and Norway grants, Total budget: 199.987 EUR, TUCN budget: 140.000 EUR,	
	https://www.linkedin.com/company/energeia-project-2023/	
2022-	Supporting increased knowledge on renewable energy and energy efficiency in Alba Iulia-	
2023	346649 – GREENER, RO-ENERGY-0146, EEA and Norway grants, Total budget: 210.196 EUR, TUCN	
	budget: 38.000 EUR, https://eeagrants.org/archive/2014-2021/projects/RO-ENERGY-0146	
2024-	Fostering the implementation of shallow geothermal hybrid heating and cooling systems in the	
2026	Danube Region - Danube GeoHeCo, Interreg Danube Region Programme, Total budget:	
	2.462.500 EUR, TUCN budget: 334.734 EUR	
2024-	Building Local Partnership for reducing the fossil energy demand of district heating systems in	
2026	Eastern Danube Region – REHEATEAST, Interreg Danube Region Programme, Total budget:	
	2.214.691 EUR, TUCN budget: 163.193 EUR	

Total: 18 - European Research Projects (Manager at 8 European Projects)

Total budget for Projects: (over 60 mil Euro)

Total Budget for TUCN Partner: (over 6 mil Euro)

- 16 National Research Projects (Manager at 7 national projects)
- > 20 projects for industry



Track record of the last 5 years most important scientific papers (selection)

ISI journal papers (Q1 and Q2):

- 1.Y. Li, S. Su, M. Zhang, Q. Liu, X. Nie, M. Xia, Dan D. Micu, "Multi-Agent Graph Reinforcement learning Method for Electric Vehicle on-Route Charging Guidance in Coupled Transportation Electrification", IEEE Transactions on Sustainable Energy, 15(2), 2024, DOI: 10.1109/TSTE.2023.3330842.
- 2.T. Oarga, G. Prunean, B. Varga, D. Moldovanu, Dan D. Micu, "Comparative Analysis of Energy Efficiency between Battery Electric Buses and Modular Autonomous Vehicles", Applied Sciences, 14(11), 2024, DOI: 10.3390/app14114389.
- 3.A. Iancu, P. Hendrick, Dan D. Micu, A. Cote, "Pandemic-Induced Shifts in Climate Change Perception and Energy Consumption Behaviors: A Cross-Country Analysis of Belgium, Italy, Romania, and Sweden", *Sustainability*, 15(20), 14679, 2023, DOI: 10.3390/su152014679.
- 4. Berciu, E. Dulf, Dan D. Micu, "Improving the Efficiency of Electricity Consumption by Applying Real-Time Fuzzy and Fractional Control", *Mathematics*, 10(20), 3807, 2022. DOI:10.3390/math10203807.
- 5.Cristea, M. Cristea, Dan D. Micu, A. Ceclan, R. Tîrnovan, F. Serban, "Tridimensional Sustainability and Feasibility Assessment of Grid-Connected Solar Photovoltaic Systems Applied for the Technical University of Cluj-Napoca", Sustainability, 14(17), 10892, 2022, DOI:10.3390/su141710892.
- 6.Kereszy, V. Rakov, L. Czumbil, A. Muresan, Z. Ding, Dan D. Micu, V. Cooray, "Energetic Radiation from Subsequent-Stroke Leaders: The Role of Reduced Air Density in Decayed Lightning Channels", Applied Sciences - Physics, 12(15), 7520, 2022. DOI:10.3390/app12157520, WOS:000840158700001.
- 7.Jurj, L. Czumbil, B. Bârgăuan, A. Ceclan, A. Polycarpou, Dan D. Micu, "Custom Outlier Detection for Electrical Energy Consumption Data Applied in Case of Demand Response in Block of Buildings", Sensors 2021, 21(9), 2946. DOI:10.3390/s21092946.
- 8.M. Cretu; L. Czumbil, B. Bargauan, A. Ceclan, A. Berciu, A. Polycarpou, R. Rizzo, Dan D. Micu: "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", IET Renewable Power Generation, 14(15), pp 2864-2875, 2020, DOI: 10.1049/iet-rpg.2020.0096.
- *9*.Darab, A. Turcu, H. Beleiu, S. Pavel, I. Birou, Dan D. Micu, "Hybrid load forecasting using gaussian process regression and novel residual prediction", *Applied Sciences*, Volume 10, Issue 13, Article number 4588, 2020, DOI: 10.3390/app10134588.
- Y. Zhu, V. A. Rakov, M. D. Tran, W. Lyu, Dan D. Micu, "A Modeling Study of Narrow Electric Field Signatures Produced by Lightning Strikes to Tall Towers", *Journal of Geophysical Research: Atmospheres*, Vol. 123/18, Pp. 10.260-10.277, 2018, DOI10.1029/2018JD028916.
- Total: 11 Scientific books published in publishing houses with prestige (7 first author)
 - 5 Book chapters published in an international publishing house
 - 1 Editor to a book published in an international publishing house
 - 318 Scientific papers published:
 - 115 ISI Thomson Journals/ Wos ISI Proceedings

57 – Scopus

146 - indexed in other data bases



Other relevant professional experiences

(e.g. institutional responsibilities, organisation of scientific meetings, membership in academic societies, review boards, advisory boards, committees and major research or innovation collaborations, other commissions of trust in public or private sector)

Year	Description - Role	
2023	Co-founder of <i>Energy Advisor</i> Start-up - https://renergia.ro/	
2022-pres.	Vice-president: Research-Education Division – Romania-China Chamber of Commerce	
2021-pres	Member – "Colegiul Consultativ pentru Cercetare Dezvoltare si Inovare (CCCDI)" Ministry	
	of Research	
2020-pres	Scientific Expert -Comisia de Științe Inginerești a Consiliului Național al Cercetării Științifice	
2020-pres	President – TUCN Senate Research Commission	
2020-pres	Scientific Expert – CeS-UTCN – Excelenta stiintifica si specializare inteligenta	
2019	Chairman of European EMTP-ATP Conference – Cluj-Napoca, 23-25 September 2019	
2019	Co-Chairman of 54th Universities Power Engineering Conference – UPEC 1-4 Sep. 2019	
2014-2017	Asistent Manager – PARTING-Parteneriat interuniversitar pentru excelenta in inginerie	
2014	General Chairman - 49th Universities Power Engineering Conference – UPEC 2-5 Sep. 2014	
2012-pres.	Member of the Scientific Research Council – Technical University of Cluj Napoca	
2010-pres.	Director - Energy Transition Research Center – EnTReC (entrec.utcluj.ro)	
2010-pres.	Member - International Steering Committee (UPEC, EHE, MedPower, Synergymed, MPS)	
2000-pres	Reviewer at International ISI Journals (Electric Power System Research, IET Renewable	
	Power Generation, Renewable Energy, Electronics, CSEE Journal of Power and Energy	
	Systems, International Transaction on Electrical Energy Systems, IET Generation,	
	Transmission & Distribution, COMPEL, Journal of Engineering, RRST, IEEE Transaction on	
	EMC, Energies, Sustainability, IEEE Transactions on Intelligent Transportation System,	
	Inverse Problems in Science & Engineering, IET Science, Measurement & Technology)	
2008-2020	Member of the Electrical Engineering Faculty Council – Technical University of Cluj	
2006-2010	Scientific expert - RDI Project Manager - Program INOVARE AMCSIT-Bucuresti	
2000-pres.	Member of IEEE, AGIR, IRE, USE-Efficiency, CREESC, TREC, EMTP	
2000-pres.	External Examiner in PhD commisions abroad (12 international; 14 national)	
2000-pres.	Erasmus coordinator (21 international institutional agreements)	
2008-pres.	Awards:	
	1. Best European Energy Service Project granted to Technical University of Cluj-Napoca &	
	Cluj-Napoca City Municipality - by EU Commission - Brussels –2019 (team award)	
	2. AEE Regional Award for Institutional Energy Management Association - by Association	
	of Energy Engineers (AEE) – Charlotte, USA –2018 (team award)	
	3. Romanian Energy Award – Special Jury Award (team award) - 2015	
	4. Excellence Award for research publications (individual award) - 2014	
	5. Professor Bologna National Prize (individual award) - 2012	
	6. Excellence Award for young researchers (individual award) - 2008	
	7. 2nd Prize for Research Projects - CEEx No. 136/2006: Intelligent and active diagnosis and	
	prediction of buildings in a complex polluted environment (team award) - 2008	
	8. 14 prizes for ISI Journal papers PN-II-RU-PRECISI and PN-III-P1-1.1- PRECISI - awarded by	
	National Authority of Scientific Research (team award) 2008-2023	



2000-pres. Research/Teaching Stages (selection) 2000/2001 - Vrije Universitiet Brussels, Belgium; 2003/2005/2008/2014- Federico II University, Italy; 2008/2011/2015 – University of Padova, Italy; 2007 – Aristotle University of Salonic, Greece; 2008 – Budapest University of Technology, Hungary; 2009 - University of Sao Paolo, Brazil; 2010/2016 – Frederick University, Cyprus; 2010 – University of Chicago, USA; 2011– Ecole Normale Superior Lyon, France; South Westphalia University, Germany; University of Western Macedonia, Greece; 2012 – Oita University, Japan; University of Cagliari, Italy; 2013 - University of Novi Sad, Serbia; 2014-University of Porto, Portugal; 2015–University of the West of England, UK; University of Patras, Greece; 2016 – University of Coimbra, Portugal; Novosibirsk State Technical University, Russia; 2017–The University of Hong Kong; Lehigh University, USA; Temple University, USA; University of Florida; 2018 -San-Diego University, USA; Texas Southern University, USA; 2019 – Beijing Jiaotong University, China; Cork Technological Institute, Ireland; 2020 – Brunel University London, UK; 2022 – Marmara University, Turkey; Abu Dhabi Polytechnic, UAE; University of Florida, USA; Howard University, USA; 2023 – Beijing Jiaotong University, China; Huazhong University of Science and Technology – HUST, China; Universitat Politècnica de Catalunya, Spain; Dalian Jiaotong University, China; 2024 – Technological Institute of Kozani, Greece; Cardiff Univeristy, Wales, UK.

*Complete list of projects/papers: <u>https://entrec.utcluj.ro/docs/main_core/Micu%20Dan/LL_Micu_Dan.pdf</u>

September 2024

Professor Dan D. Micu