



Europass Curriculum Vitae

Personal information

Surname(s) / First name(s) **Nicola, Marcel**
Address(es) Calea Severinului street, nr.12, floor 5, ap.30, 200767 Craiova, Dolj, Romania
Telephone(s) **Mobile: +40 728070595**
E-mail **marcel.nicola@edu.ucv.ro; marcel_nicola@icmet.ro; marcel_nicola@yahoo.com**
Nationality Romanian
Date of birth August.03.1972
Gender Male

Desired employment / Occupational field

Academic and Research in Automation Engineering & Control Systems
WOS ID: H-8484-2017; Scopus ID: 55834877000; ORCID: 0000-0002-1456-0127;
U-1700-029T-9076; <https://www.researchgate.net/profile/Marcel-Nicola>

Work experience

28 years

Dates

2023¹ - onwards ; 2009² – onwards;

Occupation or position held

¹Associate Professor of University of Craiova; Department of Automatic Control and Electronics; **Ph.D. supervisor**, awarded by the Order of the Minister of Education no. 5291 of 28.06.2024; "Constantin Belea" Doctoral School, University of Craiova, Faculty of Automation, Computers and Electronics

²Scientific Senior Researcher in Automation; Scientific Manager (2020-2022); President of Scientific Council 2020-2022; Vice-President from 2023;

Main activities and responsibilities

- Project Manager and Project Participant of Research Programs
- Mathematical Simulations on Computer and Software Developer for SCADA in electrical domain and control of electric drive systems; Control Theory;

Name and address of employer

¹University of Craiova, A. I. Cuza Street, no.13, 200585, Craiova,;

²National Institute for Research, Development and Testing in Electrical Engineering – ICMET Craiova, Romania

Bvd. Decebal nr. 118A, code: 200515, Craiova, Dolj, Romania

Tel: +40 351 404 888; +40 351 404 889; Fax: +40 351 404 890; +40 251 415 482

E-mail : market@icmet.ro; icmet@icmet.ro

Website : www.icmet.ro

Type of business or sector

Research-Development, Tests for electrical engineering; Electrical equipment and apparatus certification; Product, Models and Prototypes Development, SCADA

Dates

2011 -2015

Associate Professor of University of Craiova - part time; Automation and Electronic Department

Dates

1997 - 2009

Occupation or position held

Senior Researcher, Head of Research Development Laboratory for Automations and SCADA, Adjunct Manager (2005-2009)

Main activities and responsibilities	- Project Manager and Project Participant of Research Programs - Mathematical Simulations on computer and Software Developer for SCADA in energetically domain					
Name and address of employer	National Institute for Research and Development in Energetically Engineering – ICEMENERG Craiova, Romania 1, Gh. Bibescu Street, code: 200256, Craiova, Dolj, Romania					
Type of business or sector	Research-Development for Energetically engineering; Electrical equipment and apparatus certification; Product, Models and Prototypes Development, SCADA					
Education and training	March,04,2024, HABILITATION THESIS					
	CONTROL OF PERMANENT MAGNET SYNCHRONOUS MOTORS AND POWER ELECTRONIC CONVERTERS BASED ON COMPUTATIONAL INTELLIGENCE AND FRACTIONAL CALCULUS					
Dates	1997 - 2004					
Title of qualification awarded	PhD					
Principal subjects/occupational skills covered	Thesis Title : ' Systems with saturation in command. Applications of the systems with delay in command' Domain: Systems Theory and Control Engineering					
Name and type of organisation providing education and training	University of Craiova, Romania					
Level in national or international classification	ISCED 8					
Dates	1996 - 1997					
Title of qualification awarded	Master					
Principal subjects/occupational skills covered	Disertation Title : ' Expert Systems in fuzzy logic' Special Automatic Systems					
Name and type of organisation providing education and training	University of Craiova, Romania					
Level in national or international classification	ISCED 7					
Dates	1990 - 1995					
Title of qualification awarded	Bachelor of Science					
Principal subjects/occupational skills covered	Expert Systems Systems and Computers Science					
Name and type of organisation providing education and training	University of Craiova, Romania					
Level in national or international classification	ISCED 6					
Personal skills and competences						
Mother tongue(s)	Romanian					
Other language(s)						
Self-assessment	<table border="1"> <tr> <td>Understanding</td> <td>Speaking</td> <td>Writing</td> </tr> </table>	Understanding	Speaking	Writing		
Understanding	Speaking	Writing				

European level (*)

English

French

Listening		Reading		Spoken interaction		Spoken production			
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user	A2	Basic user

(*) Common European Framework of Reference for Languages II series DJ nr. 1075 - "International English School".

Diploma in English B2

Organisational skills and competences

- Leadership of R&D activities regarding SCADA
- Technical Management for various types of R&D Projects

Technical skills and competences

- Systems Theory and Control Engineering
- Personal published mathematic results in systems with delay in state and command and saturation in command
- Design for SCADA and Automatic Systems
- Mathematic simulations software and Applications Industrial Software
- Control of electric drives systems and power electronic converters
- Switched systems
- Intelligent Control and Computational intelligence
- Fractional control
- Optimizations
- Distributed Systems

Computer skills and competences

Programming language for mathematic simulation, SCADA, distributed applications and assembler

Driving licence

B category

Hobby

Soccer, basket, chess, music

Additional information

-Married, 1 child

-Books:

-The stability and robustness of the Automatic systems with saturation and delay, Editura SITECH Craiova, 2007, ISBN 978-973-746-649-5, 370 pages (in romanian)- **single author**
 -Automatic systems with saturation and delay, Editura UNIVERSITARIA Craiova, 2004, ISBN 973-8043-552-2, 220 pages (in romanian) - **single author**
 - SCADA systems for monitoring of electrical equipments, Editura Electra București, ISBN 978-606-507-062-2, 291 pages, 2011. (in romanian) – **first author**
 - Sacerdoțianu D., **Nicola M.**, Patru I., Purcaru A., Contributions to the improvement of equipment for monitoring and diagnosing electrical power transformation, Editura SITECH Craiova, Seria Inginerie Electrică, ISBN 978-606-11-5995-6, 160 pagini, 2017. [CNCSIS B+]
 - APPLICATIONS OF AUTOMATION AND SCADA IN ENERGETICS AND MONITORING OF ELECTRICAL EQUIPMENT Editura AGIR Bucuresti, ISBN 978-973-720-836-1, 640 pages, 2021. [CNCSIS B+] - **first author**
 - **Nicola Marcel**, Dan Selișteanu, Claudiu-Ionel Nicola, COMPLEX INTELLIGENT CONTROL SYSTEMS OF PERMANENT MAGNET SYNCHRONOUS MOTORS AND ELECTRONIC POWER CONVERTERS, Editura AGIR-ASTR Bucuresti, ISBN 978-973-720-889-7, 640 pagini, 2023. [CNCSIS B+]
 -**Marcel NICOLA**, Claudiu-Ionel NICOLA —Fractional-Order Control of Grid-Connected Photovoltaic System Based on Synergetic and Sliding Mode ControllersII, 25 pagini, capitol în cartea —Power Converter of Electric Machines, Renewable Energy Systems, and TransportationII, MDPI Books, ISBN 978-3-0365-1170-2 (Hbk), ISBN 978-3-0365-1171-9 (PDF), <https://doi.org/10.3390/books978-3-0365-1171-9>; 2021
 - **Marcel NICOLA**, Claudiu-Ionel NICOLA —Sensorless Fractional Order Control of PMSM Based on Synergetic and Sliding Mode ControllersII, 44 pagini, capitol în cartea Advanced Control Systems for Electric DrivesII, MDPI Books, ISBN 978-3-03943-699-6 (Hbk), ISBN 978-3-03943-700-9 (PDF), <https://doi.org/10.3390/books978-3-03943-700-9>; 2020

-Number of scientific works and research projects is 373:

- 6 books in Romanian and 2 in english
- 226 papers (english and romanian; from which 171 B+, DBI including 111 ISI/IEEEExplore (24 in ISI journals (14 in Q1/Q2)):
- 22 reports, courses and presentations (english and romanian);
- 119 R&D projects;
- ISI-IF>87; HIRSCH - Indexes: WOS: 11; Google Scholar: 17, i10-index:32; Scopus: 14, ResearchGate: 17

- 7 patent granted/requests (6 in Romanian and 1 EPO):

-PREDICTIVE METHOD AND SYSTEM FOR DETERMINING THE OPERATING CONDITION IN BIG-BLASTER AIR CANNONS AND MICRO-CANNOS 23464004.3/EP23464004, 13.03.2023, EP4386332A1-19.06.2024 Teisanu Florin, Constantin Chelan, Butoi Marinela, Nicola Marcel, Nicola Claudiu

-Integrated automatic system for monitoring of the rail and road traffic at railway level crossings. OSIM CBI -A/00097/07.02.2014; RO 130761 B1 (30.03.2021);

-Method and equipment for digital control of multi-motor electrical drives with braking energy recovery, used for high capacity extraction plants. OSIM CBI-A00749/24.10.2016;

-Adaptive system to ensure energy quality in low voltage networks. OSIM CBI – A00692/21.09.2017., RO 132402 B1 (28.08.2020)

- Method and system for monitoring overhead power line cables. OSIM CBI A01090/12.12.2018, RO 133444 B1 (30.12.2020)

- Predictive method and system for establishing the operating state to cannons and pneumatic micro-cannons of the big-blaster type, OSIM CBI-A/00818/16.12.2022, RO 137379 A0

- High frequency rotary transformer, OSIM CBI, A/00789/05.12.2022; RO137480 (A0) – 2023-05-30

-Prize, medals and diplomas: 57 (national and international).

The most importants: -Silver medal for „Method and equipment for digital control of multi-motor electrical drives with braking energy recovery, used for high capacity extraction plants”, SALON INTERNATIONAL DES INVENTIONS, Geneva, april 2019, Switzerland;

-Diploma of merit (individual) awarded by the Ministry of Research and Innovation of Romania, April 2019.

- Diploma – gold medal, for the book „SISTEME COMPLEXE DE CONTROL INTELIGENT AL MOTOARELOR SINCRONE CU MAGNEȚI PERMANENȚI ȘI AL CONVERTOARELOR ELECTRONICE DE PUTERE”, European Exhibition of Creativity and Innovation, EUOROINVENT, May 2023, Iași, Romania; under the aegis of the Academy of Romanian Scientists

- Diploma AGIR for 2023 for the book *Sisteme complexe de control inteligent al motoarelor sincrone cu magneți permanenți și al convertoarelor electronice de putere*, Editura AGIR, Bucharest, September 13, 2024 under the aegis of the Romanian Academy of Technical Sciences

-Personal published mathematical results in systems with delay in state and command and saturation in command:

- Nicola Marcel, *The Stability of the Systems with Command Saturation, Command Delay, and State Delay*. Automation 2022, 3, 47–83. <https://doi.org/10.3390/automation3010003>, WOS:001204292200001

- Nicola M., Some new results of stability of systems with saturation and delay in command and delay in state, Annals of the University of Craiova, Series : AUTOMATION, COMPUTERS, ELECTRONICS and MECHATRONICS, VOL.1, 2004, pp. 26-32, ISSN 1841-0626;

- Nicola M., On the stability of systems with saturation and multiple delay in command and multiple delay in state, The 6th International Conference On Electromechanical and Power Systems SIELMEN 2007 Chișinău – Republic of Moldavia , published in Annals of the University of Craiova 2007, vol. 1, pp. 132-137, ISSN 1842-4805;

-Nicola M., On the stability of systems with saturation and distributed delay in command and distributed delay in state, The 6th International Conference On Electromechanical and Power Systems SIELMEN 2007 Chișinău – Republic of Moldavia, published in Annals of

	<p>the University of Craiova 2007, vol. 1, pp. 138-143, ISSN 1842-4805;</p> <p>-Nicola M., Some new results of stability of systems with saturation in command and multiple delay in command, International Symposium On System Theory SINTES 12 CRAIOVA, 2005, published in Annals of the University of Craiova, Series : AUTOMATION, COMPUTERS, ELECTRONICS and MECHATRONICS vol. 1, pp. 152-157, ISBN 973-742-148-5;</p> <p>-Nicola M., Some new results of stability of systems with saturation and multiple delay in command and multiple delay in state, 15th INTERNATIONAL CONFERENCE ON CONTROL SYSTEMS AND COMPUTER SCIENCE C.S.C.S. BUCURESTI, 2005 http://cscs15.ics.pub.ro/programCSCS15.pdf;</p> <p>-Nicola M., Some new results of stability of systems with saturation in command and delay in command The 8th International Symposium on Automatic Control and Computer Science S.A.C.S. IASI, 2004, EDITURA POLITEHNIUM IASI, ISBN 973-621-083-9;</p> <p>-Nicola M., Some new results of stability of systems with saturation and distributed delay in command and distributed delay in state The 8th International Symposium on Automatic Control and Computer Science S.A.C.S. IASI, 2004, EDITURA POLITEHNIUM IASI, ISBN 973-621-083-9.</p>
	<ul style="list-style-type: none"> - Membru IEEE (Control System Society & Power Electronics Society); - member of the General Association of Engineers from Romania - member SRAIT (Romanian Society of Automation and Technical Informatics) - member of Romanian EMC Association - member of technical commissions for review of technical projects from National Research Institute (in present with ICMET Craiova, and former with National Research Institute ICEMENERG Craiova) - member and zonal vicepresident of AAIR (Association for Automation and Instrumentation from Romania) 2005-2009 - member of Council of Doctoral School Electrical Engineering from 2021 - member of the Circle affiliated to the Romanian Academy of Technical Sciences Craiova Branch - "Contactless Power transfer" - More than 350 Reviews (more than 50 ISI journals), from which: Editorial board memberships for journal Advances in Science, Technology and Engineering Systems Journal, ASTESJ, USA, from june 2017; Guest Editor and Academic Editor for Energies (IF>3.3) nov 2021-mai 2022 New Frontiers in Electrical Power Systems Quality; Guest Editor and Academic Editor for Automation feb 2022- oct 2022 Dynamics and Intelligent Control of Complex and Switched Systems; Guest Editor and Academic Editor for Fractal and Fractional (IF>3.3) mai 2023- 31.mai 2024 Electric Drive Control Using Fractal and Fractional Calculus, Topical Advisory Panel memberships for Fractal and Fractional (IF>3.3 Q1) from ian 2022, Topical Advisory Panel memberships for Mathematics (IF>2.59 Q1) from may 2023 Verified reviews for the journas: IEEE Transactions on Industrial Electronics, IEEE Transactions on Transportation Electrification, IEEE Acces, IEEE International Power Electronics and Motion Control Conference, IET Generation, Transmission & Distribution, Mathematical Problems in Engineering- Hindawi, Engineering Science and Technology, an International Journal, Energies, IEEE Journal of Emerging and Selected Topics in Power Electronics, Materials Today: Proceedings; Sensors; Actuators, Materials, Applied Artificial Intelligence, ISA Transactions, Fractal and Fractional, Symmetry, Applied Sciences, Indonesian Journal of Electrical Engineering and Computer Science, Automatika, Journal of King Saud University - Engineering Sciences, IWACCE conference, Mathematics, Machines, MEIE conference, Electronics, Sustainability, Energy Reports, Hindawi_Journal of Modelling and Simulation in Engineering, Algorithms, Electric Power Systems Research, IEEE Transactions on Green Communications and Networking, e-Prime - Advances in Electrical Engineering, Electronics and Energy, Control Engineering Practice, Cybernetics and Systems (see PUBLON, ORCID). - Presiding Member on the <i>Automation</i> section of some national conferences (National Simposium in Automation, Informatics ans Communications in Energies 2016,2018,2019) and IEEE conferences (conducted a session as a

chairman ICECET 2023 International Conference of Electrical, Computer and Energies Technologies, CapeTown, **Electrical vehicles and Control systems session**; conducted a session as a **chairman** International Conference on Electrical, Computer, Communications and Mechatronics Engineering -ICECCME 2023- Tenerife, **CONTROL session** 475 papers from 88 țări; conducted a session as a **chairman** la ICECET 2022, Praga, **ROBOTICS AND CONTROL SYSTEMS** session, International Conference of Electrical, Computer and Energies Technologies: 84 țări și 425 articole; conducted a session as a **chairman** at ICECET 2021, Cape Town, **POWER ELECTRONICS** session, International Conference of Electrical, Computer and Energies Technologies: 83 countries and 400 papers; SIELMEN 2019, Chisinau INTERNATIONAL CONFERENCE ON ELECTROMECHANICAL AND POWER SYSTEMS, **chairman** for **Automation, Robotics and Mechatronics** session and **Plenary Speaker**); International Conference on Electrical Systems & Automation 2025 Troyes, France, **TPC International Program Committee**

November 20, 2025

Associate Professor Ph. D. Eng.

Marcel NICOLA



UNIVERSITY OF CRAIOVA

National Institute for Research, Development and Testing in Electrical Engineering – ICMET Craiova, Romania

