

UNIVERSITATEA DIN PETROȘANI
Facultatea INGINERIE MECANICĂ ȘI ELECTRICĂ
Departamentul AUTOMATICĂ, CALCULATOARE, INGINERIE ELECTRICĂ ȘI ENERGETICĂ
Examen pentru ocuparea postului de profesor, poz. 2
Disciplinele: **Convertoare statice de putere I,II**

Domeniul INGINERIE ELECTRICĂ

LISTA DE LUCRĂRI

Candidat: **MARCU D. MARIUS-DANIEL** dr. din 1998.

A) Lucrări relevante pentru realizările profesionale proprii (maxim 10 lucrări)

B) Teza de doctorat

Marcu, M., *Modernizarea acționărilor reglabile din industria miniera utilizând metoda orientării după câmp*, Universitatea din Petroșani, Conducător științific: Prof. univ. dr. ing. Stochițoiu Anghel, 1998, confirmat prin Ordinul M.E.N. nr. 5182/1998.

C) Teza de abilitare

Marcu, M., *Cercetări și rezultate în domeniul ingineriei electrice*, Universitatea din Oradea, 2023, confirmat prin Ordinul M.E. nr. 3273/22.01.2024.

D) Brevete de invenție și alte titluri de proprietate industrială

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E) Cărți și capitole în cărți:

E.1. Cărți /capitole din cărți (monografii, tratate), publicate la edituri de prestigiu din străinătate

1. Fiță N.D., **Marcu M.D.**, Ilie Uțu I., (2023), *Electrical risks assessment*, Lambert Academic Publishing, Marea Britanie ISBN: 978-620-6-15522-5, 98 pag.
2. **Marcu M.**, Popescu F. G., Niculescu T., (2017), *Chapter 7 Software for Simulation of Static Switch Controllers*, in *Science Education Research and New Technologies*; Edited by Antonio Vanderlei Dos Santos and Joao Carlos Krause, ISBN 978-953-51-3540-1, Print ISBN 978-953-51-3539-5, Published: October 11, 2017 under CC BY 3.0 license, pp.DOI: 10.5772/intechopen.68672, pp 119-136.

<https://www.intechopen.com/books/science-education-research-and-new-technologies/software-for-simulation-of-static-switch-controllers>

3. Niculescu T., **Marcu M.**, Niculescu V., Popescu F. (2016), *Chapter - Using NI-USB Data Acquisition Systems to Study the Switching Phenomena of Reactive Loads, in Applications from Engineering with MATLAB Concepts*; Edited by Jan Valdman, ISBN 978-953-51-2460-3, Print ISBN 978-953-51-2459-7, 284 pages, Publisher: InTech, Chapters published July 07, 2016 under CC BY 3.0 license DOI: 10.5772/61386, 2016-18 pag. <https://www.intechopen.com/chapters/50171>
4. **Marcu, M.**, Orban, M., Yanakiev, K., Kartzelin, E. (2000), *Static Converters and Their Applications*. „St. Ivan Rilski” Publishing House, Sofia, 2000, ISBN 954-97748-35-9, 262 pag.

E.2. Cărți sau capitole din cărți (monografii, tratate), publicate la edituri din țară, recunoscute de CNCS

1. Fiță N.D., Uțu I., **Marcu M.D.**, Păsculescu D., Popescu F.G. (2023), *Stații electrice și posturi de transformare – note de curs*, Editura Universitas, Petroșani 978-973-741-825-8, 220 pag.
2. Lazăr, T., **Marcu M.D.**, Uțu I., Popescu F.G., Păsculescu D. (2023), *Mașini electrice. Culegere de probleme*. Editura Universitas, Petroșani, 2023, ISBN 978-973-741-882-1, 197 pag.
3. Handra A.D., Păsculescu D., Uțu I., **Marcu M.D.**, Popescu F.G., Rada A.C. (2022), *Tehnici de optimizare în energetică*, Editura Universitas, Petroșani, 2022, ISBN 978-973-741-826-5, - 179 pag.
4. Popescu F.G. **Marcu M.D.**, (2021), *Electronică de putere*. Petroșani, 2021, ISBN 978-973-741-797-8, - 284 pag.
5. Popescu F.G., **Marcu M.D.** (2016), *Metode moderne de analiză și reducere a armonicilor de curent și tensiune*. Editura Universitas, Petroșani, 2016, ISBN 978-973-741-504-2, - 254 pag.
6. **Marcu M.D.**, Popescu F.G. (2010) *Convertoare statice - lucrări de laborator*, Editura Universitas, Petroșani, 2010, pag. 143, ISBN 978-973-741-163-1.
7. Uțu, I., **Marcu, M.** (2004), *Tehnici de măsurare. Teorie și aplicații*. Editura Universitas, Petroșani, 2004, 188 pag., ISBN 973-8260-67-1.
8. **Marcu, M.**, Orban, M. (2001), *A.C. Switch Controllers, Cycloconverters and Inverters*. S.C. XXL EXIM S.R.L., România, 2001, 158 pag., ISBN 973-98855-6-X.
9. **Marcu, M.**, Uțu, I., Orban, M. (2000), *Mașini electrice. Îndrumător de proiectare. Vol.II*. Litografia Universității din Petroșani, Petroșani 2000, 108 pag.
10. **Marcu, M.**, Uțu, I., Orban, M. (2000), *Mașini electrice. Îndrumător de proiectare. Vol.I*. Litografia Universității din Petroșani, Petroșani 2000, 219 pag.
11. Uțu, I., **Marcu, M.** (2000), *Metrologia mărimilor neelectrice*. Editura Bibliofor, Deva, 2000, 225 pag., ISBN 973-9411-25-8.
12. **Marcu, M.**, Uțu, I. (2000), *Sisteme de reglare vectorială ale mașinilor asincrone*. Editura Universitas, Petroșani, 2000, 148 pag., ISBN 973-8045-62-7.
13. Uțu, I., **Marcu, M.**, Orban, M. (1999), *Electrotehnică. Culegere de probleme*. Litografia Universității din Petroșani, Petroșani 1999, 159 pag.
14. **Marcu, M.**, Borca, D. (1999), *Convertoare statice în acționări electrice*. Editura TOPOEXIM, București, 1999, 196 pag., ISBN 973-97407-2-3.
15. Isac, V., Niculescu, T., **Marcu, M.** (1991), *Electrotehnică - lucrări de laborator*. Litografia Institutului de Mine, Petroșani 1991, 87 pag.

F) Articole /studii in extenso, publicate în reviste din fluxul științific internațional principal

ISI

1. F.G. Popescu, D. Pasculescu, **M.D. Marcu**, V.M. Pasculescu (2020), *Analysis of current and voltage harmonics introduced by the drive systems of a bucket wheel excavator*, Mining of Mineral Deposits, Volume 14, Issue 4, 2020, Pages 40-46. ISSN: 24153435, DOI: 10.33271/mining14.04.040, WOS:000596993300005, 2020.
<https://1d10qijmi-y-https-www-webofscience-com.z.e-nformation.ro/wos/woscc/full-record/WOS:000596993300005>
2. T. Niculescu, V. Arad, **M. Marcu**, S. Arad, F.G. Popescu (2020), *Safety barrier of electrical equipment for environments with a potential explosion in underground coal mines*. MINING OF MINERAL DEPOSITS. Volume: 14 Issue: 3 Pages: 78-86, DOI: 10.33271/mining14.03.078, WOS:000569677600010, 2020.
<https://1d10qijmi-y-https-www-webofscience-com.z.e-nformation.ro/wos/woscc/full-record/WOS:000569677600010>
3. T. Niculescu, F.G. Popescu, **M. Marcu**, R.I. Slusariuc (2019), *Improving the quality of measurements in electrical processes using NI USB data acquisition systems*. QUALITY-ACCESS TO SUCCESS, Volume: 20, Supplement: 1, Pages: 293-298, WOS:000459686300052, 2019.
<https://1d10qijmi-y-https-www-webofscience-com.z.e-nformation.ro/wos/woscc/full-record/WOS:000459686300052>
4. **M.D. Marcu**, F.G. Popescu, L. Pana (2014), *Modeling and simulation of power active filter for reducing harmonic pollution using the instantaneous reactive power theory*. Environmental Engineering and Management Journal, June 2014, Vol.13, No. 6, Pages: 1377-1382, DOI: 10.30638/eej.2014.148, WOS:000344577300010, Impact Factor: 1,186
<https://1d10qijmi-y-https-www-webofscience-com.z.e-nformation.ro/wos/woscc/full-record/WOS:000344577300010>

BDI

1. N. D. Fiță, S. Radu, I. Utu, **M.D. Marcu**, D. Pasculescu, F. G. Popescu (2023), *Auditing the Conformity with Legal and Other Provisions in Terms of Occupational Health And Safety of - The 400/220/110/20 kV Mintia Power Substation*, Fiabilitate si Durabilitate - Fiability & Durability, nr. 2/2023 Editura "Academica Brâncuși", Târgu Jiu, ISSN 1844 – 640X, Indexcopernicus, EBSCO, JournalSeek, DOAJ, ULRICHs, SCIPiO,
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2. N. D. Fiță, S. M. Radu, I. Utu, **M. D. Marcu**, D. Pasculescu, F. G. Popescu (2023), *Simulation the short-circuit regime of 220/110/20 kV Sardanesti power substation with the Paladin DesignBased*. Annals of the University of Petrosani, Electrical Engineering, Vol. 25 (2023), ISSN 1454-8518, pp. 105-116, EBSCO,
<https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=176969635&h=1ZwKRNMTQjYTAACHmrSL1JXW1yHucFAAnSBtdk%2bEW2IOvW4zF9IVFbspwb5ggLGvEQYVX59hTZYAlbwhuzxgtQ%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d176969635>
3. F. M. Grecu, N. D. Fiță, F. G. Popescu, **M. D. Marcu**, D. Pasculescu, R. I. Moraru (2023), *The study and exemplification of the use of a mini-programmable logic controller in the command and*



- control of a coal transport system*. Annals of the University of Petrosani, Electrical Engineering, Vol. 25 (2023), ISSN 1454-8518, pp. 17-34, EBSCO,
<https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=176969625&h=hlPVVUYYZ%2ftzMOv%2bVRxACHnNP3br6bOIRT8osbCamFmBI9KTkaqdRHBi%2b%2bBbHQXrPyvxTusRvM%2fsXZnB24EHw%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d176969625>
4. F. G Popescu, **M. Marcu**, D. Pasculescu, R. Slusariuc, N. D. Fiță, F. M. Grecu (2023), *Photometric simulation for performance improvement of solar energy conversion with fixed photovoltaic panels and reflection membrane*, Annals of the University of Petrosani, Electrical Engineering, Vol. 25 (2023), ISSN 1454-8518, pp. 53-62, EBSCO,
<https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=176969628&h=Cogb5j4jVpXGng99WBjRwEcEtLSzMP0CfmgU7hsWdFlpLYWwhwEJXn%2f6vIkMzM7oI0FdzwjokUab6buL5lftA%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d176969628>
 5. A. C. Rada, **M. Marcu** (2023), *Current Situation in the Energy Sector at International and National Level*. Annals of the University of Petrosani, Electrical Engineering, Vol. 25 (2023), ISSN 1454-8518, pp. 117-122, EBSCO,
<https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=176969636&h=9GoG0UV0Qn3J1qUq8ae4pABBu22C6UPUqOU7QTMjv2l697fMP8XI%2fDWLds%2fbB6InBjH%2bcRclrJXaUfKMsRwa9w%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d176969636>
 6. F. Grecu, N. D. Fiță, F. G. Popescu, D. Pasculescu, **M. D. Marcu**, R. I. Moraru (2023), *The identification and application of solutions to increase energy efficiency in an agro-food market*, Annals of the University of Petrosani, Electrical Engineering, Vol. 25 (2023), ISSN 1454-8518, pp. 95-104, EBSCO,
<https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=176969634&h=KDADS8dHqK10YHxZiu%2bq47DLQr%2bOo8%2bKE7uAHf3LUIs1XVnVs3Fv3Dto48RV%2fo33PGJu5Jgtjh%2bc96t2xInoSA%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d176969634>
 7. N.D. Fiță, M.S. Radu, I. U.țu, **M.D. Marcu**, D. Păsculescu, S.D. Stănilă (2022) *The necessity and opportunity of establishment the strategic studies of energy security research center from the University of Petrosani*, Annals of the University of Petrosani, Electrical Engineering, 24 (2022), ISSN 1454-8518, pp137-142, SCIPPO, EBSCO,
<https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=162486617&h=86kF8MuYIZsGW0kBWJhumH4CAoH34Hx1ApWHwUsQrRzDcxvgG3eqA4AWS3l3cMnqsCFGQJJiYar8FeJ2Tmduw%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d162486617>
 8. F.G. Popescu, D. Pasculescu, **M. Marcu**, V.M. Pasculescu, N.D. Fiță, A. Tatar, T. Lazar (2022), *Principles of effective energy management and power control system*, Annals of the University of Petrosani, Electrical Engineering, 24 (2022), ISSN 1454-8518, pp109-116, EBSCO.
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 9. N.D. Fiță, M. I. Obretenova, **M.D. Marcu**, D. Pasculescu, A. Tatar, T. Lazar (2022), *Assessment of security risks to critical infrastructure within the national mining subsector* Fiabilitate si



- Durabilitate - Fiability & Durability No 2/ 2022 Editura "Academica Brâncuși", Târgu Jiu, ISSN 1844 – 640X, pp19-27, Indexcopernicus, EBSCO, JournalSeek, DOAJ, ULRICHSSCIPIO, <https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=1844640X&AN=163571970&h=MZAJxByn%2b5JOTCAmzCCyRg87T%2fU2z4zEuUhmJkb0e659KmIgl0X90BqAUIESVL4K9L7kn6rhEYdppUKfa2YXA%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d1844640X%26AN%3d163571970>
10. T. Lazar, M. I. Obretenova, **M.D. Marcu**, A. Tatar, N.D. Fiță, D. Pasculescu (2022), *Using coal as a pressure instrument or energy weapon* Fiabilitate si Durabilitate - Fiability & Durability No 2/ 2022 Editura "Academica Brâncuși", Târgu Jiu, ISSN 1844 – 640X, pp28-35 Indexcopernicus, EBSCO, JournalSeek, DOAJ, ULRICHS, SCIPPIO, <https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=1844640X&AN=163571971&h=OZxfEDNgW%2b%2fFDYwByPQGwmvhyoKhRjLXO00BFudH0o6s5FEWpOGtx22qX5R74YMwX15ZVLO6Zlc%2bTa6vtIpfg%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d1844640X%26AN%3d163571971>
 11. C. Suci, A.D. Handra, A.C. Rada, **M.D. Marcu** (2021), *Improving the operational strategy of industrial enterprises* Annals of 'Constantin Brancusi' University of Targu-Jiu. Engineering Series. 2021, Issue 4, p124-129., Tg. Jiu, 2021, EBSCO. <https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=18424856&AN=154906436&h=kprJ0eLbou%2fIEDz50qMNYag%2b8mFqHRV%2bFXQP10Iop3JCjGbh0RyoMxUL4X00ZO3oH5gVf0iRmGSKBPzxxruMzw%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d18424856%26AN%3d154906436>
 12. F.G.Popescu, D. Păsculescu, **M. Marcu**, R. Slusariuc, G. Buică, T. Lazăr (2021), *Analysis of filtering and correction of the power factor in distorted balance*. Annals of University of Petrosani, Electrical Engineering, Vol. 23, pag.121-132, Petroșani, 2021, ISSN 1454-8518, Ed. Universitas, EBSCO. <https://web.p.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=14548518&AN=155882816&h=gJfqHZgAshyInZ3ZaD%2fC3btwB6izV%2bbdUFUtdAtDX7PZlj4oK68qHvOZLIQluKLH8NLzsKx4ApptPAEJYnuDhA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d155882816>
 13. I. Utu, **M. Marcu**, F. G. Popescu, M. D. Stochitoiu, A. C. Rada (2020), *Determination of the optimum operating regime for two power transformers 35 / 6,3 kV*. Annals of University of Petrosani, Electrical Engineering, Vol. 22, pag.71-76, Petroșani, 2020, ISSN 1454-8518, Ed. Universitas, EBSCO. <https://eds.p.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=149897507&h=TAPfRHgHMH2zInMbXbYKdjCD4Ihtbv0Yj3M7PPPtJ0qUocCqfz1E4aNePhHbdqFLh5eJTxnRH%2bPEMBPC585YXw%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d149897507>
 14. A. D. Handra, F. G. Popescu, D. Pasculescu, **M. Marcu**, N. D. Fita (2020), *Automation of the welding process using software and industrial robots*. Annals of University of Petrosani, Electrical Engineering, Vol. 22, pag.65-70, Petroșani, 2020, ISSN 1454-8518, Ed. Universitas, EBSCO. <https://eds.s.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=149897506&h=mwitBIBp9jQHjLOxnM9CM5dORf0EGwZs08jnlrnx4JfsoHwVlvcF2xqalstKLSldPhAlaAeSe%2b%2byzn5YPLoA%3d%3d&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d149897506>
 15. F. G. Popescu, D. Pasculescu, **M. Marcu**, A. D. Handra (2019), *The technical and economic advantages of power factor correction*, Annals of University of Petrosani, Electrical Engineering, Vol. 21, pag.35-42, Petroșani, 2019, ISSN 1454-8518, Ed. Universitas, EBSCO.

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16. **M. D. Marcu**, F. G. Popescu, R. Slusariuc, S. Arad, A.D. Handra (2018), *Overview of control methods for induction motor drives*. Annals of University of Petrosani, Electrical Engineering, Vol. 20, pag.57-64, Petroșani, 2018, ISSN 1454-8518, Ed. Universitas, EBSCO. <https://eds.s.ebscohost.com/abstract?site=eds&scope=site&jrnl=14548518&AN=134845133&h=1OWOEfkgedNoCnC%2bhgiCvy8IKGU5NddQI187il932Na5SFPM0amGuPbZXXvtcthcCBMJTQkYjJBHf1E%2f7jGQ%3d%3d&cr1=c&resultLocal=ErrCr1NoResults&resultNs=Ehost&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d14548518%26AN%3d134845133>
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18. **Marcu, M.,** Uțu, I., Pana, L., Orban, M., (2004), *Computer Simulation of Real Time Identification for Induction Motor Drives*. International Conference on Theory and Applications of Mathematics and Informatics-ICTAMI, 2004, pag. 295-305. https://www.academia.edu/11319317/COMPUTER_SIMULATION_OF_REAL_TIME_IDENTIFICATION_FOR_INDUCTION_MOTOR_DRIVES

H) Proiecte de cercetare-dezvoltare-inovare:

Cerințe legate de tenhoredactare: Se vor preciza: funcția în cadrul proiectului, denumirea completă a proiectului, acronimul (dacă este cazul), numărul contractului, autoritatea finanțatoare, programul în cadrul căruia se derulează proiectul, universitatea contractantă, valoarea proiectului (totală pentru contractorul unic sau cea corespunzătoare parteneriatului), perioada de derulare, adresa web a proiectului (daca este cazul).

1. **Marcu, M.D. – Membru în colectivul de cercetare,** *Elaborarea bilanțurilor electrice pe linii tehnologice din cadrul E.M. Rovinari*. Contract de cercetare nr. 185/2-1992, beneficiar RALO, 1992.
2. **Marcu, M.D. – Responsabil de temă,** *Analiza regimului deformant si diminuarea armonicilor introduse in rețea de sistemul de acționare convertor static-motor a instalațiilor de extracție din Valea Jiului*. Contract de cercetare nr.5/1992-1994, beneficiar MCT, 1992-1994.
3. **Marcu, M.D. – Membru în colectivul de cercetare,** *Elaborarea bilanțurilor electrice pe linii tehnologice din cadrul E.M. Roșia*. Contract de cercetare nr.185/1-1992, beneficiar RALO, 1992.
4. **Marcu, M.D. – Membru în colectivul de cercetare,** *Compensarea regimului deformant introdus in rețelele electrice de acționare cu convertizor static-motor ale unor instalații de extracție din Valea Jiului*. Contract de cercetare nr.12/1992-1993, beneficiar RAH, 1992-1993.
5. **Marcu, M.D. – Membru în colectivul de cercetare,** *Metodologii de verificare si creștere a parametrilor instalațiilor de extracție tip 2T echipate cu 1 si 2 motoare*. Contract de cercetare nr. 28/1993, beneficiar RAH. 1993.
6. **Marcu, M.D. – Membru în colectivul de cercetare,** *Bloc de automatizare in logică programată pentru comanda utilajelor din subteran*. Contract de cercetare nr.100/1996, poz. A9, beneficiar MCT. 1996.



7. **Marcu, M.D. – Membru în colectivul de cercetare,** *Creșterea fiabilității motoarelor electrice utilizate în subteran.* Contract de cercetare nr.100/1996-1997, poz. A8, beneficiar MCT, 1996-1997.
8. **Marcu, M.D. – Membru în colectivul de cercetare,** *Modernizarea acționărilor electromecanice ale utilajelor dintr-o cariera de lignit.* Contract de cercetare nr.100/1996, poz. A7, beneficiar MCT, 1996.
9. **Marcu, M.D. – Membru în colectivul de cercetare,** *Posibilități de utilizare a electronicii de putere în industria miniera.* Contract de cercetare nr.100, poz. A10/1996-1997, beneficiar MCT. 1996-1997.
10. **Marcu, M.D. – Membru în colectivul de cercetare,** *Controlul și reglarea consumului de energie electrică în industria minieră.* Contract de cercetare nr.100, poz. B8/1996, poz. A8/1997, poz.A6/1998, beneficiar MCT. Valoare contract 23.205, 1996.
11. **Marcu, M.D. – Membru în colectivul de cercetare,** *Dispozitiv în construcție AG pentru măsurarea rezistenței de izolație în rețelele electrice miniere cu nulul izolat.* Contract de cercetare nr.100/1997, poz. B3, beneficiar RAH România. 1997.
12. **Marcu, M.D. – Membru în colectivul de cercetare,** *Realizări de elemente informaționale și echipamente de comanda pentru acționări ale utilajelor cu puteri mari din industria miniera.* Contract de cercetare nr.100, poz. B5/1997, poz.A11/1998, beneficiar MCT. 1998.
13. **Marcu, M.D. – Membru în colectivul de cercetare,** *Optimizarea consumului de energie electrică în industria minieră.* Contract de cercetare nr.100, poz. B7/1997, poz.A20/1998, beneficiar MCT. Valoare contract 20.000, 1997-1998.
14. **Marcu, M.D. – Membru în colectivul de cercetare,** *Îmbunătățiri constructiv conceptive și tehnologii de reparare și probe în stand la motoarele și transformatoarele electrice utilizate în industria minieră.* Contract de cercetare nr.2462/1998, beneficiar UPSRUEEM Petroșani. 1998.
15. **Marcu, M.D. – Responsabil de temă,** *Modernizarea acționărilor electrice la utilajele din depozitele de cărbune (cele de depus și scos) pentru mecanismele: roată cu cupe, de deplasare și de rotire.* Contract de cercetare nr.13/1998-1999, beneficiar C.N.L.Oltenia, 1998-1999.
16. **Marcu, M.D. – Membru în colectivul de cercetare,** *Modernizarea acționărilor electrice la mașinile de haldat pentru mecanismele: rotire, braț, depunere și cele de deplasare.* Contract de cercetare nr.14/1998-1999, beneficiar C.N.L.Oltenia. Valoare contract 30.000.000, 1998-1999.

17. **Marcu, M.D. – Responsabil de temă,** *Monitorizarea parametrilor și modernizarea comenzilor acționărilor electrice ale unor utilaje din carierele de lignit.* Contract de cercetare nr.100 poz. A8/1999, poz.B10/2000, beneficiar ANSTI. Valoare contract 95.000.000, 2000.
18. **Marcu, M.D. – Responsabil de temă,** *Reducerea consumului de energie electrică prin modernizarea acționărilor la instalațiile și utilajele principale de la S.M.Băița.* Contract de cercetare nr.1/2000, beneficiar S.M.Băița, MINVEST Deva, 2000.
19. **Marcu, M.D. – Responsabil de temă,** *Modularea prin automat programabil a protecțiilor comenzilor și măsurării în stațiile de 20/6 kV din carierele de lignit.* Contract de cercetare nr.2/2000, beneficiar C.N.L.Oltenia, 2000.
20. **Marcu, M.D. – Responsabil de temă,** *Studiul calității energiei în carierele de lignit în condițiile introducerii electronicii de putere în vederea respectării normelor europene.* Contract nr. 1225/S-22.12.2006, beneficiar C.N.L.Oltenia. Valoare contract 125.000, 2006.
21. **Marcu, M.D. – Director grant,** *Clustered Hierarchical Knowledge Based Training Systems-KNOBS.* Research Development Agreement nr.3159/2022, beneficiar DE LORENZO SPA - Rozzano Italy. Valoare 11500 Euro, 2022-2023.

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Semnătura.....



Candidat,

MARCU D. MARIUS-DANIEL