

A N E X A 4 . 1

Universitatea POLITEHNICA Bucureşti

Facultatea: Inginerie Mecanică și Mecatronică

Departamentul Termotehnică, Motoare, Echipamente Termice si Frigorifice

Nume Prenume: Negreanu Gabriel-Paul

Gradul didactic: Profesor universitar

L I S T A
lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

"Contribuții la studiul regimurilor nenominale ale turbinelor cu abur", Universitatea Politehnica din Bucureşti, 1998, 172 pagini.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. L. MIHĂESCU, I. OPREA, G. NEGREANU, I. PÎȘĂ, M. CECLAN, Mălina PRISECARU, Elena POP, Manuela GEORGESCU, V. BERBECE, „Sisteme și echipamente termice pentru producerea energiei – Construcție, funcționare, management”, Ed. Printech, Cod CNCSIS 54, ISBN 978-606-521-872-7, Bucureşti 2012, 386 pag.
2. L. MIHĂESCU, I. OPREA, G.P. NEGREANU, T. PRISECARU, L. POPPER, I. PÎȘĂ, Elena POP, G. POPPER, A. ADAM, Adelina PANAIT, “Valorificarea energetică a uleiurilor vegetale brute”, Editura Printech Cod CNCSIS 54, iulie 2011, ISBN 978-606-521-690-7, 143 pagini.
3. G.P. NEGREANU, I. OPREA, V. BERBECE, „Turbomașini termice” – îndrumar de laborator, Editura Printech, Cod CNCSIS 54, 2016, 109 pagini, ISBN 976-606-23-0703-5.
4. Gh. LĂZĂROIU, L. MIHĂESCU, Teodora VĂTUIU, I. PÎȘĂ, Dana-Andrea BONDREA, G. NEGREANU, Elena-Adriana JARCU, V. BERBECE, “Holistica impactului surselor regenerabile de energie asupra mediului și climei, vol. 2: Biomasa solidă, sursă de energie curată”, ISBN 978-606-515-840-5, Ed. Politehnica Press, 124 pag., 2018
5. Gh. LĂZĂROIU, L. MIHĂESCU, G. NEGREANU, I. PÎȘĂ, “Energy Plantations Value-Added Options”, Power Engineering: Advances and Challenges, Part A: Thermal, Hydro and Nuclear Power, Chapter 11, pp. 314-338, CRC Press, Taylor & Francis Group, 2018.
6. Gh. LĂZĂROIU, L. MIHĂESCU, I. PÎȘĂ, Dana-Andrea BONDREA, G. NEGREANU, E-A. JARCU, V. BERBECE, M. DRAGNE, „Holistica impactului surselor regenerabile de energie asupra mediului și climei, Vol. 3: Spre o energetică circulară”, ISBN:978-606-515-917-4, Editura:Politehnica Press, Data publicare:2020-08-15, Pagini 18
7. Gh. LAZAROIU; L. MIHAESCU; G – P. NEGREANU; I. PISA; V. BERBEC, “The Technological Matrix for the Efficient Use of Biofuels”, Innovative Renewable Waste Conversion Technologies, 45-74, Springer International Publishing, 2021-10-20

8. D. A. BONDREA; Gh. LAZAROIU; L. MIHAESCU; G – P. NEGREANU, „Experimental Tests on the Combustion of Animal Fats”, Innovative Renewable Waste Conversion Technologies, 103-148, Springer International Publishing, 2021-10-20
9. G – P. NEGREANU; L. MIHAESCU, „Combined Combustion Required for Energy Fuels”, Innovative Renewable Waste Conversion Technologies, 75-101, Springer Nature Switzerland, 2021-10-20
10. L. MIHAESCU; G – P. NEGREANU, The Matrix of Energy Biofuels, Innovative Renewable Waste Conversion Technologies, 21-43, Springer Nature Switzerland, 2021-10-20
11. L. MIHAESCU; G – P. NEGREANU, Experimental Research of Combustion of Poultry Manure, Innovative Renewable Waste Conversion Technologies, 213-219, Springer Nature Switzerland, 2021-10-20

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Gh. LAZAROIU, I. OPREA, L. MIHAESCU, T. PRISECARU, I. PÎŞĂ; G. NEGREANU; C.R. MOCANU, “Biomass briquettes from pitcoal-wood: boiler test facility combustion case study”, JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY, ISSN 1311-5065 Volume: 13 Issue: 2A Pages: 1070-1081 Published: 2012, ISI Thomson Reuters, FI=0,734, WOS:000310557400034, SCOPUS.
2. L. MIHAESCU, E. ENACHE, Gh. LAZAROIU , I. PÎŞĂ, V. BERBECE, G.P. NEGREANU, Elena POP, "Achievements in energy valorization of cereal straw in boiler manufactured in Romania", 5 International Conference Trends on Agricultural Engineering , 2013, , 3 - 6 september, Prague, Chech Republic, ISBN: 978-80-213-2388-9, pag 417-421, ISI Proceedings, WOS:000345059700081.
3. Gh. LAZAROIU, L. MIHAESCU, I. PÎŞĂ, Elena POP, G.P. NEGREANU, V. BERBECE, “Hydrogen - An Energy Vector In Efficient Combustion Of Energy Willow”, 49-th International Universities' Power Engineering Conference, UPEC 2014, 2-5 September 2014, Cluj-Napoca, Romania, ISBN 978-1-4799-6557-1/14, ISI Proceedings, WOS:000364087800218.
4. L. MÂNDREA, G. OPRINA, C. BĂBUȚANU, D. MARIN, G. NEGREANU, „The Study of the Depression Occurred under Different Types of Impellers”, Applied Mechanics and Materials, ISSN: 1662-7482, Vol. 841, pag. 116-121, DOI:10.4028/www.scientific.net/AMM.841.116., SCImago Journal & Country Rank, Inspec, Google Scholar, ProQuest, EBSCOhost Research Databases, Index Copernicus Journals Master List.
5. I. PÎŞĂ, Gh. LĂZĂROIU, L. MIHĂESCU, T. PRISECARU, G. NEGREANU, „Mathematical model and experimental tests of hydrogen diffusion in the porous system of biomass”, International Journal Of Green Energy, ISSN: 1543-5075, 2016, Volume: 13, Issue: 8, Pages: 774-780, DOI: 10.1080/15435075.2016.1161629, ISI Thomson Reuters, FI=1,601, WOS:000382233500004, SCOPUS.
6. Gh. LĂZĂROIU, E. POP, G. NEGREANU, I. PÎŞĂ, L. MIHĂESCU, A. BONDREA, V. BERBECE, „Biomass combustion with hydrogen injection for energy applications”, Energy, Volume 127, 2017, Pages 351-357, DOI: 10.1016/j.energy.2017.03.133, ISI, SCOPUS.

7. Gh.LAZAROIU, C. PANĂ, L. MIHĂESCU, AL. CERNAT, N. NEGURESCU, R. MOCANU, G. NEGREANU, "Solutions for energy recovery of animal waste from leather industry", October 2017, Energy Conversion and Management 149:1085-1095, DOI:10.1016/j.enconman.2017.06.042, ISI, SCOPUS.
8. Gh. LĂZĂROIU, L. MIHĂESCU, G.P. NEGREANU, C. PANĂ, I. PÎŞĂ, Al. CERNAT, CIUPAGEANU D.A., "Experimental Investigations of Innovative Biomass Energy Harnessing Solutions", ENERGIES, ISSN: 1996-1073, Volume: 11, Issue: 12, Article Number: 3469, DOI: 10.3390/en11123469, Published: DEC 2018, WOS:000455358300230
9. L. MIHĂESCU, Gh. LĂZĂROIU, G.P. NEGREANU, I. PÎŞĂ, "Influence of the characteristics of biogas generated in the leather industry on combustion quality", Thermal Science, ISSN: 0354-9836, eISSN: 2334-7163, Volume: 22, Pages: S1349-S1357, Supplement: 5, DOI: 10.2298/TSCI18S5349M, Published: 2018, WOS:000454670500005.
10. Mavrodin, M., Lazaroiu, G., Mihaescu, L., Pisa, I., Negreanu, G., Pop, E., Berbece, V., Bondrea, A. „Solution for efficient combustion of the biogas obtained depending on the characteristics of the anaerobic fermentation of animal protein”, Proceedings of 8th International Conference on Energy and Environment: Energy Saved Today is Asset for Future, CIEM 20172017, Article number 8120782, Pages 385-389, Scopus.
11. Lazaroiu, G., Mihaescu, L., Pisa, I., Negreanu, G.-P., Berbece, V., „The role of agricultural biomass in the production of ecological energy in Romania”, 18th International Multidisciplinary Scientific Geoconference, SGEM 2018; Albena; Bulgaria; July 2018; Scopus
12. Mihaescu, L., Lazaroiu, G., Pisa, I., Negreanu, G.-P., Berbece, V., Ciupageanu, D.-A., Thermal conditions required for poultry manure combustion in furnace boilers, Volume 19, Issue 4.1, 2019, Pages 569-57619th International Multidisciplinary Scientific Geoconference, SGEM 2019; Albena; Bulgaria; July 2019; Scopus
13. Lăzăroiu, G., Mihăescu, L., Negreanu, G., Berbece, V., Jarcu, E.-A., „Conceptual matrix for the biofuels of the future applicable to the Romanian economy”, Volume 112, Article number 02002, 8th International Conference on Thermal Equipment, Renewable Energy and Rural Development, TE-RE-RD 2019; Targoviste; Romania; June 2019, Scopus
14. Bondrea, D.A., Mihaescu, L., Lazaroiu, G., Pisa, I., Negreanu, G., „Researches on the mixture limits of animal fats with liquid hydrocarbons for combustion at industrial level”, Volume 112, Article number 02001, 8th International Conference on Thermal Equipment, Renewable Energy and Rural Development, TE-RE-RD 2019; Targoviste; Romania; June 2019, Scopus
15. Pop, E., Mihăescu, L., Lăzăroiu, G., Pîşă, I., Negreanu, G., Berbece, V. „Energy characteristics of the char obtained by two steps pyrolysis of chicken manure”, Volume 595, Issue 1, Article number 012051, 22nd National Conference on Thermodynamics with International Participation, NACOT 2019; Galati; Romania; May 2019, Scopus
16. G. P. Negreanu; I. Oprea; V. Berbece, Some design characteristics of micro steam turbines for agricultural biomass energy conversion, 9th International Conference on Thermal Equipment, Renewable Energy and Rural Development, TE-RE-RD 2020, E3S Web of Conferences, vol 180/2020 Scopus.

17. Gh. Lăzăroiu, L. Mihăescu, G. Negreanu, I. Simion , D. Al. Ciupăgeanu, „Researches on biofuels gasification using the Lurgi process with homogeneous air inlet over the combustion space”, 9th International Conference on Thermal Equipment, Renewable Energy and Rural Development, TE-RE-RD 2020, E3S Web of Conferences, vol 180/2020, Scopus.
18. L. Mihăescu; G. Negreanu; I. Pîsă; V. Berbece; Gh. Lăzăroiu; E. Enache, "New design of a flame-tube steam generator basedon a hot water boiler burning agricultural waste", 2020 7th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE), DOI: 10.1109/EEAE49144.2020.9279081, 12-14.11.2020, SCOPUS, WOS
19. L. Mihaescu, T. Prisecaru, I. Pisa, E. Pop, G.P. Negreanu, V. Berbece, A. Adam C. Mandrean, „Analysis of the possibilities of using a sulfur-free solid fuel at CET Deva-Romania”, 2020 7th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2020 - Proceedings, 12 November 2020, Article number 9279014, 7th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2020; Ruse; Bulgaria; 12 November 2020 through 14 November 2020; Category numberCFP20V95-ART; Code 165935, WOS:000659299700055, SCOPUS
20. L. Mihaescu, Gh. Lazariu, R.M. Grigoriu, L. Stanescu, M. Dragne, G.P. Negreanu, I. Balcu, C. Panait, „An analysis of the efficiency of flue gases energy potential conversion through methanation”, 8th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2022, Ruse (Bulgaria) 30 June- 2 July 2022, SCOPUS.
21. I. Pisa, G.P. Negreanu, L. Mihaescu, V. Berbece, Gh. Lazariu, New design developments of a steam generator with flame tubes derived from a hot water boiler burning agricultural biomass, 8th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2022, Ruse (Bulgaria) 30 June- 2 July 2022, SCOPUS.

**D. Lucrări publicate în ultimii 10 ani în reviste și volume de conferințe cu referență
(neindexate)**

- Reviste

1. V. BERBECE V., Gh. LĂZĂROIU GH., G.P. NEGREANU, L. MIHAESCU, I. PÎȘĂ, “Aspects of constructive and thermo-economic analysis of steam turbines used for solid biomass valorization”, Journal of Sustainable Energy, ISSN 2067-5534, Vol 5/Nr. 3/2014, pp. 92-95.
2. L. MIHĂESCU, I. PÎȘĂ, C. MĂRCULESCU, G. NEGREANU, E. POP, “Calculation of efficiency and wood consumption of a boiler of 40 t/h”, Rev. Termotehnica, ISSN-L 1222-4057, anul XX, 1S/2016, Pag, 4-8.
3. Gh. LĂZĂROIU, L. MIHĂESCU, E. POP, I. PÎȘĂ, G. NEGREANU, “Energetic validation of anaerobic digestion technology of animal waste from tannery industry”, Rev. Termotehnica, ISSN-L 1222-4057, anul XX, 1S/2016, Pag, 100-103.
4. L. MIHĂESCU, Gh. LĂZĂROIU, G.P. NEGREANU, I. PÎȘĂ, E. POP, “The influence of hydrogen on the combustion velocity of solid biomass”, ACTA TECHNICA CORVINIENSIS, Bulletin of Engineering, Fascicule 3/ 2016, ISSN 2067-3809 (online), pp. 167-170.

5. G.P. NEGREANU, E.C. MLADIN, „Analiza implementării cogenerării prin panouri solare mixte în clădiri rezidențiale”, Rev. Energetica, nr 6, iunie 2008, ISSN: 1453-2360, pp. 223-226.
6. G.P. NEGREANU, „Analiza performanțelor turbinelor eoliene de mica putere instalabile în România”, Revista Energetica, ISSN-1453-2360, anul 59, nr. 8/2011, pp.250-253.
7. L. MIHĂESCU, I. PÎȘĂ, G.P. NEGREANU, V. BERBECE, “Arderea pulverizată a tocăturii de biomasă – premiză pentru producerea de energie electrică”, Revista Energetica, ISSN-1453-2360, anul 59, nr. 12/2011, pp.421-424
8. G. P. NEGREANU, L. MIHĂESCU, I. PÎȘĂ, I. OPREA, A.A. ADAM, C. MÂNDREAN, V. GHERGHINA, “Concepția de retehnologizare a arzătoarelor de praf de cărbune pentru reducerea nivelului emisiilor de NOx”, Rev. Energetica, ISSN-1453-2360, anul 63, nr. 1/2015, pp. 3-5,
9. G. P. NEGREANU, D. STANCIU, L. MIHĂESCU, I. PÎȘĂ, I. OPREA, V. BERBECE, „Testing the operation of a new lignite low NOx burner module by experiment and modeling”, Transactions of the Institute of Fluid-Flow Machinery, No. 126, ISSN 0079-3205, Gdańsk 2014, pp.199-210, Index Copernicus Journal Master List, BazTech, INSPEC.
10. Gh. Lăzăroiu, G.P. Negreanu, I. Pîșă, R. M. Grigoriu, D.A. Ciupăgeanu, „Experimental researches on poultry manure combustion in co-combustion with biomass”, E3S Web Conf., Volume 286, 2021, 10th International Conference on Thermal Equipments, Renewable Energy and Rural Development (TE-RE-RD 2021)
11. L. Mihăescu, I. Pîșă, I. Simion, G.P. Negreanu, „Analytical model for estimating the production and composition of gas resulted through gasification”, E3S Web Conf., Volume 286, 2021, 10th International Conference on Thermal Equipments, Renewable Energy and Rural Development (TE-RE-RD 2021)
12. L. Mihăescu, D. Stanciu, Gh. Lăzăroiu, I. Pîșă, G. Negreanu, „Comparative analysis between methane and hydrogen regarding ignition and combustion in diffusive mode”, E3S Web Conf., Volume 327, 2021, 26th Scientific Conference on Power Engineering and Power Machines (PEPM'2021)

- Selecție cu maximum 20 lucrări în volume de conferințe

1. G. NEGREANU, L. MIHĂESCU, I. PÎȘĂ, I. OPREA, V. BERBECE, A. ADAM, C. MÂNDREAN, I. BĂRBIERU, V. GHERGHINA, Al. MOGA, „Design conception of a pilot burner that simulates the retrofitted burners from CHP Ișalnița, 3nd International Conference on Thermal Equipment, Renewable Energy and Rural Development TE-RE-RD 2014, 12-14 iunie 2014, Mamaia, Conference Proceedings indexed in Index Copernicus Master List si Ebsco Academic Search Ultimate.
2. G. NEGREANU, V. BERBECE, L. MIHĂESCU, I. OPREA, I. PÎȘĂ, D. ANDREESCU, “Thermal power plant for energy willow use: design, performances”, 3nd International Conference on Thermal Equipment, Renewable Energy and Rural Development TE-RE-RD 2014, 12-14 iunie 2014, Mamaia, Conference Proceedings indexed in Index Copernicus Master List si Ebsco Academic Search Ultimate..
3. G. NEGREANU, N. GHEORGHE, L. MÂNDREA, “Optimization of the flash pressure of a geothermal plant , 4th International Conference on Thermal Equipment, Renewable Energy and Rural

Development TE-RE-RD 2015, Posada Vidraru, 4-6 June 2015, pp. 83-86, Conference Proceedings indexed in Index Copernicus Master List si Ebsco Academic Search Ultimate.

4. G.P. NEGREANU, I.OPREA, "Thermodynamic and Economic Analysis of the Microturbines for Cogeneration", Sxieme edition du Colloque Francophone sur l'Energie-Environment-Economie et Thémodinamique, 11-13 Juin 2012, Sozopol, Bulgaria, Actes de colloque, ISBN 978-619-460-008-3, Avangard Prima, Sofia, pp. 45-48.
5. L. MIHĂESCU, T. PRISECARU, I. PÎŞĂ, G. NEGREANU, A. ADAM, I. BĂRBIERU, SILVIA LIGDA, "Coal-dust burner retrofitting in order to reduce pollutant emissions at CHP Isalnita", FOREN 2012 – WEC Central & Eastern Europe Energy Forum, Key Issue 3: Promoting of clean and efficient technologies in Romania, 17-21 June 2012, Neptun-Olimp, Romania.
6. G. P. NEGREANU, D. STANCIU, L. MIHĂESCU, I. PÎŞĂ, I. OPREA, „Testing the operation of a new lignite low NOx burner module by experiment and modeling”, International Conference on Applied Energy, ICAE 2013, Jul 1-4, 2013, Pretoria, South Africa
7. L. MIHAESCU, E. ENACHE, Gh. LAZAROIU, I. PÎŞĂ, V. BERBECE, G.P. NEGREANU, "Endurance aspects for the 150 KW boiler for starw briquettes" , UAB-B.EN.A International Conference, Alba Iulia, Romania, Mai 23-25, 2013
8. L. MIHAESCU, I. PÎŞĂ, G.P. NEGREANU, Gh. LAZAROIU, V. BERBECE, E. POP, S. BARTHA, E. ENACHE, " Archivements and perspectives of solid biomass energy valorization", , 9 th International Conference on "Biomass for Energy" , Sept. 24-25 ,2013, Kyiv, Ukraine
9. G.P. NEGREANU, L. MIHĂESCU, I PÎŞĂ, I. OPREA, V. BERBECE, „Mathematical modeling and experimental tests of the air jets mixing process in a new prototype of lignite burner for lower NOx emissions”, Proceedings of the XIX National Scientific Conference with International Participation FPEPM 2014, 14-17 september, Sozopol, Bulgaria
10. L. MIHĂESCU, I. PÎŞĂ, G.P. NEGREANU, C. MĂRCULESCU, „Analysis of the implementation opportunity of a ORC plant in order to recover the exhausted heat of a 35 MWth steam generator burning biomass”, Huitieme edition du Colloque Francophone sur l'Energie-Environment-Economie et Thémodinamique, 29-30 Juin 2016, Proceedings on CD.

E. Brevete obținute în întreaga activitate

1. L. MIHĂESCU, I. PÎŞĂ, V. BERBECE, G.P. NEGREANU, Anca ENACHE, “ Instalație cu dublă acționare pentru controlul arderii brichetelor de paie”, Brevet de inventie nr. 129738/30.05.2018.

Data: 12.09.2022

Semnătura: