Anexa A.3.9. Lista de lucrări, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **ISTRATE Dumitru-Marcel**

A. ***Teza de doctorat.***

1. „Contribuţii la coordonarea izolaţiei reţelelor electrice, în vederea compactizării liniilor electrice aeriene”, 1996, Domeniul „Inginerie Energetică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Nicolae Gavrilaș.

B. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.***

C. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).***

1. Oprea Roxana, Istrate Marcel, Machidon Dragos, Solutii pentru cresterea performantelor sistemelor fotovoltaice, Editura PIM, 205 pagini, ISBN 978-606-138696-3, 2024.
2. Machidon Dragoș. Istrate Marcel, Modelel matematice de calcul a zonelor de protecție generate de sistemele de paratrăsnete, Editura Universității Tehnice “Gheorghe Asachi“ din Iași, 182 pag, ISBN 978-973-621-537-7, 2024.
3. Beniuga Razvan, Istrate Marcel, Provocari privind integrarea centralelor eoliene in sistemul energetic, Editura Politehnium (cod CNCSIS 211), Iaşi, 208 pag., (31 rânduri/pagină – coeficient 1,03), ISBN 978-973-621-520-9, 2023
4. Machidon D., Istrate M., Tehnica tensiunilor înalte – Lucrari de laborator, Editura Politehnium, Iaşi, 185 pag., 50 exemplare, ISBN 978-973-621-501-8, 2021.
5. Istrate M., Asandei D., Temneau C., Analiza asistată de calculator a coordonării protecţiei de impedanţă Editura Politehnium (cod CNCSIS 211), Iaşi, 255 pag., ISBN 978-973-621-266-4, 2008
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7. Istrate M., Electrosecuritate, Editura Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 384 pag., ISBN 978-973-667-274-3, 2007.
8. Istrate M., Tehnologii şi instalaţii pentru reducerea emisiilor poluante – Controlul poluării în termoenergetică, Editura SETIS, Iaşi, cod CNCSIS 279, 428 pag, ISBN 97386764-0-1, 2004.
9. Adam M., Istrate M., Baraboi A., Guşă M., Echipamente de comutaţie şi izolaţia reţelelor electrice, Editura AGIR, Bucureşti, (cod CNCSIS 140) 185 pag., ISBN – 9738130-38-7, 2001.
10. Georgescu Gh., Varvara V., Istrate M., Sisteme de distribuţie a energiei electrice. Volumul II, partea a I-a, Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 453 pag., 200 ex., ISBN 978-973-667-314-6, 2008.

11. Georgescu G., Istrate M., Varvara V., Rădăşanu D., Popa B., Transportul şi distribuţia energiei electrice, Vol. II, Editura "Gh.Asachi" Iaşi, (cod CNCSIS 211), 442 pag, 350 ex., ISBN 973-8292-03-4., 2001.
12. Istrate M., Guşă M., Impactul producerii, transportului şi distribuţiei energiei electrice asupra mediului, Editura AGIR, Bucureşti, (cod CNCSIS 140) 210 pagini, 150 exemplare, ISBN 973-99295-5-9, , 2000.

D. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.***

1. Guşă M., Istrate M., Gavrilaş N., Asaftei C.,Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Editura Fundaţiei culturale "Renaşterea Română", Iaşi, 300 pagini, 200 exemplare, ISBN 973-97246-3-9, 1997.
2. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Tehnici de control şi supraveghere a reţelelor de distribuţie, Editura Fundaţiei Culturale "Renaşterea Română", Iaşi, 315 pagini, ISBN 973-97246-1-2, 1998.
3. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Curs litografiat la Universitatea Tehnică "Gheorghe Asachi" din Iaşi, 210 pag., 1996.

E. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.***

1. Istrate M., Machidon D., Electrosecuritate – curs electronic, www.tti.ieeia.tuiasi.ro
2. Istrate M., Machidon D., Regimuri tranzitorii electromagnetice – curs electronic, www.tti.ieeia.tuiasi.ro
3. Istrate M., Guşă M., Machidon D., High Voltage Enegineering – curs electronic, www.tti.ieeia.tuiasi.ro

F. ***Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.***

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2. Costel Boariu, Costică Roman, Marcel Istrate, Tor Haakon Bakken, Atle Harby, Elena Pummer, Georgiana Dunca, Diana Maria Bucur, Peculiarities of the run-off-river hydropower potential in Romania, Environmental Engineering and Management Journa, January 2024, Vol. 23, No. 1, pp. 51-60, Print ISSN: 1582-9596, eISSN: 1843-3707, DOI: 10.30638/eemj.2024.005, http://www.eemj.icpm.tuiasi.ro/issues/vol23/vol23no1.htm, Revista ISI - Impact factor la data publicarii 1,1
3. Fadila Barkat, Ali Cheknane, Josep M. Guerrero, Abderezak Lashab, Marcel Istrate, Mihai Gavrilas, Justina G. Motas, Ioan Viorel Banu, Review, analysis, and performance evaluation of the most common four active methods for islanding detection in gridconnected photovoltaic systems, January 2023, Electric Power Systems Research 214(Part A), DOI: 10.1016/j.epsr.2022.108909, LicenseCC BY 4.0,

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4. Dragos Machidon, Marcel Istrate, Tilt Angle Adjustment for Incident Solar Energy Increase: A Case Study for Europe, Sustainability 2023, 15(8), 7015; https://doi.org/10.3390/su15087015, Received: 20 March 2023 / Revised: 19 April 2023 / Accepted: 20 April 2023 / Published: 21 April 2023, https://www.mdpi.com/20711050/15/8/7015, Revista ISI - Impact factor 3.889, Q2
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7. Neagu, B.-C.; Ivanov, O.; Grigoras, G.; Gavrilas, M.; Istrate, D.-M. New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids. Sustainability 2020, 12, 7265, doi:10.3390/su12187265.
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10. Nemes C., Istrate M., A clear sky irradiation assessment using the ESRA model and SRTM database, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1271-1279. ISSN 1582-9596.
11. Lunca E., Istrate M., Salcean A., Comparative Analysis of The Extremely LowFrequency Magnetic Field Exposure from Overhead Power Lines, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1145-1151. ISSN 1582-9596.
12. Ursulean R., Lazar A.M., Istrate M., A New Method to Evidence the P300 Eventrelated Potential based on a Lifting Scheme, Elektronika Ir Elektrotechnika. Electronics, No. 2 Vol.19, 2013, ISSN 1392–1215, pp. 31-36.
13. Nemes C., Istrate M., Statistical Analysis of Wind Turbine's Output Power, Electronics and Electrical Engineering Journal, No. 4 (120), 2012, pp. 31-34, ISSN 1392 – 1215.

14. Ursulean R., Lazar A.M., Istrate M., The Sensitivity of the Fractal Spectrum: a Means of Controlling the Statistical Properties of Chaotic Signals, Elektronika Ir Elektrotechnika. Electronics, No. 8(114), 2011, ISSN 1392–1215, pp. 21-26, Electronic version.
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18. Istrate M., Grigoraş Gh., Energy Consumption Estimation in Water Distribution Systems Using Fuzzy Techniqus, Environmental Engineering and management Journal, Vol. 9, No.2, pp.249-256, February 2010. ISSN 1582-9596.
19. Istrate M., Gusa M., Assessment Of Two Single-End Fault Location Algorithms In An ATP Approach, Revue Roumaine de Sciences Techniques – Électrotechique et Énergétique, Tome 54, 4, pp. 345-354, ISSN: 0035-4066.
20. Istrate M., Miron A., Istrate C., Gusa M., Machidon D., Single-phased Fault Location on Transmission Lines Using Unsynchronized Voltages, Advances in Electrical and Computer Engineering, Issue 3, 2009, pages 51-56, ISSN: 1582-7445, e-ISSN: 18447600, Digital Object Identifier: 10.4316/AECE.2009.03010, Accession Number: WOS:000271872000010.

G. ***Lucrări ştiinţifice publicate în reviste din străinătate.***

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4. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Semnalizarea locală a zonelor cu defect de izolaţie a reţelelor electrice de medie tensiune, Upravlemie Electroperedaci, editat de Academia de Ştiinţe a Republicii Moldova, Vol. 7, pag. 56 – 60, 1993.
5. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Telesemnalizarea zonelor cu defect în liniile de medie tensiune, Buletinul Academiei de Ştiinţe a Republicii Moldova, Seria Fizică şi tehnică, Chişinău, nr.3 (9), pag.101-106, 1992.

H. ***Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.***

21. Machidon D., Istrate M., Oprea R., Some considerations on the photovoltaic conversion of the solar energy in Romania, Bulletin of the Polytechnic Institute of Iasi, Section

Electrotehnica. Energetica. Electronica Volume 62(66), Fasc.3, pg.21-30, ISSN 12238139, (CNCSIS, code 87, http://www.cncsis.ro/, http://www.bulipieee.tuiasi.ro/archive/2016/fasc.3/p2_f3_2016.pdf), 2016.
22. Machidon D., Istrate M., Weather Influence Analysis on the Lightning Protection Current Estimation, Acta Electrotehnica, Number 3-2015, Proceedings of The 6th
23. International Conference on Modern Power Systems, MPS 2015, 18-21 mai 2015 ClujNapoca, Romania, pp.161-164, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries).
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25. of The 5th International Conference on Modern Power Systems MPS 2013, ClujNapoca, Romania, Vol. 54, No., 5, 2013, pp.256-261, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org)
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28. Beniuga R., Banu I.V., Istrate M., Behaviour od Double-Feed Induction Generatyor Wind Turbines with Crowbar System during Grid Faults, Acta Electrotehnica, Special Issue "Proceedings of The 5th International Conference on Modern Power Systems MPS 2013, Cluj-Napoca, Romania, Vol. 54, No., 5, 2013, pp.59-63, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org), Revista BDI
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4. Istrate M., Asaftei C., Guşă M., Gavrilaş N., Sistem de testare a semnalizatoarelor locale de scurtcircuit din reţelele electrice de medie tensiune, Brevet România, 113907B/30.11.1998. International Patent Classification G01R-031/02, http://apps.isiknowledge.com
5. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Vorobchevici M., Indicator local pentru scurtcircuit, Brevet România, nr.106621 C1/1996, Interna-tional Patent Classification G01R-031/02, http://apps.isiknowledge.com
6. Asaftei C., Guşă M., Istrate M., Gavrilaş N, Ciutea I., Sistem de semna-lizare locală şi la distanţă, Brevet România nr. 105862 C1/1992, Interna-tional Patent Classification G01R031/02, http://apps.isiknowledge.com
7. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Tărăboanţă I., Receptor pilotat cu cuarţ, Brevet România, nr. 105747 C1/1992, Interna-tional Patent Classification H02J013/00, http://apps.isiknowledge.com
8. Asaftei C., Guşă M., Gabură A., Istrate M., Gavrilaş N., Tărăboanţă I., Emiţător pilotat cu cuarţ, Brevet România, nr. 105754 C1/1992. Interna-tional Patent Classification H04B-003/54 http://apps.isiknowledge.com
9. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Instalaţie pentru emiterea semnalelor electrice pe linii de medie tensiune, Brevet România, nr.105638 B1/1992. International Patent Classification H04B-003/54, http://apps.isiknowledge.com
10. Guşă M., Gavrilaş N., Asaftei C., Istrate M., Regulator automat pentru bobine de stingere, Brevet România, nr. 104711/1991. International Patent Classification H02J003/18, http://apps.isiknowledge.com.Acest brevet a fost medaliat cu argint la la Salonul internaţional al invenţiilor şi tehnicii noi, Iaşi 1994 şi medaliat cu aur la Salonul internaţional al invenţiilor "EUREKA '94"- Bruxelles, 1994.
11. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Dispozitiv trifazat de semnalizare locală şi la distanţă, Brevet România nr. 104650/1991, Inter-national Patent Classification H02H007/26, http://apps.isiknowledge.com
12. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Releu de semnalizare locală şi la distanţă, Brevet România, nr.104649/1991, International Patent Classification H02H-007/26, http://apps.isiknowledge.com
13. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Botez C., Receptor de semnale codificate, Brevet România, nr. 104264/1991, International Patent Classification G08B-025/00, http://apps.isiknowledge.com
14. Guşă M., Asaftei C., Istrate M., Gavrilaş N., Instalaţie de semnalizare centralizată, Brevet România, nr. 103783/1991, International Patent Classification G08B-025/00, http://apps.isiknowledge.com
15. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Ciutea I., Receptor pentru semnalizarea centralizată a zonelor cu defect de izolaţie pe linii electrice de medie tensiune, Brevet România, nr. 103548/1991, International Patent Classification H02J-013/00, http://apps.isiknowledge.com
16. Istrate M., Guşă M., Asaftei C., Gavrilaş N., Sufleţel N., Botez C., Metodă şi dispozitiv emiţător pentru stabilirea zonelor cu defect de izolaţie, Brevet România,

nr.103448/1991, International Patent Classification G01N-031/03, http://apps.isiknowledge.com

17. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Sufleţel N., Dispozitiv de semnalizare a depăşirii unui curent maxim într-un conductor, Brevet România, nr. 103490/1990, International Patent Classification H02H-003/04, http://apps.isiknowledge.com

K. ***Contracte de cercetare/granturi.***

1. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Performanței in Cercetare, Dezvoltare si Inovare COMPETE 2.0, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 27PFE/30.12.2021– Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 6.578.117 lei, in trei etape anuale, astfel: anul 2022 – 2.466.918 lei; anul 2023 – 3.546.772 lei; anul 2024 – 546.427 lei, Istrate M – Responsabil stiintific.
2. Contractul nr. 11155/06.04.2022 TUIASI, Innovation Norway No. 2021/332809 din 24.03.2022, EEA and Norway Grants 2014-2021, „Energy Generation from NonPowered Dams - ENERGYDAM", Implementare iunie 2022-decembrie 2023, Sume; Total proiect: 346958 Euro, din care in 2022 – 154175 Euro si in 2023 – 192783 Euro, Istrate M. – Manager proiect si membru in echipa de cercetare pe anumite pachete de lucru.
3. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 9PFE/2018 în cadrul Programului 1 - Dezvoltarea sistemului național de cercetaredezvoltare, Subprogramul 1.2 – Performanță instituțională – Proiecte de dezvoltare instituțională – Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 4.530.000 lei, in trei etape anuale, astfel: anul 2018 – 203750 lei; anul 2019 -2090769 lei; anul 2020 – 2235481 lei; Istrate M – Responsabil stiintific
4. Analiza regimurilor tranzitorii electromagnetice în rețele de medie tensiune în vederea implementării automaticii de reanclanșare rapidă monofazată, Contractul de cercetare nr. 1264P/21.01.2019, Istrate M.- Director tema, Beneficiar: beneficiarului SC EXIMPROD GRUP SA, cu sediul în Buzău, contract obtinut prin negociere directa – suma 10000 lei +TVA
5. Analiza și interpretarea datelor, întocmirea algoritmilor de prelucrarea datelor, simularea asistată de calculator și întocmirea rapoartelor de simulare, cod CPV 71335000-5; Beneficiar: Societatea pentru Servicii de Mentenață a Rețelei Electrice de Transport "SMART" S.A. București Sucursala de Mentenanță SIBIU, 2015-2018, tema 27373/22.12.2015, Istrate M.- Responsabil contract, Machidon D. Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP. Valoare studiu: 185.000 lei +TVA
6. Studiu privind verificarea schemelor de protecţie împotriva loviturilor directe de trăsnet în cazul staţiei 220/110/20 kV Munteni. Analiză comparată a metodei normate şi a metodei electrogeometrice", cod CPV 71335000-5; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2013, tema 8795/17.05.2013, Istrate M.- Director tema, Machidon D. Valoare 57000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,4111 lei/Euro (echivalentul in Euro al sumei contractate este de 12922 Euro fara TVA sau 16023 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008
7. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamentele de 400/110 kV ale staţiei de transformare Roman Nord. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2012, tema 8731/25.05.2012, Istrate M.- Director tema, Machidon D.

Valoare 77000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,45 lei/Euro (echivalentul in Euro al sumei contractate este de 17300 Euro fara TVA sau 21400 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

8. Studiu privind analiza asistată pe calculator a riscului producerii loviturilor de trăsnet în echipamente de 220 kV şi 400 kV ale staţiei de transformare Suceava. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2011, tema 1090P/03.05.2011, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 70000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,1073 lei/Euro (echivalentul in Euro al sumei contractate este de 17042,8 Euro fara TVA sau 21133,1 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

9. Studiu privind expertizarea instalaţiilor de 110 şi 220 kV din staţia FAI, urmare modificării schemelor de conexiuni, prin metoda electrogeometrică, privind riscul producerii loviturilor directe de trăsnet în echipamentele staţiei; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2009, tema 9958P/15.07.2009, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 48000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,2175 lei/Euro (echivalentul in Euro al sumei contractate este de 11381,5 Euro fara TVA sau 13543,6 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008.

10. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 77/11.06.2008, tema nr. 20, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 36000 RON

11. Sistem inteligent de predicţie şi control al congestiilor în reţelele de transport şi distribuţie la înaltă tensiune, Grant PN2-Parteneriate, contract 22-126 / 2008, membru în echipa de cercetare; Valoare UTI: 1.800.000 lei, Valoare UTI 2008: 67779, 5 membri/2008 în echipa de cercetare, Director proiect: Mihai Gavrilaş, Istrate M.. – responsabil partener UTI.

12. Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare; Grant PN2-Parteneriate, contract 72173/2008, director C. Donciu; Valoare UTI: 1.130.000 lei; 17 membri în echipa de cercetare, Istrate M.. – membru echipa partener UTI.

13. Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza, dezvoltat pe platforma reconfigurabila online pentru aplicatii de tip laborator virtual., Proiect CEEX Modul 1 – INFOSOC, Contract nr. 137 / 02.10.2006, Director proiect: Codrin Donciu, Durata proiect 1 an si 11 luni (predare etapa finala 30.08.2008), Valoare totala proiect: 880.000 lei, Valoare UTI: 606.164 lei, Istrate M.. – membru echipă partener UTI.

14. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 80 /23.05.2007, tema nr. 28, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 44000 RON. (Medie grant CNCSIS-UTI 2007 – 41408).

15. Analiza asistată de calculator a influenţei defectelor din reţeaua de 110 kV asupra funcţionării reţelei de transport a ST Bacău, Beneficiar: CN Trans-electrica SA, Sucursala de Transport Bacău, tema 2220P/02.06.2006, Istrate M., Guşă M.. Valoare 35700 RON cu TVA,

contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 10110.7 Euro cu TVA)

16. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamantele staţiei 220/110 kV Dumbrava. Aplicaţie a metodei electrogeometrice, Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, tema 2219P/02.06.2006 Istrate M., Guşă M. Valoare 23800 RON cu TVA, contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 6740,5 Euro cu TVA)

17. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. 2735/ 19.05.2006, tema nr. 16, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C.; Valoare 46000 RON.

18. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, contract 2741/ 19.05.2006, tema 40, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Valoare contract: 10000 RON

19. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, A, contract 27637/2005, tema 28, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract: 100000000 lei

20. Studiul zonelor de protecţie prin metoda sferei fictive aplicată staţiei de transformare 400(220)/110 kV Munteni. Beneficiar: C.N. Transelectrica SA, S.T. Bacău, Tema 61P/2003. Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract 71400000 lei cu TVA

21. Aplicaţie software pentru analiza regimurilor electromagnetice tranzitorii generate de funcţionarea unor protecţii şi instalaţii automate din RET 220/400 kV. Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău (contract obţinut prin procedura de licitaţie deschisă, la care au fost şi alţi participanţi - TRAPEC Bucureşti), Tema 61P/2003. Istrate M. – Director temă, Guşă M. Valoare contract 77350000 lei cu TVA.

22. Analiza modului de realizare a protecţiei împotriva loviturilor directe de trăsnet în staţia de transformare Iaşi - Sud. Beneficiar: S.D.F.E.E. Iaşi Tema 965P/2002. Colectiv: Guşă M., Istrate M., Valoare contract 47600000 lei cu TVA.

23. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive – Aplicaţie pentru staţia de transformare Suceava. Beneficiar: S.D.E.E. Bacău, Tema 422P/2002. Col.: Guşă M., Istrate M. Valoare contract 50000000 lei cu TVA.

24. Analiza asistată a regimurilor tranzitorii din reţelele de joasă tensiune. Beneficiar: Electrica S.A. – S.D.E.E. Bacău, Tema 807P/2001. Asaftei C., Istrate M., Guşă M. Valoare contract 65000000 lei cu TVA.

25. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive–Aplicaţie pentru staţia de transformare Roman Nord. Beneficiar: SDEE Bacău, Tema 194P/2001. Colectiv: Guşă M., Istrate M. Valoare contract 40000000 lei cu TVA

26. Analiza asistată de calculator a funcţionării protecţiilor de distanţă în reţeaua de transport 220/400 kV a S.T. Bacău. Beneficiar: CN Transelectrica - ST Bacău, 2001. Istrate M. – Director temă, Guşă M. Valoare contract 48 milioane lei.

27. Protecţia reţelelor de distribuţie de JT împotriva supratensiunilor transmise din reţelele de MT. Grant ANSTI, contract nr. 6177/2000, număr temă: B-50. Două etape: 2000 şi 2001. Colectiv: Guşă M., Istrate M. Valoare contract: 43100000 lei

28. Evaluarea nivelului de ţinere la impuls de trăsnet a izolaţiei echipamentelor de joasă tensiune din posturile de transformare MT/JT. Beneficiar: S.D.E.E. Bacău, Tema 1627P/2000. Col.: Guşă M., Istrate M., Asaftei C. Valoare contract: 50000000 lei

29. Soluţii pentru evitarea incendiilor determinate de trăsnet la rezervoarele metalice cu capac flotant pentru produse petroliere. Beneficiar: S.C. “Oil Terminal” S.A. Constanţa, Tema 1633P/2000. Col.: Guşă M., Istrate M. Valoare contract: 15500000
30. Studiul asistat de calculator al protecţiei staţiilor de transformare împotriva loviturii directe de trăsnet. Beneficiar: Sucursala de Transport a Energiei Electrice Constanţa; Tema 1740P/1999(2000). Colectiv: Gavrilaş N., Istrate M., Guşă M., Valoare contract: 60000000
31. Transmiterea supratensiunilor de trăsnet prin transformatoarele de distribuţie de medie tensiune/joasă tensiune. Beneficiar: S.D.E.E. Iaşi, Tema 567P/2000. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 45000000 lei
32. Studiu privind modelarea pe calculator a regimurilor de defect monofazat în reţeaua de distribuţie de 20 kV a municipiului Galaţi, având neutrul tratat prin rezistor. Beneficiar: S.D.E.E. Galaţi, Tema 849P/2000. Colectiv: Asaftei C., Istrate M., Guşă M. Valoare contract: 40000000 lei
33. Analiza regimurilor complexe de avarie şi postavarie în reţeaua de transport a STD Bacău. Beneficiar: Sucursala Transport Dispecer Bacău, Tema 303P/1999. Colectiv: Guşă M., Istrate M.Valoare contract: 45000000 lei.
34. Protecţia împotriva supratensiunilor atmosferice a posturilor de transformare MT/JT şi a reţelei de joasa tensiune aferente. Beneficiar: S.D.E.E. Bacău, Tema 283P/1998. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 30000000
35. Analiza tensiunilor de regim tranzitoriu în zona de reţea de medie tensiune a municipiului Sibiu. Beneficiar: S.D.E.E. Sibiu, Tema 147P/1998. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 30000000 lei
36. Sistem de autodeclanşare selectivă, telecomandă şi telesemnalizare centralizată pentru reţelele aeriene de 20 kV. Beneficiar: F.T.D.E.E. Suceava, Tema 3587/1997. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 15000000 lei.
37. Studiu privind asigurarea selectivităţii şi sensibilităţii protecţiei în reţelele de medie tensiune aferente staţiilor cu neutrul tratat prin rezistenţă din municipiul Botoşani. Beneficiar: F.D.E.E. Botoşani, Tema 11941/1997. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 12000000
38. Realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune şi montarea unor astfel de indicatoare în zona Tg.Frumos. Beneficiar: F.R.E. Iaşi, Tema 9397/1996. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
39. Optimizarea funcţionării reţelelor compensate prin implementarea unor mijloace de detectare a defectelor monofazate. Beneficiar: F.R.E. Iaşi, Tema 4730/1996. Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 6000000 lei
40. Analiza supratensiunilor interne în reţelele de 110 kV şi 220 kV cu considerarea unor fenomene nelineare. Beneficiar: Filiala de Reţele Electrice Iaşi, Teama 6147/1996.
41. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei, Determinarea supratensiunilor în reţele de înaltă tensiune cu considerarea unor pierderi şi neliniarităţi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1995, Tema 6456, Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C.; Valoare contract: 3000000 lei.
42. Studiul posibilităţilor de detectare a zonelor de defect pe LEA de medie tensiune cu neutrul tratat cu bobină de stingere. Beneficiar: F.R.E. Iaşi, 1995; Tema 6455; Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei
43. Determinarea supratensiunilor interne şi atmosferice în reţele de înaltă tensiune. Beneficiar: Filiala de Reţele Electrice Iaşi, 1994. Tema 3745/1994; Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei

44. Studiul posibilităţilor de realizare şi realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune. Beneficiar: F.R.E. Iaşi, 1994. Tema 3850; Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
45. Autodeclanşarea selectivă a separatoarelor de sarcină în SF6 de pe derivaţii şi de pe axele de MT, cu semnalizare în staţia de alimentare, prin transmisie pe conductoarele LEA. Beneficiar: F.R.E. Suceava; Tema 6630/1994, 1995 şi 1996. Tema 6630/1994,1995,1996 Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare totala contract: 32000000 lei
46. Solicitarea izolaţiei liniilor electrice debuclate. Beneficiar: F.R.E. Bacău, 1994, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei.
47. Studiul comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile FRE Iaşi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1993. Tema 2540. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 900000 lei
48. Comanda declanşării întrerupătoarelor din reţelele aeriene de 20 kV cu neutrul tratat prin rezistenţă şi semnalizarea centralizată a funcţionării acestuia. Beneficiar: F.R.E. Suceava, 1993, Tema 6360; Colectiv: Guşă M., Gavrilaş N., Istrate M., Asaftei C. Valoare contract: 1000000 lei
49. Cercetări teoretice şi încercări experimentale privind rezistenţa la oboseală mecanică a izolatoarelor de tip IsNs. Beneficiar: F.R.E. Bacău, 1993, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1000000 lei
50. Cercetări privind implementarea şi funcţionarea unui sistem de semnalizare centralizată a defectelor în reţelele aeriene de distribuţie de medie tensiune. Beneficiar: RENEL, Divizia Strategie şi Retehnologizare, Bucureşti 1992, Tema 1433/1992; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M.; Valoare contract: 700000 lei
51. Controlul stării izolaţiei LEA de medie şi înaltă tensiune. Beneficiar: F.R.E. Bacău, 1992. Tema 9223; Guşă M., Gavrilaş N., Istrate M.,, Asaftei C. Valoare contract: 400000 lei
52. Proiectarea prototipului de sistem de semnalizare centralizată a defectelor în reţele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1992. Tema 1433; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 700000 lei
53. Cercetarea comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile de transport electric feroviar. Beneficiar: Regionala de Căi Ferate Iaşi, 1991. Tema 896; Istrate M. – Director temă, Guşă M, Gavrilaş N.; Valoare contract: 24705 lei
54. Studiul posibilităţilor de realizare a detectării şi semnalizării centralizate a defectelor în reţelele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1991. Tema 2439 (1541); Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 300000 lei
55. Realizarea şi testarea sistemului de semnalizare centralizată a defectelor într-o reţea aeriană de 20 kV cu un singur emiţător. Beneficiar: I.R.E. Iaşi, 1991. Tema 6156; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 380000 lei
56. Proiectarea, realizarea şi experimentarea echipamentului pentru semnalizarea centralizată a defectelor într-o reţea aeriană de 20 kV. Beneficiar: I.R.E. Iaşi, 1990. Tema 229; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 230000 lei
57. Cercetarea posibilităţilor de localizare de la distanţă a scurtcircuitelor monofazate în reţelele aeriene de medie tensiune având neutrul tratat prin rezistor. Beneficiar: I.R.E. Iaşi, 1989., Tema 80; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 220000 lei.

L. ***Premii, distincţii.***

1. Brevetul de invenţie Regulator automat pentru bobine de stingere, Brevet România, nr. 104711/1991. International Patent Classification H02J-003/18, http://apps.isiknowledge.com a fost medaliat cu argint la la Salonul internaţional al

invenţiilor şi tehnicii noi, Iaşi 1994 şi medaliat cu aur la Salonul internaţional al invenţiilor “EUREKA ‘94”- Bruxelles, 1994.

2. Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri private pentru cercetare,– Contractul de 185000 lei din 27373/22.12.2015 cu Transelectrica/Smart Sibiu, premiu acordat pe 15 noiembrie 2019, la nivelul TUIASI.

M. ***Alte realizări semnificative.***

1. Grant FDI, mai-decembrie 2019, proiect nr. CNFIS-FDI-2019-0120, cu titlul „CONSILIERE ȘI ORIENTARE PENTRU STUDENȚII TUIASI – C.O.S.T.”, Competitie nationala interuniversitara, Istrate M. - Director grant, Valoare finantare = 400000 lei.
2. Proiect POR „Consolidare si reabilitare termica imobil EN”, depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120774., contract semnat in mai 2020, suma=8.831.866,83 lei , Istrate M. - manager proiect.
3. Proiect "Reabilitare termică corp TEX2 din cadrul Facultății de Textile, Pielărie și Management Industrial", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120773, contract semnat in mai 2020, suma=3.654.667,21lei, Istrate M. - manager proiect.
4. Proiect "Reabilitare termică imobil CH", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120775., contract semnat in august 2019, suma=17.526.985,81 lei, Istrate M. - manager proiect.
5. Titlul de Profesor Bolgna, acordat de ANOSR, in anul 2012.

Data,

02.04.2025

Prof. dr. ing. Istrate Dumitru-Marcel

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: **Prof. dr. ing. Mihai GAVRILAȘ**

A. Teza de doctorat.

1. Cercetări privind optimizarea structurii şi regimurilor liniilor de transport a energiei electrice compacte, 1994, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Alexandru Poeată.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Neagu B.C., **Gavrilaș M.**, Ivanov O., Grigoraș, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Chapter in The Future of Data Mining, editor C.U. Baytar. Nova Science Publisher, 18 pag., 2022, 978-1-53618-508-9
2. **Gavrilaș M.**, Neagu B.C., Enhanced metaheuristic search algorithms; Applications in the management of electricity distribution systems, Lambert Academic Publishing, Riga, Lituania, 140 pag., 2020, 978-620-2-51263-3
3. Neagu B.C., **Gavrilaș M.**, Optimal Placement of Energy Storage Systems in Prosumer Microgrids, Chapter in Advances in Engineering Research, editor V.M. Petrova, Nova Science Publisher, 48 pag., 2020, 978-1-53618-508-9
4. Grigoraş G., Neagu B.C., Ivanov O., **Gavrilaș M.,** Scarlatache F., Smart Meter Data-based Strategies in the Optimal Operation of Electric Distribution Systems, Lambert Academic Publishing, Riga, Lituania, 256 pg., 2019, 978-620-0-50306-0 (30 pag. Gavrilaș M.)

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Ivanov O., **Gavrilaș M.**, Algoritmi metaeuristici cu aplicații în energetică, Editura PIM Iași, 2018, 210 pag, ISBN 978-606-13-4698-1 (21% contribuție)
2. **Gavrilaș M.,** Aplicatii ale inteligentei artificiale si calculului inteligent in energetica; capitol in EMERG 2017 (Energie, Mediu, Eficienta, Resurse, Globalizare), Editura AGIR, pp. 73-118.
3. **Gavrilaș M.,** Piata de energie electrică, Editura PIM Iasi, 2017, 188 pag., ISBN 978-606-13-4144-3.
4. **Gavrilaș M.**, Stabilitatea si controlul sistemelor electroenergetice, Editura Politehnium, Iasi, 2011, 300 pag., ISBN 978-973-621-329-8.
5. **Gavrilaș M.**, Aspecte moderne în modelarea sistemelor electroenergetice, Casa de editura Venus, Iasi, 2008, 258 pag., ISBN 978-973-756-033-9.
6. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice – Vol. 2, Editura Cermi Iasi, 2008, 116 pag., ISBN 978-973-667-315-3
7. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice - Vol. 1, Editura PIM Iasi, 2006, 124 pag., ISBN 973-716-433-4, ISBN 978-973-716-433-4
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11. **Gavrilaș M.**, Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 1999, 502 pag., ISBN 973-9178-65-0
12. Cartina Gh., Georgescu Gh., **Gavrilaș M.**, Bonciu Cl., Retele neuronale artificiale si sisteme expert in energetica, Editura „Gh. Asachi" Iasi, 1994, 195 pag., ISBN 973-9178-06-5

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Georgescu Gh., **Gavrilaș M.**, Radasanu D., Calculul si reducerea pierderilor de putere si energie in retelele electrice, Editura SPECTRUM Iasi, 1997, 165 pag., ISBN 973-98335-1-9
2. **Gavrilaș M.,** Utilizarea calculatoarelor in proiectarea si exploatarea retelelor electrice - Metode numerice, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 200 pag., 1995
3. Georgescu Gh., **Gavrilaș M.,** Transportul energiei electrice; Analiza asistata de calculator a regimurilor de functionare a liniilor lungi, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 174 pag., 1992

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1. **Gavrilaș M.**, Sisteme electroenergetice I – note de curs (83 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SEE_1/Sisteme_1.htm
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F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

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7. Banerjee A., Chattopadhyay S., **Gavrilas M.** Grigoras, G., Optimization and estimation of reliability indices and cost of Power Distribution System of an urban area by a noble fuzzy-hybrid algorithm. *Applied Soft Computing*, 2021, *102* p.107078235, DOI: 10.1016/j.asoc.2021.107078, WOS:000632598600011
8. Neagu B.C., Ivanov O., Grigoras Ghg., **Gavrilaș M.**, A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts, Mathematics 2020, 8(2), 235; https://doi.org/10.3390/math8020235
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13. Postolaty V., Berzan V. Bykova E., Bosnaega V., Suslov V., Ermurachi Iu., Grigoras Gh., **Gavrilas M.,** Istrate M., Estimation of Power Exchange through 110 kV Overhead Power Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, Issue 2, 2018, pp. 46-61, ISSN: 1857-0070, DOI:10.5281/zenodo.1343396
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15. Coroama I., Chicco G., **Gavrilas M.**, Russo A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38, ISSN: 0378-7796, DOI: https://doi.org/10.1016/j.epsr.2013.01.004
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17. **Gavrilaş M.,** Rusu I., Gavrilaş G., Ivanov O., Synchronized Phasor Measurements for State Estimation, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2009, Vol.54, No.4, pp. 335-344, ISSN: 0035-4066

18. **Gavrilas M.**, Ivanov O., Load profiling by self organization with affinity control strategy; Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2008, Vol.53, No.4, pp. 413-421, ISSN: 0035-4066
19. **Gavrilas M.**, Gavrilas G., Improving energy efficiency in water distribution systems based on water consumption profiling; Environmental Engineering and Management Journal, May/June 2008, Vol.7, No.3, pp. 321-327, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.035
20. **Gavrilas M.**, Gavrilas G., Ivanov O., Electricity load prediction for water supply systems; Environmental Engineering and Management Journal, July/August 2008, Vol.7, No.4, pp. 453-458, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.067
21. Kriukov A., **Gavrilaș M.,** Smart Charging of Multiple EVs in Smart Grid Radial Low Voltage Distribution Networks. Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, 2021. 67 (3), pp. 9-20, (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
22. Neagu, B.C., **Gavrilas, M.,** Tirsu, M., Covalenco, N. and Negura, I., 2021. Environmental Performance Evaluation for a Small Scale Trigeneration System. *Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section*, *67*(4), pp.73-85 (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
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G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

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2. Grigoras Gh., **Gavrilaș M.**, Scarlatache Fl., Cazacu M., Cosarca G., Assessing Energy Losses in Unbalanced Low Voltage Electric Distribution Networks, Energetica, Vol. 64, Nr. 2, pp. 53 – 59, ISSN: 1453-2360, 2016 (**cod CNCSIS 512**)
3. Kriukov Al., **Gavrilas M.,** Managing a multi-purpose parking lot for electric vehicles, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 307-312 (**cod CNCSIS 415**)
4. Stativa A., **Gavrilas M.,** Small signal stability enhancement using supplementary signals from PMU, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 261-267 (**cod CNCSIS 415**)
5. Stativa A., **Gavrilas M.,** Using DIGSILENT in small signal stability studies, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 269-274 (**cod CNCSIS 415**)
6. Vicol B., **Gavrilas M**., Ivanov O., Modern technologies for power systems monitoring, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 299-305 (**cod CNCSIS 415**)
7. Coroama I., **Gavrilas M.,** Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
8. Coroama I., **Gavrilas M**., Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
9. Ivanov O., **Gavrilas M**., Static Power Systems State Estimation. A Neural Network Software Approach, Revista Energetica, Vol. 61, Nr. 5, pag. 184-188, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
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11. **Gavrilas M.,** Cazacu M., Cosarca G., Postolache D., Assessement of Technical Energy Losses for Low Voltage Distribution Networks with Uncertain Load Characteristics, Revista Energetica, Vol. 61, Nr. 6, pag. 221-227, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
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13. Coroamă I.**, Gavrilaş M.**, Ivanov O.**,** Multi-objective Pareto Network Optimization Problem for Technical, Economical and Environmental Objectives, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 587-594, iunie 2012 (**cod CNCSIS 415**)
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20. Ivanov O., **Gavrilas M.**, Istrate M., A Radial Basis Function Neural Network with Pruning Strategy for Distance Relaying Systems, Analele Universităţii din Craiova, Seria Inginerie electrica, Transportul şi distribuţia energieie electrice, pp. 345-348, 2007, ISSN 1842-4805 (**cod CNCSIS 174)**
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22. **Gavrilas M.**, Ivanov O., Sfintes C.V. – Electricity Costs Optimization by Customer Activity Scheduling; Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, 2007, Electrotehnica, Energetica, Electronica, pp.129-136,2007,ISSN 1223-8139 (**cod CNCSIS 87**)
23. **Gavrilas M**., Ivanov O. – *Medium Term Load Forecasting in Distribution Systems Using Load Profiling*; Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, 2007, Electrotehnica, Energetica, Electronica, pp. 137-143., 2007, ISSN 1223-8139 (**cod CNCSIS 87**)
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J. Invenţii.

1. Grigoraș G., Ivanov O., Neagu B.C., **Gavrilaș M.,** Scarlatache Fl., Platformă software de management și control integrat al consumurilor de energie electrică și gaze naturale în scopul creșterii eficienței energetice la întreprinderile mici și mijlocii, A/00922-13.11.2017 (cerere brevet).
2. Grigoraș G., Ivanov O., Neagu B.C., Scarlatache Fl., **Gavrilaș M.**, Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei în scopul creșterii eficienței energetice la toate categoriile de consumatori, A/00923-21.11.2018 (cerere brevet).

K. Contracte de cercetare.

Granturi / proiecte câștigate prin competiție

1. „Cercetarea și promovarea generării eficiente de energie prin trigenerare și utilizare a resurselor solare regenerabile pentru obținerea energiei electrice, căldurii și frigului și achiziționare de echipamente", cod 2SOFT/1.2.66, (2020-2022). în cadrul Programului Operaţional Comun România – Republica Moldova 2014–2020 **Gavrilaș M.** (director grant din partea TUIASI)
2. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, contract nr. 22126 / 01.10.2008, valoare 86911 Euro, 2008-2010, **Gavrilaș M.** (director grant)
3. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii surselor de consumator şi studio privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A., Contract de cerectare nr. 7405 P / 26.10.2007, valoare 43627 Euro, 2007-2008, **Gavrilaș M.** (director contract)
4. Tehnici de inteligenta artificiala si modele noi pentru dezvoltarea studiilor de sarcina in scopul utilizarii eficiente a energiei electrice in conditiile impuse de functionarea pietei de energie electrica, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, valoare 25648 Euro, 2006-2007, **Gavrilaș M.** (director grant)
5. Modele ale inteligentei artificiale pentru prognoza pe termen scurt si mediu a consumului de energie electrica, Grant nr. 6177 / B29 / 2000, valoare 753 Euro, Benficiar: Ministerul Educatiei și Cecetarii, 2000, **Gavrilaș M.** (coordonator grant).
6. Managementul inteligent al centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivității energetice Europene, Contract nr. 173CI din 02/07/2018 (PN-III-P2-2.1-CI-2018-1011), UEFISCDI, valoare 10672 Euro, 2018, **Gavrilaș M.** (membru echipa)

7. Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, UEFISCDI, valoarea 10803 Euro, 2018, **Gavrilaș M.** (membru echipa)
8. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, UEFISCDI, valoare 10961 Euro, 2017, **Gavrilaș M.** (membru echipa)
9. Instrument software pentru gestiunea tranzacțiilor pe piața de energie electrică (GTMarket), Contract PNCDI III nr.45CI/2017, cod PN-III-P2-2.1-CI-2017-0328, UEFISCDI, valoare 10959 Euro, 2017, **Gavrilaș M.** (membru echipa)
10. Platformă software inovativa pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Contract nr. 174CI din 04/07/2018 (PN-III-P2-2.1-CI-2018-1017), UEFISCDI, valoarea 10724 Euro, 2018, **Gavrilaș M.** (membru echipa)
11. Instrument software destinat cresterii securitatii sistemelor electroenergetice prin coordonarea protectiei de distanta, dezvoltat pe baza unor tehnici de inteligenta artificiala, Grant CNCSIS tip A, cod 283, tema nr. 16, contract nr. 2735/19.05.2006 si tema nr. 28, contract nr. GR80/23.05.2007, valoare 23824 Euro, 2006-2007, **Gavrilaș M.** (membru echipa)

Contracte de cercetare / consultanță

1. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018, contract nr. 3105/ 14.02.2018, valoare 9981 Euro, 2018, **Gavrilaș M.** (director contract)
2. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A., contract nr. 448P / 15.03.2017, valoare 9881 Euro, 2017, **Gavrilaș M.** (director contract)
3. Servicii de consultanta de specialitate in proiectul EON Moldova Distributie de reducere a pierderilor tehnice in retelele de distributie, contract nr. 684P / 21.04.2016, valoare 13396 Euro, 2016, **Gavrilaș M.** (director contract)
4. Servicii de consultanta de specialitate in proiectul EON Moldova Distributie de reducere a pierderilor tehnice in retelele de distributi, contract nr. 1398P / 08.10.2014, valoare 43654 Euro, 2014-2015, **Gavrilaș M.** (director contract)
5. Norma de consum propriu tehnologic in retelele de distributie pentru anul 2013, contract de cercetare nr. 337P / 21.03.2014, valoare 2250 Euro, Beneficiar: E.ON Moldova Distribuţie S.A., 2014, **Gavrilaș M.** (director contract)
6. Incarcarea dinamica a liniilor electrice aeriene prin evaluarea on-line a capacitatii de transport, contract nr. 912P / 03.07.2012, valoare 14583 Euro, 2012, **Gavrilaș M.** (director contract)
7. Studiu de determinare a consumului propriu tehnologic in retelele de joasa tensiune aferente jud. Bacau, apartinand E.ON Moldova Distributie S.A., contract de cercetare nr. 3564P / 01.11.2011, valoare 11799 Euro, 2011, **Gavrilaș M.** (director contract)
8. Cercetari privind analiza si optimizarea regimurilor de functionare ale retelelor electrice de distributie folosind elemente ale inteligentei artificiale, Contract de cercetare nr 4030P/15.11.2004, valoare 7482 Euro, Beneficiar: F.D.F.E.E. Electrica „Muntenia Sud" Bucuresti, 2004, **Gavrilaș M.** (director contract).
9. Studiu privind planificarea tranzactiilor cu energie electrica la nivelul furnizorilor – prognoze pe termen scurt si mediu, Contract de cercetare nr. 966P/2002, valoare 1885 Euro, Beneficiar: S.D.F.E.E. Iasi, 2002, **Gavrilaș M.** (director contract).
10. Controlul si conducerea retelelor electrice cu modele ale inteligentei artificiale, Contract de cercetare nr. 915P/2000, valoare 2007 Euro, Beneficiar: Transelectrica, S.T. Bacau, 2000, **Gavrilaș M.** (director contract)
11. Aplicatii software ale sistemelor hibride de inteligenta artificiala pentru proiectarea si dezvoltarea retelelor electrice, Contract de cercetare nr. 557P/2000, valoare 2685 Euro, Beneficiar: S.D.F.E.E. Iasi, 2000, **Gavrilaș M.** (director contract)

12. Prognoza consumului de energie electrica pe termen scurt pentru S.D. Iasi, Contract de cercetare 742P / 1999, valoare 2450 Euro, Beneficiar: S.D. Iasi, 1999, **Gavrilaș M.** (director contract)
13. Studiu privind regimurile de scurtcircuit din reteaua de transport exploatata de Sucursala de Transport Constanta, Contract de cercetare nr. 1739P/1999, valoare 3676 Euro, Beneficiar: Transelectrica, S.T. Constanta, 1999, **Gavrilaș M.** (director contract)
14. Studiu privind prognoza pe termen scurt a consumului de energie electrica la S.D. Buzau, Contract de cercetare 735P / 1999, valoare 1838 Euro, Beneficiar S.D. Buzău, 1999, **Gavrilaș M.** (director contract).
15. Studiu privind prognoza pe termen scurt a consumului de energie electrica la S.D. Botoșani, Contract de cercetare 730P / 1999, valoare 1838 Euro, Beneficiar S.D. Botoșani, 1999, **Gavrilaș M.** (director contract).
16. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu la nivelul F.R.E. Suceava., act aditional 1 / 1999 la contractul de cercetare 3625 / 1997, valoare 1838 Euro, Beneficiar: F.R.E. Suceva, 1999, **Gavrilaș M.** (director contract).
17. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu la nivelul F.R.E. Suceava., act aditional 1 / 1998 la contractul de cercetare 3625 / 1997, valoare 924 Euro, Beneficiar: F.R.E. Suceva, 1998, **Gavrilaș M.** (director contract).
18. Previziunea pe termen scurt a puterii absorbite si a consumului de energie folosind elemente ale inteligentei artificiale, Contract de cercetare 6760 /1998, valoare 973 Euro, Beneficiar F.R.E. Vaslui, 1998, **Gavrilaș M.** (director contract).
19. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu, Contract de cercetare nr. 3625/1997, valoare 1586 Euro, Beneficiar F.R.E. Suceava, 1997, **Gavrilaș M.** (director contract).
20. Cercetari privind optimizarea multicriteriala a structurii si regimurilor de functionare ale retelelor electrice de distributie in vederea cresterii calitatii energiei electrice si reducerii consumurilor proprii tehnologice, Contract de cercetare nr. 6685/1996, valoare 1604 Euro, Beneficiar F.R.E. Iași, 1996, **Gavrilaș M.** (director contract).
21. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare nr. 5857/1995, valoarea 1475 Euro, Beneficiar: F.R.E. Iași, 1995, **Gavrilaș M.** (director contract).
22. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare 2443 / 1994, Beneficiar: F.R.E. Iași, 1994, **Gavrilaș M.** (director contract).
23. Studiu pentru reconfigurarea retelelor de distributie de medie si joasa tensiune tinand seama de incarcarea optima a retelelor si de caderile de tensiune, in vederea scaderii consumului propriu tehnologic, contract de cercetare nr. 3624/1997, valoare 2018 Euro, Beneficiar: F.R.E. Focsani, 1997, **Gavrilaș M.** (membru echipă)
24. Utilizarea inteligentei artificiale in supravegherea si conducerea retelelor electrice, tema nr. 31 / 557, grant nr. 7002/1997, valoare 2096 Euro, 1997, **Gavrilaș M.** (membru echipa)
25. Utilizare inteligentei artificiale (algoritmi genetici) in vederea optimizarii structurii si regimurilor de functionare ale retelelor electrice de distributie, Contract de cercetare nr. 4027/1997, valoare 836 Euro, Beneficiar: F.R.E. Galați, 1997, **Gavrilaș M.** (membru echipă).
26. Cresterea calitatii supravegherii si conducerii retelelor electrice prin utilizarea metodelor moderne ale inginerii datelor si inteligentei artificiale; Contract de cercetare nr. 6726/1996, valoare 963 Euro, Beneficiar: F.R.E. Galați, 1996, **Gavrilaș M.** (membru echipă).
27. Utilizarea inteligentei artificiale in controlul si conducerea optimala a regimurilor retelelor electrice, Contract de cercetare nr. 6686/1996, valoare 723 Euro, Beneficiar: F.R.E. Iași, 1996, **Gavrilaș M.** (membru echipă).
28. Estimarea nivelului de tensiune, a consumului propriu tehnologic si cai de reducere a acestuia, folosind inteligenta artificiala, Contract de cercetare nr. 5856/1995, valoare 922 Euro, Beneficiar: F.R.E. Iași, 1996, **Gavrilaș M.** (membru echipă).
29. Cresterea calitatii supravegherii si conducerii retelelor electrice prin utilizarea metodelor moderne ale inginerii datelor si inteligentei artificale, Contract de cercetare nr. 5842/1995, valoare 1327 Euro, Beneficiar: F.R.E. Galați, 1995, **Gavrilaș M.** (membru echipă).
30. Evaluarea consumului propriu tehnologic in retelele de distributie si stabilirea eficientei diferitelor metode de reducere a acestora, Contract de cercetare nr. 3610/1995, valoare 1106 Euro, Beneficiar: F.R.E. Botoșani, 1995, **Gavrilaș M.** (membru echipă).

31. Optimizarea regimurilor de functionare ale retelelor de distributie urbana si rurala, Contract de cercetare nr. 1827/1994, Beneficiar: F.R.E. Bistrița Năsăud, 1994, **Gavrilaș M.** (membru echipă).
32. Planificarea optimala a retelelor de distributie rurala, Contract de cercetare nr. 2444/1994, Beneficiar: F.R.E. Iași, 1994, **Gavrilaș M.** (membru echipă).
33. Dezvoltarea optimala a retelelor de distributie de medie si joasa tensiune, in cazul zonelor de munte, cu densitate redusa de consum, Contract de cercetare 6296 / 1993, Beneficiar: F.R.E. Suceava, 1993, **Gavrilaș M.** (membru echipă).
34. Planificarea optimala a retelelor de distributie urbana si rurala, Contract de cercetare 3763 / 1993, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
35. Posibilitati de extindere a utilizarii tehnicii de calcul in conducerea retelelor electrice de distributie, Contract de cercetare 2437 / 1991, Beneficiar: Ministerul Invatamantului si Stiintei, 1991, **Gavrilaș M.** (membru echipă).
36. Optimizarea regimurilor de functionare ale retelelor de distributie de medie si joasa tensiune ale F.R.E. Iași, Contract de cercetare 4167 / 1990, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
37. Optimizarea regimurilor de functionare ale retelelor de distributie de medie tensiune ale I.R.E. Iasi, Contract de cercetare 11693 / 1989, Beneficiar: I.R.E. Iași, 1989, **Gavrilaș M.** (membru echipă).
38. Cresterea capacitatii de transport si micsorarea pierderilor in retele prin modificarea geometriei si a parametrilor LEA, contract de cercetare 2161 / 1989, contract de cercetare 2889 / 1989, Beneficiar: F.R.E. Iași, 1993, **Gavrilaș M.** (membru echipă).
39. Cercetari privind conducerea optimala a regimurilor retelelor din gestiunea I.R.E. Iasi in scopul ameliorarii indicatorilor tehnico-economici, Contract de cercetarea 10681 / 1987, **Gavrilaș M.** (membru echipă).

L. Premii, distincţii.

1. IEEE Senior Member din 2012 (http://ewh.ieee.org/ieee/tv/MGA/SMUpdates/2012/March.xls)
2. Best Paper Award of EC'12 (13th WSEAS International Conference on Evolutionary Computing 2012): Enhanced Evolutionary Search Algorithms for multiobjective Optimization in Power Systemby Mihai Gavrilas (web site: http://www.wseas.org/cms.action?id=2816)
3. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks publicata in jurnalul Mathematics https://uefiscdi.gov.ro/resource-824820-precisi_lista-1_partial-2_rezultate-eligibilitate_articole-2020_.pdf?&wtok=&wtkps=XU5ZasMwEL2LvhtHIyFkjX9yghDICVyP7A5YcbC8pATfPZJb6PI1b97Gq9HiM6JGEZlEFdEoFLCo1nL3HqDt2a2h7uZxpttipPL9oJye3KcfDxTuztoDPZT70DkLKDjfVGHgG5wmUdVJee5y+P0kL2MJ0lXbtk9oKGbKaJPLLAqi++1yPWorValKacq9NEV/mDcFYDSAhq8JZk+d/2VAovhrTNNWn4FOKAw0974Yxq6YfcuxIS4W9mtRjxM3Qy+q7QU=&wchk=20b953a24c2cc61b474b8ca651f69217f6bacb92
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M. Alte realizări semnificative.

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J. Invenţii.

1. 1. Ciprian Nemes, Florin Munteanu.“Metodă pentru managementul receptoarelor consumatorilor rezidențiali alimentați din surse fotovoltaice proprii” Cerere brevet nr. A00161/08.03.2018__

K. Contracte de cercetare.

Granturi de cercetare-dezvoltare câştigate prin competiţie naţională

1. Sistem de majorare a indicatorilor de autoconsum din surse fotovotaice, folosind conversia si stocarea sub forma de energie termica, Proiect tip PN-III-P3-3.1-PM-ROCN-2018-0093 / 02.07.2018-31.12.2018. Valoare 49.500 ron. Director proiect: CiprianNemeş

2. Sistem inteligent pentru managementul sarcinii consumatorilor rezidentiali alimentati din surse fotovoltaice, Proiect tip PN-III-P2-2.1-CI-2017-0823 nr. 145 CI / 10.10.2017-11.04.2018. Valoare 44990 ron. Director proiect: Ciprian Nemeş

3. Utilizarea modelelor analitice si a tehnicilor de inteligenta artificiala in optimizarea indicatorilor de fiabilitate a echipamentelor electroenergetice, prin monitorizarea solicitărilor. CNCSIC-AT/2007-2008, Cod CNCSIS – 29, Contract nr. : 33 GR /23.05.2007, 77 GR /11.06.2008.Valoare: 17000/2007; 18000/2008, Director proiect: Ciprian Nemeş

4. Zone urbane bioclimatice inteligente cu emisii reduse de carbon ca insule inovatoare energetic într-un oraș durabil, Proiect international - ERA NET Cofund-83/2016-2017 (SMART URBAN ISLE). Membru: Ciprian Nemeş

5. Construire platformă de cercetare pentru integrarea resurselor regenerabile in instalatii autonome-COPRESA, Proiect finanţat prin programul operaţional sectorial creşterea competitivităţii economice, axa prioritară 2 – Competitivitate prin CDI, operatiunea 2.3.2: Dezvoltarea infrastructurii de C-D a întreprinderilor, cu crearea de noi locuri de munca pentru C-D.

Proiect nr. 608/10.12.2013 coordonat de S.C. DAS S.R.L. Iaşi. Valoarea totală de 6.126.355,31 RON, din care asistenţa financiară nerambursabilă este de 2.443.129 RON. Membru UTI: Ciprian Nemeş

6. Cercetări privind integrarea surselor regenerabile de energie: studii în direcţia dezvoltării serviciului de alimentare cu energie electrică. Domeniul de cercetare: Mediu dezvoltare durabilă, Proiect: Performanţă prin postdoctorat pentru integrarea in aria europeană de cercetare, PERFORM-ERA, ID – 57649, 2010 - 2013, POSDRU/89/1.5/S/57649 Proiect finanţat prin Programul Operaţional Sectorial pentru Dezvoltarea Resurselor Umane 2007 – 2013. Buget total proiect: 20.813.320 RON, din care finanţare nerambursabilă 20.016.735 RON. Proiect coordonat de Prorectoratul Ştiinţific al Universtităţii Tehnice "Gheorghe Asachi" din Iaşi. Membru / cercetător postdoc: Ciprian Nemeş

7. Aparate si comutari inteligente in sistemele electroenergetice, Proiect CEEX – MENER nr. 607/2005-2007, Valoare: 48936.21/2005; 168000/2006; 50000/2007, Membru: Ciprian Nemeş

8. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului, CEEX Modul 3, contract 201/2006, 2006 – 2008, Membru: Ciprian Nemeş.

Contracte încheiate cu institute de cercetare, companii, regii, societăţi comerciale

1. Cercetari privind dezvoltarea uniu sistem pentru monitorizarea si optimizarea indicatorilor de autoconsum din surse distribuite Contract nr. 16052P\07.09.2017 - 15.10.2018, Beneficiar: SC DAS SRL Iasi. Valoare: 45000 RON + TVA, Responsabil temã: Ciprian Nemes.

2. Cercetari experimentale privind calitatea energiei electrice si solutii de ameliorare in cadrul Arcelor Mittal Galati. Contract nr. 141P\26.01.2017, Beneficiar: SC Arcelor Mittal Galati. Valoare: 33750 RON + TVA, Membru: Ciprian Nemes

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11. Modelarea fiabilităţii sistemelor cu structură dinamică aplicată sistemelor de transport al energiei electrice, Contract nr. 1579P/24.07.2004, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău, Valoare 6.500+TVA=7.735 RON, Responsabil temă: Ciprian Nemeş
12. Verificarea SUUCE pentru optimizarea exploatării şi dezvoltării instalaţiilor la SH Rm. Vâlcea, Contract nr. 894P/2001-2002 Beneficiar: SH Râmnicu Vâlcea. Valoare 9.146+TVA=10.884 RON, Membru: Ciprian Nemeş

13. Criterii, metode şi instrumente de decizie în dezvoltarea şi exploatarea reţelelor de transport în condiţiile create de reforma sectorului energetic, Contract nr. 1135P/2001, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău. Valoare 4.000+TVA=4.760 RON, Membru: Ciprian Nemeş

14. Optimizarea structurii reţelelor de MT ale SDEE Bacău pe baza analizei combinate CPT-fiabilitate, Contract nr. 1262/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

15. Principii tehnice şi economice moderne în exploatarea sistemelor de alimentare cu energie electrică, Contract nr. 1263/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

16. Evaluarea instrumentelor necesare pentru licitarea energiei electrice pe intervale, Contract nr. 412P/1999, Beneficiar: CONEL Bacău. Valoare 4.500 RON, Membru:Ciprian Nemeş

17. Analiza pierderilor este energie electrică în reţeaua de distribuţie a SDEE Târgovişte, Contract nr. 16709/1998, Beneficiar: SC Electrica SA. Valoare 6.000 RON, Membru: Ciprian Nemeş

7. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte

L. Premii, distincţii.

M. Alte realizări semnificative.

Data,
20.04.2025

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Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: Gheorghe Grigoraș

N. Teza de doctorat.

„Tehnici noi de supraveghere si conducere a sistemelor electroenergetice", 2005, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Cârțină Gheorghe

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I. Premii, distincţii.

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Data,
07.04.205

Prof. dr. ing. Gheorghe Grigoras

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele și prenumele:
Costică NIȚUCĂ

A. Teza de doctorat.

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Volumul finanţării: 97,880.00 Euro. Director proiect, conf.dr.ing. C. Niţucă.
Perioada: 2020-2021.
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Perioada: 2013-2014.
Membru proiect.

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **Dragomir Alin**

P. Teza de doctorat.

1. „Contribuții privind managementul echipamentelor electrice. Monitorizarea solicitărilor termice”, 2017, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Adam Maricel.

Q. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

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Y. Invenţii.

Z. Contracte de cercetare/granturi.

1. Dezvoltarea instituțională a TUIASI prin creșterea performanței în cercetare, dezvoltare și inovare – COMPETE 2.0, Contract tip PNCDI III – PFE, nr. 27PFE/2021, 2021÷2023, funcția coordonator științific de proiect, echipa 7, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
2. Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, Contract tip PNCDI III – PFE, nr. 9PFE/2018, 2018÷2020, funcția coordonator științific de proiect, echipa 2, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
3. Proiect mobilitati Romania-Franta PN III, PN-III-P3-3.1-PM-RO-FR, nr. 19BM / 2019, perioada 2019-2020 (international), Titlu: Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
4. Proiect ERANET-MANUNET-III-PlasmaPack nr. 214/2020, perioada 2020-2022 (international), Titlu: Bio-tratament aplicat pe ambele suprafete ale foliei polimerice utilizata pentru impachetarea produselor alimentare utilizand plasma non-termica DBD-Corona, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
5. Proiect PN-III-P2-2.1-PED-2019-0556 nr. 361PED /2020, perioada 2020 (national), Titlu: Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW), funcția membru echipa implementare, Director proiect prof.univ.dr.ing Radu Burlică,
6. Proiect de tip ERANET-MANUNET-III-Treatoflex nr. 146/2020, perioada 2020-2022 (international), Titlu: Reactor cu plasma non-termica la presiune atmosferica pentru pre-tratamentul substraturilor polimerice utilizate in fabricarea circuitelor

imprimate flexibile, funcția membru echipa implementare, Director proiect: prof.univ.dr.ing Radu Burlică.

7. Granturi interne - IDEI DE PROIECT nr. GI_P7_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem și metodă pentru producerea de energie electrică cu ajutorul micro-organismelor vii, funcția Director proiect: ș.l.dr.ing Alin Dragomir.
8. Granturi interne - IDEI DE PROIECT nr. GI_P8_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem modular de stocare a energiei electrice pentru un vehicul electric cu posibilitatea inlocurii partiale a acumulatorului, funcția membru în echipa de proiect, Director proiect: ș.l.dr.ing Daniel Sticea.
9. Granturi interne - PUBLICATII nr. GI_P15_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.07.2021- 15.12.2021, Titlu: Sistem inteligent pentru monitorizarea și protecția instalațiilor de alimentare din tracțiunea electrică / Modelarea, simularea si monitorizarea solicitărilor termice ale elementelor sistemului de retur din tracțiunea electrică, membru în echipa de proiect, Director proiect: ș.l.dr.ing Mihai Andrușcă.

AA. Premii, distincţii.

BB. Alte realizări semnificative.

Data, 09.04.2025

Ș.l. dr. ing. Alin Dragomir

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat

Managementul sistemelor de energie

Numele şi prenumele: Iuliana Vieru

A. Teza de doctorat.

• Contributii la optimizarea comportarii liniilor electrice aeriene la supratensiuni de trasnet, 2010

B. Lucrări ştiinţifice publicate în volumele conferinţelor.

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Analysis of Overhead Lines Behavior to Direct Lightning Strokes", WESC 2008

• Hriscu I, Gusa M and Istrate M: „Lightning stroke against overhead electric lines: a comparision between analytical and simulation methods of study" IS-SPETO 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the ightning Behavior of Overhead Lines", CNEI 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the Influences of Surge Arresters upon Lightning Behavior of Overhead Lines", WESC 2010

Data, Nume, semnătura

09.04.2025 dr. ing. Iuliana Vieru (Hriscu)

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetica

Numele şi prenumele: **ADAM Maricel**

A. Teza de doctorat

2. "Contribuţii la supravegherea, controlul, încercarea şi diagnosticarea echipamentelor electrice", 1996, sub coordonarea d-lui prof.dr.ing. Petru Leonte, domeniul: Maşini, Aparate şi Acţionări electrice, Universitatea Tehnică Iaşi

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS)

1. Pancu C., Andruşcă M., **Adam M.,** Echipamente cu logică programabilă, Editura PIM, Iasi, 2017, 170 pag., ISBN: 978-606-13-3721-7.
2. Andruşcă M., **Adam M.,** Managementul echipamentelor electrice, Editura Politehnium, Iasi, 2017, 200 pag., ISBN: 978-973-621-464-6.
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4. Pancu C., **Adam M.,** Baraboi A., Echipamente cu logica programabila. Îndrumar de laborator, Editura Politehnium Iași, pag. 150 (40 rânduri/pag.), 2013, ISBN 978-973-621-399-1.
5. Pancu C., Baraboi A., **Adam M.,** Echipamente electrice. Solicitări. Modelare şi simulare numerică, Editura Politehnium, Iaşi, pag. 165, 2009, ISBN 978-973-621-289-5.
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8. Munteanu Fl., Adam M., Ivas D., Nemeş C., Aparate şi comutări inteligente în sistemele electroenergetică, Editura VENUS, Iaşi, pag.317, 2006, ISBN 973-756-025-6.
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11. Schreiner Cristina, Adam M., Ciobanu R. C., Cercetări privind asigurarea calităţii şi fiabilităţii în ingineria electrică, Editura Gh. Asachi, Iaşi, pag.150, 2003, ISBN 973-621-031-6.
12. Furnică E., Baraboi A., Adam M., Întrerupătoare cu vid, Editura Gh. Asachi, Iaşi, pag.166, 2002, ISBN 973-8292-36-2.
13. Baraboi A., Adam M., Ciobanu R., Aparate electrice de înaltă tensiune, Editura Gh. Asachi, Iaşi, pag. 208, 2002, ISBN 973-8292-23-9.
14. Adam M., Baraboi A., Echipamente electrice, Vol. II, Editura Gh. Asachi, Iaşi, pag. 216, 2002, ISBN 973-8292-37-9.
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17. Adam M., Baraboi A., Ciobanu R., Monitorizarea şi diagnosticarea întrerupătoarelor de putere, Editura Gh. Asachi, Iaşi, pag. 256, 2001, ISBN 973-8292-18-2.
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20. Baraboi A., Leonte P., Adam M., Solicitările echipamentelor electrice, Editura BIT, Iaşi, pag. 250, 1997, ISBN 973-97908-6-0.
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D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Adam M., Baraboi A., Echipamente electrice - curs, Universitatea Tehnică "Gh. Asachi" Iaşi, pag. 422, 1997.
2. Hnatiuc E., Leonte P., Furnică E., Adam M., Aparate electrice, Vol. I, Indrumar de laborator, Universitatea Tehnică "Gh. Asachi" Iaşi, pag.262, 1994.
3. Leonte P., Hnatiuc E., Furnică E., Adam M., Aparate electrice, Vol. II, Indrumar de laborator, Universitatea Tehnică "Gh. Asachi" Iaşi, pag. 255, 1993.
4. Baraboi A., Adam M., Furnică E., Echipamente electrice. Lucrări de laborator, Institutul Politehnic "Gh. Asachi" Iaşi, pag. 214, 1990.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

8. M. Andrusca, M. Adam, A. Dragomir, E. Lunca, R. Seeram, O. Postolache, Condition Monitoring System and Faults Detection for Impedance Bonds from Railway Infrastructure, Journal Applied Sciences (ISSN 2076-3417; CODEN: ASPCC7), 4 September 2020, WOS.
9. Andrusca M, Adam M., Dragomir A., Lunca E, Innovative Integrated Solution for Monitoring and Protection of Power Supply System from Railway Infrastructuresm Sensors MDPI, 2021, FI-3.57, Q1. 3.
10. Dragomir A., Adam M., Andrusca M, Grigoraș G., Dragomir M., Ramakrishna S., Modeling, Simulation and Monitoring of Electrical Contacts Temperature in Railway Electric Traction, Mathematics MDPI, 2021, FI-2.25, Q1.
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5. Dezvoltarea platformei de cercetare pentru energie eficientă şi durabilă-ENERED, Grant POSCCE A2- O221-2009, ID 91, Cod SMIS 13987, Contract: /2012-2016, Valoare totala: 51.000.000 RON, Adam M.-membru
6. Sistem Inteligent de Monitorizare şi Diagnosticare a Echipamentelor Electrice – SIMDE, Grant PNCDI 2-Parteneriate, Contract nr. 21014 /2007-20010, Coordonator: UTI, Adam M.-Director proiect, Valoare totală 1246591 RON; Valoare UTI/2010: 38507. Valoare UTI/2009: 68505. Valoare UTI/2008: 392336 RON. Valoare UTI/2007: 76000 RON.
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8. Laborator de monitorizare, diagnosticare şi testarea calităţii echipamentelor electrice – MODITEST, ID-777, competiţia IMPACT (iunie 2007), obţinerea finanţării studiului de fezabilitate al proiectului, Adam M.-Director de proiect
9. Grant de mobilitate cercetător, tip PN-II-RU-MC, cod CNCSIS 49, Adam M.-aplicant; Valoare 7000 RON, 2007.
10. Cercetarea si implementarea unor structuri software/hardware avansate in constructia aparatelor electrice inteligente, Grant CNCSIS tip A, cod 407, contract nr. …./2007, tema 1, 16500 RON, 2007.
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17. Metode avansate de proiectare si testare a sistemelor de izolatie destinate functionarii in conditii extreme si tolerante la defectare, Grant CNCSIS tip A, cod 489, 150 mil ROL, 2004.
18. Metoda avansata de analiza a calitatii si de optimizare a structurii si tehnologiei bio_ si nano_compozitelor, pe baza spectroscopiei dielectrice corelata cu teoria elementului finit, Grant CNCSIS tip E, cod 82, 650 mil ROL, 2004.
19. Soluţii moderne de monitorizare şi diagnosticare a aparatajului din instalaţiile electrice, Grant CNCSIS tip A, cod 294, contract nr. 33557/2003, tema 1, 67,5 mil ROL, 2003.
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21. Soluţii moderne de monitorizare şi diagnosticare a aparatajului din instalaţiile electrice, Grant CNCSIS tip A, cod 129, contract nr. 33479/2002, tema 52, 50 mil ROL, 2002.
22. Sisteme expert de asigurare a calităţii totale în industria de materiale şi echipamente, Grant CNCSIS tip D, cod 215, 62 mii USD, 2000-2001.
23. Studiu privind monitorizarea şi diagnosticarea on-line a aparatajului de comutaţie, contract nr. 1458P/2000, ISCE Bucureşti, 70 mil ROL, 2000.
24. Modelarea şi simularea numerică a solicitării complexe a echipamentelor electrice din instalaţiile FTDEE Bacău, în vederea predicţiei stării tehnice a acestora, contract nr. 1517/14.02.1998, RENEL-FTDEE Bacău, 14,2 mil ROL, 1998.
25. Sistem de monitorizare a transformatoarelor de putere din staţiile de înaltă tensiune, contract nr. 2812/27.02.1997, RENEL-FRE Bacău, 9 mil ROL, 1997.
26. Modelarea solicitărilor termice ale căii de curent a întrerupătorului de 24 kV cu SF6 , contract nr. 7187/22.05.1996, ELECTROPUTERE Craiova, 4 mil ROL, 1996.
27. Modelarea şi identificarea structurii şi dinamicii stărilor pentru creşterea performanţelor instalaţiilor energetice, Grant CNCSU-MIS, cod 595/96, 10 mil ROL, 1996.
28. Studiul posibilităţilor de îmbunătăţire a activităţii de mentenanţă la întrerupătoarele de înaltă tensiune, contract nr. 4423/28.03.1996, RENEL-FRE Iaşi, 4 mil ROL, 1996.
29. Studierea sistemului de comandă a întrerupătoarelor pentru reducerea supratensiunilor de comutaţie, contract nr. 1660/7.02.1996, RENEL-FRE Bacău, 5 mil ROL, 1996.
30. Studiul posibilităţilor de aplicare a unor tehnici de încercare şi măsurare specifice compatibilităţii electromagnetice, contract nr. 4422/28.03.1996, RENEL-FRE Iaşi, 3,8 mil ROL, 1996.
31. Modernizarea siguranţelor fuzibile tip MPR prin îmbunătăţirea caracteristicilor de protecţie timp-curent,contract nr. 10986/07.08.1995, RENEL-FRE Iaşi, 3,6 mil ROL, 1995.
32. Modelarea şi identificarea structurii şi dinamicii stărilor pentru creşterea performanţelor instalaţiilor energetice, Grant CNCSU-MIS, cod 527/95, 3 mil ROL, 1995.
33. Analiza reţelelor din FRE Iaşi din punct de vedere al compatibilităţii electromagnetice, RENEL-FRE Iaşi, 1995.
34. Studiul posibilităţilor de îmbunătăţire a activităţii de mentenanţă la întrerupătoarele de înaltă tensiune, RENEL-FRE Iaşi, 1995.
35. Menţinerea nivelului de tensiune, pe joasă tensiune, la consumatorii izolaţi, RENEL-FRE Buzău, 1995.
36. Metode de control şi diagnostic în tehnica echipamentelor electrice cu aplicaţii la activitatea de întreţinere din staţii, RENEL-FRE Suceava, 1994, 1995.
37. Metode de control şi diagnostic în tehnica echipamentelor electrice, MIS, 1991, 1992, 1993.
38. Studiul posibilităţilor de utilizare a tubului termic în construcţia contactelor electrice ale întreruptoarelor de medie tensiune, IRE Iaşi, 1989.
39. Determinarea perametrilor lineici ai cablurilor de 12/20 kV realizate cu izolaţie extrudată indigenă, MEE-CIRE Bucureşti, 1988.

L. Premii, distincţii

1. Medalie de bronz şi diplomă la "50ème Salon mondial de l'invention, de la recherche et de l'innovation industrielle BRUSSELS EUREKA 2001", Bruxelles 2001.
2. Medalie de bronz şi diplomă la "Salon international des inventions et des techniques nouvelles", Iaşi 1996.
3. Medalie de argint şi diplomă la "44ème Salon mondial de l'invention, de la recherche et de l'innovation industrielle BRUSSELS EUREKA'95", Bruxelles 1995.
4. Medalie de bronz şi diplomă la "44ème Salon mondial de l'invention, de la recherche et de l'innovation industrielle BRUSSELS EUREKA'95", Bruxelles 1995.
5. Medalie de bronz şi diplomă la "Salon international des inventions et des techniques nouvelles", Iaşi 1994.

M. Alte realizări semnificative

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3. Sistem inteligent de monitorizare si diagnosticare a echipamentelor electrice tip SIMDE, 2010, (produs omologat Universitatea Tehnică Iași, 2010).

Data, Prof.dr.ing. Maricel Adam

Lista de lucrări în domeniul de studii universitare de masterat:
Managementul sistemelor de energie

Numele şi prenumele: **prof.asoc.dr.ing. Mircea-Dan Guşă**

A. Teza de doctorat.

1. "Contribuţii la optimizarea tratării neutrului în reţelele de medie tensiune", 1984, Domeniul "Inginerie energetică , Universitatea Tehnică „Gheorghe Asachi" din Iaşi, conducător doctorat: prof. dr. ing. Poeată Alexandru.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

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K. Contracte de cercetare/granturi.

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33. Solicitarea izolaţiei liniilor electrice debuclate. FRE Bacău, 1994, Guşă M. (director contract).

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55. Incercări de tip ale accesoriilor cablurilor de 6 kV. Trustul de instalaţii-montaj Iaşi, 1981, Guşă M. (director contract).

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58. Reglarea automată a bobinelor de stingere în reţelele de medie tensiune ale IRE Suceava. IRE Suceava, 1978-79, Guşă M. (director contract).
59. Simulator de manevre şi avarii. IRE Suceava, 1979 , Guşă M. (membru echipă).
60. Tehnologia încercării transformatoarelor de sudură cu premagnetizare. IRE Bacău, 1978, Guşă M. (membru echipă).
61. Transformatoare de sudură cu premagnetizare în curent continuu. IRE Bacău, 1978, Guşă M. (membru echipă).
62. Tehnologia încercării izolaţiei echipamentului cu tensiunea nominală de 110-400 kV. IRE Bacău, 1977, Guşă M. (membru echipă).
63. Studiu de soluţie pentru un banc de probe la atelierul de transformatoare al IRE Iaşi. IRE Iaşi, 1976, Guşă M. (membru echipă).
64. Posibilitatea şi oportunitatea trecerii la 10 kV în actuala reţea de 6 kV a municipiului Iaşi. IRE Iaşi, 1976, Guşă M. (membru echipă).
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L. Premii, distincţii.

1. Medalia „Meritul pentru învăţământ, cl. a II-a
2. Medalia de aur la Salonul internaţional al invenţiilor, Bruxelles 1992
3. Medalia de bronz la Salonul Internaţional de inventică, Iaşi 1992

M. Alte realizări semnificative.

1. Specializarea personalului didactic universitar pentru funcţia de „Cadru didactic supervizor de practică tehnologică şi de cercetare", proiect POSDRU 57/1.3/S/17884, 2010-2012, **Guşă M.** (manager proiect).
2. Reţea Nationala de Formare **CON**tinuă a **C**adrel**OR** **D**idactice din Invatamantul Preuniversitar în Domeniile Informaticii, Tehnologiei, Comunicatiilor si Dezvoltarii Durabile – **CONCORD,** **proiect POSDRU/87/1.3/S/61397, 2011-2013, Guşă M.** (coordonator Partener 2).

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Lista de lucrări în domeniul de studii universitare de masterat
Managementul Sistemelor de Energie

Numele şi prenumele: **Ivanov Ovidiu**

A. Teza de doctorat.

3. „Contribuţii la managementul congestiilor în sistemele electroenergetice, 2011, Universitatea Tehnică ”Gheorghe Asachi” din Iași, Domeniul Energetică, conducător ştiinţific prof. dr. ing. Gavrilaş N.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Grigoraș Gh., Neagu B.C., **Ivanov O.**, Gavrilaș M., Scarlatache F. - Smart Meter Data-based Strategies: In the Optimal Operation of Electric Distribution Systems, LAP LAMBERT Academic Publishing, ISBN-10 : 6200503060, ISBN-13 : 978-6200503060, 264 pag., 31 Dec. 2019
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C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

28. **Ivanov O.**, Gavrilaș M., Metode metaeuristice cu aplicații în energetică, Editura PIM, Iași, 2018, 210 pag. ISBN 978-606-13-4698-1.
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D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

7. **Ivanov O.** - Baze de date în Energetică – suport de curs (147 pagini) și lucrări de laborator (146 pagini) (2023 – prezent).

8. **Ivanov O.** – Procesarea Cunoștințelor și Calcul Inteligent – îndrumar de proiect și suport de curs (2017-prezent).
9. **Ivanov O.** - Monitoring and Management of Electrical Systems – note de curs (2014-2015).
10. **Ivanov O.** - Piete de Energie - Management si Reglementare si Piete de Energie si Politici Energetice – note de curs (2012-2013).
11. **Ivanov O.** - Retele si Echipamente pentru Conducerea Sistemelor Energetice – note de curs - (2012).
12. **Ivanov O.** - Sisteme Electroenergetice I – Note de curs (2012).

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F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

a. Reviste ISI/WoS

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b. Reviste BDI

1. Neagu B.-C., **Ivanov O.**, Grigoras Gh., Gavrilas M. - Short Term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Volumul 65 (69), Numărul 2, 2019, ISSN 1223-8139, p. 81-95 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's), http://www.bulipi-eee.tuiasi.ro/archive/2019/fasc.2/p1_f2_2019.pdf
2. Neagu B.C., Georgescu G., **Ivanov O.,** Determining Additional Power and Energy Losses in Low Voltage Electricity Distribution Networks Operated in Distorted and Unbalanced Operation States, Buletinul Institutului Politehnic din Iaşi, secția Electrotehnică. Energetică. Electronică, Vol. 63 (67), No. 1, 2017, ISSN 1223-8139, pp. 97-110 (CNCSIS B+, Index Copernicus, getCITED, Ulrich's)
3. Georgescu Gh., Neagu B.C., **Ivanov O.**, Voltage Quality Analysis in Low Voltage Public Electric Distribution Networks Operatedin Distorted and Unbalanced Conditions, Buletinul Institutului Politehnic din Iaşi, Vol. 62 (66), No. 2, 2016, pag. 81-95, 2016 (Index Copernicus, Ulrich's).
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5. **Ivanov O.**, Gavrilaş M., Improvement of a Neural Network Based State Estimation Algorithm by Using PMU Measurements, Buletinul Institutului Politehnic din Iaşi, Tom LX (LXIV), No. 4, 2014, pag. 9-22, 2014 (Index Copernicus, Ulrich's).
6. Vicol B., Gavrilas M., **Ivanov O.**, Kriukov Al., On-Line Transmission Line Parameter Identification using Synchrophasor Measurements, 5th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 28-31 May, Acta Electrotehnica, special issue, 2013, pag.526-529, 2013 (DOAJ).
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H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. Aftanase R., Gavrilas M., **Ivanov O.**, A Survey on Recent Home Energy Management Systems for Demand Response Programs, 6th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 18-21 May, Acta Electrotehnica, special issue, 2015, pag. 1-4, 4 pg., 2015 (Cod CNCSIS 576).
2. Vicol B., Gavrilaş M., **Ivanov O.**, Software Resource for Data Acquisition in Synchronized Phasor Measurement Systems (Aplicație software pentru achiziția datelor în sistemele de măsurări fazoriale sincronizate), Revista Energetica, Vol. 62, No. 3, martie 2014, pag. 96-99, 2014 (cod CNCSIS 512).
3. **Ivanov O.**, Gavrilas M., Static Power System State Estimation. A Neural Network Software Approach (Estimarea starii retelelor electrice - Model software cu retele

neuronale artificiale), Revista Energetica, Vol. 61, No. 5, mai 2013, pag. 184-188, 2013 (cod CNCSIS 512).

4. Vicol B., Gavrilas M., **Ivanov O.**, Kriukov Al., Estimation of Electrical Overhead Lines Parameters Using Synchro-Phasor Measurements (Estimarea parametrilor LEA folosind măsurători sincrofazoriale), Revista Energetica, Vol. 61, No. 5, mai 2013, pag. 194-198, 2013 (cod CNCSIS 512).
5. **Ivanov O.**, Gavrilas M., Enhanced REI Equivalents with Phasor Measurements, Buletinul Institutului Politehnic din Iaşi, Tom LVII (LXI), No. 1, 2011, pag. 125-132, 2011 (Cod CNCSIS 87).
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7. Dragoi C., Csulak F., Anisie D., Gavrilas M., **Ivanov O.**, Analiza CPT in reteaua de 110 kV a E.ON Moldova distributie in conditiile realizarii insulei Stanca-Costesti, Revista Energetica, nr. 3, martie 2008, ISSN 1453-2360, pp. 96-103, 2008 (cod CNCSIS 512).
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10. Gavrilas M., **Ivanov O.**, Medium Term Load Forecasting in Distribution Systems Using Load Profiling, Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, Electrotehnica, Energetica, Electronica, ISSN 1223-8139, pp. 137-143, 2007 (Cod CNCSIS 87).
11. Gavrilas M., **Ivanov O.**, Sfintes C.V., Electricity Costs Optimization by Customer Activity Scheduling, Buletinul Institutului Politehnic Iasi, Tom LIII (LVII), Fasc. 3-4, , Electrotehnica, Energetica, Electronica, ISSN 1223-8139, pp.129-136, 8 pg., 2007 (Cod CNCSIS 87).
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15. **Ivanov O.**, Gavrilas M., Finding the optimal path of electrical distribution networks using cooperating agents, Buletinul Institutului Politehnic Iasi, Tom L (LIV), Fasc. 5C, Electrotehnica-Energetica-Electronica, ISSN 1223-8139, pag. 1436-1441, 2004 (Cod CNCSIS 87).

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

a. ISI/WoS Proceedings

1. Neagu, B. C., Gavrilas M., **Ivanov, O.,** & Grigoras, G., Load Modeling Approaches in Smart Grids: An Overview. In The 15th International Conference Interdisciplinarity in Engineering: Conference Proceedings, Book Series Lecture Notes in Networks and Systems, Volume 386, Pages 533-561, 2022, Cham: Springer International Publishing, DOI 10.1007/978-3-030-93817-8_49, WOS:000773080200049
2. **Ivanov O.,** Neagu B.C., Niţu A.I., Gavrilaş M, An Improved Metaheuristic Algorithm for Load Balancing in LV Distribution Networks, 2021 9th International Conference on Modern Power Systems (MPS), 2021, pp. 1-5, doi: 10.1109/MPS52805.2021.9492680, WOS:000941563300084
3. Grigoras Gh., Neagu B.C., **Ivanov O.** - An Efficient Approach for Flattening the Electricity Consumption Profile at Small and Medium Enterprises, Proc. of 2019 8th International Conference on Modern Power Systems (MPS), 21-23 May 2019, Cluj Napoca, Cluj, Romania, DOI: 10.1109/MPS.2019.8759670, WOS:000612401900021 (WoS, IEEExplore)
4. Neagu B.C., Grigoras Gh., **Ivanov O.** - An Efficient Peer-to-Peer Based Blokchain Approach for Prosumers Energy Trading in Microgrids, Proc. of 2019 8th International Conference on Modern Power Systems (MPS), 21-23 May 2019, Cluj Napoca, Cluj, Romania, DOI: 10.1109/MPS.2019.8759743, WOS:000612401900090 (WoS, IEEExplore)
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c. Conferințe neindexate

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4. **Ivanov O.**, Gavrilas M., The Romanian electricity market in the European framework, International World Energy System Conference (WESC),"Gh. Asachi" Tehnical University, Iasi, Romania, 30 June – 2 July 2008, CD-ROM.
5. Gavrilas M., Sfintes C.V., **Ivanov O.**, Load Profiling Methodology For Electricity Markets, Proceedings of 30-th International Conference of Fundamentals of Electrotechnics and Circuit Theory – IC SPETO, May 2007, Gliwice-Ustron, Poland, CD-ROM.
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10. Gavrilas M., **Ivanov O.**, Sfintes C.V., Load estimation in distribution systems based on evolutionary algorithms, International World Energy System Conference WESC 2006, Torino, Italy, 10-12 July 2006, ISBN: 88-87380-51-1, pp. 153-156.
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J. Invenţii.

1. Software platform for decision assistance in optimal ecological designing of electric systems, has data archiving module that allows quick identification of common characteristics of designs using data base exploring techniques

Patent Number(s): RO133527-A0

Inventor(s): GRIGORAS G, IVANOV O, NEAGU B C, SCARLATACHE F, GAVRILAS M

Patent Assignee Name(s) and Code(s): UNIV IASI TEHNICA ASACHI GHEORGHE (UYIA-Non-standard)

Derwent Primary Accession Number: 2019-68377H (cerere brevet)

2. Software platform for integrated management and control of electric energy and natural gas consumption, has fourth module that is adapted for programming energy consumption based on energy consumption profiles of equipment

Patent Number(s): RO132688-A0

Inventor(s): GRIGORAS G, IVANOV O, NEAGU B C, GAVRILAS M, SCARLATACHE F

Patent Assignee Name(s) and Code(s): UNIV IASI TEHNICA ASACHI GHEORGHE (UYIA-Non-standard)

Derwent Primary Accession Number: 2019-29111P (cerere brevet)

K. Contracte de cercetare/granturi.

a. Granturi

40. Platformă software inovativă pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Grant PN-III-P2-2.1-CI-2018-1017, Contract nr. 174CI din 04/07/2018, Valoare: 49990 lei, Beneficiar: Energy Audits SRL, Autoritate contractantă: UEFISCDI, 2018, **Ivanov O.** (membru în echipă).
41. Management inteligent a centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivitatii energetice Europene, Grant PN-III-P2-2.1-CI-2018-1011, Contract nr. 173CI din 02/07/2018, Valoare: 49750 lei, Autoritate contractantă: UEFISCDI, 2018, **Ivanov O.** (membru în echipă).
42. Platformă software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, Valoare: 50.000 lei, Beneficiar: Smoc M. Denis Claudiu, PFA, Autoritate contractantă: UEFISCDI, 2018, **Ivanov O.** (membru în echipă).
43. Instrument software pentru gestiunea tranzacțiilor pe piața de energie electrică (GTMarket), Grant PN-III-P2-2.1-CI-2017-0328, Contract tip Cecuri de Inovare nr. 45CI/2017, Valoare: 49990 lei, Beneficiar S.C. EFE Energy SRL, Buzău, Autoritate contractantă: UEFISCDI, 2017, **Ivanov O.** (responsabil partener).
44. Platformă de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri (EFIERED), contract tip Cecuri de Inovare nr. 105CI/2017 (PN-III-P2-2.1-CI-2017-0190), Valoare: 50000 lei, Beneficiar: Smoc M. Denis Claudiu, PFA, Autoritate contractantă: UEFISCDI, 2017, Ivanov O. (membru în echipă).
45. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, Contract nr. 22126 / 01.10.2008, Valoare: 319859 lei, Beneficiar: CNCSIS, 2008-2010, **Ivanov O.** (membru în echipă).

46. Instrument software destinat cresterii securitatii sistemelor electroenergetice prin coordonarea protectiei de distanta, dezvoltat pe baza unor tehnici de inteligenta artificiala, Grant CNCSIS tip A, cod 283, tema nr. 16, Contract nr. 2735/19.05.2006 si tema nr. 28, contract nr. GR80/23.05.2007, Valoare: 84000 lei, Beneficiar: CNCSIS, 2006 – 2007, **Ivanov O.** (membru în echipă).
47. Tehnici de inteligenta artificiala si modele noi pentru dezvoltarea studiilor de sarcina in scopul utilizarii eficiente a energiei electrice in conditiile impuse de functionarea pietei de energie electrica, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, Valoare: 90430 lei, Beneficiar: CNCSIS, 2006-2007, **Ivanov O.** (membru în echipă).
48. Modele ale inteligentei artificiale pentru prognoza pe termen scurt si mediu a consumului de energie electrica, Grant 6177 / B29 / 2000, Valoare: 1500 lei, Beneficiar: ANSTI, 2000, **Ivanov O.** (membru în echipă).

b. Contracte de cercetare

49. Determinarea anuală şi/sau trimestrială a Prognozei de Consum Propriu Tehnologic, pentru rețeaua de energie electrică din zona de activitate DEGR pentru fiecare an cuprins in perioada 2023- 2028 aferenta judetelor Bacau, Botosani, Iasi, Neamt, Suceava si Vaslui, contract nr. 48734/19.12.2022, valoarea 11128 Euro, 2022, membru în echipă, **O. Ivanov**
50. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018., Contract nr. 3105P / 14.02.2018, Valoare: Valoare: 9981 EUR, Beneficiar: Delgaz Grid. S.A , 2018, **Ivanov O.** (membru în echipă)
51. Prognoza de consum propriu tehnologic pentru reaua de energie electrica din zona de activitate a Delgaz Grid. S.A., Contract nr. 448P / 15.03.2017, Valoare: 44888 lei, Beneficiar: Delgaz Grid. S.A., 2017, **Ivanov O.** (membru în echipă).
52. Prestări servicii cercetare: prelucrare MST instantanee şi stabilire locatii MST 1 zi, Contract nr. 12697/05.07.2017, Valoare: 9783 lei, Beneficiar: Delgaz Grid S.A, 2017, **Ivanov O.** (membru în echipă).
53. Elaborare studii - Servicii de consultanta de specialitate in proiectul E.ON Distributie Romania S.A. de reducere a pierderilor tehnice in retelele de distributie a energiei electrice Contract nr. 684P/21.04.2016, Valoare: 48000 lei, Beneficiar: E.On Distribuție Romania S.A., 2016-2017, **Ivanov O.** (membru în echipă).
54. Servicii de consultanţă de specialitate în proiectul E.ON Moldova Distribuţie de reducere a pierderilor tehnice în reţelele de distribuţie – Contract nr. 1398P/08.10.2014, Valoare: 108000 lei, beneficiar E.ON Distribuţie România, 2014 – 2015, **Ivanov O.** (membru în echipă).
55. Norma de consum propriu tehnologic in retelele de distributie pentru anul 2013, Contract nr. 337P/21.03.2014, Valoare: 10000 lei, Beneficiar: E.ON Moldova Distribuţie S.A., 2014, Ivanov O. (membru în echipă).
56. Incarcarea dinamica a liniilor electrice aeriene prin evaluarea on-line a capacitatii de transport, Contract nr. 912P/03.07.2012, Valoare: 65000 lei, Beneficiar: Transelectrica S.A. Sucursala Transport Bacau, 2012, **Ivanov O.** (membru în echipă).
57. Studiu de determinare a consumului propriu tehnologic in retelele de joasa tensiune aferente jud. Bacau, apartinand E.ON Moldova Distributie S.A, Contract de cercetare nr. 3564P/01.11.2011, Valoare: 50000 lei, Beneficiar: E.ON Moldova Distribuţie S.A., 2011, **Ivanov O.** (membru în echipă).
58. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii

surselor de consumator şi studiu privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A, Contract de cerectare nr. 7405P/6.10.2007, Valoare: 145440 lei, Beneficiar: E.ON Moldova Distribuţie S.A., 2006-2007, **Ivanov O.** (membru în echipă).

59. Cercetari privind analiza si optimizarea regimurilor de functionare ale retelelor electrice de distributie folosind elemente ale inteligentei artificiale, Contract cercetare nr 4030P/15.11.2004, Valoare: 29750 lei, Beneficiar: F.D.F.E.E. Electrica „Muntenia Sud" Bucuresti, 2004, **Ivanov O.** (membru în echipă).

L. Premii, distincţii.

M. Alte realizări semnificative

27 martie 2025 conf. dr. ing. Ivanov Ovidiu

Lista de lucrări în domeniul de studii universitare de masterat Managementul Sistemelor de Energie

Numele şi prenumele: **Bogdan Constantin Neagu**

A. Teza de doctorat.

1. „ Contribuţii privind optimizarea structurii şi regimurilor de funcţionare ale sistemelor de repartiţie şi distribuţie a energiei electrice”, 2014, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Mircea Dan Gușă.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Grigoras, G., **Neagu, B. C.,** Noroc, L., Chelaru, E. (2024). New smart devices-based strategies for optimal planning and operation of active electric distribution networks, Chapter in book Power System Strength: Evaluation methods, best practice, case studies, and applications, IET Publisher, ISBN: 978-1-839-53807-0.
2. **Neagu B.C.**, Gheorghe Grigoras, and Florina Scarlatache. "Engineering Applications of Blockchain Based Crowdsourcing Concept in Active Distribution Grids." *Smart Grid 3.0: Computational and Communication Technologies*. Cham: Springer International Publishing, 2023. 57-76.
3. Grigoras, Gheorghe**, Neagu B.C.**, and Florina Scarlatache. "Data Mining-Based Approaches in the Power Quality Analysis." In *Smart Grid 3.0: Computational and Communication Technologies*, pp. 93-119. Cham: Springer International Publishing, 2023.
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J. Invenţii.

1. Grigoraș G., Ivanov O., Neagu B.C., Gavrilaș M., Scarlatache Fl., Platformă software de management și control integrat al consumurilor de energie electrică și gaze naturale în scopul creșterii eficienței energetice la întreprinderile mici și mijlocii, A/00922-13.11.2017 (cerere brevet).
2. Grigoraș G., Ivanov O., Neagu B.C., Scarlatache Fl., Gavrilaș M., Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei în scopul creșterii eficienței energetice la toate categoriile de consumatori, A/00923-21.11.2018 (cerere brevet).

K. Contracte de cercetare.

1. 2SOFT/1.2/66, din cadrul programului ”Joint Operational Programme Romania – Republic of Moldova 2014 – 2020” finanţat prin ENI CBC, cu titlul “Research and promotion of highly efficient energy generation through trigeneration by using solar renewable resources for getting electricity, heat and cold and purchasing of equipment” 2020-2022.
2. Determinarea anualăşi/sau trimestrială a Prognozei de Consum Propriu Tehnologic, pentru rețeaua deenergie electrică din zona de activitateDEGR pentru fiecare an cuprins in perioada 2023- 2028 aferenta judetelor Bacau, Botosani, Iasi, Neamt, Suceava si Vaslui,contract nr. 48734/19.12.2022, valoarea 11128 Euro.
3. Dezvoltarea institutionala a TUIASI prin cresterea vizibilitatii si a performantei cercetarii, (TUIASI-COMPETE), Grant PNIII-1.2.PDI-PFC-C1-2018, Project Manager,

Prof.univ.dr.ing. Carmen Loghin, Contract nr. 9PFE din 18/10/2018, Beneficiar: UEFISCDI, Valoare: 4530000 lei. Tema: Platformă software de asistență decizională orientată spre eficientizarea managementului activității furnizorilor de energie electrică. Neagu B.C. (Responsabil echipa 9).

4. Holistica impactului surselor regenerabile de energie asupra mediului și climei-HORESEC, Grant PN-III-P1-1.2-PCCDI-2017-0404 / 31PCCDI/2018, Director Proiect Cornel Panait, Coordonator Universitatea Maritimă din Constanța, Durata 33 de luni. Valoare totală 5.287.500 lei. Neagu B.C. (membru).
5. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2019, Contract nr. 1305P / 14.02.2019; beneficiar: Delgaz Grid. S.A ,Valoare: 7500 euro, Neagu B.C. (membru)
6. Platformă software inovativa pentru managementul energetic al consumatorilor finali in vederea cresterii eficientei energetice și a reducerii emisiilor de carbon, Grant PN-III-P2-2.1-CI-2018-1017, Contract nr. 174CI din 04/07/2018, Beneficiar: UEFISCDI, Valoare: valoare 49990 lei, Neagu B.C. (director)
7. Management inteligent a centralelor electrice virtuale cu ajutorul platformelor software bazate pe inteligenta artificiala, in contextul competitivitatii energetice Europene, Grant PN-III-P2-2.1-CI-2018-1011, Contract nr. 173CI din 02/07/2018, Valoare: 49750 lei, Neagu B.C. (director)
8. Platforma software de asistare a deciziilor în proiectarea ecologică optimă a instalațiilor electrice cu producere si stocare locală a energiei, în contextul creșterii eficienței energetice, Grant PN-III-P2-2.1-CI-2018-1128, Contract 192CI/25.07.2018, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2018, Neagu B.C. (membru)
9. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A. pentru anul 2018., Contract nr. 3105P / 14.02.2018; beneficiar: Delgaz Grid. S.A ,Valoare:9981 euro, Neagu B.C. (membru)
10. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, Beneficiar: UEFISCDI, Valoare: 50.000 lei, 2017, Neagu B.C. (membru)
11. Instrument software pentru gestiunea tranzactiilor pe piata de energie electrica, Grant PN-III-P2-2.1-CI-2017-0328, Contract 45CI/25.07.2017, Valoare: 50.000 lei, 2017, Neagu B.C. (membru)
12. Prognoza de consum propriu tehnologic pentru reaua de energie electrica din zona de activitate a Delgaz Grid. S.A., Contract nr. 448P / 15.03.2017; beneficiar: Delgaz Grid. S.A ,Valoare: 44888 lei, Neagu B.C. (membru)
13. Prestări servicii cercetare: prelucrare MST instantanee și stabilire locatii MST 1 zi, Contract nr. 12697/05.07.2017, beneficiar: Delgaz Grid S.A, valoare 9783 lei, Neagu B.C. (membru).
14. Zone urbane bioclimatice inteligente cu emisii reduse de carbon ca insule inovatoare energetic într-un oraș durabil (SMART URBAN ISLE). Contract 83/2016 - ERA NET Cofund-83/2016-2018. Valoare proiect: 710.968,5 lei, Neagu B.C. (membru).
15. Elaborare studiu - Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție a energiei electrice pentru perioada 2016; Contract nr. 684P / 21.04.2016; beneficiar: EON Distribuție Romania S.A., Valoare: 60000 lei, Neagu B.C. (membru).
16. Nanomateriale și arhitecturi inovatoare pentru aplicații integrate de captare a energiei piezoelectrice (HarvEnPiez), Contract 50/2016, Proiect Era Net.Nivel internațional. Valoare proiect: 447.750 lei, Neagu B.C. (membru).

17. Senzori integrati cu caracteristici microfluidice folosind tehnologia LTCC", (INTCERSEN), Contract 9/2015, Proiect international Era Net. Valoare proiect: 468.000 lei, Neagu B.C. (membru).
18. Servicii de consultanță de specialitate în proiectul EON Moldova Distribuție de reducere a pierderilor tehnice în rețelele de distribuție, Contract nr. 1398P / 08.10.2014, beneficiar: E.ON Moldova Distribuţie S.A., Valoare: 194000 lei, Neagu B.C. (membru).
19. Tehnologii inovative de asamblare – dezasamblare a componentelor nemetalice industriale, bazate pe adezivi electro - activi nano-structuraţi, Contract de cercetare nr. 7-042/09.05.2011 (MAGBOND), beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2011-2012. (valoare 1.122.730 RON - 249.496 EUR), Neagu B.C. (membru).
20. Dezvoltarea de bio-senzori prin intermediul unei tehnologii inovative de electro - acoperire a structurilor carbonice cu polimeri activi. Contract de cercetare nr. 7-038/13.05.2011 (CARBIOSENSE), beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2011-2013. (valoare 1.079.300 RON - 239.844 EUR), Neagu B.C. (membru)
21. Școala Universitară de formare inițială și continuă a personalului didactic și a trainerilor din domeniul specializărilor tehnice și inginerești – DidaTec, Contract POSDRU / 87 / 1.3 /S /6089, beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2012-2013. Neagu B.C. (membru)
22. Specializarea personalului didactic universitar pentru functia de supervizor de practica tehnologica si de cercetare, Cod contract: 57/1.3/S/17884, beneficiar Universitatea Tehnică „Gheorghe Asachi" din Iaşi, durata contractului 2010-2012. Neagu B.C. (membru)
23. Studiu de determinare a consumului propriu tehnologic în rețelele de joasă tensiune aferente jud. Bacău, aparținând E.ON Moldova Distribuție S.A, Contract de cercetare nr. 3564P / 01.11.2011, 2011, beneficiar: E.ON Moldova Distribuţie S.A, Valoare: 50000 lei, Neagu B.C. (membru)
24. Contract cercetare nr. 1265P/2010, Analiza structurii şi a posibilităţilor de reconfigurare în regimurile post avarie a reţelelor electrice, a calităţii energiei electrice livrate consumatorilor, prognoza sarcinilor, dimensionarea optimă din punct de vedere tehnico-economic a elementelor componente, precum şi calculul regimurilor simetrice, a regimurilor de avarie (scurtcircuite) şi a regimurilor deformante care apar în sistemele de repartiţie şi distribuţie a energiei electrice (valoare 3500 RON + TVA). Neagu B.C. (membru).

L. Premii, distincţii.

M. Alte realizări semnificative.

Data,
08.04.2025

Nume, semnătura

Bogdan-Constantin Neagu

* Conform H.G. 1175/ 2006

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat Managementul sistemelor de energie*

Numele şi prenumele: **Beniugă Oana Cristina**

A. Teza de doctorat.

1. „Studii teoretice şi experimentale privind procesarea numerică a imaginilor în metrologie" – Domeniul Inginerie Electrica, sustinuta public in data de 25.09.2009, in cadrul Universitatii Tehnice "Gheorghe Asachi" din Iaşi, Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată, conducător de doctorat prof. dr. ing. Mihai Crețu.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Donciu C., Costea O., Temneanu M., Damian R., Branzila M., New prototype architecture for automated irrigation based on power line communications, Grid Enabled Remote Instrumentation, Book Series: Signals and Communication Technology, Part V, chapter 33, pp. 499-509, 2009; ISSN:1860-4862, Publisher: Springer US, DOI: 10.1007/978-0-387-09663-6_33

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Oana Cristina Beniugă, Protecția prin relee – note de curs, editura PIM, ISBN: 978-606-13-7838-8, 176 pag., 2023
2. Oana Cristina Beniugă, Florin Băiceanu - Protecția prin relee – îndrumar de laborator, editura PIM, ISBN: 978-606-13-7837-1, 180 pag., 2023
3. Oana-Maria Asiminicesei, Oana-Cristina Beniugă, Alin Dragomir, Ciprian-Romeo Comșa, Cristian-Gyözö Haba, Constantin-Cătălin Dosoftei, Sebastian-Teodor Arădoaei, Marius-Ciprian Brânzilă, AFACERI DIGITALE 3, seria: Antreprenoriat pentru ingineri și arhitecți, editura PERFORMANTICA, ISBN 978-606-685-932-5, 308 pag., 2022
4. Beniugă Oana Cristina, Automatizarea procesului de măsurare folosind procesarea numerică a imaginilor, editura PIM, format academic, ISBN 978-606-13-7985-9, 186 pag., 2023
5. Beniugă Oana, Emilian Furnică, Tehnologia fabricării aparatelor electrice - principii şi metode, editura PIM, format academic, ISBN 978-606-13-3827-6, 323 pag., 2017
6. Alexandru Sălceanu, Eduard Luncă, Oana Beniugă, Oana Neacşu, Silviu Ursache, Marius Păuleţ, Works and Walks in ESD, developed at the Faculty of Electrical Engineering, Electromagnetic Compatibility/Electromagnetic Field. Research and Development in Romania, Editura Agir, Bucureşti, format academic, Cap 3. EDUCATION, Seria: Electrotehnica – Electroenergetica, ISBN 978-973-720-521-6, 15 pag., 2014

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Set prezentări în format PPT - Protecția prin relee - disponibil la https://edu.tuiasi.ro/course/view.php?id=2066
2. Set prezentări în format PPT - Automatizarea sistemelor electroenergetice disponibil la https://edu.tuiasi.ro/course/view.php?id=3932

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Beniugă, D. Machidon, P. S. Popa, O. Beniugă, F. Băiceanu and M. Istrate, Cost-effectiveness and sustainability analysis of a NZEB house, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 187-192, doi: 10.1109/EPEi63510.2024.10758113
2. O. Beniugă, R. Beniugă, F. Băiceanu, House heating system thermal dynamics assessment using Petri Net approach, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 01-05, doi: 10.1109/MPS58874.2023.10187544
3. R. Beniugă, O. Beniugă, D. Machidon, F. Băiceanu, M. Istrate, NZEB compliance principles in Romania for residential buildings, 2023 10th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2023, pp. 01-06, doi: 10.1109/MPS58874.2023.10187523.
4. B. A. Pingescu, V. D. Asmarandei, D. G. Astanei, O. C. Beniugă, C. R. Beniugă and R. Burlică, High conductivity solution treatment by non-thermal plasma T-shaped mini electrochemical reactors, 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi), Iasi, Romania, 2024, pp. 616-619, doi: 10.1109/EPEi63510.2024.10758144
5. Bogdan, Pingescu, Astanei Dragos, Burlică Radu, Asmarandei Vasile Daniel, Beniugă Oana Cristina and Gheorghe Veronica. “Capacitive Power Supplies for Non-Thermal Plasma Electrochemical Mini-Reactors.” 2024 IEEE International Conference And Exposition On Electric And Power Engineering (EPEi) (2024): 632-635.
6. R. Burlica, D.E. Creţu, O. Beniugă, D. Astanei, Nonthermal Plasma Multi-Reactor Scale-Up Using Pulse Capacitive Power Supplies, Applied Sciences – Basel, vol. 12, issue 20, Art. number 10403, WOS: 000872282100001, 2022.
7. D. Astanei, R. Burlică, D.E. Creţu, M. Olariu, I. Stoica, O. Beniugă, Treatment of Polymeric Films Used for Printed Electronic Circuits Using Ambient Air DBD Non-Thermal Plasma, Materials, vol. 15, issue 5, art. number 1919, 2022.
8. R. Burlică, D. Astanei, D.E. Cretu, D. Dirlau, O. Beniugă, S. Padureanu, V. Stoleru, A. Patras, Non-thermal plasma T-shaped reactor for activated water production, Environmental Engineering and Management Journal, vol. 20, issue 3, pp. 397-404, WOS:000637746900009, 2021.
9. Alexandru Sălceanu, Oana Beniugă, Eduard Lunca - Advances in measurement and analysis of electrostatic discharge significance of human body capacitance, Environmental Engineering and Management Journal, Vol.12, No. 6, 1119-1124, ISSN: 1582-9596, WOS:000325632500002, 2013
10. Oana Beniugă, Oana Neacsu, Electrostatic discharge e-field spectrum analysis and graphical interpretation, BDI (B+) - BULETINUL INSTITUTULUI POLITEHNIC DIN IASI, TOME LVII (LXI), FASC. 4, Electrotechnics, Energetics, Electronics, ISSN 1223-8139 - PP.139-146, 2011.
11. Rusu, Ciprian-Cătălin, Crețu, Daniel-Eusebiu, Burlică, Radu, Astanei, Dragoș, Beniugă, Oana. DBD System Operating in Ambient Air for Surface Treatment of Polyethylene Terephthalate Films, Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, Volume 68 (2022) - Issue 1 (March 2022), 3922, pp.67-79, https://doi.org/10.2478/bipie-2022-0004, 2022

12. I.D. Dirlau, R. Burlica, D. Astanei, O. Beniugă, Effect of non-thermal plasma on molecular species formed in water based solution, Buletinul Institutului Politehnic din Iaşi, Secţia Electrotehnică, Energetică, Electronică, vol. 63(67), nr. 1, pp. 9 – 20, 2017
13. Oana Neacşu, Oana Beniugă, Alexandru Sălceanu - Assessment on electric charges pollution in the residential area and laboratory environment, Environmental Engineering and Management Journal, , Vol. 11, No. 3, pp. 635-640, ISSN: 1582-9596, 2012.
14. Karol Kováč, Jozef Hallon, Oana Beniugă - Measurement of magnetic wave shape of indirect electrostatic discharge, Journal of ELECTRICAL ENGINEERING, VOL 63. NO 7s, pp.126-129, ISSN 1335-3632, 2012
15. D.E. Cretu, C.C. Rusu, D. Astanei, R. Burlica, O. Beniugă, Assessment of HV Power Supply Efficiency in Plasma Activated Water Production, Proc. of the 2022 International Conference and Exposition on Electrical and Power Engineering, 20-22 oct. 2022, Iasi, Romania, DOI: 10.1109/EPE56121.2022.9959831
16. D.E. Creţu, Ş. Ciauşu, R. Burlică, D. Astanei, O. Beniugă, D. Teşoi, Electromagnetic Field Radiation Generated by Dielectric Barrier Discharge, Proc. of the 2021 9th International Conference on Modern Power Systems (MPS), pp. 1-6, 16-17 iun. 2021, Cluj-Napoca, Romania, DOI: 10.1109/MPS52805.2021.9492635
17. Beniugă, O. Beniugă, F. Băiceanu, M. Istrate, The Influence of Feedwater Preheaters on the Power Plant Thermal Efficiency 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-5, doi: 10.1109/MPS52805.2021.9492627
18. R. Beniugă, O. Beniugă, D. Machidon, M. Istrate, Wind Power in Romania Energy Mix Towards Sustainable Development, 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492673.
19. F. C. Baiceanu, O. Beniugă, R. C. Beniuga, E. I. Diac, Quality Assessment of Power Transformers Differential Protection Behavior Using Harmonic Restraint Techniques, 2020 International Conference and Exposition on Electrical and Power Engineering (EPE), 2020, pp. 680-684, doi: 10.1109/EPE50722.2020.9305610.
20. F. C. Baiceanu, O. Beniugă, R. Beniugă, F. T. Munteanu, Transient of High Voltage Circuit Breakers Intelligent Switching during Grid Faults, 2021 9th International Conference on Modern Power Systems (MPS), Cluj-Napoca, Romania, 2021, pp. 1-4, doi: 10.1109/MPS52805.2021.9492555.
21. D. Astanei, D. Creţu, R. Burlică, ID Dirau, O. Beniugă, S. Pellerin, M. Wartel, Voltage Polarity Influence on NTP Energy Efficiency of Point-to-Point Reactor, Proceedings of 2019 International Conference on Electromechanical and Energy Systems (SIELMEN 2019), art. number 263, Oct 9 – 11, 2019, Craiova, Romania, WOS:000630287500116
22. Răzvan Beniugă, Marcel Istrate, Oana Beniugă, Dragoș Machidon, Educational Resource for Wind Turbine Behaviour Assessment, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, pp.395-398 IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5
23. Gabriel Constantin Sârbu, Oana Beniugă, Evaluating measurement uncertainty of thermocouples calibration, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5
24. Răzvan Beniugă, Marcel Istrate, Oana Beniugă - Crowbar protection impact on wind farm behaviour during grid disturbance, Proceedings of the 7th International Conference on Modern Power Systems (MPS 2017), ISBN 978-1-5090-6565-3

25. Oana Beniugă, Razvan Beniuga, 3D Assessment of ESD field level for protection devices safety, Proceedings of the 10th International Symposium on Advanced Topics in Electrical Engineering March 23-25, 2017, ISBN: 978-1-5090-5160-1, pp. 354-357
26. Beniugă Oana, Beniugă Răzvan - Assessing operational planning performance among wind power system based on N-1 criterion (2017) 22nd IMEKO TC4 International Symposium and 20th International Workshop on ADC Modelling and Testing 2017, pp. 435-438
27. Oana Beniugă, Mihai Leca, Razvan Beniuga, Assessment of Influence of Grid Disturbances on Wind Turbine DFIG Converters, Proceedings of the 2016 International Conference and Exposition on Electrical and Power Engineering, ISBN: 978-1-5090-6128-0, pp. 693-696
28. Donciu C., O. Costea (Beniugă) Prototype architecture for automatic control of greenhouse crops irrigation, Acta Electrotehnica, nr. 2, pp.139 – 143, ISSN 1841-3323, Academia de Stiinţe Tehnice din România, Universitatea Tehnică din Cluj-Napoca, 2007
29. Temneanu C., C. Donciu, C. Cristian, O. Costea (Beniugă) Informatic System of Interactive Training for Virtual Laboratory Type Aplications (I). L5-Common Gate Interface (CGI) in Labview environment, Acta Electrotehnica nr. 2, pp.222– 227, ISSN 1841-3323, Academia de Stiinţe Tehnice din Romania, Universitatea Tehnica din Cluj-Napoca, 2008
30. O. Costea (Beniugă) Informatic System of Interactive Training for Virtual Laboratory Type Aplications (I). L1-The study of temperature transducers usimg FileldPoint Module, Acta Electrotehnica nr. 3, pp.213 – 217, ISSN 1841-3323, Academia de Stiinţe Tehnice din Romania, Universitatea Tehnica din Cluj-Napoca, 2007

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

I. Lucrări ştiinţifice publicate în volumele conferinţelor.

1. Oana Beniugă, Razvan Beniuga, Wind Farms' Grid Connection and Protection Requirements for Sustainable Development International Conference "Energy of Moldova – 2016. Regional aspects of development", 2016 - Chisinau, Republic of Moldova, ENERGY OF MOLDOVA-2016, pp.478 – 481, ISBN 978-9975-4123-5-3
2. Costea (Beniugă) O., Donciu C., Labview based analog and digital instrument's automated calibration, Management of Technological Changes, vol. 1, pp. 473-476, 2009;
3. Beniugă Oana, Neacşu Oana, Sălceanu Alexandru, Aproaches on Pollutant Fields Associated to Electrostatic Discharge over the Working and Electronic Environment – Modelling and Simulation, BDI - Buletinul Ştiinţific al Universităţii "Politehnica" din Timişoara Seria Electronică şi Telecomunicaţii -Transactions on Electronics and Communications Tom 56(70), Fascicola 2, pp.3-6, ISSN 1583-3380, 2011

J. Invenţii.

1. R. Burlică, D. Astanei, I.D. Dirlău, O. Beniugă, M. Andrușcă, M. Adam, Minireactor electrochimic cu plasma non-termica cu geometri in forma de T pentru producerea apei activate, Brevet nr. 134206/29.03.2024, RO 134206 B1
2. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, A. Dragomir, R.Beniuga, Sistem de panouri fotovoltaice cu dispersie optică a luminii solare pentru aplicații în agricultură, Cerere de brevet nr. nr. A00557/ 06.10.2023.
3. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, D.E. Creţu, C.C. Rusu, Dispozitiv cu plasma non-termica DBD-Corona pentru tratamentul substraturilor polimerice destinate ambalarii produselor alimentare,Cerere de brevet nr. A00493/12.08.2022.

4. Cerere de brevet – R. Burlică, D. Astanei, O. Beniugă, M.A. Olariu, D.E. Creţu, Dispozitiv cu plasma non-termica DBD pentru tratamentul substraturilor polimerice destinate imprimării circuitelor electronice flexibile, Cerere de brevet nr. nr. A00117/11.03.2022.
5. Cerere de brevet – I.D. Dirlău, D. Astanei, O. Beniugă, R. Burlică, Minireactor conic cu plasmă non-termică pentru producerea apei activate, cu aplicaţii în agricultură, Cerere de brevet nr. A01081/11.12.2017, publicată în RO-BOPI RO133404A2 / 28.06.2019.

K. Contracte de cercetare.

1. Membru proiect PN-IV-P8-8.3-PM-RO-BE-2024-0011, Titlu - Evaluarea impactului utilizării tehnologiei cu plasmă non-termică asupra creșterii și dezvoltării plantelor în sere și în spații protejate (Assessment of the impact of using non-thermal plasma technology on plant growth and development in indoor farming), internațional România – Belgia finanțat prin UEFISCDI
2. Membru proiect Bio-tratament aplicat pe ambele suprafețe ale foliei polimerice utilizată pentru împachetarea produselor alimentare utilizând plasma non-termică DBD-Corona, Proiect tip ERANET-MANUNET-III-PlasmaPack, nr. 214/2020, perioada 2020-2022 (24 luni)
3. Membru proiect Reactor cu plasma non-termica la presiune atmosferica pentru pre-tratamentul substraturilor polimerice utilizate in fabricarea circuitelor imprimate flexibile, proiect tip ERANET-MANUNET-III-Treatoflex, nr. 146/2020, perioada 2020-2022 (24 luni)
4. Director proiect - grant intern TUIASI, Titlu: Organic pollutant reformation to green hydrogen using non-thermal plasma technologies REFORM2H2 Proiect finantat de Univ.Tehnica Gheorghe Asachi din Iasi, Grant intern nr. GI/P11_IDEI 2021, Durata de derulare: 01.08.2021 - 15.12.2021
5. Director de proiect s.l.dr.ing. Oana Cristina Beniugă (Costea): Studii teoretice şi experimentale privind utilizarea procesării numerice a imaginilor în metrologie, Proiect finanțat de CNCSIS – PN II Contract TD nr. 92/2008, 2008-2009
6. Membru proiect C8. Centrul pentru Educație digitală - Grant intern de tip top-down cu Tema: Operaționalizarea Centrului de Inovare Digitală al TUIASI în cadrul proiectului ”DigitAll@TUIASI - Transformare digitală pentru profesiile viitorului” Contract tip G.I., nr. GI-TD-DigitAll-1/2022
7. Membru proiect Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică, proiect tip PN-III-P3-3.1-PM-RO-FR, nr. 19BM/2019, perioada 2019-2021 (30 luni)
8. Membru proiect Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW), proiect tip PN-III-P2-2.1-PED-2019-0556, nr. 361PED/2020, perioada 2020-2022 (24 luni)
9. Membru proiect Creșterea Producției Agricole în Sere Utilizând Irigarea cu Apă Activată cu Plasmă Rece, proiect tip PN III, PCE, nr. 15/12.07.2017, perioada 2017-2019 (30 luni)
10. Membru proiect Dezvoltarea unui ansamblu de senzori de curent şi tensiune şi a unui releu de protecţie pentru monitorizarea parametrilor electrici pe liniile MT/JT Beneficiar: Elecro Alfa International Botosani, nr. contract: 26153/10.12.2020, perioada de implementare: 2021
11. Membru proiect Sistem video inteligent de comandă a semaforizării intersecţiilor destinat diminuării congestiilor rutiere şi reducerii poluării fizico-chimice şi fonice a mediului, proiect finantat de CNCSIS - PN2-Parteneriate, 71-100/2007, 2007-2010
12. Membru proiect Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare Proiect finantat de CNCSIS - PN2-Parteneriate, contract 72-173/2008, 2008-2011

13. Membru proiect Titlul proiectului: Instrumentație la distanță pentru noile griduri regionale dedicate, PN II CAPACITĂȚI, nr. 62 CB/2008
14. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului Proiect finantat de CNCSIS - CEEX Modul 3, contract 201/2006, 2006 – 2008
15. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul video-inspecţiei inteligente a materialelor textile Proiect finantat de CNCSIS - CEEX – Modul 3, contract 194/ 2006, 2006-2008
16. Membru proiect Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza dezvoltat pe platforma reconfigurabila online pentru aplicații de tip laborator virtual Proiect finantat de CNCSIS - CEEX – Modul 1 – Infosoc, contract 137/2006, 2006 – 2008
17. Proiect de mobilități de tip INTERNATIONAL RESEARCH Project (IRP) Titlul proiectului: PLASMEAU - Plasmas non-thermiques pour la dégradation des contaminants émergents dans l'eau", finanțat de CNRS Franța

Perioada de derulare a mobilităților: 2024-2028

L. Premii, distincţii.

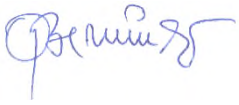
Premiile pentru excelență în cercetarea științifică acordate în 2023 de Universitatea Tehnică „Gheorghe Asachi” din Iași:

✓ Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri publice pentru cercetarea științifică - Grupul coordonat de Prof. univ. dr. ing. Radu Burlică, Facultatea de Inginerie Electrică, Energetică și Informatică Aplicată, Grup format din: Prof. univ. dr. ing. Radu Burlică, Conf. dr. ing. Dragoș Astanei, s.l.dr.ing. Oana Cristina Beniugă, Suma atrasă în universitate: 1.429.900 lei.

M. Alte realizări semnificative.

Data,
09.04.2025

Nume, semnătura
Beniugă Oana Cristina



* Conform H.G. 1175/ 2006

Anexa A.3.7. Lista de lucrări, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **ISTRATE Dumitru-Marcel**

A. ***Teza de doctorat.***

1. „Contribuţii la coordonarea izolaţiei reţelelor electrice, în vederea compactizării liniilor electrice aeriene”, 1996, Domeniul „Inginerie Energetică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Nicolae Gavrilaș.

B. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.***

C. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).***

1. Oprea Roxana, Istrate Marcel, Machidon Dragos, Solutii pentru cresterea performantelor sistemelor fotovoltaice, Editura PIM, 205 pagini, ISBN 978-606-138696-3, 2024.
2. Machidon Dragoș. Istrate Marcel, Modelel matematice de calcul a zonelor de protecție generate de sistemele de paratrăsnete, Editura Universității Tehnice “Gheorghe Asachi“ din Iași, 182 pag, ISBN 978-973-621-537-7, 2024.
3. Beniuga Razvan, Istrate Marcel, Provocari privind integrarea centralelor eoliene in sistemul energetic, Editura Politehnium (cod CNCSIS 211), Iaşi, 208 pag., (31 rânduri/pagină – coeficient 1,03), ISBN 978-973-621-520-9, 2023
4. Machidon D., Istrate M., Tehnica tensiunilor înalte – Lucrari de laborator, Editura Politehnium, Iaşi, 185 pag., 50 exemplare, ISBN 978-973-621-501-8, 2021.
5. Istrate M., Asandei D., Temneau C., Analiza asistată de calculator a coordonării protecţiei de impedanţă Editura Politehnium (cod CNCSIS 211), Iaşi, 255 pag., ISBN 978-973-621-266-4, 2008
6. Guşă M., Istrate M., Bucă C., Tehnica tensiunilor înalte – Aplicaţii. Ediţia a II-a, revizuită, Casa de Editură Venus (cod CNCSIS 199), Iaşi, 351 pag., 100 exemplare, ISBN 973-756-028-0, 2006.
7. Istrate M., Electrosecuritate, Editura Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 384 pag., ISBN 978-973-667-274-3, 2007.
8. Istrate M., Tehnologii şi instalaţii pentru reducerea emisiilor poluante – Controlul poluării în termoenergetică, Editura SETIS, Iaşi, cod CNCSIS 279, 428 pag, ISBN 97386764-0-1, 2004.
9. Adam M., Istrate M., Baraboi A., Guşă M., Echipamente de comutaţie şi izolaţia reţelelor electrice, Editura AGIR, Bucureşti, (cod CNCSIS 140) 185 pag., ISBN – 9738130-38-7, 2001.
10. Georgescu Gh., Varvara V., Istrate M., Sisteme de distribuţie a energiei electrice. Volumul II, partea a I-a, Editura Tehnică, ştiinţifică şi didactică CERMI (cod CNCSIS 181), Iaşi, 453 pag., 200 ex., ISBN 978-973-667-314-6, 2008.

11. Georgescu G., Istrate M., Varvara V., Rădăşanu D., Popa B., Transportul şi distribuţia energiei electrice, Vol. II, Editura "Gh.Asachi" Iaşi, (cod CNCSIS 211), 442 pag, 350 ex., ISBN 973-8292-03-4., 2001.
12. Istrate M., Guşă M., Impactul producerii, transportului şi distribuţiei energiei electrice asupra mediului, Editura AGIR, Bucureşti, (cod CNCSIS 140) 210 pagini, 150 exemplare, ISBN 973-99295-5-9, , 2000.

D. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.***

1. Guşă M., Istrate M., Gavrilaş N., Asaftei C.,Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Editura Fundaţiei culturale "Renaşterea Română", Iaşi, 300 pagini, 200 exemplare, ISBN 973-97246-3-9, 1997.
2. Asaftei C., Guşă M., Istrate M., Gavrilaş N., Tehnici de control şi supraveghere a reţelelor de distribuţie, Editura Fundaţiei Culturale "Renaşterea Română", Iaşi, 315 pagini, ISBN 973-97246-1-2, 1998.
3. Gavrilaş N., Istrate M., Guşă M., Asaftei C., Tehnica tensiunilor înalte - Supratensiuni în sistemele electroenergetice, Curs litografiat la Universitatea Tehnică "Gheorghe Asachi" din Iaşi, 210 pag., 1996.

E. ***Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.***

1. Istrate M., Machidon D., Electrosecuritate – curs electronic, www.tti.ieeia.tuiasi.ro
2. Istrate M., Machidon D., Regimuri tranzitorii electromagnetice – curs electronic, www.tti.ieeia.tuiasi.ro
3. Istrate M., Guşă M., Machidon D., High Voltage Enegineering – curs electronic, www.tti.ieeia.tuiasi.ro

F. ***Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.***

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2. Costel Boariu, Costică Roman, Marcel Istrate, Tor Haakon Bakken, Atle Harby, Elena Pummer, Georgiana Dunca, Diana Maria Bucur, Peculiarities of the run-off-river hydropower potential in Romania, Environmental Engineering and Management Journa, January 2024, Vol. 23, No. 1, pp. 51-60, Print ISSN: 1582-9596, eISSN: 1843-3707, DOI: 10.30638/eemj.2024.005, http://www.eemj.icpm.tuiasi.ro/issues/vol23/vol23no1.htm, Revista ISI - Impact factor la data publicarii 1,1
3. Fadila Barkat, Ali Cheknane, Josep M. Guerrero, Abderezak Lashab, Marcel Istrate, Mihai Gavrilas, Justina G. Motas, Ioan Viorel Banu, Review, analysis, and performance evaluation of the most common four active methods for islanding detection in gridconnected photovoltaic systems, January 2023, Electric Power Systems Research 214(Part A), DOI: 10.1016/j.epsr.2022.108909, LicenseCC BY 4.0,

https://www.sciencedirect.com/science/article/pii/S0378779622009609?via%3Dihub, Revista ISI - Impact factor 3.9, Q2

4. Dragos Machidon, Marcel Istrate, Tilt Angle Adjustment for Incident Solar Energy Increase: A Case Study for Europe, Sustainability 2023, 15(8), 7015; https://doi.org/10.3390/su15087015, Received: 20 March 2023 / Revised: 19 April 2023 / Accepted: 20 April 2023 / Published: 21 April 2023, https://www.mdpi.com/20711050/15/8/7015, Revista ISI - Impact factor 3.889, Q2
5. Ioan Viorel Banu, Fadila Barkat, Marcel Istrate, Josep M.Guerrerod, GeorgeCulea, PetruLivinti, Justina G.Motasb, Bogdan Neagub, Dragos Andrioaia, Passive antiIslanding protection for Three-Phase Grid-Connected photovoltaic power systems, January 2023, International Journal of Electrical Power & Energy Systems 148:108946, DOI: 10.1016/j.ijepes.2023.108946, journal homepage: www.elsevier.com/locate/ijepes, https://doi.org/10.1016/j.ijepes.2023.108946, Received 16 July 2022; Received in revised form 27 October 2022; Accepted 3 January 2023 https://www.sciencedirect.com/science/article/pii/S0142061523000030?via%3Dihub, Revista ISI - Impact factor 5,2, Q1
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7. Neagu, B.-C.; Ivanov, O.; Grigoras, G.; Gavrilas, M.; Istrate, D.-M. New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids. Sustainability 2020, 12, 7265, doi:10.3390/su12187265.
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10. Nemes C., Istrate M., A clear sky irradiation assessment using the ESRA model and SRTM database, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1271-1279. ISSN 1582-9596.
11. Lunca E., Istrate M., Salcean A., Comparative Analysis of The Extremely LowFrequency Magnetic Field Exposure from Overhead Power Lines, Environmental Engineering and Management Journal, vol. 12 (June 2013), no. 6, pp. 1145-1151. ISSN 1582-9596.
12. Ursulean R., Lazar A.M., Istrate M., A New Method to Evidence the P300 Eventrelated Potential based on a Lifting Scheme, Elektronika Ir Elektrotechnika. Electronics, No. 2 Vol.19, 2013, ISSN 1392–1215, pp. 31-36.
13. Nemes C., Istrate M., Statistical Analysis of Wind Turbine's Output Power, Electronics and Electrical Engineering Journal, No. 4 (120), 2012, pp. 31-34, ISSN 1392 – 1215.

14. Ursulean R., Lazar A.M., Istrate M., The Sensitivity of the Fractal Spectrum: a Means of Controlling the Statistical Properties of Chaotic Signals, Elektronika Ir Elektrotechnika. Electronics, No. 8(114), 2011, ISSN 1392–1215, pp. 21-26, Electronic version.
15. Grigoras G, Istrate M., An Efficient Clustering Method In Evaluation Of The Electric Energy Consumption From Water Hydrophore Stations, International Review on Modelling and Simulations (I.RE.MO.S.), Vol. 4, No. 2, April 2011, pp. 813-818, Print ISSN: 1974-9821, Cd-Rom ISSN: 1974-983X.
16. Grigoras G., Cartina G., Istrate M., Rotaru F., The Efficiency of the Clustering Techniques in the Energy Losses Evaluation from Distribution Networks, International Journal Of Mathematical Models And Methods In Applied Sciences, Issue 1, Vol.5, 2011, pp. 133-141, ISSN: 1998-0140.
17. Ursulean R., Lazăr A.-M., Istrate M., Structuring Elements for the P300 Event-related Potential Detection, Elektronika Ir Elektrotechnika. System Engineering, Computer Technology, No. 9(105), 2010, ISSN 1392–1215, pp. 85-88, Electronic version
18. Istrate M., Grigoraş Gh., Energy Consumption Estimation in Water Distribution Systems Using Fuzzy Techniqus, Environmental Engineering and management Journal, Vol. 9, No.2, pp.249-256, February 2010. ISSN 1582-9596.
19. Istrate M., Gusa M., Assessment Of Two Single-End Fault Location Algorithms In An ATP Approach, Revue Roumaine de Sciences Techniques – Électrotechique et Énergétique, Tome 54, 4, pp. 345-354, ISSN: 0035-4066.
20. Istrate M., Miron A., Istrate C., Gusa M., Machidon D., Single-phased Fault Location on Transmission Lines Using Unsynchronized Voltages, Advances in Electrical and Computer Engineering, Issue 3, 2009, pages 51-56, ISSN: 1582-7445, e-ISSN: 18447600, Digital Object Identifier: 10.4316/AECE.2009.03010, Accession Number: WOS:000271872000010.

G. ***Lucrări ştiinţifice publicate în reviste din străinătate.***

1. Istrate M., Gavrilaş N., Guşă M., Asaftei C., Calculul supratensiunilor temporare datorate efectului capacitiv pe liniile de foarte înaltă tensiune, cu considerarea descărcării corona, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, pag. 213 – 218, 1996.
2. Asaftei C., Gavrilaş N., Guşă M., Istrate M., Cu privire la transmiterea şi recepţia semnalelor emise de indicatoarele de defect, Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 229 – 237, 1996.
3. Guşă M., Gavrilaş N., Asaftei C., Istrate M., Supratensiuni provocate de scurtcircuitul monofazat în reţele de medie tensiune având neutrul tratat cu inductanţă Analele Institutului de Energetică al Academiei de Ştiinţe a Republicii Moldova, Chişinău, pag. 203 – 212, 1996.
4. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Semnalizarea locală a zonelor cu defect de izolaţie a reţelelor electrice de medie tensiune, Upravlemie Electroperedaci, editat de Academia de Ştiinţe a Republicii Moldova, Vol. 7, pag. 56 – 60, 1993.
5. Asaftei C., Guşă M., Gavrilaş N., Istrate M., Telesemnalizarea zonelor cu defect în liniile de medie tensiune, Buletinul Academiei de Ştiinţe a Republicii Moldova, Seria Fizică şi tehnică, Chişinău, nr.3 (9), pag.101-106, 1992.

H. ***Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.***

21. Machidon D., Istrate M., Oprea R., Some considerations on the photovoltaic conversion of the solar energy in Romania, Bulletin of the Polytechnic Institute of Iasi, Section

Electrotehnica. Energetica. Electronica Volume 62(66), Fasc.3, pg.21-30, ISSN 12238139, (CNCSIS, code 87, http://www.cncsis.ro/, http://www.bulipieee.tuiasi.ro/archive/2016/fasc.3/p2_f3_2016.pdf), 2016.
22. Machidon D., Istrate M., Weather Influence Analysis on the Lightning Protection Current Estimation, Acta Electrotehnica, Number 3-2015, Proceedings of The 6th
23. International Conference on Modern Power Systems, MPS 2015, 18-21 mai 2015 ClujNapoca, Romania, pp.161-164, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries).
24. Machidon D., Istrate M., Power Station Protection Zones Estimation Using the Rolling Sphere Method and the Elliptic Model, Acta Electrotehnica, Special Issue "Proceedings
25. of The 5th International Conference on Modern Power Systems MPS 2013, ClujNapoca, Romania, Vol. 54, No., 5, 2013, pp.256-261, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org)
26. Banu I.V., Beniuga R., Istrate M., Study of Temperature for Modeling of Photovoltaic Solar Array using Experimental Test Data, Acta Electrotehnica, Special Issue "Proceedings of The 5th International Conference on Modern Power Systems MPS
27. 2013, Cluj-Napoca, Romania, Vol. 54, No., 5, 2013, pp.51-54, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org), Revista BDI
28. Beniuga R., Banu I.V., Istrate M., Behaviour od Double-Feed Induction Generatyor Wind Turbines with Crowbar System during Grid Faults, Acta Electrotehnica, Special Issue "Proceedings of The 5th International Conference on Modern Power Systems MPS 2013, Cluj-Napoca, Romania, Vol. 54, No., 5, 2013, pp.59-63, ISSN 1841-3323, (Indexed in VINITI, DOAJ Lund University Lybraries http://www.doaj.org), Revista BDI
29. Machidon D., Istrate M., Guşă M., Dragomir M., The Elliptic Model Implementation For The Estimation Of The Vertical Rod's Protection Zones, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII, Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.477-482, http://www.buletinulagir.agir.ro/articol.php?id=1426.
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32. Beniugă R., Istrate M., DFIG Wind Turbina Dynamic Under The Stress Of Power System Faults, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR, nr.3/2012, An.XVII,
33. Index Copernicus International, ISSN-L 1224-7928, Online: ISSN 2247-3548, pp.429-434, http://www.buletinulagir.agir.ro/articol.php?id=1418, Revista BDI
34. Dragomir M., Istrate M., Beniugă R., Machidon D., Assessment Of Two-End Data Fault Location Algorithms For Transmission Grids, World Energy System Conference.Towards Sustainable and Integrated Energy Systems, Suceava, 28-30 iunie 2012, Buletinul AGIR,

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35. Nemes C., Istrate M., Overview of Optimal Wind Turbine Selecting, Acta Electrotehnica, Vol.52, No.5, 2011, pp.323-326, ISSN 1841-3323.
36. Dragomir M., Istrate M., Gusa M., Machidon D., The Influence of The Power Frequency on the Accuracy of Two-Enda data fault Location Algorithm, Acta Electrotehnica, Vol.52, No.5, 2011, pp.143-146, ISSN 1841-3323.
37. Machidon D., Istrate M., Gusa M., Dragomir M., Lightning Protection Current determination Using ATP Simulations and Leader Progression Model, Acta Electrotehnica, Vol.52, No.5, 2011, pp.243-246, ISSN 1841-3323.
38. Dragomir M., Istrate M., Evaluation of Two-End Data Fault Location Algorithms Used in Fault Location, Buletinul Institutului Politehnic Iaşi, Tomul LVII (LXI), Fasc.3, pag.17-22, ISSN 1223-8139, (Clasificare B+ (CNCSIS cod 87); Indexari BDI: Index Copernicus, getCITED, Ulrich's), http://www.tuiasi.ro/facultati/eth/index.php?page=820 , 2011, Revista BDI
39. Dragomir M., Istrate M., The Influence of the Fault Resistance on The Accuracy of The One-end data Fault Location Algorithms, Buletinul Institutului Politehnic Iaşi, Tomul LVII (LXI), Fasc.3, pag.117-122, ISSN 1223-8139, (Clasificare B+ (CNCSIS cod 87);
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45. Istrate M., Fault Location In Distribution Grids In An ATP Approach, Buletinul Institutului Politehnic Iaşi, Tomul LIV (LVIII), Fasc.3, pag.173-178, ISSN 1223-8139, (Categ. C-CNCSIS, cod 87, http://www.cncsis.ro/ articole/1901/Arhiva-20052008.html), 2008.
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J. ***Invenţii.***

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K. ***Contracte de cercetare/granturi.***

1. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Performanței in Cercetare, Dezvoltare si Inovare COMPETE 2.0, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 27PFE/30.12.2021– Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 6.578.117 lei, in trei etape anuale, astfel: anul 2022 – 2.466.918 lei; anul 2023 – 3.546.772 lei; anul 2024 – 546.427 lei, Istrate M – Responsabil stiintific.
2. Contractul nr. 11155/06.04.2022 TUIASI, Innovation Norway No. 2021/332809 din 24.03.2022, EEA and Norway Grants 2014-2021, „Energy Generation from NonPowered Dams - ENERGYDAM", Implementare iunie 2022-decembrie 2023, Sume; Total proiect: 346958 Euro, din care in 2022 – 154175 Euro si in 2023 – 192783 Euro, Istrate M. – Manager proiect si membru in echipa de cercetare pe anumite pachete de lucru.
3. Grant Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, https://www.compete.tuiasi.ro/, finanțat prin Contractul nr. 9PFE/2018 în cadrul Programului 1 - Dezvoltarea sistemului național de cercetaredezvoltare, Subprogramul 1.2 – Performanță instituțională – Proiecte de dezvoltare instituțională – Proiecte de finanțare a excelenței în CDI din cadrul PNCDI III. Domeniul 3 – Energie, mediu, schimbari climatice, Suma bugetata = 4.530.000 lei, in trei etape anuale, astfel: anul 2018 – 203750 lei; anul 2019 -2090769 lei; anul 2020 – 2235481 lei; Istrate M – Responsabil stiintific
4. Analiza regimurilor tranzitorii electromagnetice în rețele de medie tensiune în vederea implementării automaticii de reanclanșare rapidă monofazată, Contractul de cercetare nr. 1264P/21.01.2019, Istrate M.- Director tema, Beneficiar: beneficiarului SC EXIMPROD GRUP SA, cu sediul în Buzău, contract obtinut prin negociere directa – suma 10000 lei +TVA
5. Analiza și interpretarea datelor, întocmirea algoritmilor de prelucrarea datelor, simularea asistată de calculator și întocmirea rapoartelor de simulare, cod CPV 71335000-5; Beneficiar: Societatea pentru Servicii de Mentenață a Rețelei Electrice de Transport "SMART" S.A. București Sucursala de Mentenanță SIBIU, 2015-2018, tema 27373/22.12.2015, Istrate M.- Responsabil contract, Machidon D. Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP. Valoare studiu: 185.000 lei +TVA
6. Studiu privind verificarea schemelor de protecţie împotriva loviturilor directe de trăsnet în cazul staţiei 220/110/20 kV Munteni. Analiză comparată a metodei normate şi a metodei electrogeometrice", cod CPV 71335000-5; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2013, tema 8795/17.05.2013, Istrate M.- Director tema, Machidon D. Valoare 57000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,4111 lei/Euro (echivalentul in Euro al sumei contractate este de 12922 Euro fara TVA sau 16023 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008
7. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamentele de 400/110 kV ale staţiei de transformare Roman Nord. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2012, tema 8731/25.05.2012, Istrate M.- Director tema, Machidon D.

Valoare 77000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,45 lei/Euro (echivalentul in Euro al sumei contractate este de 17300 Euro fara TVA sau 21400 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

8. Studiu privind analiza asistată pe calculator a riscului producerii loviturilor de trăsnet în echipamente de 220 kV şi 400 kV ale staţiei de transformare Suceava. Analiza comparată a metodei normate şi a metodei electrogeometrice; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2011, tema 1090P/03.05.2011, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 70000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,1073 lei/Euro (echivalentul in Euro al sumei contractate este de 17042,8 Euro fara TVA sau 21133,1 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008

9. Studiu privind expertizarea instalaţiilor de 110 şi 220 kV din staţia FAI, urmare modificării schemelor de conexiuni, prin metoda electrogeometrică, privind riscul producerii loviturilor directe de trăsnet în echipamentele staţiei; Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, 2009, tema 9958P/15.07.2009, Istrate M.- Director tema, Guşă M, Machidon D. Valoare 48000+TVA RON; Contract obţinut prin procedura de licitaţie deschisă – publicată pe SEAP; Cursul de schimb valutar BNR la data semnarii contractului a fost de 4,2175 lei/Euro (echivalentul in Euro al sumei contractate este de 11381,5 Euro fara TVA sau 13543,6 Euro cu TVA). Asimilat grant de cercetare obținut prin competiție, conform Ordin MECT nr. 5896, din 11.11.2008.

10. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 77/11.06.2008, tema nr. 20, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 36000 RON

11. Sistem inteligent de predicţie şi control al congestiilor în reţelele de transport şi distribuţie la înaltă tensiune, Grant PN2-Parteneriate, contract 22-126 / 2008, membru în echipa de cercetare; Valoare UTI: 1.800.000 lei, Valoare UTI 2008: 67779, 5 membri/2008 în echipa de cercetare, Director proiect: Mihai Gavrilaş, Istrate M.. – responsabil partener UTI.

12. Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare; Grant PN2-Parteneriate, contract 72173/2008, director C. Donciu; Valoare UTI: 1.130.000 lei; 17 membri în echipa de cercetare, Istrate M.. – membru echipa partener UTI.

13. Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza, dezvoltat pe platforma reconfigurabila online pentru aplicatii de tip laborator virtual., Proiect CEEX Modul 1 – INFOSOC, Contract nr. 137 / 02.10.2006, Director proiect: Codrin Donciu, Durata proiect 1 an si 11 luni (predare etapa finala 30.08.2008), Valoare totala proiect: 880.000 lei, Valoare UTI: 606.164 lei, Istrate M.. – membru echipă partener UTI.

14. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. GR 80 /23.05.2007, tema nr. 28, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C. Valoare 44000 RON. (Medie grant CNCSIS-UTI 2007 – 41408).

15. Analiza asistată de calculator a influenţei defectelor din reţeaua de 110 kV asupra funcţionării reţelei de transport a ST Bacău, Beneficiar: CN Trans-electrica SA, Sucursala de Transport Bacău, tema 2220P/02.06.2006, Istrate M., Guşă M.. Valoare 35700 RON cu TVA,

contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 10110.7 Euro cu TVA)

16. Analiza asistată de calculator a riscului producerii loviturilor directe de trăsnet în echipamantele staţiei 220/110 kV Dumbrava. Aplicaţie a metodei electrogeometrice, Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău, tema 2219P/02.06.2006 Istrate M., Guşă M. Valoare 23800 RON cu TVA, contract obţinut prin procedura de licitaţie deschisă. Cursul de schimb valutar BNR la data semnarii contractului a fost de 3.5309 lei/Euro (echivalentul in Euro al sumei contractate este de 6740,5 Euro cu TVA)

17. Instrument software destinat creşterii securităţii sistemelor electroenergetice prin coordonarea protecţiei de distanţă, dezvoltat pe baza unor tehnici de inteligenţă artrificială. Grant CNCSIS, A, contract nr. 2735/ 19.05.2006, tema nr. 16, cod CNCSIS 283; Istrate M.-Director grant, Guşă M., Gavrilas M., Asandei D., Temnenau C.; Valoare 46000 RON.

18. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, contract 2741/ 19.05.2006, tema 40, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Valoare contract: 10000 RON

19. Cercetări privind oportunitatea instalării de descărcătore cu rezistenţă variabilă pe liniile electrice aeriene; Grant CNCSIS, A, contract 27637/2005, tema 28, cod CNCSIS 483, Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract: 100000000 lei

20. Studiul zonelor de protecţie prin metoda sferei fictive aplicată staţiei de transformare 400(220)/110 kV Munteni. Beneficiar: C.N. Transelectrica SA, S.T. Bacău, Tema 61P/2003. Colectiv: Guşă M., Istrate M., Bucă C., Valoare contract 71400000 lei cu TVA

21. Aplicaţie software pentru analiza regimurilor electromagnetice tranzitorii generate de funcţionarea unor protecţii şi instalaţii automate din RET 220/400 kV. Beneficiar: CN Transelectrica SA, Sucursala de Transport Bacău (contract obţinut prin procedura de licitaţie deschisă, la care au fost şi alţi participanţi - TRAPEC Bucureşti), Tema 61P/2003. Istrate M. – Director temă, Guşă M. Valoare contract 77350000 lei cu TVA.

22. Analiza modului de realizare a protecţiei împotriva loviturilor directe de trăsnet în staţia de transformare Iaşi - Sud. Beneficiar: S.D.F.E.E. Iaşi Tema 965P/2002. Colectiv: Guşă M., Istrate M., Valoare contract 47600000 lei cu TVA.

23. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive – Aplicaţie pentru staţia de transformare Suceava. Beneficiar: S.D.E.E. Bacău, Tema 422P/2002. Col.: Guşă M., Istrate M. Valoare contract 50000000 lei cu TVA.

24. Analiza asistată a regimurilor tranzitorii din reţelele de joasă tensiune. Beneficiar: Electrica S.A. – S.D.E.E. Bacău, Tema 807P/2001. Asaftei C., Istrate M., Guşă M. Valoare contract 65000000 lei cu TVA.

25. Studiul zonelor de protecţie împotriva loviturilor directe de trăsnet prin metoda sferei fictive–Aplicaţie pentru staţia de transformare Roman Nord. Beneficiar: SDEE Bacău, Tema 194P/2001. Colectiv: Guşă M., Istrate M. Valoare contract 40000000 lei cu TVA

26. Analiza asistată de calculator a funcţionării protecţiilor de distanţă în reţeaua de transport 220/400 kV a S.T. Bacău. Beneficiar: CN Transelectrica - ST Bacău, 2001. Istrate M. – Director temă, Guşă M. Valoare contract 48 milioane lei.

27. Protecţia reţelelor de distribuţie de JT împotriva supratensiunilor transmise din reţelele de MT. Grant ANSTI, contract nr. 6177/2000, număr temă: B-50. Două etape: 2000 şi 2001. Colectiv: Guşă M., Istrate M. Valoare contract: 43100000 lei

28. Evaluarea nivelului de ţinere la impuls de trăsnet a izolaţiei echipamentelor de joasă tensiune din posturile de transformare MT/JT. Beneficiar: S.D.E.E. Bacău, Tema 1627P/2000. Col.: Guşă M., Istrate M., Asaftei C. Valoare contract: 50000000 lei

29. Soluţii pentru evitarea incendiilor determinate de trăsnet la rezervoarele metalice cu capac flotant pentru produse petroliere. Beneficiar: S.C. “Oil Terminal” S.A. Constanţa, Tema 1633P/2000. Col.: Guşă M., Istrate M. Valoare contract: 15500000
30. Studiul asistat de calculator al protecţiei staţiilor de transformare împotriva loviturii directe de trăsnet. Beneficiar: Sucursala de Transport a Energiei Electrice Constanţa; Tema 1740P/1999(2000). Colectiv: Gavrilaş N., Istrate M., Guşă M., Valoare contract: 60000000
31. Transmiterea supratensiunilor de trăsnet prin transformatoarele de distribuţie de medie tensiune/joasă tensiune. Beneficiar: S.D.E.E. Iaşi, Tema 567P/2000. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 45000000 lei
32. Studiu privind modelarea pe calculator a regimurilor de defect monofazat în reţeaua de distribuţie de 20 kV a municipiului Galaţi, având neutrul tratat prin rezistor. Beneficiar: S.D.E.E. Galaţi, Tema 849P/2000. Colectiv: Asaftei C., Istrate M., Guşă M. Valoare contract: 40000000 lei
33. Analiza regimurilor complexe de avarie şi postavarie în reţeaua de transport a STD Bacău. Beneficiar: Sucursala Transport Dispecer Bacău, Tema 303P/1999. Colectiv: Guşă M., Istrate M.Valoare contract: 45000000 lei.
34. Protecţia împotriva supratensiunilor atmosferice a posturilor de transformare MT/JT şi a reţelei de joasa tensiune aferente. Beneficiar: S.D.E.E. Bacău, Tema 283P/1998. Colectiv: Guşă M., Istrate M., Asaftei C. Valoare contract: 30000000
35. Analiza tensiunilor de regim tranzitoriu în zona de reţea de medie tensiune a municipiului Sibiu. Beneficiar: S.D.E.E. Sibiu, Tema 147P/1998. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 30000000 lei
36. Sistem de autodeclanşare selectivă, telecomandă şi telesemnalizare centralizată pentru reţelele aeriene de 20 kV. Beneficiar: F.T.D.E.E. Suceava, Tema 3587/1997. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 15000000 lei.
37. Studiu privind asigurarea selectivităţii şi sensibilităţii protecţiei în reţelele de medie tensiune aferente staţiilor cu neutrul tratat prin rezistenţă din municipiul Botoşani. Beneficiar: F.D.E.E. Botoşani, Tema 11941/1997. Colectiv: Guşă M., Istrate M., Gavrilaş N. Valoare contract: 12000000
38. Realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune şi montarea unor astfel de indicatoare în zona Tg.Frumos. Beneficiar: F.R.E. Iaşi, Tema 9397/1996. Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
39. Optimizarea funcţionării reţelelor compensate prin implementarea unor mijloace de detectare a defectelor monofazate. Beneficiar: F.R.E. Iaşi, Tema 4730/1996. Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 6000000 lei
40. Analiza supratensiunilor interne în reţelele de 110 kV şi 220 kV cu considerarea unor fenomene nelineare. Beneficiar: Filiala de Reţele Electrice Iaşi, Teama 6147/1996.
41. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei, Determinarea supratensiunilor în reţele de înaltă tensiune cu considerarea unor pierderi şi neliniarităţi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1995, Tema 6456, Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C.; Valoare contract: 3000000 lei.
42. Studiul posibilităţilor de detectare a zonelor de defect pe LEA de medie tensiune cu neutrul tratat cu bobină de stingere. Beneficiar: F.R.E. Iaşi, 1995; Tema 6455; Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 4000000 lei
43. Determinarea supratensiunilor interne şi atmosferice în reţele de înaltă tensiune. Beneficiar: Filiala de Reţele Electrice Iaşi, 1994. Tema 3745/1994; Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei

44. Studiul posibilităţilor de realizare şi realizarea unui tester de verificare a indicatoarelor de defect pe LEA de medie tensiune. Beneficiar: F.R.E. Iaşi, 1994. Tema 3850; Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare contract: 4000000 lei
45. Autodeclanşarea selectivă a separatoarelor de sarcină în SF6 de pe derivaţii şi de pe axele de MT, cu semnalizare în staţia de alimentare, prin transmisie pe conductoarele LEA. Beneficiar: F.R.E. Suceava; Tema 6630/1994, 1995 şi 1996. Tema 6630/1994,1995,1996 Colectiv: Asaftei C., Istrate M., Guşă M., Gavrilaş N. Valoare totala contract: 32000000 lei
46. Solicitarea izolaţiei liniilor electrice debuclate. Beneficiar: F.R.E. Bacău, 1994, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1500000 lei.
47. Studiul comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile FRE Iaşi. Beneficiar: Filiala de Reţele Electrice Iaşi, 1993. Tema 2540. Istrate M. – Director temă, Guşă M, Gavrilaş N., Asaftei C. Valoare contract: 900000 lei
48. Comanda declanşării întrerupătoarelor din reţelele aeriene de 20 kV cu neutrul tratat prin rezistenţă şi semnalizarea centralizată a funcţionării acestuia. Beneficiar: F.R.E. Suceava, 1993, Tema 6360; Colectiv: Guşă M., Gavrilaş N., Istrate M., Asaftei C. Valoare contract: 1000000 lei
49. Cercetări teoretice şi încercări experimentale privind rezistenţa la oboseală mecanică a izolatoarelor de tip IsNs. Beneficiar: F.R.E. Bacău, 1993, Colectiv: Guşă M., Istrate M., Gavrilaş N., Asaftei C. Valoare contract: 1000000 lei
50. Cercetări privind implementarea şi funcţionarea unui sistem de semnalizare centralizată a defectelor în reţelele aeriene de distribuţie de medie tensiune. Beneficiar: RENEL, Divizia Strategie şi Retehnologizare, Bucureşti 1992, Tema 1433/1992; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M.; Valoare contract: 700000 lei
51. Controlul stării izolaţiei LEA de medie şi înaltă tensiune. Beneficiar: F.R.E. Bacău, 1992. Tema 9223; Guşă M., Gavrilaş N., Istrate M.,, Asaftei C. Valoare contract: 400000 lei
52. Proiectarea prototipului de sistem de semnalizare centralizată a defectelor în reţele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1992. Tema 1433; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 700000 lei
53. Cercetarea comportării în exploatare a descărcătoarelor cu rezistenţă variabilă din instalaţiile de transport electric feroviar. Beneficiar: Regionala de Căi Ferate Iaşi, 1991. Tema 896; Istrate M. – Director temă, Guşă M, Gavrilaş N.; Valoare contract: 24705 lei
54. Studiul posibilităţilor de realizare a detectării şi semnalizării centralizate a defectelor în reţelele electrice de distribuţie. Beneficiar: Ministerul Învăţământului şi Ştiinţei, 1991. Tema 2439 (1541); Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 300000 lei
55. Realizarea şi testarea sistemului de semnalizare centralizată a defectelor într-o reţea aeriană de 20 kV cu un singur emiţător. Beneficiar: I.R.E. Iaşi, 1991. Tema 6156; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 380000 lei
56. Proiectarea, realizarea şi experimentarea echipamentului pentru semnalizarea centralizată a defectelor într-o reţea aeriană de 20 kV. Beneficiar: I.R.E. Iaşi, 1990. Tema 229; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 230000 lei
57. Cercetarea posibilităţilor de localizare de la distanţă a scurtcircuitelor monofazate în reţelele aeriene de medie tensiune având neutrul tratat prin rezistor. Beneficiar: I.R.E. Iaşi, 1989., Tema 80; Colectiv: Asaftei C., Guşă M., Gavrilaş N., Istrate M. Valoare contract: 220000 lei.

L. ***Premii, distincţii.***

1. Brevetul de invenţie Regulator automat pentru bobine de stingere, Brevet România, nr. 104711/1991. International Patent Classification H02J-003/18, http://apps.isiknowledge.com a fost medaliat cu argint la la Salonul internaţional al

invenţiilor şi tehnicii noi, Iaşi 1994 şi medaliat cu aur la Salonul internaţional al invenţiilor “EUREKA ‘94”- Bruxelles, 1994.

2. Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri private pentru cercetare,– Contractul de 185000 lei din 27373/22.12.2015 cu Transelectrica/Smart Sibiu, premiu acordat pe 15 noiembrie 2019, la nivelul TUIASI.

M. ***Alte realizări semnificative.***

1. Grant FDI, mai-decembrie 2019, proiect nr. CNFIS-FDI-2019-0120, cu titlul „CONSILIERE ȘI ORIENTARE PENTRU STUDENȚII TUIASI – C.O.S.T.”, Competitie nationala interuniversitara, Istrate M. - Director grant, Valoare finantare = 400000 lei.
2. Proiect POR „Consolidare si reabilitare termica imobil EN”, depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120774., contract semnat in mai 2020, suma=8.831.866,83 lei , Istrate M. - manager proiect.
3. Proiect "Reabilitare termică corp TEX2 din cadrul Facultății de Textile, Pielărie și Management Industrial", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120773, contract semnat in mai 2020, suma=3.654.667,21lei, Istrate M. - manager proiect.
4. Proiect "Reabilitare termică imobil CH", depus la data de 16.04.2018, codul SMIS al cererii de finanțare 120775., contract semnat in august 2019, suma=17.526.985,81 lei, Istrate M. - manager proiect.
5. Titlul de Profesor Bolgna, acordat de ANOSR, in anul 2012.

Data,

02.04.2025

Prof. dr. ing. Istrate Dumitru-Marcel

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: **Prof. dr. ing. Mihai GAVRILAȘ**

A. Teza de doctorat.

1. Cercetări privind optimizarea structurii şi regimurilor liniilor de transport a energiei electrice compacte, 1994, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Alexandru Poeată.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Neagu B.C., **Gavrilaș M.**, Ivanov O., Grigoraș, The Crowdsourcing Concept-Based Data Mining Approach Applied in Prosumer Microgrids, Chapter in The Future of Data Mining, editor C.U. Baytar. Nova Science Publisher, 18 pag., 2022, 978-1-53618-508-9
2. **Gavrilaș M.**, Neagu B.C., Enhanced metaheuristic search algorithms; Applications in the management of electricity distribution systems, Lambert Academic Publishing, Riga, Lituania, 140 pag., 2020, 978-620-2-51263-3
3. Neagu B.C., **Gavrilaș M.**, Optimal Placement of Energy Storage Systems in Prosumer Microgrids, Chapter in Advances in Engineering Research, editor V.M. Petrova, Nova Science Publisher, 48 pag., 2020, 978-1-53618-508-9
4. Grigoraş G., Neagu B.C., Ivanov O., **Gavrilaș M.,** Scarlatache F., Smart Meter Data-based Strategies in the Optimal Operation of Electric Distribution Systems, Lambert Academic Publishing, Riga, Lituania, 256 pg., 2019, 978-620-0-50306-0 (30 pag. Gavrilaș M.)

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Ivanov O., **Gavrilaș M.**, Algoritmi metaeuristici cu aplicații în energetică, Editura PIM Iași, 2018, 210 pag, ISBN 978-606-13-4698-1 (21% contribuție)
2. **Gavrilaș M.,** Aplicatii ale inteligentei artificiale si calculului inteligent in energetica; capitol in EMERG 2017 (Energie, Mediu, Eficienta, Resurse, Globalizare), Editura AGIR, pp. 73-118.
3. **Gavrilaș M.,** Piata de energie electrică, Editura PIM Iasi, 2017, 188 pag., ISBN 978-606-13-4144-3.
4. **Gavrilaș M.**, Stabilitatea si controlul sistemelor electroenergetice, Editura Politehnium, Iasi, 2011, 300 pag., ISBN 978-973-621-329-8.
5. **Gavrilaș M.**, Aspecte moderne în modelarea sistemelor electroenergetice, Casa de editura Venus, Iasi, 2008, 258 pag., ISBN 978-973-756-033-9.
6. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice – Vol. 2, Editura Cermi Iasi, 2008, 116 pag., ISBN 978-973-667-315-3
7. **Gavrilaș M.**, Cartina Gh., Alexandrescu V., Grigoras Gh., Ivanov O., Modelarea sarcinilor din retelele electrice - Vol. 1, Editura PIM Iasi, 2006, 124 pag., ISBN 973-716-433-4, ISBN 978-973-716-433-4
8. **Gavrilaș M.**, Inteligenta artificiala si aplicatii in energetica; Vol. II – Teorie si aplicatii, Editura Polytechnium, 2005, 194 pag., ISBN 973-8292-20-4, ISBN 973-621-116-9
9. **Gavrilaș M.**, Inteligenta artificiala si aplicatii in energetica; Vol. I – Teorie, Editura „Gh. Asachi‖ Iasi, 2002, 320 pag., ISBN 973-8292-20-4, ISBN 973-8292-21-2

10. **Gavrilaș M.**, Filimon M.N., Tendinte moderne in distributia energiei electrice, Editura AGIR Bucuresti, 2001, 163 pag., ISBN 973-8130-47-6
11. **Gavrilaș M**., Calcul numeric cu aplicatii in Turbo Pascal, Editura "Gh. Asachi" Iasi, 1999, 502 pag., ISBN 973-9178-65-0
12. Cartina Gh., Georgescu Gh., **Gavrilaș M**., Bonciu Cl., Retele neuronale artificiale si sisteme expert in energetica, Editura „Gh. Asachi" Iasi, 1994, 195 pag., ISBN 973-9178-06-5

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Georgescu Gh., **Gavrilaș M.**, Radasanu D., Calculul si reducerea pierderilor de putere si energie in retelele electrice, Editura SPECTRUM Iasi, 1997, 165 pag., ISBN 973-98335-1-9
2. **Gavrilaș M.,** Utilizarea calculatoarelor in proiectarea si exploatarea retelelor electrice - Metode numerice, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 200 pag., 1995
3. Georgescu Gh., **Gavrilaș M.,** Transportul energiei electrice; Analiza asistata de calculator a regimurilor de functionare a liniilor lungi, Litografia Universitatii Tehnice "Gh. Asachi" Iasi, 174 pag., 1992

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. **Gavrilaș M.**, Sisteme electroenergetice I – note de curs (83 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SEE_1/Sisteme_1.htm
2. **Gavrilaș M.**, Sisteme electroenergetice II – note de curs (44 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SEE_2/Sisteme_2.htm
3. **Gavrilaș M.**, Stabilitatea și controlul sistemelor electroenergetice – note de curs (121 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SCSEE/SCSEERom.html
4. **Gavrilaș M.**, Sisteme cu inteligență artificială – note de curs (95 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/SIA/AI.htm
5. **Gavrilaș M.**, Piețe de enrgie – management și reglementare – note de curs (32 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/PEMR/PEMRRom.html **Gavrilaș M.**, Piața de energie și politici energetice – note de curs (14 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/PEPE/PEPERom.html
6. **Gavrilaș M.**, Computational Intelligence and Applications – course notes (99 pag.), http://www.mihai-gavrilas.ieeia.tuiasi.ro/CIA/CIA.htm

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

1. Barkat F., Cheknane A., Guerrero J.M., Lashab A., Istrate M., **Gavrilas M.,** Motas J.G., Banu I.V., 2023. Review, analysis, and performance evaluation of the most common four active methods for islanding detection in grid-connected photovoltaic systems. Electric Power Systems Research, 214, p.108909, DOI: 10.1016/j.epsr.2022.108909**.]**.
2. Kriukov A., **Gavrilaș M.**, Ivanov O., Grigoraș G., Neagu B.-C., Scarlatache F., Novel Decentralized Voltage-Centered EV Charging Control Algorithm Using DSRC System in Low Voltage Distribution Networks, IEEE Access (Early Access), Decembrie 2021, 9, pp. 164779-164800, doi: 10.1109/ACCESS.2021.3132419
3. Ivanov O., Neagu B.-C., **Gavrilaș M.**, Grigoraș G., A Phase Generation Shifting Algorithm for Prosumer Surplus Management in Microgrids using Inverter Automated Control, Electronics, vol. 10, nr. 22, 2740, 2021, WOS:000727513800001

4. Grigoraș G., Noroc L., Chelaru E., Scarlatache F., Neagu B.-C., Ivanov O., **Gavrilaș M.**, Coordinated Control of Single-Phase End-Users for Phase Load Balancing in Active Electric Distribution Networks, Mathematics, vol. 9, nr. 21, 2662, 2021, Accession Number: WOS:000719474900001
5. Ivanov, O., Neagu B.C., Grigoras G., Scarlatache F., **Gavrilas M.**, 2021. A metaheuristic algorithm for flexible energy storage management in residential electricity distribution grids. Mathematics, 9(19), p.2375. https://doi.org/10.3390/math9192375
6. **Gavrilas M.**, Toma R., Flexible Alternating Current Transmission System Optimisation In The Context Of Large Disturbance Voltage Stability. Revue Roumaine Des Sciences Techniques—Série Électrotechnique Et ÉnergétiquE, 2021, 66(1), pp.21-26, WOS:000645139100004
7. Banerjee A., Chattopadhyay S., **Gavrilas M.** Grigoras, G., Optimization and estimation of reliability indices and cost of Power Distribution System of an urban area by a noble fuzzy-hybrid algorithm. *Applied Soft Computing*, 2021, *102* p.107078235, DOI: 10.1016/j.asoc.2021.107078, WOS:000632598600011
8. Neagu B.C., Ivanov O., Grigoras Ghg., **Gavrilaș M.**, A New Vision on the Prosumers Energy Surplus Trading Considering Smart Peer-to-Peer Contracts, Mathematics 2020, 8(2), 235; https://doi.org/10.3390/math8020235
9. Ivanov O., Chattopadhyay S., Banerjee S., Neagu B.C., Grigoras Gh., **Gavrilas M.,** A Novel Algorithm with Multiple Consumer Demand Response Priorities in Residential Unbalanced LV Electricity Distribution Networks, Mathematics 2020, 8(8), 1220; https://doi.org/10.3390/math8081220
10. Neagu, B.C., Ivanov O., Grigoras Gh., **Gavrilaș M**., Istrate D.M., New Market Model with Social and Commercial Tiers for Improved Prosumer Trading in Microgrids, Sustainability 2020, 12(18), 7265; https://doi.org/10.3390/su12187265
11. Grigoraș Gh., Neagu B.C., **Gavrilaș M.,** Triștiu I., Bulac C., Optimal Phase Load Balancing in Low Voltage Distribution Networks Using a Smart Meter Data-Based Algorithm, Mathematics 2020, 8(4), 549; https://doi.org/10.3390/math8040549
12. Ivanov O., Neagu B.C., Grigoras Gh., **Gavrilas M.**, Optimal Capacitor Bank Allocation in Electricity Distribution Networks Using Metaheuristic Algorithms. Energies 2019, 12, 4239, Accession Number: WOS:000504898500017 (FI =2.702, JCR 2019)
13. Postolaty V., Berzan V. Bykova E., Bosnaega V., Suslov V., Ermurachi Iu., Grigoras Gh., **Gavrilas M.,** Istrate M., Estimation of Power Exchange through 110 kV Overhead Power Lines at the Interface of the Romanian and Moldovan Power Systems, PROBLEMELE ENERGETICII REGIONALE, Issue 2, 2018, pp. 46-61, ISSN: 1857-0070, DOI:10.5281/zenodo.1343396
14. Banerjee A., Chattopadhyay S., Grigoras Gh., **Gavrilas M.**, Minimization of reliability indices and cost of power distribution systems in urban areas using an efficient hybrid meta-heuristic algorithm, Soft Computing, 2017, pp. 1-25, 1432-7643, DOI: https://doi.org/10.1007/s00500-017-2846-6
15. Coroama I., Chicco G., **Gavrilas M.**, Russo A., Distribution system optimisation with intra-day network reconfiguration and demand reduction procurement, Electric Power Systems Research, Vol. 98, 2013, pp. 29-38, ISSN: 0378-7796, DOI: https://doi.org/10.1016/j.epsr.2013.01.004
16. **Gavrilas, M**., Stahie, V., Cascade hydropower plants optimization with Honey Bee Mating Optimization algorithm**,** *International Review of Electrical Engineering, Vol.* 6, No. 5, 2011, pp. 2456-2466
17. **Gavrilaş M.,** Rusu I., Gavrilaş G., Ivanov O., Synchronized Phasor Measurements for State Estimation, Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2009, Vol.54, No.4, pp. 335-344, ISSN: 0035-4066

18. **Gavrilas M.**, Ivanov O., Load profiling by self organization with affinity control strategy; Revue Roumaine des Sciences Techniques-Serie Electrotechnique et Energetique, Oct – Dec. 2008, Vol.53, No.4, pp. 413-421, ISSN: 0035-4066
19. **Gavrilas M.**, Gavrilas G., Improving energy efficiency in water distribution systems based on water consumption profiling; Environmental Engineering and Management Journal, May/June 2008, Vol.7, No.3, pp. 321-327, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.035
20. **Gavrilas M.**, Gavrilas G., Ivanov O., Electricity load prediction for water supply systems; Environmental Engineering and Management Journal, July/August 2008, Vol.7, No.4, pp. 453-458, ISSN: 1582-9596, DOI: 10.30638/eemj.2008.067
21. Kriukov A., **Gavrilaș M.,** Smart Charging of Multiple EVs in Smart Grid Radial Low Voltage Distribution Networks. Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section, 2021. 67 (3), pp. 9-20, (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
22. Neagu, B.C., **Gavrilas, M.,** Tirsu, M., Covalenco, N. and Negura, I., 2021. Environmental Performance Evaluation for a Small Scale Trigeneration System. *Bulletin of the Polytechnic Institute of Iași. Electrical Engineering, Power Engineering, Electronics Section*, *67*(4), pp.73-85 (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)
23. Neagu B.C., Ivanov O., Grigoraș G., **Gavrilaș M.,** Short-term Load Forecast Approach Based on Artificial Neural Networks, Buletinul Institutului Politehnic din Iasi, Secţia: Electrotehnică, Energetică, Electronică, Volumul 65 (69), Fasc. 2, pp. 9-22, 2019, ISSN 1223-8139 (**Index Copernicus, getCITED, Ulrich's, cod CNCSIS: 87**)

G. Lucrări ştiinţifice publicate în reviste din străinătate.

H. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

1. **Gavrilaș M.,** Grigoraș Gh., Cazacu M., Carp C.O., Andrei I., Reducing Active Energy Losses in Low Voltage Distribution Grids, Journal of Sustainable Energy, Vol. 8, No. 3, pp. 113 – 120, ISSN: 2067-5534, 2017 (**cod CNCSIS 817**)
2. Grigoras Gh., **Gavrilaș M.**, Scarlatache Fl., Cazacu M., Cosarca G., Assessing Energy Losses in Unbalanced Low Voltage Electric Distribution Networks, Energetica, Vol. 64, Nr. 2, pp. 53 – 59, ISSN: 1453-2360, 2016 (**cod CNCSIS 512**)
3. Kriukov Al., **Gavrilas M.,** Managing a multi-purpose parking lot for electric vehicles, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 307-312 (**cod CNCSIS 415**)
4. Stativa A., **Gavrilas M.,** Small signal stability enhancement using supplementary signals from PMU, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 261-267 (**cod CNCSIS 415**)
5. Stativa A., **Gavrilas M.,** Using DIGSILENT in small signal stability studies, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 269-274 (**cod CNCSIS 415**)
6. Vicol B., **Gavrilas M**., Ivanov O., Modern technologies for power systems monitoring, Buletinul AGIR, nr. 3, 2013, ISSN 1224-7928 si ISSN online 2247-3548, pp. 299-305 (**cod CNCSIS 415**)
7. Coroama I., **Gavrilas M.,** Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
8. Coroama I., **Gavrilas M**., Chicco G., Multiobjective Optimization for Smart Grids, Revista Energetica, Vol. 61, Nr. 5, pag. 178-183, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
9. Ivanov O., **Gavrilas M**., Static Power Systems State Estimation. A Neural Network Software Approach, Revista Energetica, Vol. 61, Nr. 5, pag. 184-188, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
10. Vicol B., **Gavrilas M.,** Ivanov O., Estimation f Electrical Overhead Lines Parameters using Synchro-Phasor Measurements, Revista Energetica, Vol. 61, Nr. 5, pag. 194-198, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)

11. **Gavrilas M.,** Cazacu M., Cosarca G., Postolache D., Assessement of Technical Energy Losses for Low Voltage Distribution Networks with Uncertain Load Characteristics, Revista Energetica, Vol. 61, Nr. 6, pag. 221-227, 2013, ISSN 1453-2360 (**cod CNCSIS 512**)
12. Ivanov O., **Gavrilaş M.,** Vicol B., New models for power systems state estimation, UPB Scientific Bulletin, Series C: Electrical Engineering, Volume 74, Issue 1, 2012, Pages 181-188, ISSN: 2286-3540 (**Scopus**)
13. Coroamă I.**, Gavrilaş M.**, Ivanov O.**,** Multi-objective Pareto Network Optimization Problem for Technical, Economical and Environmental Objectives, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 587-594, iunie 2012 (**cod CNCSIS 415**)
14. Stativă A., **Gavrilaş M.**, A metaheuristic approach for power system stability enhancement, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 483-488, iunie 2012 (**cod CNCSIS 415**)
15. Kriukov Al., Vicol B., **Gavrilaş M.**, Ivanov O., A stochastic method for calculating energy losses in low voltage distribution networks using genetic algorithms, Buletinul AGIR nr. 3/2012, iunie-august, ISSN 1224-7928 si ISSN online 2247-3548, pag 595-602, iunie 2012 (**cod CNCSIS 415**)
16. Ivanov O., **Gavrilas M.,** Enhanced REI Equivalents with Phasor Measurements, Buletinul Institutului Politehnic Iasi, Tom LVII (LXI), Fasc. 1, 2011, Electrotehnica, Energetica, Electronica, pp.129-136,2007,ISSN 1223-8139 (**cod CNCSIS 87**)
17. **Gavrilas M**., Ivanov O., Gavrilas G., *REI equivalent design for electric power systems with genetic algorithms*, WSEAS Transactions on Circuits and Systems, v 7, n 10, 2008, p 911921, ISSN: 1109-2734 (**Compendex, Scopus)**
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J. Invenţii.

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K. Contracte de cercetare.

Granturi / proiecte câștigate prin competiție

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2. Sistem inteligent de predictie si control al congestiilor in retelele de transport si distributie la inalta tensiune, Grant PNCDI II – Parteneriate, contract nr. 22126 / 01.10.2008, valoare 86911 Euro, 2008-2010, **Gavrilaș M.** (director grant)
3. Amplasarea surselor de putere în reţelele de distribuţie de 110 kV şi MT ale S.C. E.ON Moldova Distribuţie S.A. după criteriul pierderilor minime de energie şi al apropierii surselor de consumator şi studio privind compensarea şi reglarea puterii reactive în scopul optimizării nivelului de tensiune în reţelele de 110 kV ale S.C. E.ON Moldova Distribuţie S.A., Contract de cerectare nr. 7405 P / 26.10.2007, valoare 43627 Euro, 2007-2008, **Gavrilaș M.** (director contract)
4. Tehnici de inteligenta artificiala si modele noi pentru dezvoltarea studiilor de sarcina in scopul utilizarii eficiente a energiei electrice in conditiile impuse de functionarea pietei de energie electrica, Grant CNCSIS tip A, cod 241, tema 13 / 2006, contract nr. 63GR/19.05.2006 si tema 26 / 2007, contract nr. GR80/23.05.2007, valoare 25648 Euro, 2006-2007, **Gavrilaș M.** (director grant)
5. Modele ale inteligentei artificiale pentru prognoza pe termen scurt si mediu a consumului de energie electrica, Grant nr. 6177 / B29 / 2000, valoare 753 Euro, Benficiar: Ministerul Educatiei și Cecetarii, 2000, **Gavrilaș M.** (coordonator grant).
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8. Platforma de management si control integrat al fluxurilor purtatorilor de energie in scopul cresterii eficientei energetice la IMM-uri, Grant PN-III-P2-2.1-CI-2017-0190, Contract 105CI/25.07.2017, UEFISCDI, valoare 10961 Euro, 2017, **Gavrilaș M.** (membru echipa)
9. Instrument software pentru gestiunea tranzacțiilor pe piața de energie electrică (GTMarket), Contract PNCDI III nr.45CI/2017, cod PN-III-P2-2.1-CI-2017-0328, UEFISCDI, valoare 10959 Euro, 2017, **Gavrilaș M.** (membru echipa)
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11. Instrument software destinat cresterii securitatii sistemelor electroenergetice prin coordonarea protectiei de distanta, dezvoltat pe baza unor tehnici de inteligenta artificiala, Grant CNCSIS tip A, cod 283, tema nr. 16, contract nr. 2735/19.05.2006 si tema nr. 28, contract nr. GR80/23.05.2007, valoare 23824 Euro, 2006-2007, **Gavrilaș M.** (membru echipa)

Contracte de cercetare / consultanță

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2. Prognoza de consum propriu tehnologic pentru reteaua de energie electrica din zona de activitate a Delgaz Grid. S.A., contract nr. 448P / 15.03.2017, valoare 9881 Euro, 2017, **Gavrilaș M.** (director contract)
3. Servicii de consultanta de specialitate in proiectul EON Moldova Distributie de reducere a pierderilor tehnice in retelele de distributie, contract nr. 684P / 21.04.2016, valoare 13396 Euro, 2016, **Gavrilaș M.** (director contract)
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5. Norma de consum propriu tehnologic in retelele de distributie pentru anul 2013, contract de cercetare nr. 337P / 21.03.2014, valoare 2250 Euro, Beneficiar: E.ON Moldova Distribuţie S.A., 2014, **Gavrilaș M.** (director contract)
6. Incarcarea dinamica a liniilor electrice aeriene prin evaluarea on-line a capacitatii de transport, contract nr. 912P / 03.07.2012, valoare 14583 Euro, 2012, **Gavrilaș M.** (director contract)
7. Studiu de determinare a consumului propriu tehnologic in retelele de joasa tensiune aferente jud. Bacau, apartinand E.ON Moldova Distributie S.A., contract de cercetare nr. 3564P / 01.11.2011, valoare 11799 Euro, 2011, **Gavrilaș M.** (director contract)
8. Cercetari privind analiza si optimizarea regimurilor de functionare ale retelelor electrice de distributie folosind elemente ale inteligentei artificiale, Contract de cercetare nr 4030P/15.11.2004, valoare 7482 Euro, Beneficiar: F.D.F.E.E. Electrica „Muntenia Sud" Bucuresti, 2004, **Gavrilaș M.** (director contract).
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10. Controlul si conducerea retelelor electrice cu modele ale inteligentei artificiale, Contract de cercetare nr. 915P/2000, valoare 2007 Euro, Beneficiar: Transelectrica, S.T. Bacau, 2000, **Gavrilaș M.** (director contract)
11. Aplicatii software ale sistemelor hibride de inteligenta artificiala pentru proiectarea si dezvoltarea retelelor electrice, Contract de cercetare nr. 557P/2000, valoare 2685 Euro, Beneficiar: S.D.F.E.E. Iasi, 2000, **Gavrilaș M.** (director contract)

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13. Studiu privind regimurile de scurtcircuit din reteaua de transport exploatata de Sucursala de Transport Constanta, Contract de cercetare nr. 1739P/1999, valoare 3676 Euro, Beneficiar: Transelectrica, S.T. Constanta, 1999, **Gavrilaș M.** (director contract)
14. Studiu privind prognoza pe termen scurt a consumului de energie electrica la S.D. Buzau, Contract de cercetare 735P / 1999, valoare 1838 Euro, Beneficiar S.D. Buzău, 1999, **Gavrilaș M.** (director contract).
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16. Utilizarea retelelor neuronale artificiale in previziunea sarcinii pe termen scurt si mediu la nivelul F.R.E. Suceava., act aditional 1 / 1999 la contractul de cercetare 3625 / 1997, valoare 1838 Euro, Beneficiar: F.R.E. Suceva, 1999, **Gavrilaș M.** (director contract).
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20. Cercetari privind optimizarea multicriteriala a structurii si regimurilor de functionare ale retelelor electrice de distributie in vederea cresterii calitatii energiei electrice si reducerii consumurilor proprii tehnologice, Contract de cercetare nr. 6685/1996, valoare 1604 Euro, Beneficiar F.R.E. Iași, 1996, **Gavrilaș M.** (director contract).
21. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare nr. 5857/1995, valoarea 1475 Euro, Beneficiar: F.R.E. Iași, 1995, **Gavrilaș M.** (director contract).
22. Utilizarea retelelor neuronale in supravegherea si conducerea retelelor electrice, Contract de cercetare 2443 / 1994, Beneficiar: F.R.E. Iași, 1994, **Gavrilaș M.** (director contract).
23. Studiu pentru reconfigurarea retelelor de distributie de medie si joasa tensiune tinand seama de incarcarea optima a retelelor si de caderile de tensiune, in vederea scaderii consumului propriu tehnologic, contract de cercetare nr. 3624/1997, valoare 2018 Euro, Beneficiar: F.R.E. Focsani, 1997, **Gavrilaș M.** (membru echipă)
24. Utilizarea inteligentei artificiale in supravegherea si conducerea retelelor electrice, tema nr. 31 / 557, grant nr. 7002/1997, valoare 2096 Euro, 1997, **Gavrilaș M.** (membru echipa)
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J. Invenţii.

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K. Contracte de cercetare.

Granturi de cercetare-dezvoltare câştigate prin competiţie naţională

1. Sistem de majorare a indicatorilor de autoconsum din surse fotovotaice, folosind conversia si stocarea sub forma de energie termica, Proiect tip PN-III-P3-3.1-PM-ROCN-2018-0093 / 02.07.2018-31.12.2018. Valoare 49.500 ron. Director proiect: CiprianNemeş

2. Sistem inteligent pentru managementul sarcinii consumatorilor rezidentiali alimentati din surse fotovoltaice, Proiect tip PN-III-P2-2.1-CI-2017-0823 nr. 145 CI / 10.10.2017-11.04.2018. Valoare 44990 ron. Director proiect: Ciprian Nemeş

3. Utilizarea modelelor analitice si a tehnicilor de inteligenta artificiala in optimizarea indicatorilor de fiabilitate a echipamentelor electroenergetice, prin monitorizarea solicitărilor. CNCSIC-AT/2007-2008, Cod CNCSIS – 29, Contract nr. : 33 GR /23.05.2007, 77 GR /11.06.2008.Valoare: 17000/2007; 18000/2008, Director proiect: Ciprian Nemeş

4. Zone urbane bioclimatice inteligente cu emisii reduse de carbon ca insule inovatoare energetic într-un oraș durabil, Proiect international - ERA NET Cofund-83/2016-2017 (SMART URBAN ISLE). Membru: Ciprian Nemeş

5. Construire platformă de cercetare pentru integrarea resurselor regenerabile in instalatii autonome-COPRESA, Proiect finanţat prin programul operaţional sectorial creşterea competitivităţii economice, axa prioritară 2 – Competitivitate prin CDI, operatiunea 2.3.2: Dezvoltarea infrastructurii de C-D a întreprinderilor, cu crearea de noi locuri de munca pentru C-D.

Proiect nr. 608/10.12.2013 coordonat de S.C. DAS S.R.L. Iaşi. Valoarea totală de 6.126.355,31 RON, din care asistenţa financiară nerambursabilă este de 2.443.129 RON. Membru UTI: Ciprian Nemeş

6. Cercetări privind integrarea surselor regenerabile de energie: studii în direcţia dezvoltării serviciului de alimentare cu energie electrică. Domeniul de cercetare: Mediu dezvoltare durabilă, Proiect: Performanţă prin postdoctorat pentru integrarea in aria europeană de cercetare, PERFORM-ERA, ID – 57649, 2010 - 2013, POSDRU/89/1.5/S/57649 Proiect finanţat prin Programul Operaţional Sectorial pentru Dezvoltarea Resurselor Umane 2007 – 2013. Buget total proiect: 20.813.320 RON, din care finanţare nerambursabilă 20.016.735 RON. Proiect coordonat de Prorectoratul Ştiinţific al Universtităţii Tehnice "Gheorghe Asachi" din Iaşi. Membru / cercetător postdoc: Ciprian Nemeş

7. Aparate si comutari inteligente in sistemele electroenergetice, Proiect CEEX – MENER nr. 607/2005-2007, Valoare: 48936.21/2005; 168000/2006; 50000/2007, Membru: Ciprian Nemeş

8. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului, CEEX Modul 3, contract 201/2006, 2006 – 2008, Membru: Ciprian Nemeş.

Contracte încheiate cu institute de cercetare, companii, regii, societăţi comerciale

1. Cercetari privind dezvoltarea uniu sistem pentru monitorizarea si optimizarea indicatorilor de autoconsum din surse distribuite Contract nr. 16052P\07.09.2017 - 15.10.2018, Beneficiar: SC DAS SRL Iasi. Valoare: 45000 RON + TVA, Responsabil temã: Ciprian Nemes.

2. Cercetari experimentale privind calitatea energiei electrice si solutii de ameliorare in cadrul Arcelor Mittal Galati. Contract nr. 141P\26.01.2017, Beneficiar: SC Arcelor Mittal Galati. Valoare: 33750 RON + TVA, Membru: Ciprian Nemes

3. Masuratori privind calitatea energiei electrice si solutii de ameliorare in cadrul Arcelor Mittal Galati. Contract nr. 2016P\15.12.2015 - 19.09.2016 , Beneficiar: SC Arcelor Mittal Galati. Valoare: 30000 RON + TVA. Membru: Ciprian Nemes

4. Estimarea productiei de energie electrica si dimensionarea parcului fotovoltaic de 132,6 kWp – Letcani, Contract nr. 3872P / 04.03.2013, Beneficiar: SC Consult Finance SRL Iasi. Valoare: 3500+ TVA= 4340 RON, Responsabil temã: Ciprian Nemes.

5. Cercetări experimentale privind proiectarea, functionarea si exploatarea panourilor fotovoltaice si optimizarea sistemelor inteligente de orientare biaxialã. Contract nr. 2274P / 17.12.2012 - 15.06.2014, Beneficiar: SC DAS SRL Iasi. Valoare: 20.000 euro+TVA. Membru: Ciprian Nemes

6. Evaluarea prin calcul a câmpurilor electrice şi magnetice de 50Hz în zona traversărilor variantei de ocolire a mun. Iaşi, de către LEA 220 kV Gutinaş-Munteni-FAI, Contract nr. 2874P / 31.08.2011, Beneficiar: SC Electromontaj SA, Sucursala Iaşi. Valoare: 2000 RON. Responsabil temă: Ciprian Nemeş

7. Substaţiile de tracţiune la Regionala CFR Iaşi şi siguranţa circulaţiei pe căile ferate, Contract nr. 7680P/2007 Beneficiar: E-on Energie Iasi. Valoare: 12.500+TVA=14.875RON, Membru: Ciprian Nemes

8. Studiul şi determinarea prin calcul a tensiunilor induse în LEA 220-400 kV din gestiunea ST. Bacău, în condiţii speciale de paralelism, în vederea respectării valorilor limită admise, Contract nr. 3274P/17.10.2005, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău. Valoare 99000+TVA=11781 RON, Membru: Ciprian Nemeş

9. Măsurarea tensiunii de atingere şi de pas la staţia 110/20/6 kV Comăneşti, Contract nr. 321P/13.02.2004, Beneficiar: S.C. ELCO SA Botosani, Valoare 2000+TVA=2.380 RON, Responsabil temă: Ciprian Nemeş

10. Instrumente matematice de modelare a comportării construcţiilor hidrotehnice bazate pe metoda seriilor de timp, Contract nr. 1910P/23.09.2004, Beneficiar: Universitatea Tehnicã Cluj Napoca, Valoare 15.000+TVA=17.850 RON, Responsabil temă: Ciprian Nemeş

11. Modelarea fiabilităţii sistemelor cu structură dinamică aplicată sistemelor de transport al energiei electrice, Contract nr. 1579P/24.07.2004, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău, Valoare 6.500+TVA=7.735 RON, Responsabil temă: Ciprian Nemeş
12. Verificarea SUUCE pentru optimizarea exploatării şi dezvoltării instalaţiilor la SH Rm. Vâlcea, Contract nr. 894P/2001-2002 Beneficiar: SH Râmnicu Vâlcea. Valoare 9.146+TVA=10.884 RON, Membru: Ciprian Nemeş

13. Criterii, metode şi instrumente de decizie în dezvoltarea şi exploatarea reţelelor de transport în condiţiile create de reforma sectorului energetic, Contract nr. 1135P/2001, Beneficiar: C.N. Transelectrica S.A. Sucursala de Transport Bacău. Valoare 4.000+TVA=4.760 RON, Membru: Ciprian Nemeş

14. Optimizarea structurii reţelelor de MT ale SDEE Bacău pe baza analizei combinate CPT-fiabilitate, Contract nr. 1262/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

15. Principii tehnice şi economice moderne în exploatarea sistemelor de alimentare cu energie electrică, Contract nr. 1263/1999 Beneficiar: CONEL Bacău. Valoare 2.500 RON, Membru: Ciprian Nemeş

16. Evaluarea instrumentelor necesare pentru licitarea energiei electrice pe intervale, Contract nr. 412P/1999, Beneficiar: CONEL Bacău. Valoare 4.500 RON, Membru:Ciprian Nemeş

17. Analiza pierderilor este energie electrică în reţeaua de distribuţie a SDEE Târgovişte, Contract nr. 16709/1998, Beneficiar: SC Electrica SA. Valoare 6.000 RON, Membru: Ciprian Nemeş

7. Dezvoltarea parteneriatelor C/D in vederea promovării unor proiecte

L. Premii, distincţii.

M. Alte realizări semnificative.

Data,
20.04.2025

Nume, semnătura
prof.univ.dr.ing. Ciprian Mircea Nemeș

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele şi prenumele: Gheorghe Grigoraș

N. Teza de doctorat.

„Tehnici noi de supraveghere si conducere a sistemelor electroenergetice", 2005, Domeniul „Inginerie Energetică", Universitatea Tehnică „Gheorghe Asachi" din Iași, conducător doctorat: prof. dr. ing. Cârțină Gheorghe

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5. Vasilica Dandea, **Gheorghe Grigoras**, Expert System Integrating Rule-Based Reasoning to Voltage Control in Photovoltaic-Systems-Rich Low Voltage Electric Distribution Networks: A Review and Results of a Case Study. Applied Sciences. 2023; 13(10):615, https://doi.org/10.3390/app13106158 (Q2) Accession Number: WOS:000995609600001
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Data,
07.04.205

Prof. dr. ing. Gheorghe Grigoras

Lista de lucrări în domeniul de studii universitare de masterat Inginerie Energetică

Numele și prenumele:
Costică NIȚUCĂ

A. Teza de doctorat.

1. *"Probleme de captare a curentului electric de la linia de contact pentru vehicule acţionate electric"*, anul susţinerii – 2003, Universitatea Tehnică "Gheorghe Asachi" din Iaşi, Domeniul – Inginerie electrică, conducător doctorat, prof. dr. ing. dr. H.C. Lorin Cantemir.

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K. Contracte de cercetare/granturi.

P1 - Improving the cross-border public transportation using electric buses supplied with renewable energy” – ELBUS, Code project 2SOFT/3.1/54, European Neighbourhood Instrument (ENI), Cross Border Cooperation (CBC) from Joint Operational Programme Romania – Republic of Moldova, Priority 3.1 – Development of cross border transport infrastructure and ICT infrastructure.
Volumul finanţării: 97,880.00 Euro. Director proiect, conf.dr.ing. C. Niţucă.
Perioada: 2020-2021.
Director proiect

P2 - The experimental study on overload current arc characteristics of DC electric fuse, DCFUSE, România - China, Contract PN-III-P3-3.1-PM-RO-CN-2018-25BM;. Volumul finanţării: 49.980,00 Lei. Director proiect, s.l.dr.ing. C. Niţucă
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Perioada: 2013-2014.
Membru proiect.

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat „Inginerie Energetică”

Numele şi prenumele: **Dragomir Alin**

P. Teza de doctorat.

1. „Contribuții privind managementul echipamentelor electrice. Monitorizarea solicitărilor termice”, 2017, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Adam Maricel.

Q. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

R. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS (sau CNCS).

1. *Asiminicesei O.M., Beniugă O.C., Dragomir A.,Comșa C.R., Haba C.G., Arădoaei S. T., Dosoftei C. C., Brînzilă M. C., Afaceri Digitale, Editura Performantica, ISBN: 978-606-685-932-5.*

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T. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

U. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

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W.Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS.

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54. Dragomir A., Adam M., Andruşcă M., Munteanu A., Boghiu E., Considerations regarding infrared thermal stresses monitoring of electrical equipment, the 11th International Conference on Electromechanical and Power Systems - SIELMEN, Chișinău, Rep. Moldova, pp. 100-103, 2017(*IEEExplore*).
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Y. Invenţii.

Z. Contracte de cercetare/granturi.

1. Dezvoltarea instituțională a TUIASI prin creșterea performanței în cercetare, dezvoltare și inovare – COMPETE 2.0, Contract tip PNCDI III – PFE, nr. 27PFE/2021, 2021÷2023, funcția coordonator științific de proiect, echipa 7, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
2. Dezvoltarea Instituțională a TUIASI Prin Creșterea Vizibilității și a Performanței Cercetării TUIASI-COMPETE, Contract tip PNCDI III – PFE, nr. 9PFE/2018, 2018÷2020, funcția coordonator științific de proiect, echipa 2, Director proiect: prof.univ.dr.ing Maria Carmen Loghin.
3. Proiect mobilitati Romania-Franta PN III, PN-III-P3-3.1-PM-RO-FR, nr. 19BM / 2019, perioada 2019-2020 (international), Titlu: Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
4. Proiect ERANET-MANUNET-III-PlasmaPack nr. 214/2020, perioada 2020-2022 (international), Titlu: Bio-tratament aplicat pe ambele suprafete ale foliei polimerice utilizata pentru impachetarea produselor alimentare utilizand plasma non-termica DBD-Corona, funcția membru echipa implementare, Director proiect: S.l.dr.ing. Dragos-George Astanei.
5. Proiect PN-III-P2-2.1-PED-2019-0556 nr. 361PED /2020, perioada 2020 (national), Titlu: Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW), funcția membru echipa implementare, Director proiect prof.univ.dr.ing Radu Burlică,
6. Proiect de tip ERANET-MANUNET-III-Treatoflex nr. 146/2020, perioada 2020-2022 (international), Titlu: Reactor cu plasma non-termica la presiune atmosferica pentru pre-tratamentul substraturilor polimerice utilizate in fabricarea circuitelor

imprimate flexibile, funcția membru echipa implementare, Director proiect: prof.univ.dr.ing Radu Burlică.

7. Granturi interne - IDEI DE PROIECT nr. GI_P7_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem și metodă pentru producerea de energie electrică cu ajutorul micro-organismelor vii, funcția Director proiect: ș.l.dr.ing Alin Dragomir.
8. Granturi interne - IDEI DE PROIECT nr. GI_P8_IDEI_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.08.2021- 15.12.2021, Titlu: Sistem modular de stocare a energiei electrice pentru un vehicul electric cu posibilitatea inlocurii partiale a acumulatorului, funcția membru în echipa de proiect, Director proiect: ș.l.dr.ing Daniel Sticea.
9. Granturi interne - PUBLICATII nr. GI_P15_2021, Proiect pentru susţinerea capacităţii de participare cu propuneri de proiecte în cadrul Programului Cadru al Uniunii Europene pentru Cercetare şi Inovare 2021-2027 Orizont Europa, perioada 01.07.2021- 15.12.2021, Titlu: Sistem inteligent pentru monitorizarea și protecția instalațiilor de alimentare din tracțiunea electrică / Modelarea, simularea si monitorizarea solicitărilor termice ale elementelor sistemului de retur din tracțiunea electrică, membru în echipa de proiect, Director proiect: ș.l.dr.ing Mihai Andrușcă.

AA. Premii, distincţii.

BB. Alte realizări semnificative.

Data, 09.04.2025

Ș.l. dr. ing. Alin Dragomir

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat

Managementul sistemelor de energie

Numele şi prenumele: Iuliana Vieru

A. Teza de doctorat.

• Contributii la optimizarea comportarii liniilor electrice aeriene la supratensiuni de trasnet, 2010

B. Lucrări ştiinţifice publicate în volumele conferinţelor.

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Analysis of Overhead Lines Behavior to Direct Lightning Strokes", WESC 2008

• Hriscu I, Gusa M and Istrate M: „Lightning stroke against overhead electric lines: a comparision between analytical and simulation methods of study" IS-SPETO 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the ightning Behavior of Overhead Lines", CNEI 2009

• Iuliana Hriscu, Mircea Gusa and Marcel Istrate: „Some Aspects Concerning the Influences of Surge Arresters upon Lightning Behavior of Overhead Lines", WESC 2010

Data, Nume, semnătura

09.04.2025 dr. ing. Iuliana Vieru (Hriscu)

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat Management Energie Mediu*

Numele şi prenumele: **Beniugă Oana Cristina**

A. Teza de doctorat.

1. „Studii teoretice şi experimentale privind procesarea numerică a imaginilor în metrologie" – Domeniul Inginerie Electrica, sustinuta public in data de 25.09.2009, in cadrul Universitatii Tehnice "Gheorghe Asachi" din Iaşi, Facultatea de Inginerie Electrică, Energetică şi Informatică Aplicată, conducător de doctorat prof. dr. ing. Mihai Crețu.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. Donciu C., Costea O., Temneanu M., Damian R., Branzila M., New prototype architecture for automated irrigation based on power line communications, Grid Enabled Remote Instrumentation, Book Series: Signals and Communication Technology, Part V, chapter 33, pp. 499-509, 2009; ISSN:1860-4862, Publisher: Springer US, DOI: 10.1007/978-0-387-09663-6_33

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. Oana Cristina Beniugă, Protecția prin relee – note de curs, editura PIM, ISBN: 978-606-13-7838-8, 176 pag., 2023
2. Oana Cristina Beniugă, Florin Băiceanu - Protecția prin relee – îndrumar de laborator, editura PIM, ISBN: 978-606-13-7837-1, 180 pag., 2023
3. Oana-Maria Asiminicesei, Oana-Cristina Beniugă, Alin Dragomir, Ciprian-Romeo Comșa, Cristian-Gyözö Haba, Constantin-Cătălin Dosoftei, Sebastian-Teodor Arădoaei, Marius-Ciprian Brânzilă, AFACERI DIGITALE 3, seria: Antreprenoriat pentru ingineri și arhitecți, editura PERFORMANTICA, ISBN 978-606-685-932-5, 308 pag., 2022
4. Beniugă Oana Cristina, Automatizarea procesului de măsurare folosind procesarea numerică a imaginilor, editura PIM, format academic, ISBN 978-606-13-7985-9, 186 pag., 2023
5. Beniugă Oana, Emilian Furnică, Tehnologia fabricării aparatelor electrice - principii şi metode, editura PIM, format academic, ISBN 978-606-13-3827-6, 323 pag., 2017
6. Alexandru Sălceanu, Eduard Luncă, Oana Beniugă, Oana Neacşu, Silviu Ursache, Marius Păuleţ, Works and Walks in ESD, developed at the Faculty of Electrical Engineering, Electromagnetic Compatibility/Electromagnetic Field. Research and Development in Romania, Editura Agir, Bucureşti, format academic, Cap 3. EDUCATION, Seria: Electrotehnica – Electroenergetica, ISBN 978-973-720-521-6, 15 pag., 2014

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Set prezentări în format PPT - Protecția prin relee - disponibil la https://edu.tuiasi.ro/course/view.php?id=2066
2. Set prezentări în format PPT - Automatizarea sistemelor electroenergetice disponibil la https://edu.tuiasi.ro/course/view.php?id=3932

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale.

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2. Using Petri Net Tool to Study the Dynamic Behaviour of Power Systems Protections, Oana Beniugă, Razvan Beniuga, Mihai Leca, Gabriel Constantin Sârbu, Proceedings of the 2018 International Conference and Expositions on Electrical and Power Engineering, pp. 416-419, IEEE Catalog Number: CFP1847S-USB ISBN: 978-1-5386-5061-5, WOS:000458752200079, 2018.
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K. Contracte de cercetare.

1. Membru proiect PN-IV-P8-8.3-PM-RO-BE-2024-0011, Titlu - Evaluarea impactului utilizării tehnologiei cu plasmă non-termică asupra creșterii și dezvoltării plantelor în sere și în spații protejate (Assessment of the impact of using non-thermal plasma technology on plant growth and development in indoor farming), internațional România – Belgia finanțat prin UEFISCDI
2. Membru proiect Bio-tratament aplicat pe ambele suprafețe ale foliei polimerice utilizată pentru împachetarea produselor alimentare utilizând plasma non-termică DBD-Corona, Proiect tip ERANET-MANUNET-III-PlasmaPack, nr. 214/2020, perioada 2020-2022 (24 luni)
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9. Membru proiect Creșterea Producției Agricole în Sere Utilizând Irigarea cu Apă Activată cu Plasmă Rece, proiect tip PN III, PCE, nr. 15/12.07.2017, perioada 2017-2019 (30 luni)
10. Membru proiect Dezvoltarea unui ansamblu de senzori de curent şi tensiune şi a unui releu de protecţie pentru monitorizarea parametrilor electrici pe liniile MT/JT Beneficiar: Elecro Alfa International Botosani, nr. contract: 26153/10.12.2020, perioada de implementare: 2021
11. Membru proiect Sistem video inteligent de comandă a semaforizării intersecţiilor destinat diminuării congestiilor rutiere şi reducerii poluării fizico-chimice şi fonice a mediului, proiect finantat de CNCSIS - PN2-Parteneriate, 71-100/2007, 2007-2010
12. Membru proiect Sistem video automatizat cu grad ridicat de interschimbabilitate pentru etalonare metrologică a echipamentelor de măsurare Proiect finantat de CNCSIS - PN2-Parteneriate, contract 72-173/2008, 2008-2011
13. Membru proiect Titlul proiectului: Instrumentație la distanță pentru noile griduri regionale dedicate, PN II CAPACITĂȚI, nr. 62 CB/2008
14. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul sistemelor distribuite de monitorizare a mediului Proiect finantat de CNCSIS - CEEX Modul 3, contract 201/2006, 2006 – 2008
15. Membru proiect Dezvoltarea parteneriatelor C/D în vederea promovării unor proiecte europene în domeniul video-inspecţiei inteligente a materialelor textile Proiect finantat de CNCSIS - CEEX – Modul 3, contract 194/ 2006, 2006-2008
16. Membru proiect Sistem informatic de instruire interactiva bazat pe algoritmi multitask de mare viteza dezvoltat pe platforma reconfigurabila online pentru aplicații de tip laborator virtual Proiect finantat de CNCSIS - CEEX – Modul 1 – Infosoc, contract 137/2006, 2006 – 2008
17. Proiect de mobilități de tip INTERNATIONAL RESEARCH Project (IRP) Titlul proiectului: PLASMEAU - Plasmas non-thermiques pour la dégradation des contaminants émergents dans l'eau", finanțat de CNRS Franța

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L. Premii, distincţii.

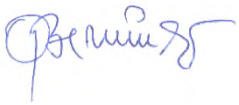
Premiile pentru excelență în cercetarea științifică acordate în 2023 de Universitatea Tehnică „Gheorghe Asachi” din Iași:

✓ Premiul pentru grupul care a contribuit la atragerea celor mai multe fonduri publice pentru cercetarea științifică - Grupul coordonat de Prof. univ. dr. ing. Radu Burlică, Facultatea de Inginerie Electrică, Energetică și Informatică Aplicată, Grup format din: Prof. univ. dr. ing. Radu Burlică, Conf. dr. ing. Dragoș Astanei, s.l.dr.ing. Oana Cristina Beniugă, Suma atrasă în universitate: 1.429.900 lei.

M. Alte realizări semnificative.

Data,
09.04.2025

Nume, semnătura
Beniugă Oana Cristina



* Conform H.G. 1175/ 2006

Lista de lucrări în domeniul de studii universitare de master „Inginerie Energetică”

Numele şi prenumele: **ANDRUŞCĂ Mihai**

A. Teza de doctorat.

2. „Contribuții privind managementul echipamentelor electrice din cadrul unei companii de electricitate”, 2013, Domeniul „Inginerie Electrică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Adam M.

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

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J. Invenţii.

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2. Burlica R., Astanei D., Dirlau D., Beniuga O., **Andrusca M.,** Adam M., MInireactor electrochimic cu plasma non-termica cu geometrie in forma de T pentru producerea apei activate, **Brevet de invenție** nr. RO134206 (B1), 2024-03-29.
3. Dragomir A., Adam M., **Andrușcă M.,** Metodă si aplicatie software pentru monitorizarea și diagnosticarea cetralizată a circuitului de retur al tracțiunii electrice feroviare, Cerere brevet de invenție nr. 135541 A2, 2022.

4. Adam M., Munteanu A., Pancu C.M., **Andrușcă M.,** Metodă și sistem pentru localizarea sectorului cu defect în instalațiile de alimentare din tracțiunea electrică, Cerere brevet de invenție nr. a 00936, 2017.

K. Contracte de cercetare/granturi.

1. Director Proiect contract tip cercetare cu agent economic, SC ELEMATIS TECH. SRL, nr. 5078/14.02.2025, cu titlul Cercetări privind noi soluții moderne pentru proiectarea, realizarea și testarea tablourilor electrice de joasă tensiune, 2025-2026.
2. Coordonator GT in cadrul proiectului cu titlul Primul Student Electro din familie, Contract de finanțare: Nr. G2025-4065/21.01.2025, cod SMIS+- 326666, 2025-2027, Director proiect Conf. dr. ing. Dragos Astanei.
3. Membru in echipa de proiect international “Energy generation from Non-Powered Dams - ENERGYDAM”, 2021/332809, EEA and Norway grants, 2021 – ian. 2024, Director proiect Prof. dr. ing. Marcel Istrate.
4. Director Proiect “Grant Intern nr. GI/ P15 /2021 Publicatii”, Univ. Tehnica Gh. Asachi din Iasi, 2021.
5. Membru in echipa de proiect “Grant Intern nr. GI/ P7 /2021 Idei”, Univ. Tehnica Gh. Asachi din Iasi, 2021, Director proiect șef lucr. dr. ing. Alin Dragomir.
6. Membru in echipa de proiect “Model experimental pentru demonstrarea fezabilitatii cresterii potentialului terapeutic al germenilor de grau prin tratarea acestora cu apa activata cu plasma non-termica (PAW) – PhytoPAW”; PN-III-P2-2.1-PED-2019-0556; Contract UEFISCDI nr. 361PED / 2020; Perioadă de implementare: 01.11.2020 – 31.10.2022, Director proiect Prof. dr. ing. Radu Burlica.
7. Membru in echipa de proiect “Bio-tratament aplicat pe ambele suprafete ale foliei polimerice utilizata pentru impachetarea produselor alimentare utilizand plasma non-termica DBD-Corona - PlasmaPack”; tipul PN III-ERANET-MANUNET-III; Contract UEFISCDI nr. 214/2020; 23.11.2020-23.11.2022, Director proiect Sef lucr. dr. ing. Dragos Astanei.
8. Membru in echipa de proiect “Reactor cu plasma non-termica la presiune atmosferică pentru pre-tratamentul substraturilor polimerice utilizate în fabricarea circuitelor imprimate flexibile - Treatoflex”, tipul PN III-ERANET-MANUNET-III, Contract UEFISCDI nr. 146/ 2020; 23.03.2020-23.03.2022, Director proiect Prof. dr. ing. Radu Burlica.
9. Membru in echipa de proiect “Creșterea Producției Agricole în Sere Utilizând Irigarea cu Apă Activată cu Plasmă Rece”, Proiect tip PNIII – PCE (Proiect cercetare exploratorie) nr. 15 / 12.07.2017, 2017-2019, Director proiect Prof. dr. ing. Radu Burlica.
10. Membru in echipa de proiect “Evaluarea apei activate produse de către diferite reactoare de plasmă non-termică”, tip PN-III-P3-3.1-PM-RO-FR-2019-0213, Director proiect Sef lucr. dr. ing. Dragos Astanei.
11. Asistent manager in cadrul proiectului Şcoala de vară „Student ELECTRO la TUIASI”, Acord de grant nr. 120/SGU/PV/II din data de 07.05.2019. (2019-2022), Director proiect Prof. dr. ing. Maricel Adam.
12. Expert pe termen lung în cadrul proiectului „Dezvoltarea culturii antreprenoriale a studenților de la inginerie și arhitectură prin crearea unei rețele de centre de pregătire în antreprenoriat – AntreprenorIng”, POCU/379/6/21/123975, 2019-2022, Director proiect Prof. dr. ing. Neculai Eugen Seghedin.

13. Expert pe termen scurt în cadrul proiectului POCU/626/6/13/130661 ”Stagii de PRACTICă performante pentru studenţii Universităţii Tehnice Gheorghe Asachi Iaşi – PRACTIC”, 2020-2022, Director proiect Prof. dr. ing. Neculai Eugen Seghedin.
14. Expert învățământ superior în cadrul proiectului CNFIS-FDI, nr. 0006/2018 ”Acces direct prin Internationalizare Digitala – DIGITALin TUIASI”, 2018, Director proiect Prof. dr. ing. Irina Lungu.

L. Premii, distincţii.

1. Premierea rezultatelor cercetării UEFISDI-2023, PN-IV-P2-2.3- PRECISI-2023- 73617, **Andrusca M,** Adam M., Dragomir A., Lunca E, Innovative Integrated Solution for Monitoring and Protection of Power Supply System from Railway Infrastructuresm Sensors MDPI, 2021, FI-3.57, Q1, SENSORS Article.
2. Premierea rezultatelor cercetării UEFISDI-2023, PN-IV-P2-2.3- PRECISI-2023- 70575, Dragomir A., Adam M., **Andrusca M,** Grigoraș G., Dragomir M., Ramakrishna S., Modeling, Simulation and Monitoring of Electrical Contacts Temperature in Railway Electric Traction, Mathematics MDPI, 2021, FI-2.25, Q1, Mathematics Article.
3. Premiu UEFISCDI prin programul Planul National de Cercetare, Dezvoltare si Inovare pentru perioada 2015-2020, PNCDI III, Programul Dezvoltarea sistemului national de cercetare-dezvoltare, Subprogramul 1.1. – Resurse Umane, Premierea rezultatelor cercetarii – articole, in anul 2020 pentru lucrarea Condition Monitoring System and Faults Detection for Impedance Bonds from Railway Infrastructure, **Andrusca M,** Adam M., Dragomir A., Lunca E, Postolache O., Ramakrishna S., publicata in jurnalul Applied Sciences 10 (18), 6167, 2020.

M. Alte realizări semnificative.

Data,
Șef. lucr. dr. ing. Mihai Andrușcă
07.04.2025

Anexa A.3.3.c. Lista de lucrari, cadre didactice

Lista de lucrări în domeniul de studii universitare de masterat Management Energie Mediu

Numele şi prenumele: **Ș.l.dr.ing. Beniugă Răzvan**

A. Teza de doctorat

1. „*Cercetări privind integrarea surselor eoliene în sistemul energetic național*”, 2013, Domeniul „Inginerie Energetică”, Universitatea Tehnică „Gheorghe Asachi” din Iași, conducător doctorat: prof. dr. ing. Istrate Marcel

B. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate

Nu e cazul

C. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS

1. Răzvan Beniugă, Marcel Istrate, „*Provocări privind integrarea centralelor eoliene în sistemul energetic*”, Editura Politehnium, Iași 2023, ISBN 978-973-621-520-9
2. Răzvan Beniugă, „*Producerea energiei electrice și termice – Îndrumar de laborator*”, Editura PIM, Iași 2023, ISBN 978-606-13-8016-9
3. Răzvan Beniugă, „*Clădiri eficiente energetic. Soluții și strategii pentru îndeplinirea standardului NZEB*”, Editura PIM 2025, ISBN 978-606-13-8955-1

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local

Nu e cazul

E. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web

1. Istrate Marcel, Beniugă Răzvan, Sustainable Energy – Part B – Clean Coal Technology– suport curs publicat pe web în limba engleză,

http://iota.ee.tuiasi.ro/~tti/materiale/sustainable/Sustainable%20Energy-Part%20B.pdf

F. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate în baze de date internaţionale

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K. Contracte de cercetare

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4. Membru în echipa de cercetare a proiectului Cercetări privind evaluarea potențialului eolian în diferite amplasamente din țară, Contract consultanță științifică nr.

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L. Premii, distincţii.

M. Alte realizări semnificative.

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09.04.2024

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