

## LISTA DE LUCRARI

### A. Teza de doctorat

Unguresan Paula Veronica (2008), „Cercetari privind optimizarea centralelor termice de cogenerare cu motoare cu ardere internă, prin analiza exergoeconomica a schimbatoarelor de caldura,” Conducător științific: Prof.dr.ing. Teodor Madarasan

### B. Cărți și captoare în cărți publicate (în edituri recunoscute CNCSIS):

#### CĂRȚI

1. Madarasan, T., Apahidean, B., Ghiran, I., Teberean, I., Balan, M., Unguresan, Paula, B.Duma, F.Bode - *Indrumator pentru lucrari de termotehnica si masini termice*, Editura Todesco, Cluj-Napoca, 2006, ISBN 973-7695-17-8, in format electronic, pe CD.
2. Florin Bode, Paula Unguresan, Combustie si instalatii de ardere, Editura UT Pres, 2015, ISBN 978-976-662-998-3
3. Paula Unguresan Florin Bode, Termodinamica aplicata, UT Press, 2017, ISBN 978-606-737-248-9, in format electronic, pe CD.

#### CAPITOLE DE CARTE

1. Unguresan, P., *Exergoeconomic analysis of an internal combustion engine cogeneration system*, in *Developments in Mechanical Engineering*, Vol.4, Gdansk University of Technology Publishers, ISBN 978-83-7348-301-9, p.171-187, 2010

### C. Articole publicate în reviste de specialitate

#### c1) Articole științifice indexate Web of Science cu factor de impact

1. Florin Bode, Corina Giurgea, Victor Hodor, Paula Unguresan, Investigation of the non-reactive flow in a swirling burner, *Journal Mechanika*, Nr. 5(79), 2009, pp. 42-4, ISSN 1392-1207, WOS:000271802000006
2. Ungureşan Paula Veronica, Porumb Raluca Andrada, Petreus Dorin, Pocola Adrian George, Pop Octavian Gabriel, Bălan Mugur Ciprian, *Assessments about orientation of façades for active solar energy applications in different climatic conditions* Journal of Energy Engineering, Impact factor 1.895, Challenging energy issues in transition economies; the case of Romania (accepted for publication)

#### c2) Articole științifice indexate BDI

1. Paula Ungureşan, Dorin Petreus, Adrian Pocola, Mugur Bălan, Potential of Solar ORC and PV Systems to Provide Electricity under Romanian Climatic Conditions, *Energy Procedia*. Volume 85, January 2016, Pages 584–593, doi:10.1016/j.egypro.2015.12.248
2. Bogdan Porumb, Paula Ungureşan, Lucian Fechete Tutunaru, Alexandru Şerban, Mugur Bălan, A Review of Indirect Evaporative Cooling Operating Conditions and Performances, *Energy Procedia*, Volume 85, January 2016, Pages 452–460, <https://doi.org/10.1016/j.egypro.2015.12.226>
3. Bogdan Porumb, Paula Ungureşan, Lucian Fechete Tutunaru, Alexandru Şerban, Mugur Bălan, , A Review of Indirect Evaporative Cooling Technology, *Energy Procedia*, Volume 85, January 2016, Pages 461–471, <https://doi.org/10.1016/j.egypro.2015.12.228>

4. M Simion, L Socaciu, P Unguresan, Factors which Influence the Thermal Comfort Inside of Vehicles, *Energy Procedia* Volume 85, January 2016, Pages 472–480, <https://doi.org/10.1016/j.egypro.2015.12.229>
5. Lavinia Socaciu, Paula Unguresan, Using the Analytic Hierarchy Process to Prioritize and Select Phase Change Materials for Comfort Application in Buildings *Mathematical Modelling in Civil Engineering*, Volume 10, Issue 1, Pages 21–28, ISSN (Online) 2066-6934, DOI: 10.2478/mmce-2014-0003, April 2014
6. Lavinia Socaciu, Angela Plesa, Paula Unguresan, Oana Giurgiu, Review on phase change materials for building applications, *Leonardo Electronic Journal of Practices and Technologies*, ISSN 1583-1078, Issue 25, July-December 2014,p. 179-194
7. Paula Unguresan, Florin Bode, Mugur Balan, Andrei Ceclan, Analysis of the cogeneration implementation potential into an existing saturated steam boiler industrial plant, *Revista Termotehnica*, ISSN-L 1222-4057, online ISSN 2247-1871, issue 1/2011, pag. 104-109,
8. Mugur Bălan, Paula Ungureşan, Florin Bode, Andrei Ceclan, Lorentz Jäntschi, Study of energy recovery options at a Wistra ceramoc insulators oven, *National Conference of Thermodynamics with International Participation* 26-28 May 2011, Craiova, *Revista Termotehnica (Supliment)*, ISSN-L 1222-4057, online ISSN 2247-1871, nr 1/2011, Romania
9. Marcu, I. L., Unguresan P., Nasutiu L., (2009): Aspects Regarding the Alternating Flow Driven Hydraulic Systems, *Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium*, 25-28th November 2009, Vienna, Austria, pag, 0155-0156, ISSN 1726-9679, ISBN 978-3-901509-70-4, Katalinic, B. (Ed.), Published by DAAAM International Vienna, Vienna (2009 )
10. Angela Plesa, Dan Opruta, Monica Balcau, Paula Unguresan, Mathematical model for air flow in heat exchanger sinusoidal fins, *Revista Termotehnica*, Nr.2/2009, pg.22-25, ISSN-L 1222-4057
11. Plesa, Angela,Opruta D., Teberean I., Unguresan, Paula, Some practical aspects regarding the flow in a plate and fins heat exchanger, *Experimental Fluid mechanics* 2006, Proceedings, pg.157-160, ISSN 80-7372-141-4;
12. Madarasan, T., Unguresan, Paula, Contributions regarding the exergetic analysis of heat exchangers, *Revista Termotehnica* An X, nr.1-2/2006
13. V. Hodor, T. Madarasan, R. Balan, Paula Unguresan, Cercetari privind realizarea unor regimuri termice impuse in schimbatoarele de caldura lichid-lichid, *Revista Termotehnica* nr.1/2002,ISSN-L 1222-4057, 2 numere pe an, pg.32-37

### C3) Articole publicate în reviste recunoscute CNCSIS

1. Paula Unguresan, Dorin Petreus, Mugur Balan, Model for the behaviour of low temperature and small size ORC equipment, *Buletinul Institutului Politehnic din Iasi*, Tomul LXI (LXV), Fasc 2, 2015, Sectia Constructii de Masini, pp. 73-82
2. Florin Bode, Paula Unguresan and Mugur Balan, study concerning the forming of asphalt crust during transport, *Buletinul Institutului Politehnic din Iasi*, Tomul LXI (LXV), Fasc 2, 2015, Sectia Constructii de Masini, pp. 61-72
3. Alexandra Alutei, Paula Unguresan, Dan Mandru, Numerical Analysis of a wax-paraffin Linear Thermal Actuator with Internal Heat generation, *Automation Computers Applied Mathematics*, Vol.20.2012
4. Bode F., Giurgea, Corina, Hodor V., Ungureşan Paula, Nonreactive flow in a swirl burner. Part1: Experimental investigation using Particle Image Velocimetry (PIV), *Acta Technica Napocensis – Applied Mathematics and Mechanics*, pag.137-142, ISSN 1221-5872, 52, vol.2, pag.137-142, The 1st International Symposium on Green Energy, ISGE2009, 14-16 Mai 2009, Cluj-Napoca, Romania

5. Plesa Angela, Dan Opruta, Monica Balcau, Paula Unguresan, Liviu Vaida, Mathematical model for air flow in heat exchanger sinusoidal fins „*The 1st International Symposium on green energy*” , 14-16 Mai ,Cluj-Napoca si publicata în *Acta Technica Napocensis*, 2009, seria *Applied Mathematics and Mechanics*, nr.52, vol. II, ISSN 1221-5872
6. Ungureşan Paula, Angela Pleşa, Monica Bălcău, Researches concerning the exergetic behaviour of heat exchangers from internal combustion engines cogeneration plants, în *Acta Technica Napocensis*, 2008, seria *Applied Mathematics and Mechanics*, nr. 51, vol. IV, ISSN 1221-5872, pag.93-98.
7. Angela Pleşa, Monica Bălcău, Ungureşan Paula, Particular cases on the modification methods of projections, în *Acta Technica Napocensis*, 2008, seria *Applied Mathematics and Mechanics*, nr.51, vol. IV, ISSN 1221-5872, pag.89-92.
8. Angela Pleşa, Ungureşan Paula, Monica Bălcău, L'analyse exergétique des échangeurs de chaleur compacts à plaques et aux ailettes, în *Acta Technica Napocensis*, 2008, seria *Applied Mathematics and Mechanics*, nr.51, vol. IV, ISSN 1221-5872
9. Angela Pleşa, Monica Bălcău, Ungureşan Paula, Numerical computation for the determination of air feed using the diaphragm method, în *Acta Technica Napocensis*, 2008, seria *Applied Mathematics and Mechanics*, nr. 51, vol. IV , ISSN 1221-5872, pag.81-88.
10. Hodor, V., Bode, F., Unguresan, Paula., Ratiu, C., CFD first prediction in designing a 50 kW swirling burner within its combustion chamber, Scientific Bulletin of the Politehnica University of Timisoara, Transaction on Mechanics, Proceedings of the 3rd Workshop on Vortex Dominated Flows, Achievements and Open Problems, ISSN 1224-6077, June 1- 2, Timisoara, 2007
11. Hodor, V., Bode, F., Unguresan, Paula, Ratiu, C., Numerical simulation researches on variable valve timing, *Acta Technica Napocensis – Applied Mathematics and Mechanics*, ISSN 1221-5872, 50, vol.4, International Congress Automotive, Environment And Farm Machinery, AMMA 2007, 11-13 oct 2007, Cluj-Napoca, Romania
12. Hodor, V., Unguresan, Paula, Bode, F., Numerical analysis of the uniformly temperature distribution on induction heat treatment furnaces, Colocviul Franco-Roman cu tema “Energie, Environment, Economie et Thermodynamique” Timisoara, 15-17 iunie 2006, publicata in Scientific Bulletin of the Politehnica University of Timisoara, Transaction on Mechanics, 2006, Tom 51(65), Fascicula 2, ISSN 1224-6077
13. Madarasan T., Unguresan, Paula, Exergetic analysis of the heat exchangers by mathematical modeling, *Acta Technica Napocensis*, Series: Applied Mathematics and Mechanics, nr.49, Vol. I, 2006, pg.7-13, ISSN 1221-5872
14. Bode, F., Hodor, V., Madarasan, T., Unguresan, Paula “Investigation on turbulence related to a swirling burner within its back pressure combustion chambre”, in cadrul Proceedings of the 2nd Workshop on Vortex Dominated Flows, Achievements and Open Problems, Bucuresti, 30 Iunie – 1 Iulie, 2006, publicata in Scientific Bulletin of the Politehnica University of Timisoara, Transaction on Mechanics, Tom 51(65) Fascicola 3, Special Issue, pg. 141-147, ISSN 1224-6077.
15. Hodor, V., Bode, F., Madarasan, T., Unguresan, Paula, “CFD prediction of a burner gasodynamic geometry within its back pressure combustion chamber”, in cadrul Proceedings of the 2nd Workshop on Vortex Dominated Flows, Achievements and Open Problems, Bucuresti, 30 Iunie – 1 Iulie, 2006, publicata in Scientific Bulletin of the Politehnica University of Timisoara, Transaction on Mechanics, Tom 51(65) Fascicola 3, Special Issue, pg. 135-141, ISSN 1224-6077.

- 16.** Madarasan T., Unguresan, Paula, Contribution regarding the determination of surface heat transfer coefficients for a heat exchanger, *Acta Technica Napocensis*, Series: Applied Mathematics and Mechanics, nr. 48, vol.I, 2005, pg.23-30, ISSN 1221- 5872
- 17.** Madarasan T., Unguresan, Paula, The influence of external irreversibility upon Stirling cycle, *Acta Technica Napocensis*, Series: Applied Mathematics and Mechanics, Nr. 47, Vol III, 2004, pg.41-48, ISSN 1211-5872
- 18.** Madarasan T., Unguresan, Paula, Researches on the gas turbine installations optimisation *Acta Tehnica Napocensis*, Series: Applied Mathematics and Mechanics Nr.46, Vol. I, 2003, pg.13-18, ISSN 1225-5872

#### **D. Studii publicate în volumele unor manifestări științifice**

##### **D1- Articole publicate în volumele unor conferințe internaționale**

- 1.** Paula Unguresan, A.Pisla, D. Opruta, Computer program for simulating Organic Rankine Cycle, *Low temperature and waste heat use in communal and Industrial Energy Supply Systems*, 25-26 Octombrie 2012, Bremen, Germania.
- 2.** Unguresan Paula, Victor Hodor, Angela Plesa, Florin Bode Exergoeconomic analysis of an internal combustion engine cogeneration system”, *XIX International Symposium, Research-Education-Technology Bremen*, September 24th – 25th, 2009
- 3.** Angela Plesa, Dan Opruta, **Unguresan Paula**, Using numerical computation method for determination of the plate and fins heat exchangers convective coefficient, *XIX International Symposium, Research-Education-Technology Bremen*, September 24th – 25th, 2009
- 4.** **Unguresan Paula**, T. Madarasan, V. Hodor, F. Bode, Researches regarding the exergoeconomic optimization of internal combustion engine cogeneration systems, in lucrările *Colocviului Franco-Roman cu tema “Energie, Environnement, Economie et Thermodynamique” COFRET'08*, 11 – 13 juin 2008, Nantes, France
- 5.** Florin Bode, **Unguresan Paula**, Combustion module activation in CFD design of an methane swirl burner, 9th International Scientific Conference, Automation in production planning and manufacturing, Zilina, Slovak Republic, ISSN 978-80-89276-11-0, 2008

##### **D2- Articole publicate în volumele unor conferințe nationale**

- 6.** **Paula Unguresan**, V. Farcas, D. Banyai, Study for integrating ORC cycles in geothermal exploitations of north-west Romania reservoir, *International Conference on Environmental Research and Technology*, ECO Impuls 2013
- 7.** **Unguresan, Paula**, Madarasan T., Hodor V., Bode F., *Cercetari experimentale privind eficiența instalațiilor termice de cogenerare cu motoare cu ardere internă*, in Lucrările Conferinței Nationale de Termotehnica cu participare internațională, Editia XIV-a, Universitatea Tehnică de Constructii Bucuresti, 25-26 Noiembrie 2004, 7 pag., lucrari publicate pe CD.
- 8.** Hodor, V., **Unguresan, Paula**, Bode, F., Madarasan, T., *Problematica regimurilor propagării temperaturii la nivelul cupoarelor electrice pentru tratamente termice*, Lucrările Conferinței Nationale de Termotehnica cu participare internațională, Editia XIV-a, Universitatea Tehnică de Constructii Bucuresti, 25-26 Noiembrie 2004, 4 pag., lucrari publicate pe CD.
- 9.** Hodor, V., **Unguresan, Paula**, Bode, F., Ghiran, I., *Studii de simulare numerică în vederea prediciunii realizării curbelor de tratament termic în incinte izoterme*, Lucrările Conferinței Nationale de Termotehnica cu participare internațională, Editia XIV-a, Universitatea Tehnică de Constructii Bucuresti, 25-26 Noiembrie 2004, 6 pag., lucrari publicate pe CD.
- 10.** Hodor V., Madarasan T., **Unguresan, Paula**, *Researches on the distorted sprayed fuel-air mixture, and its effect on lambda closed-loop control*, The National Conference with International Participation: Automobile, Environment and Agricultural Machinery, Cluj-Napoca, October 2002, pg.73-81, ISBN 973-8335-62-0

11. Unguresan, Paula, Plesa, Angela, Opruta, D., Duma, B., *Analiza exergetica a sistemelor termoenergetice*, in Lucrarile Conferintei Nationale de Termotehnica cu participare internationala, Editia XII-a, Academia Navală "Mircea cel Batran", Constanta, 14-16 noiembrie 2002, pg.211-219, ISBN 973-8303-24-9
12. Plesa, Angela, Teberean I., Opruta D., Unguresan, Paula, *Metode de dimensionare termica a schimbatoarelor de caldura cu placi*, in Lucrarile Conferintei Nationale de Termotehnica cu participare internationala, Editia XII-a, Academia Navală "Mircea cel Batran", Constanta, 14-16 noiembrie 2002, pg.85-93, ISBN 973-8303-17-7
13. Opruta, D., Hedesiu, H., Plesa, Angela, Unguresan, Paula, *Sistem de monitorizare si automatizare pentru retelele de alimentare cu apa*, Conferinta Nationala de Termotehnica cu participare internationala, Editia XII-a, Academia Navală "Mircea cel Batran", Constanta, 14-16 noiembrie 2002 , pg.206-211, ISBN 973-8303-24-9
14. Vasarhely, P., Hodor, V., Unguresan, Paula, *Instalatie electronica digitala pentru supravegherea si controlul arderii in sisteme termoenergetice*, in lucrările Conferintei Nationale de Termotehnica, Editia a XI-a Galati, 17-19 mai 2001, Vol.2, pg.345-350, ISBN 973-8052-72-6

Data

06.06.2017

Semnătura

