



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **MIHAI RATA**
Address
Mobile
E-mail(s) mihai.rata@usm.ro, mihair@eed.usv.ro
Nationality Romanian
Date of birth November 12th 1970
Gender Male

Work experience

Dates	01/03/2009 – until present
Occupation or position held	Associate professor Ph.D. Eng.
Name and address of employer	"Stefan cel Mare" University of Suceava/ Faculty of Electrical Engineering and Computer Science (FIESC) / Electrotechnics University, no. 13, 720229 Suceava (Romania)
Type of business or sector	Higher Education
Main activities and responsibilities	Power electronics – courses, laboratory and project, Numerical control of electrical drive systems – courses, laboratory, Electrical Systems Control with PLC – courses, laboratory and project.
Dates	04.03.2002÷1.10.2005, 1.10.2007÷23.02.2009 04 March 2002 - 28 February 2009
Occupation or position held	Lecturer Drd./Phd. Eng.
Name and address of employer	"Stefan cel Mare" University of Suceava/ Faculty of Electrical Engineering and Computer Science (FIESC) / Electrotechnics Department University, no. 13, 720229 Suceava (Romania)
Type of business or sector	Higher Education
Main activities and responsibilities	Power electronics – courses, laboratory and project, Numerical control of electrical drive systems – courses, laboratory Electrical Machines – laboratory, project
Dates	1 October 2005 – 1 October 2007
Occupation or position held	Academic Research in a Post-Doctoral program
Name and address of employer	"Stefan cel Mare" University of Suceava University, no. 13, 720229 Suceava (Romania)
Type of business or sector	Higher Education
Main activities and responsibilities	RFID systems

Dates	01 October 1999 - 03 March 2002
Occupation or position held	Assistant Drd. Eng.
Name and address of employer	"Stefan cel Mare" University of Suceava/ Faculty of Electrical Engineering and Computer Science (FIESC) / Electrotechnics Department University, no. 13, 720229 Suceava (Romania)
Type of business or sector	Higher Education
Main activities and responsibilities	Electrotechnical materials - laboratory Electrical Machines – laboratory, project
Dates	01 March 1996 - 01 October 1999
Occupation or position held	Prep. Drd. Eng.
Name and address of employer	"Stefan cel Mare" University of Suceava/ Faculty of Electrical Engineering and Computer Science (FIESC) / Electrotechnics Department University, no. 13, 720229 Suceava (Romania)
Type of business or sector	Education
Main activities and responsibilities	Electrotechnical materials - laboratory Electrical Machines – laboratory, project
Education and training	
Dates	1985 - 1989
Title of qualification awarded	baccalaureate degree
Principal subjects / occupational skills covered	Electrotechnics
Name and type of organisation providing education and training	"Liceul industrial Nr.3 " High School Suceava (Romania)
Dates	1990 - 1995
Title of qualification awarded	engineer
Principal subjects / occupational skills covered	electrotechnics specialization
Name and type of organisation providing education and training	"Gh. ASACHI" Technical University Professor Dimitrie Mangeron Bd, no. 51 to 53, 700050 Iasi (Romania)
Level in national or international classification	ISCED 5
Dates	1995 - 1996
Title of qualification awarded	Master degree
Principal subjects / occupational skills covered	Power electronics
Name and type of organisation providing education and training	"Gh. ASACHI" Technical University Professor Dimitrie Mangeron Bd, no. 51 to 53, 700050 Iasi (Romania)
Dates	1996 - 2004
Title of qualification awarded	PhD.
Principal subjects / occupational skills covered	Thesis Title: " Contributions to vector control of electric drive systems with AC machines"
Name and type of organisation providing education and training	"Gh. Asachi" Technical University Iasi (Romania)
Level in national or international classification	ISCED 6

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s) **English**

Self-assessment
European level ()*

English

Understanding		Speaking		Writing
Listening	Reading	Conversation	Oral speech	Expressing ideas in writing
B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user

(*) [*Common European Framework of Reference \(CEF\) level*](#)

Social skills and competences Team spirit:

Technical skills and competences Power electronics;
Numerical control of electrical drive systems;
PLC automations.

Computer skills and competences Competent with most Microsoft Office programmes, Matlab-Simulink, PLC Programming Software (CodeSys, TIA Portal, MELSEC),

Driving licence(s) B

Relevant Publications Annex 1

- **Books**

RAȚĂ Gabriela, RAȚĂ Mihai, Răboaca Maria Simona (2019), *Calitatea energiei electrice, Îndrumar de laborator*, Editura Universitatii Suceava, Suceava, ISBN: 978-973-666-584-4, 113 pag.

UNGUREANU Constantin, RAȚĂ Mihai, RAȚĂ Gabriela (2009), *Încercările echipamentelor electrice - Îndrumar de laborator*, Editura Universitatii Suceava, Suceava, ISBN: 978-973-666-308-6, 250 pag;

RAȚĂ Mihai (2008), *Convertoare statice*, Editura Didactica si Pedagogica-R.A., Bucuresti, ISBN: 978-973-30-2427-9, 212 pag;

RAȚĂ Mihai (2008), *Convertoare Statice - Îndrumar de laborator*, Editura Universitatii Suceava, Suceava, ISBN: 978-973-666-300-0, 125 pag;

DIACONESCU Mircea-Paul, RAȚĂ Mihai (2005), *Complemente de acționări electrice reglabile cu motoare asincrone*, Casa de Editura Venus, Iasi, ISBN: 973-7960-79-3, 358 pag.

- **Papers**

RAȚĂ M., RAȚĂ G., FILOTE C., RABOACA M.S., GRAUR A., AFANASOV C., FELSEGHI R. A. (2020), The Electrical Vehicle Simulator for Charging Station in Mode 3 of IEC 61851-1 Standard, *Energies*, Volume 13, Issue 1, Article No. 176, DOI: 10.3390/en13010176, ian 2020, Factor Impact 2.707

RĂBOACĂ Maria Simona, BADEA Gheorghe, ENACHE Adrian, FILOTE Constantin, RASOI Gabriel, RATA Mihai, LAVRIC Alexandru, FELSEGHI Raluca-Andreea, *Concentrating Solar Power Technologies*, *ENERGIES*, SN 1996-1073, MAR 18 2019, VL 12, IS 6, AR 1048, DI 10.3390/en12061048, WOS:000464494700009

RAȚĂ Mihai, RAȚĂ Gabriela, *An Efficient Method for Studying the Motion Graphs Optimization in Electric Drive Systems*, International Conference and Exposition on Electrical and Power Engineering - EPE2018, IASI, 18-19 oct, ISBN:978-1-5386-5062-2, WOS:000458752200088, pp 465-469

RAȚĂ Mihai, RAȚĂ Gabriela, *A Solution for Study of Positioning Control of Two Axes*, International Conference and Exposition on Electrical and Power Engineering - EPE2016, IASI, 20-22 oct, WOS:000390706300129, pp 648-652

RAȚĂ Mihai, RAȚĂ Gabriela, *Study solution of induction motor dynamic braking*, 2016 International Conference on Development and Application Systems (DAS2016), Suceava, 2016, pp. 33-37. doi: 10.1109/DAAS.2016.7492544

RAȚĂ Mihai, RAȚĂ Gabriela (2016), *A Solution for Study of Positioning Control of Two Axes*, THE 2016 INTERNATIONAL CONFERENCE AND EXPOSITION ON ELECTRICAL AND POWER ENGINEERING (EPE 2016), 20-22 Octombrie, 2016, Iasi, Romania, ISSB/ISBN: 978-1-5090-6128-0, pag: 648-652

RAȚĂ Mihai, RAȚĂ Gabriela (2016), *Study Solution of Induction Motor Dynamic Braking*, 13TH INTERNATIONAL CONFERENCE ON DEVELOPMENT AND APPLICATION SYSTEMS (DAS 2016), 19-21 Mai, 2016, Suceava, Romania, ISSB/ISBN: 978-1-5090-1993-9, pag: 33-37

RAȚĂ Mihai, RAȚĂ Gabriela, AFANASOV Ciprian, "Soluție pentru studiul preciziei de poziționare a unui motor pas cu pas" (2016), *Buletinul AGIR*, Supliment Nr.1/2016, pp 30-34

AFANASOV Ciprian, RAȚĂ Mihai, RAȚĂ Gabriela, "Optimizarea diagramelor de mișcare pentru sistemele de acționare cu motor pas cu pas" (2016), *Buletinul AGIR*, Supliment Nr.1/2016, pp 3-8

RAȚĂ Mihai, GRAUR Adrian, RAȚĂ Gabriela, AFANASOV Ciprian, PRODAN Cristina, *Researches in Ștefan cel Mare University of Suceava about Electric Vehicle* (2016), *ACTA ELECTROTEHNICA*, ISSN: 1841-3323, vol: 57, nr: 3-4, pag. 375-379

AFANASOV Ciprian, RAȚĂ Mihai, *Three-phase frequency converter with MC3PHAC controller* (2016), *ACTA ELECTROTEHNICA*, ISSN: 1841-3323, vol: 57, nr: 3-4, pag. 439-443

- RAȚĂ Gabriela, RAȚĂ Mihai (2015), *A solution for study of PID controllers using cRIO system*, Advanced Topics in Electrical Engineering (ATEE), 7-9 Mai, 2015, Bucuresti, Romania, ISSB/ISBN: DOI: 10.1109/ATEE.2015.7133685, pag: 121-124
- RAȚĂ Mihai, RAȚĂ Gabriela, CHATZIATHANASIOU Vasilis (2014), *A Solution for the Study and Understanding of PID Controllers*, 2014 International Conference and Exposition on Electrical and Power Engineering, 16-18 Octombrie, 2014, Iasi, Romania, ISSB/ISBN: IEEE CATALOG NUMBER CFP1447S-USB 978-1-4799-5848-1, pag: 1-4
- RAȚĂ Mihai, RAȚĂ Gabriela, MANDICI Leon, CERNOMAZU Dorel, PRODAN Cristina (2013), *A SOLUTION FOR DC-DC CONVERTERS STUDY*, International Conference on Automatic Control, Modelling & Simulation (ACMOS'13), 1-3 Iunie, 2013, Brasov, Romania, ISSB/ISBN: : 1790-5117, pag: 192-197
- AFANASOV Ciprian, RAȚĂ Mihai, MANDICI Leon (2013), *SPEED CONTROL OF DC MOTOR USING FOUR-QUADRANT CHOPPER AND BIPOLAR CONTROL STRATEGY*, Buletinul AGIR, Bucuresti, ISSN: 1224-7928, nr: 3, pag. 253-259
- AFANASOV Ciprian, HOPULELE Eugen, MANDICI Leon, RAȚĂ Mihai (2013), *STEP-DOWN VOLTAGE CONVERTER*, ACTA ELECTROTEHNICA (COPERNICUS Master List Journal-<http://journals.indexcopernicus.com/masterlist>), ISSN: 1841-3323, vol: 54, nr: 5, pag. 1-5
- RAȚĂ Gabriela, GRAUR Adrian, CHATZIATHANASIOU Vasilis, RAȚĂ Mihai, GRAUR Evelyne (2013), *THE STUDY OF THE DEFORMING REGIME OF THREE-PHASE RECTIFIERS USING PROGRAMMABLE AUTOMATION CONTROLLER - COMPACTRIO*, 17th INTERNATIONAL SYMPOSIUM on POWER ELECTRONICS - Ee 2013, 1-1 Noiembrie, 2013, Novi Sad, Serbia & Montenegro (ex-Yugoslavia), ISSB/ISBN: 978-86-7892-551-1, pag: 1-5
- RAȚĂ Mihai, Adrian JURALE, RAȚĂ Gabriela, MANDICI Leon, CHATZIATHANASIOU Vasilis, AFANASOV Ciprian (2013), *VARIABLE-FREQUENCY DRIVE WITH MC3PHAC*, Buletinul AGIR, nr: 4, pag. 219-223
- RAȚĂ Mihai, RAȚĂ Gabriela, MANDICI Leon, CERNOMAZU Dorel, PRODAN Cristina, AFANASOV Ciprian, NITAN Ilie (2012), *Efficient Gate Drive Circuit for IGBT*, INTERNATIONAL CONFERENCE AND EXPOSITION ON ELECTRICAL AND POWER ENGINEERING (EPE 2012), 25-27 Octombrie, 2012, Iasi, Romania, ISSB/ISBN: 978-1-4673-1172-4, pag: 427-431
- RAȚĂ Gabriela, POPA Valentin, RAȚĂ Mihai (2012), *The Study of the Deforming Regime of AC/AC Converter using Fourier and Multiresolution Analysis*, ELEKTRONIKA IR ELEKTROTEHNIKA, ISSN: 1392-1215, nr: No. 5(121), T 190, pag. 7-12;
- RAȚĂ Mihai, RAȚĂ Gabriela, CERNOMAZU Dorel, MANDICI Leon, AFANASOV Ciprian (2012), *UNCONVENTIONAL MOTORS BASED ON VIBRATION MOTION*, International Review of Electrical Engineering - IREE, Naples, ISSN: 1827- 6660, vol: 7, nr: 5, pag. 5542-5548
- RAȚĂ Gabriela, RAȚĂ Mihai (2014), *System for Monitoring and Analysis of Vibrations at Electric Motors*, Analele Universitatii Eftimie Murgu , Resita, ISSN: 1453-7397, nr: 3, pag. 97-104
- RAȚĂ Mihai, CERNOMAZU Dorel, POPA Valentin, RAȚĂ Gabriela (2011), *A FLEXIBLE SOLUTION TO STUDY ALL TYPES OF SINGLE-PHASE RECTIFIERS*, The International Journal of Arts & Sciences, ISSN: 1944-6934, vol: 4, nr: 19, pag. 99-105
- AFANASOV Ciprian, RAȚĂ Mihai (2011), *Position Control of a Two-phase Induction Motor with Three Phase Inverter*, Buletinul AGIR, Bucuresti, ISSN: 1224-7928, nr: 4, pag. 135-138
- AFANASOV Ciprian, MANDICI Leon, SIMION Alecsandru, RAȚĂ Mihai, MIHAI Sorin (2010), *RAPID TECHNIQUE FOR IMPLEMENTING A MODEL SIMULATED OF VECTOR CONTROL SYSTEM WITH TWO-PHASE INDUCTION MOTOR ON A HIGH POWER INVERTER*, ANALELE UNIVERSITATII DIN CRAIOVA: SERIA INGINERIE ELECTRICA, Craiova, ISSN: 1842-4805, vol: II, nr: 34, pag. 206-211
- RAȚĂ Mihai, MANDICI Leon, RAȚĂ Gabriela, STELUTA Mircea, AFANASOV Ciprian (2010), *Equipment for the study of motion graphs optimization in electric drive systems*, ANALELE UNIVERSITATII DIN CRAIOVA: SERIA INGINERIE ELECTRICA, Craiova, ISSN: 1842-4805, vol: II, nr: 34, pag. 142-146
- AFANASOV Ciprian, RAȚĂ Mihai, HOPULELE Eugen, SIMION Alecsandru (2010), *INDIRECT VECTOR CONTROL OF A TWO-PHASE INDUCTION MOTOR WITH POSITION CONTROLLER AND EIGHT-*

TRANSISTOR INVERTER, ANALELE UNIVERSITATII DIN CRAIOVA: SERIA INGINERIE ELECTRICA, Craiova, ISSN: 1842-4805, vol: II, nr: 34, pag. 153-156

RAȚĂ Mihai, MANDICI Leon, RAȚĂ Gabriela, STELUTA Mircea, AFANASOV Ciprian (2010), *Equipment for the Study of Motion Graphs Optimization in Electric Drive Systems*, ANALELE UNIVERSITATII DIN CRAIOVA: SERIA INGINERIE ELECTRICA, Craiova, ISSN: 1842-4805, vol: II, nr: 34, pag. 142-146

AFANASOV Ciprian, RAȚĂ Mihai, MANDICI Leon, SIMION Alecsandru, MIHAI Sorin (2010), *Indirect vector control of a two-phase induction motor with position controller and three phase inverter*, ANALELE UNIVERSITATII DIN CRAIOVA: SERIA ING. EL., Craiova, ISSN: 1842-4805, vol: II, nr: 34, pag. 248-251

RAȚĂ Gabriela, RAȚĂ Mihai, GRAUR Iulian, MILICI Laurentiu-Dan (2009), *Induction Motor Speed Estimator Using Rotor Slot Harmonics*, *Advances in Electrical and Computer Engineering*, ISSN: 1582-7445, vol: 9, nr: 1, pag. 70-73

RAȚĂ Mihai, RAȚĂ Gabriela, MILICI Laurentiu-Dan, GRAUR Iulian (2009), *An Efficient Solution of the Step-down Converter for Students Teaching*, *ELECTRONICS AND ELECTRICAL ENGINEERING (ELEKTRONIKA IR ELEKTROTEHNIKA)*, Kaunas, ISSN: 1392-1215, nr: 3(91), pag. 77-80

RAȚĂ Mihai, RAȚĂ Gabriela, BOBRIC Crenguta-Elena (2003), *Three-phase PWM inverter with HEF4752*, *Advances in Electrical and Computer Engineering*, Suceava, ISSN: 1582-7445, vol: 3, nr: 1, pag. 90-93

RAȚĂ Mihai, COJOCARIU Ioan, RAȚĂ Gabriela, BOBRIC Crenguta-Elena (2000), *Inverter trifazat realizat cu IGBT-uri*, Conferința Națională de Energetică CNE - M - 2000, 19-21 Octombrie, 2000, Chisinau, Moldova, pag: 57-62

- **Patents**

European

NIȚAN Ilie, MILICI Dan Laurențiu, Poienar Mihaela, CERNUȘCĂ Dumitru, PAȚA Sergiu, PIANÎH Alexei, PENTIUC Radu Dumitru, POPA Cezar Dumitru, RAȚĂ Mihai, UNGUREANU Constantin, Interlocking System, Brevet de invenție European, EP3536880/30.09.2020;

Național

2. POPA Valentin, Nitan Ilie, ROMANIUC Ilie, GEORGESCU Stefan Daniel, RAȚĂ Mihai, PRODAN Cristina, MILICI Mariana Rodica, Milici Dan Laurențiu, OLARIU Elena Daniela, CERNOMAZU Dorel (2019), Pompă Electrochimică, Brevet de invenție nr. RO129310/30.10.2019;

CERNOMAZU Dorel, GRAUR Adrian, MANDICI Leon, BACIU Iulian, OLARIU Elena-Daniela, RAȚĂ Mihai, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, PRODAN Cristina, ROMANIUC Ilie (2018), Model demonstrativ, Brevet de invenție nr. 128444;

CERNOMAZU Dorel, MANDICI Leon, GRAUR Adrian, SOREA Nicolai, NITAN Ilie, PRODAN Cristina, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, RAȚĂ Mihai, ROMANIUC Ilie (2018), Motor solar, Brevet de invenție nr. 128311;

NITAN Ilie, ROMANIUC Ilie, PRODAN Cristina, OLARIU Elena-Daniela, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, RAȚĂ Mihai (2018), Releu de timp, Brevet de invenție nr. 127858;

ROMANIUC Ilie, NITAN Ilie, RAȚĂ Mihai, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, PRODAN Cristina, RAȚĂ Gabriela (2018), Vibromotor, Brevet de invenție nr. 127861;

UNGUREANU Constantin, NITAN Ilie, ROMANIUC Ilie, BACIU Iulian, PRODAN Cristina, RAȚĂ Mihai, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, OLARIU Elena-Daniela, CERNOMAZU Dorel (2017), Stand de încercare, Brevet de invenție nr. 129122/30.06.2017;

BACIU Iulian, OLARIU Elena-Daniela, PRODAN Cristina, UNGUREANU Constantin, BUZDUGA Corneliu, NITAN Ilie, RAȚĂ Mihai, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, ROMANIUC Ilie, CERNOMAZU

Dorel (2017), Transformator monofazat cu bobină mobilă în scurtcircuit și posturi multiple, Brevet de invenție nr. 128959/28.07.2017;

BACIU Iulian, OLARIU Elena-Daniela, PRODAN Cristina, UNGUREANU Constantin, BUZDUGA Corneliu, NITAN Ilie, RAȚĂ Mihai, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, ROMANIUC Ilie, CERNOMAZU Dorel (2017), Transformator trifazat cu bobină mobilă în scurtcircuit și posturi multiple, Brevet de invenție nr. 128958/28.07.2017;

CERNOMAZU Dorel, MANDICI Leon, GRAUR Adrian, SOREA Nicolai, NITAN Ilie, RAȚĂ Mihai, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, PRODAN Cristina, ROMANIUC Ilie, BACIU Iulian (2017), Actuator solar, Brevet de invenție nr. 128771/30.10.2017;

CERNOMAZU Dorel, MANDICI Leon, GRAUR Adrian, SOREA Nicolai, NITAN Ilie, RAȚĂ Mihai, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, PRODAN Cristina, ROMANIUC Ilie, BACIU Iulian (2017), Motor solar, Brevet de invenție nr. 128655/28.02.2017;

CERNOMAZU Dorel, MANDICI Leon, GRAUR Adrian, SOREA Nicolai, NITAN Ilie, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, RAȚĂ Mihai, PRODAN Cristina, ROMANIUC Ilie, BUZDUGA Corneliu (2017), Actuator solar., Brevet de invenție nr. 128411/28.04.2017;

UNGUREANU Constantin, NITAN Ilie, ROMANIUC Ilie, BACIU Iulian, PRODAN Cristina, RAȚĂ Mihai, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, OLARIU Elena-Daniela, CERNOMAZU Dorel (2017), Stand de încercare pentru actuator electromecanic cu silfon, Brevet de invenție nr. 127842/29.09.2017;

CERNOMAZU Dorel, UNGUREANU Constantin, OLARIU Elena-Daniela, RAȚĂ Mihai, DAVID Cristina, MILICI Mariana Rodica, MILICI Laurențiu Dan, NITAN Ilie, ROMANIUC Ilie, Sistem de orientare a unui panou fotovoltaic, Brevet nr. RO127769 (B1), 2017-12-29;

GEORGESCU Daniel Ștefan, DAVID Cristina, NITAN Ilie, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, RAȚĂ Mihai, CERNOMAZU Dorel, Comutator sincron, Brevet de invenție nr. RO127701/29.12.2017;

CERNOMAZU Dorel, MILICI Mariana-Rodica, NITAN Ilie, DAVID Cristina, RAȚĂ Mihai, MILICI Laurențiu-Dan, Actuator electromecanic cu lichid, Brevet de invenție nr. RO127579 — 2017.11.29;

CERNOMAZU Dorel, NITAN Ilie, SOREA Nicolai, PRODAN Cristina, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, RAȚĂ Mihai (2017), Stand pentru studiul caracteristicilor de funcționare a motoarelor Stirling, Brevet de invenție nr. 127434/29.09.2017;

CERNOMAZU Dorel, MILICI Mariana-Rodica, PRODAN Cristina, MILICI Laurențiu-Dan, RAȚĂ Mihai, SAVU Elena (2016), Micropompă electrochimică cu lichid, Brevet de invenție nr. 127326/26.02.2016

CERNOMAZU Dorel, MANDICI Leon, GRAUR Adrian, SOREA Nicolai, NITAN Ilie, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, RAȚĂ Mihai, PRODAN Cristina, ROMANIUC Ilie, BUZDUGA Corneliu (2016), Actuator solar, Brevet de invenție nr. 128654/29.11.2016;

CERNOMAZU Dorel, PRODAN Cristina, MILICI Mariana-Rodica, RAȚĂ Mihai, MILICI Laurențiu-Dan, NITAN Ilie (2016), Aparat pentru determinarea stabilității la oxidare, Brevet de invenție nr. 127345/26.02.2016;

CERNOMAZU Dorel, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, NITAN Ilie, PRODAN Cristina, RAȚĂ Mihai (2016), Releu de timp, Brevet de invenție nr. 127787/29.11.2016;

CERNOMAZU Dorel, MANDICI Leon, GRAUR Adrian, SOREA Nicolai, NITAN Ilie, RAȚĂ Mihai, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, PRODAN Cristina, ROMANIUC Ilie, BACIU Iulian (2016), Motor solar, Brevet de invenție nr. 128652/29.07.2016;

CERNOMAZU Dorel, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, PRODAN Cristina, RAȚĂ Mihai, BUZDUGA Corneliu, OLARIU Elena-Daniela, NITAN Ilie (2016), Releu de gaze, Brevet de invenție nr. 127146/26.02.2016;

CERNOMAZU Dorel, IRIMIA Daniela, JEDER Mihaela, NITAN Ilie, OLARIU Elena-Daniela, PRODAN Cristina, RAȚĂ Mihai, MILICI Laurențiu-Dan, MILICI Mariana-Rodica (2016), Folie termosemnalizatoare, Brevet de invenție nr. 127342/30.12.2016;

UNGUREANU Constantin, NITAN Ilie, ROMANIUC Ilie, BACIU Iulian, PRODAN Cristina, RAȚĂ Mihai, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, OLARIU Elena-Daniela, CERNOMAZU Dorel (2015), Stand de încercare, Brevet de invenție nr. 127919/29.05.2015;

MILICI Mariana-Rodica, SAVU Elena, PRODAN Cristina, MILICI Laurențiu-Dan, RAȚĂ Mihai, CERNOMAZU Dorel (2014), Micropompă electrochimică cu acționare magnetică, Brevet de invenție nr. 127320/30.09.2014;

CERNOMAZU Dorel, MILICI Mariana-Rodica, PRODAN Cristina, MILICI Laurențiu-Dan, RAȚĂ Mihai, SAVU Elena (2014), Pompă electrochimică cu lichid, Brevet de invenție nr. 127325/30.09.2014;

CERNOMAZU Dorel, NITAN Ilie, SOREA Nicolai, PRODAN Cristina, MILICI Mariana-Rodica, MILICI Laurențiu-Dan, RAȚĂ Mihai (2014), Stand pentru studiul caracteristicilor de funcționare a motoarelor Stirling, Brevet de invenție nr. 127433/30.10.2014;

CERNOMAZU Dorel, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, RAȚĂ Mihai, PRODAN Cristina, OLARIU Elena-Daniela (2012), Motor ultrasonic, Brevet de invenție nr. 127069/29.11.2012;

CERNOMAZU Dorel, MILICI Laurențiu-Dan, MILICI Mariana-Rodica, PRODAN Cristina, RAȚĂ Mihai, RAȚĂ Gabriela, OLARIU Elena-Daniela (2012), Motor ultrasonic., Brevet de invenție nr. 127070/29.11.2012;