



## **CURRICULUM VITAE**

Name: Marinescu  
Christian Name: Corneliu  
Job: Professor, Department of Electrical Engineering and Applied Physics;  
Head of POWERELMA research laboratory.  
Address: BI Eroilor 29, Brasov 500036, Romania, Transilvania University.  
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Earned Degrees: 1) Ph. D. from the Universitatea Politehnica Bucharest, 1991,  
Thesis "Contributions on an Diesel Engine-Synchronous Generator- Induction  
Motors Locomotive Development".  
2) M Sc in "Environmental Monitoring", Transilvania University Brasov,2001.  
Thesis " **Electric Vehicles powered by Fuel Cells**"  
3) M Sc in Electromechanics, Institutul Politehnic Brasov,1971.  
Thesis " Synchronous Generator with SCR controlled excitation " .

Grants : 15 grants in EU projects in the last 20<sup>th</sup> years, (more than 24 months):  
1993-1994 : 7.5 months at Politecnico di Torino, Italy. Work developed under the  
supervision of Prof. Paolo Ferraris and Prof. Francesco Profumo.  
1996 and 1998: 8 weeks at TEI Patras, Greece.  
1998: 8 weeks at University of Central Lancashire.  
1999: one week TEI of Pireas and 8 weeks TEI of Patras.  
2000: 2 weeks at the University of Perugia, Italy.  
2001 February - March : IUT Nisa, Universite Sophia Antipolis, Nisa, Franta.  
2001: 2 weeks at University of Delft, Netherlands.  
2004: 2 weeks University of Zaragoza, Spain.  
2005 2 weeks TEI Larissa and TEI Iraklion, Greece.  
2008 2 weeks UK, ARU Cambridge and DIT Dublin, Ireland  
2012, 2013 4 weeks University of Karabuk, Turkey  
2014 2 weeks University of Huddersfield.UK  
2015 1 week University of Malaga, Spain.

Experience: 1971-1973 researcher ISCT ( R&D on Transport Institute), Bucharest;  
1973-1974 engineer Locomotives Depot of Brasov, supervising the Diesel-electric  
locomotives department;

1975 -2016 member of the teaching staff "Transilvania" University of Brasov.  
Professor since 1999.

Languages: Mother tongue : Romanian  
Language : English: Reading - Very good, Writing-Very good, Speaking - Very good  
Language : Italian: Reading -Good, Writing – Elementary, Speaking - Elementary  
Language : Hungarian: Reading - Good, Writing - Elementary, Speaking - good

Publications: 13 books, 8 teaching books (2 in English written at Politecnico di Torino, Italy);  
188 scientific papers ( 16 in Journals like Renewable Energy Elsevier; IEEE Transactions on Industrial Electronics, IEEE Transactions on Power Electronics, IET Renewable Energy).

Awards: **Paper awarded with the IET Premium Awards 2015** (see below)

Research work: 41 research projects/research contracts fulfilled, mainly in the field of Power Electronics, Renewable energies, Efficient use of energy in industry and transport(Electric and Hybrid Vehicles).  
The most important to mention in the last years (as project leader):

**International**

2007-2009 **FP6:CRISTAL** , Project full title: CONTROL OF RENEWABLE INTEGRATED SYSTEMS TARGETING ADVANCED LANDMARKS

2016-2017 LIFE, "SUSTAINHUTS, **LIFE15 CCA/ES/000058**

2017-2019 Horizon2020 **ERANET-LAC**, Project RETRACT, Project full title: "Enabling RESilient urban TRANsportation systems in smart CiTes".

**National**

2007-2010 Research project IDEI no. 134/2007 RES in Smart Hybrid MicroGrids

2007-2010 Research project „Parteneriate” no. D1 11 0004 „ Intelligent distributed system for improving the efficiency of Hidroelectric plants „

2007-2010 Research project „Parteneriate” no. D3 21 062, „ Hybrid wind-hydro-energetic system”

2008-2011 E-Farm Informatics Support System for the Design and Control of Hybrid Energy Farms. Research project „Parteneriate” no D3 22 134/2008-2011.

Area of expertise: Deep knowledge in power electronics( PE) especially involving:  
- electric machines drives (DC and AC);  
- renewable energy sources-RES  
- electric and diesel-electric vehicles;  
Sound knowledge in saving Electric energy -RUE.  
Reliable knowledge on Energy management in industry.  
Reliable knowledge on Transport means and Energy management in transport.  
Skilled in International Co-operation as a result of more than 20<sup>th</sup> years of co-operation with a lot of EU Universities and organizations during my participation in the 4 EU Tempus Program Projects, 2 "Socrates" Program Projects, 2 Leonardo Projects belonging to EU Educational Programs, 1 EU LIFE project, FP6 and ERANET-LAC research projects.

POSITION  
**COORDINATOR  
OF ELECTRICAL  
ENGINEERING**  
School for **PhD**  
**IOSUD UTBv**

PhD coordinator in the doctoral studies domain: **Electrical Engineering**

Since: Year / date – ex. 2003/October

Expertise fields and research interest topics within the coordinated PhD domain:

- Power Electronics
- Renewable Energies
- Electric Transportation: Electric Vehicles

### **Most relevant publications in the last years**

- 1.I. Serban, C. Marinescu, "Battery energy storage system for frequency support in microgrids and with enhanced control features for uninterrupted supply of local loads", International Journal of Electrical Power and Energy Systems, vol. 54, Jan. 2014, pp. 432-441.  
<https://dx.doi.org/10.1016/j.ijepes.2013.07.004>
2. I. Serban , C. Marinescu *Design and experimental investigations of a smart battery energy storage system for frequency control in microgrids*, Journal of Renewable and Sustainable Energy **6**, 023130 (2014); doi: 10.1063/1.4873995,
3. I. Serban, C. Marinescu, *Control Strategy of Three-Phase Battery Energy Storage Systems for Frequency Support in Microgrids and with Uninterrupted Supply of Local Loads*, IEEE TRANSACTIONS ON POWER ELECTRONICS, VOL. 29, NO. 9, SEPTEMBER 2014,pp 5010-5021,  
<https://doi.org/10.1109/TPEL.2013.2283298>
- 4.L. Barote, C. Marinescu, *Software method for harmonic content evaluation of grid connected converters from distributed power generation systems*, Energy 66 (2014) 401e412.
5. L. Barote, C. Marinescu and M. N. Cirstea, *Control Structure for Single-Phase Stand-Alone Wind-Based Energy Sources*, IEEE TRANSACTION ON INDUSTRIAL ELECTRONICS, vol. 60, no. 2, pp. 764- 772, Feb. 2013.
- 6.I. Serban, R. Teodorescu, C. Marinescu, Energy Storage Systems Impact on the Short-Term Frequency Stability of Distributed Autonomous Microgrids, an Analysis Using Aggregate Models, ", IET Renewable Power Generation, vol 7, no. 5, Sept. 2013, pp. 531-539. <https://doi.org/10.1049/iet-rpg.2011.0283> **Paper awarded with the IET Premium Awards 2015**
7. I. Serban,C. Marinescu "Aggregate load-frequency control of a wind-hydro autonomous microgrid", *Renewable Energy Journal*, Elsevier, 2011, **36**, (12), pp. 3345-3354,
8. C.P. Ion, C. Marinescu, "Autonomous micro hydro power plant with induction generator", *Renewable Energy Journal*, Elsevier, 2011, **36**, (8), pp. 2259-2267, doi:10.1016/j.renene.2011.01.028
9. C.P. Ion, C. Marinescu , Three -Phase Induction Generators for Single-Phase Power Generation: An Overview, *Renewable & Sustainable Energy Reviews*, Elsevier, 2013
10. C.P. Ion, C. Marinescu, *Stand-alone micro-hydro power plant with induction generator supplying single phase loads*, J. Renewable Sustainable Energy **5**, 013105 (2013)
11. Barote, L, Marinescu, C. *Modeling and Operational Testing of an Isolated Variable Speed PMSG Wind Turbine with Battery Energy Storage* Advances in Electrical and Computer Engineering ; Volume 12, Issue 2, Year 2012, On page(s): 81 – 88;ISSN: 1582-7445, e-ISSN: 1844-7600;
12. L. Barote, **C. Marinescu**, *Current-Controller Effectiveness for Grid-Connected Converters: Comparative Case Studies*, Journal of energy engineering, vol. 144, no. 1 February 2018.
- 13.D. Munteanu, I. Serban, L. Barote, **C. Marinescu**, *Dynamic performance analysis of a photovoltaic power plant with integrated storage for microgrids dynamic support*, Journal of energy engineering, , vol. 144, no. 1 February 2018.
14. Andrei Marinescu, Adam Taylor, Siobhan Clarke, Ioan Serban, Corneliu Marinescu, "Optimizing Residential Electric Vehicle Charging under Renewable Energy: Multi-Agent Learning in Software Simulation and Hardware-in-the-loop Evaluation",Wiley- International Journal of Energy Research, vol. 43, no. 8, June 2019, pp.3853-3868 - *ISI Journal*. <https://doi.org/10.1002/er.4559>, FI: 3,3
15. I Serban, Sandra Cespedes, **C.Marinescu**, et al., *Communication requirements in Microgrids: a practical survey*, IEEE Acces, DOI 10.1109/ACCESS, 2020, FI 4,08,.

H Index: Scopus 16; Google Scholar 20; ISI Knowledge 13.

Brasov 28.07.2021

Prof dr eng. Corneliu MARINESCU