

UNIVERSITATEA TEHNICĂ "GHEORGHE ASACHI" DIN IAȘI
FACULTATEA DE MECANICĂ
DEPARTAMENTUL DE INGINERIE MECANICĂ ȘI AUTOVEHICULE RUTIERE

Concurs pentru ocuparea postului de **PROFESOR, poz. 2**

Disciplinele postului: Compresoare
 Termodinamica fluidelor compresibile
 Mașini termice neconvenționale

Domeniul **Inginerie mecanică**

FIȘA DE VERIFICARE
a îndeplinirii standardelor minime naționale de prezentare la concurs pentru postul de
profesor universitar

publicat în Monitorul Oficial al României nr. 391 / 27.04.2022, partea a III-a.

Candidat: **HOMUTESCU C.-A. VLAD-MARIO**

Data nașterii: 29.06.1969

Funcția actuală: conferențiar,

Data numirii în funcția actuală: 18.02.2019

Instituția: Universitatea Tehnică "Gheorghe Asachi" din Iași

Notă privind îndeplinirea standardelor minime naționale pentru profesor universitar
(conform Ordin MECTS 6129 din 20.12.2016)

Comisia CNATDCU nr.17, Inginerie mecanică, mecatronică și robotică

Domeniul de activitate		Indicatori	Condiții minimele și obligatorii	Indicatori realizați de candidat	Indicator îndeplinit
Activitatea didactică / profesională DID (A1)	A1.1	N1	2	3	DA
		N1.1	1	1	DA
		N1.3	1	1	DA
	A1.2	N2	4	10	DA
		N2.1	2	3	DA
Activitatea de cercetare CDI (A2)	A2.1 + A2.3	P1 + P2	10	18,185	DA, 181,8 %
		P1	6	18,185	DA, 303,0 %
	A2.2	N3	10	20	DA
		N3.1	5	5	DA
	A2.4 + A2.5	N4	2	3	DA
		N4.3	1	1	DA
Recunoașterea impactului activității RIA (A3)	A3.1	S1 + S2	50	71,483	DA, 142,9 %
	A3.2	N5	10	26	DA
	A3.3	C	25	355,232	DA, 1420,9 %

Criteriul 1

DID (A1): Activitatea didactică și profesională

DID (A1.1): Manuale suport de curs (conform fișei disciplinei de concurs)

N1.1 = număr

N1.2 = număr

N1.3 = număr

Cerințe:

N1 = N1.1 + N1.2 = 1 + 1 = 3 ≥ 2

N1.1 = 1 ≥ 1

N1.3 = 1 ≥ 1

Subcategorii		Realizări	Indicatori
Format tipărit / electronic [1] (minim 100 pagini)	Coordonator / prim autor	1. Homutescu V.M. , Homutescu C.A., Homutescu A., Mașini și instalații termice și hidraulice. Ed. CERMI, Iași, 2001, ISBN 973-8000-90-4, 268 p., 45 r/p, 110 ex., 7 ex. la Biblioteca U.T. Iași	N1.1 = 1
	Co-autor	1. Giurcă V., Homutescu V.M. , Homutescu C.A., Bazele dinamicii gazelor. Vol. I. Ed. Cermi Iași, ISBN 973-9378-09-9, 1998, 326 p., 40r/p, 100 ex., cota la Biblioteca Națională III 235568 2. Bălănescu D.T., Homutescu V.M. , Construcția și calculul cazanelor și turbinelor. Editura Performantica, Iași, 2021, ISBN 978-606-685-813-7, 209 p., 4 ex. la Biblioteca U.T. Iași	N1.2 = 2

Format electronic disponibil pe platforma universității / departamentului (autor)	1. Homutescu V.M. , Compresoare. format B5, 191 p., 49 r/pagină, 2018-2022	N1.3 = 1
---	---	----------

DID (A1.2): Material didactic / Dezvoltare laboratoare, aplicații

N2.1 = număr

N2.2 = număr

N2.3 = număr

Cerințe:

$$N2 = N2.1 + N2.2 + N2.3 = 3 + 3 + 4 = 10 \geq 4$$

$$N2.1 = 3 \geq 2$$

Subcategorii	Realizări	Indicatori
Standuri laborator (construcție/modernizări) certificate de directorul de departament	1. Măsurarea zgomotului produs de compresoarele cu piston. Lucrare nouă, 20 p. referat + 4 p. program 2. Determinarea experimentală a coeficientului de viteză la curgerea prin ajutorul geometric convergent. Metodă bazată pe cunoașterea debitului. Lucrare nouă – referat de 12 p. 3. Determinarea experimentală a vitezei de curgere a unui gaz cu tubul Pitot-Prandtl (Tubul Pitot-Prandtl). Lucrare nouă - referat de 14 p.	N2.1 = 3
Îndrumar laborator / carte aplicații format tipărit sau electronic (autor, co-autor)	1. Homutescu V.M. , Homutescu C.A., Mașini și instalații termice și hidraulice. Îndrumar de laborator. Rotaprint, 1996, 305 p., 40 rânduri/p, tiraj 100 ex. 2. Homutescu V.M. , Bălănescu D.T., <i>Termodinamica fluidelor compresibile. Îndrumar de laborator</i> . Editura Performantica, Iași, 2018, ISBN 978-606-685-605-8, 135 p. B5 la 52 rânduri/pagină, cu Arial 11 3. Bălănescu D.T., Homutescu V.M. , <i>Generatoare de abur. Calculul termic – îndrumar pentru proiect</i> . Editura Performantica, Iași, 2018, ISBN 978-606-685-602-7, 164 p. B5 la 48 rânduri/pagină cu Times New Roman 10	N2.2 = 3
Aplicație informatică educațională	1. Program pentru calculul turbinei cu abur Curtis 2. Program pentru calculul termic al compresoarelor cu piston cu două trepte 3. Program pentru calculul termic al compresoarelor centrifuge cu o treaptă 4. Program pentru calculul termic al mașinilor Stirling	N2.3 = 4
		N2 = 3 + 3 + 4 = 10

Criteriul 2

CDI (A2): Activitatea de cercetare științifică, dezvoltare tehnologică și inovare

CDI (A2.1): Articole și publicații științifice indexate Web of Science Thomson Reuters (WOS) [2], unde n = nr. de autori și FI este factorul de impact [3]

$$P1.1 = 2 \cdot (0,2 + FI)$$

$$P1.2 = 2 \cdot 3 \cdot (0,2 + FI) / n$$

$$P1.3 = 0,2 + FI$$

$$P1.4 = 3 \cdot (0,2 + FI) / n$$

Cerințe:

$$P1 = P1.1 + P1.2 + P1.3 + P1.4 = 10,99 + 0,3 + 6.295 + 0 = 18.185 > 6$$

$$P1 + P2 = 18.185 + 0 = 5.071 \geq 10$$

Subcategorii	Realizări		Punctaj	Indicatori
Autor corespondent / prim autor	$n \leq 3$	1. Bălănescu D.-T., Homutescu V.M.* (autor corespondent), Effects of hydrogen-enriched methane combustion on latent heat recovery potential and environmental impact of condensing boilers. Applied Thermal Engineering, Available online 5 August 2021, Volume 197, October 2021, 117411, https://doi.org/10.1016/j.applthermaleng.2021.117411 , impact factor: 5,295 (2020), 5.175 (5 years)	$2 \cdot (0,2 + 5,295)$	P1.1 = 10,99
	$n \geq 4$	1. Homutescu V.M. , Bălănescu D.-T., Panaite Carmen Ema, Atanasiu M.-V., Variable displacement alpha-type Stirling engine. IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012143, 7 pp, doi:10.1088/1757-899X/147/1/012143, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012143/pdf .	$2 \cdot 3 \cdot (0,2 + 0) / 4 = 0,3$	P1.2 = 0,3
Co-autor	$n \leq 3$	1. Bălănescu D.-T., Homutescu V.M. , Experimental investigation on performance of a condensing boiler and economic evaluation in real operating conditions. Applied Thermal Engineering, Volume 143, October 2018, Pages 48-58, https://doi.org/10.1016/j.applthermaleng.2018.07.082 . impact factor: 5,295 (2020), 5,175 (5 years)	$0,2 + 5,295 = 5,495$	P1.3 = 6,895
		2. Bălănescu D.-T., Homutescu V.M. , Atanasiu M.-V., Air turbine - an interesting solution for straw energy conversion into electricity. IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012141, 6 pp, doi: 10.1088/1757-899X/147/1/012141, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012141/pdf .	0,2	
		3. Bălănescu D.-T., Homutescu V.M. , Atanasiu M.-V., Dimensional approach on hot air turbine power plant in opened cycle for straw recycling. IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012142, 6 pp, doi: 10.1088/1757-899X/147/1/012142, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012142/pdf .	0,2	
		4. Bălănescu D.-T., Homutescu V.M. , Straw Energy saving Solution: Power Plant Based on a Hot Air Turbine. Procedia Engineering, volume 181, 2017, pp 698-705, 10 th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016; Petru Maior University of Tîrgu Mureș, Romania; 6 October 2016 through 7 October 2016.	0,2	
		5. Bălănescu D.-T., Homutescu V.M. , Experimental Study on the Combustion System Optimization in the Case of a 36 kW Condensing Boiler. Procedia Engineering, volume 181, 2017, pp 706-711, 10 th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016; Petru Maior University of Tîrgu Mureș, Romania; 6 October 2016 through 7 October 2016.	0,2	
		6. Bălănescu D.-T., Homutescu V.M. , Agricultural Machinery Hybrid Propulsion System Based on Combined Cycle Gas and Steam Turbines. Proceedings of the 46th International Symposium "Actual Tasks on Agricultural Engineering", Opatija, Croatia, 2018, pp. 57-66, ISSN 1848-442, published by University of Zagreb, Faculty of Agriculture, Department of Agricultural Engineering. indexat WoS (2020), Google Academic (2018)	0,2	

		7. Bălănescu D.-T., Homutescu V.M. , Performance analysis of a gas turbine combined cycle power plant with waste heat recovery in Organic Rankine Cycle, volume 32, 2019, pp 520-528, 12th International Conference Interdisciplinarity in Engineering, INTER-ENG 2018; Petru Maior University of Tîrgu Mureş, Romania; October 2018, ISSN: 2351-9789, DOI: 10.1016/j.promfg.2019.02.248, Accession Number: WOS:000471295800071. indexat Web of Science (2019), indexat SCOPUS (2019), Science Direct (2019), Google Academic (2019)	0,2	
		8. Bălănescu D.-T., Homutescu V.M. , Study on Condensing Boiler Technology Potential Accounting Various Fuels. Procedia Engineering, volume 32, 2019, pp 504-512, 12th International Conference Interdisciplinarity in Engineering, INTER-ENG 2018; Petru Maior University of Tîrgu Mureş, Romania; October 2018, ISSN: 2351-9789, DOI: 10.1016/j.promfg.2019.02.246, Accession Number: WOS:000471295800073. indexat Web of Science (2019), SCOPUS (2019), Science Direct (2019), Google Academic (2019)	0,2	
	n ≥ 4	1.		P1.4 = 0
				P1 = 18.185

CDI (A2.2): Articole şi publicaţii ştiinţifice indexate BDI [4] neincluse la A2.1

N3.1 = număr

N3.2 = număr

Cerinţe

$N3 = N3.1 + N3.2 = 5 + 15 = 20 \geq 10$

$N3.1 = 5 \geq 5$

Subcategorii	Realizări	Indicatori
Autor corespondent / prim autor	<p>1. Homutescu V. M., Bălănescu D.-T., Gamma-Type Stirling Motor-Driven Compressor. International Scientific Conference ACME 2014, Iaşi, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 377-382, DOI 10.4028/www.scientific.net/AMM.659.377. – indexat SCOPUS</p> <p>2. Homutescu V. M., Bălănescu D.-T., Physico-Mathematical Model of the Theoretical Gamma-Type Stirling Motor-Driven Compressor. International Scientific Conference ACME 2014, Iaşi, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 383-388, DOI 10.4028/www.scientific.net/AMM.659.383. – indexat SCOPUS</p> <p>3. Homutescu V.M., Bălănescu D.-T., Lupu Ana Georgiana, Physico-Mathematical Model for Theoretical One-Stage Heat-Driven Compressor. IOP Conf. Ser.: Mater. Sci. Eng. 444 082024, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi: 10.1088/1757-899X/444/8/082024, Accession Number: WOS:000467443600152, 9 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iaşi, România. indexat Web of Science (2019), indexat Scopus (2018)</p> <p>4. Homutescu V.M., Bălănescu D.-T., Popescu A., Adiabatic Behavior of the Vuilleumier Heat Pump. IOP Conf. Ser.: Mater. Sci. Eng. 444 082025, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981,</p>	N3.1 = 5

	doi:10.1088/1757-899X/444/8/082025, Accession Number: WOS:000467443600153, 10 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România. indexat Web of Science (2019), indexat Scopus (2018) 5. Homutescu V.M. , Bălănescu D.-T., Panaite Carmen Ema, Lupu Ana Georgiana, Kinematic Beta-Type Stirling Motor-Driven Compressor. IOP Conf. Series: Materials Science and Engineering 595, 012029, 2019, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/595/1/012029, The XXIIInd National Conference on Thermodynamics with International Participation, 23-24 May 2019, Galați, România. indexat SCOPUS (2020)	
Co-autor	1. Horbaniuc B., Dumitrașcu Gh., Homutescu V. M. , Gas Turbine System with Interstage Cooling and Steam Injection Using Oxy-combustion. 6 th IASME International Conference on HEAT TRANSFER, THERMAL ENGINEERING and ENVIRONMENT (HTE'08) Rhodes, Greece, August 20-22, 2008, ISSN: 1790-5095, ISBN: 978-960-6766-97-8, p. 120-125. – indexat Thomson Reuters 2. Bălănescu D.-T., Homutescu V. M. , Vasiliu P.-D., Hrițcu C.-E., Combined Cycle Units – an Alternative to Reciprocating Engines in Terrestrial Propulsion Field. Estimation of Performances. Conferința științifică internațională ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 289-294. – indexat SCOPUS 3. Bălănescu D.-T., Homutescu V. M. , Hrițcu C.-E., Talif S.-G., Combined Cycle Units for Terrestrial Propulsion. Dimensional Approach. Conferința științifică internațională ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 295-300. – indexat SCOPUS 4. Bălănescu D.-T., Homutescu V.M. , A new approach in combined cycles – low power unit for hybrid terrestrial propulsion. Performance assessment. Procedia Manufacturing, volume 22, 2018, ISSN 2351-9789, pp 730-737, DOI: 10.1016/j.promfg.2018.03.105, Accession Number: WOS:000456199200103, 11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017; Petru Maior University of Tîrgu Mureș, Romania; 5-6 October 2017. indexat WoS (2019), SCOPUS (2018), Science Direct (2018), Crossref (2018), WorldCat (2018), Google Academic (2018) 5. Bălănescu D.-T., Homutescu V.M. , Dimensional assessment of a low power combined cycle system for hybrid propulsion. Procedia Manufacturing, volume 22, 2018, ISSN 2351-9789, pp 738-746, DOI: 10.1016/j.promfg.2018.03.106, Accession Number: WOS:000456199200104, 11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017; Petru Maior University of Tîrgu Mureș, Romania; 5-6 October 2017. indexat indexat WoS (2019), SCOPUS (2018), Science Direct (2018), Crossref (2018), WorldCat (2018), Google Academic (2018) 6. Bălănescu D.-T., Homutescu V.M. , Popescu A., Micro gas and steam turbines power generation system for hybrid electric vehicles. IOP Conf. Ser.: Mater. Sci. Eng. 444 082022, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/444/8/082022, Accession Number: WOS:000467443600150, 9 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România. indexat Web of Science (2019), indexat Scopus (2018) 7. Bălănescu D.-T., Homutescu V.M. , Lupu Ana Georgiana, Experimental study on enhanced heat transfer	N3.2 = 15

by water spraying in the cooling air flow. IOP Conf. Ser.: Mater. Sci. Eng. 444 082021, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/444/8/082021, Accession Number: WOS:000467443600149, 8 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România. indexat Web of Science (2019), indexat Scopus (2018)

8. Lupu Ana Georgiana, **Homutescu V.M.**, Bălănescu D.-T., Popescu A., Efficiency of solar collectors – a review. IOP Conf. Ser.: Mater. Sci. Eng. 444 082015, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/444/8/082015, Accession Number: WOS:000467443600143, 8 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România. indexat Web of Science (2019), indexat Scopus (2018)

9. Lupu Ana Georgiana, **Homutescu V.M.**, Bălănescu D.-T., Popescu A., A review of solar photovoltaic systems cooling technologies. IOP Conf. Ser.: Mater. Sci. Eng. 444 082016, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/444/8/082016, Accession Number: WOS:000467443600144, 8 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România. indexat Web of Science (2019), indexat Scopus (2018)

10. Panaite Carmen-Ema, Popescu A., Homutescu V.M., Uzuneanu Krisztina, Performance assessment of a solar-powered adsorption air conditioning system. IOP Conf. Ser.: Mater. Sci. Eng. 444 082027, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/444/8/082027, Accession Number: WOS:000467443600155, 10 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România. indexat Web of Science (2019), indexat Scopus (2018)

11. Bălănescu D.-T., **Homutescu V.M.**, Panaite Carmen Ema, Popescu A., Study on performance of an innovative power system for hybrid propulsion consisting in a gas turbine with heat exchanger and steam turbine. IOP Conf. Series: Materials Science and Engineering 595, 012050, 2019, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/595/1/012040, The XXIIInd National Conference on Thermodynamics with International Participation, 23-24 May 2019, Galați, România. indexat SCOPUS (2020)

12. Lupu Ana Georgiana, Panaite Carmen Ema, **Homutescu V.M.**, Bălănescu D.-T., Popescu A., Trifold PV-T-TEG (photovoltaic-thermal-thermoelectric generators) panel characterization overview. IOP Conf. Series: Materials Science and Engineering 595, 012040, 2019, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/595/1/012050, The XXIIInd National Conference on Thermodynamics with International Participation, 23-24 May 2019, Galați, România. indexat SCOPUS (2020)

13. Bălănescu D.-T., **Homutescu V. M.***, Ianuș G. and Popescu A., In situ study on the condensate latent heat recovery and its economic impact in the case of a 60 kW condensing boilers system. IOP Conf. Ser.: Mater. Sci. Eng. 997 012139, 2020, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi: 10.1088/1757-899X/997/1/012139, 7 p, The 9th International Conference on Advanced Concepts in Mechanical Engineering ACME 2020, 4-5 iunie 2020, Iași, România. indexat SCOPUS (2021)

14. Bălănescu D.-T., **Homutescu V. M.***, Ianuș G. and Lupu Ana Georgiana, Study on the in situ performance of a 60 kW condensing gas boilers thermal installation and economic assessment. IOP Conf.

	<p>Ser.: Mater. Sci. Eng. 997 012140, 2020, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi: 10.1088/1757-899X/997/1/012140, 7 p, The 9th International Conference on Advanced Concepts in Mechanical Engineering ACME 2020, 4-5 iunie 2020, Iași, România. indexat SCOPUS (2021)</p> <p>15. Lupu Ana Georgiana, Homutescu V. M., Bălănescu D.-T. and Popescu A., Hybrid PV-TE-T modules: life cycle analysis and end of life assessment. IOP Conf. Ser.: Mater. Sci. Eng. 997 012149, 2020, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi: 10.1088/1757-899X/997/1/012149, 7 p, The 9th International Conference on Advanced Concepts in Mechanical Engineering ACME 2020, 4-5 iunie 2020, Iași, România. indexat SCOPUS (2021)</p>	
		N3 = 20

CDI (A2.5): Monografii / cărți de specialitate, format tipărit / electronic (minim 100 pagini)

N4.3 = număr

N4.4 = număr

Cerințe:

$$N4 = N4.1 + N4.2 + N4.3 + N4.4 = 0 + 0 + 1 + 2 = 3 > 2$$

$$N4.3 = 1 \geq 1$$

Subcategorii	Realizări	Indicatori
Coordonator / prim autor	1. Homutescu V.M. , Bălănescu D.-T., <i>Echipamente termice. Ejectoare</i> . Editura Performantica, Iași, 2018, ISBN 978-606-685-603-4, format B5, 143 p, 46 rânduri/pagină, 4 ex. la Biblioteca U.T. Iași	N4.3 = 1
Co-autor	1. Homutescu C.A., Savitescu Gh., Jugureanu E., Homutescu V.M. , Introducere în mașini Stirling. Ed. CERMI, Iași, 2003, ISBN 973-667-016-3, 124 p., 49 r/p 2. Jugureanu E., Homutescu V.M. , <i>Evoluții termodinamice</i> . Ed. Stef, Iași, 2012, ISBN 978-606-575-201-6, 370 p., 44 r/p	N4.4 = 2
		N4 = 3

Criteriul 3

RIA (A3): Recunoașterea și impactul activității

RIA (A3.1): Atragere resurse financiare prin granturi / proiecte / contracte terți

S1 = sumă echivalentă în mii euro

S2 = sumă echivalentă în mii euro

Cerințe:

$$S1 + S2 = 4.6 + 66.883 = 71.483 \geq 50$$

Subcategorii	Realizări	Punctaj	Indicatori
Director sau responsabil partener la grant / proiect câștigat prin competiție națională sau internațională, proiecte / contracte terți	1. Homutescu V.M. (director), Bălănescu D.-T., Elaborarea modelului fizico-matematic aferent instalației ENERGIEWANDLER H, contract de cercetare U.T. Iași nr. 991P/10.07.2014, beneficiar WALUKO B.V., Sündenzeestrasse nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 10.07.2014-01.10.2014, valoarea totală a contractului 1000 Euro .	1000 E = 1	S1 = 4,6
	2. Homutescu V.M. (director), Bălănescu D.-T., Atanasiu M.-V., Dezvoltarea conceptuală a modelului fizico-matematic aferent instalației ENERGIEWANDLER H / Conceptual developing of the physico-mathematical model related to the installation ENERGIEWANDLER H, contract de cercetare U.T. Iași nr. 1543P/27.10.2014, beneficiar WALUKO B.V., Sündenzeestrasse nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 27.07.2014-15.01.2015, valoarea totală a contractului 1600 Euro .	1600 E = 1,6	
	3. Homutescu V.M. (director), Bălănescu D.-T., Atanasiu M.-V., Cercetări și consultanță pentru stabilirea cerințelor teoretice necesare dimensionării modelului funcțional al instalației <i>ENERGIEWANDLER H</i> / Researches and consultancy for the establishment of the theoretical requirements needed for dimensioning the functional model of the <i>ENERGIEWANDLER H</i> installation, contract de cercetare U.T. Iași nr. 888P/08.06.2015, beneficiar WALUKO B.V., Sündenzeestrasse nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 08.06.2015-01.11.2015, valoarea totală a contractului 1000 Euro .	1000 E = 1	
	4. Homutescu V.M. (director), Bălănescu D.-T., Atanasiu M.-V., Cercetări și consultanță pentru determinarea caracteristicilor termodinamice principale ale schimbătoarelor de căldură ale instalației <i>ENERGIEWANDLER H</i> / Researches and consultancy for establishing of the main thermodynamic requirements for the heat exchangers of the <i>ENERGIEWANDLER H</i> installation, contract de cercetare U.T. Iași nr. 1347P/10.07.2017, beneficiar WALUKO B.V., Sündenzeestrasse nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 10.07.2017-01.11.2017, valoarea totală a contractului 1000 Euro .	1000 E = 1	
Membru în echipă la grant / proiect câștigat prin competiție națională sau internațională, proiecte / contracte terți	Prisăcaru Gh., Bujoreanu Carmen., ... Homutescu V.M. (funcția: expert), ș.a., FLEXFORM – Program de formare profesională flexibilă pe platforme mecatronice, Cod contract POSDRU/87/1.3/S/64069 (fonduri structurale), perioada de implementare 01.09.2010-31.08.2013, beneficiar Universitatea Tehnică din Cluj-Napoca, partener 5 - Universitatea Tehnică „Gheorghe Asachi” din Iași, (5 parteneri), valoare 1.330.825 lei. cotă atribuită de responsabil partener: 38700 Euro	38700 = 38,7	S2 = 66,883
	Dumitrașcu Gh. (responsabil partener), Horbaniuc B., Dragomir-Stanciu D., Bălănescu D.-T., Homutescu V.M. , Compresor cu grad de comprimare mai mare de 9, într-o singură treaptă, acronim COMCIP, colaborare proiect PN II/4 82-090/2008, 2008-2011, în cadrul Programului 4 – Parteneriate în domeniile prioritare, direcția de cercetare D8, valoare subcontract 200.000 lei, realizat 15000 lei, procent repartizat 40 %, sumă repartizată: 6000 lei 2008: 6000 lei brut, curs mediu 2008, 3.6827 lei/Euro, 6000/3.6827 = 1629 Euro	1629 = 1,629	

	<p>Dumitrașcu Gh. (responsabil partener), Horbaniuc B., Popescu A., Stadoleanu O. V., Dragomir Stanciu D., Prodan M. M., Homutescu V.M., Zubcu Dorina-Silvia, Panaite Ema Carmen, Lozonschi Teona, Bălănescu D.-T., Atanasiu M., Sârbu I., Instalație de generare a ceții pentru protecția plantelor contra factorilor nefavorabili ai mediului, utilizând camere de ardere pulsatorie (acronim PULSOPROTECT), 2007 – 2010, PN II/4, nr 51-043/2007 in cadrul Programului 4 – Parteneriate în domeniile prioritare; Categoria de proiect: PC, valoare subcontract: 216.000 lei, realizat 105000 lei, procent repartizat 15 %, sume repartizate: 3000 lei (2007), 10500 lei (2008), 2250 lei (2010)).</p> <p>2007: 3000 lei brut, curs mediu 2007, 3.3373 lei/Euro, $3000/3.3373 = 898$ Euro</p> <p>2008: 10500 lei brut, curs mediu 2008, 3.6827 lei/Euro, $10500/3.6827 = 2851$ Euro</p> <p>2010: 2250 lei brut, curs mediu 2010, 4.2099 lei/Euro, $2250/4.2099 = 534$ Euro</p>	$898 + 2851 + 534 = 4083 = 4,283$	
	<p>Gălușcă Narciza-Izabela, Homutescu V.M., Elaborare rețete de mixturi asfaltice și analize mixturi asfaltice. Contract 732P/2013, beneficiar S.C. EKY-SAM Tîrgu Frumos, total deviz 5.000 lei (total retribuție 1542 lei - salar brut maxim)</p> <p>2014: 1542 lei brut, curs mediu 2014, 4.4446 leu/Euro, $1542/4.4446 = 346$ Euro</p>	$346 = 0,346$	
	<p>Gălușcă Narciza-Izabela, Homutescu V.M., Gugiuman Gh., Elaborare rețete tehnologice de mixturi și analize probe din mixturi asfaltice. Contract 450P/2012, beneficiar Citadin S.A. Iași, total deviz 18.213 lei.</p> <p>etapa I-A, 1293 lei manoperă HVM / 2425 lei totalul devizului</p> <p>curs mediu 2012, 4.4560 leu/Euro, $2425/4.4560 = 544$ Euro</p>	$544 = 0.544$	
	<p>Gălușcă Narciza-Izabela, Gugiuman Gh., Homutescu V.M., Elaborare rețete tehnologice de mixturi asfaltice și analize probe din mixturi asfaltice. Contract 363P/2011, beneficiar S.C. Citadin S.A. Iași.</p> <p>etapa I-C, 2150 lei manoperă HVM / 6926 lei total manoperă / 9733 lei totalul devizului; parte HVM din manopera totală (din contract) $2150/6926 = 0,31$; parte HVM din total deviz $0.31*9733 = 3017$ lei</p> <p>2015: 3017 lei, curs mediu 2015, 4.4450 leu/Euro, $3017/4.4450 = 678.7$ Euro</p>	$678 = 0,678$	
	<p>Gugiuman Gh., Homutescu V.M., Gălușcă Izabela, Elaborare rețete tehnologice de mixturi asfaltice și analize probe din mixturi asfaltice (I-V-A). Contract 1052P/2010, beneficiar S.C. Citadin S.A. Iași.</p> <p>etapa I-V-A, 4062 lei manoperă HVM / 10247 lei total manoperă / total I -15387, fara TVA / 20281 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $4062/10247 = 0,396$; parte HVM din total deviz $0.396*15387 = 6093$ lei</p> <p>2013: 6093 lei, curs mediu 2013, 4.4190 leu/Euro, $6093/4.4190 = 1378.9$ Euro</p> <p>etapa V-B-VI, 630 lei manoperă HVM / 2684 lei total manoperă / total I - 4032 fara TVA (5000 lei totalul devizului)</p> <p>parte HVM din manopera totală (din contract) $630/2684 = 0,234$; parte HVM din total I $0.234*4032 = 943$ lei</p> <p>2013: 943 lei, curs mediu 2013, 4.4190 leu/Euro, $943/4.4190 = 213.5$ Euro</p>	$1378+213 = 1591 = 1,591$	

	<p>Gugiuman Gh., Homutescu V.M. și alții, Stabilire rețete tehnologice de mixturi asfaltice și analize probe de mixturi asfaltice. Contract 837P/2009, beneficiar S.C. Citadin S.A. Iași, total deviz (toate etapele) 42.361 lei. etapa IV, 293 lei manoperă HVM / 3626 lei total manoperă / total I 5450 (estimat fara TVA) / 6758 lei totalul devizului parte HVM din manopera totală (din contract) $293/3626 = 0,080$; parte HVM din total I $0.080 \cdot 5450 = 436$ lei 2010: 436 lei, curs mediu 2010, 4.2099 leu/Euro, $436/4.2099 = \mathbf{103,5}$ Euro etapa V-B, 847 lei manoperă HVM / 2662 lei total manoperă / total I 4032 (estimat fără TVA) / 5000 lei totalul devizului parte HVM din manopera totală (din contract) $847/2662 = 0,318$; parte HVM din total I $0.318 \cdot 4032 = 1282$ lei 2010: 1282 lei, curs mediu 2009, 4.2099 leu/Euro, $1282/4.2099 = \mathbf{304,5}$ Euro etapa V-C, 2682 lei manoperă HVM / 2682 lei total manoperă / total I 4032 (estimat fără TVA) / 5000 lei totalul devizului (sînt singur) parte HVM din manopera totală (din contract) 1; parte HVM din total deviz $1 \cdot 4032 = 4032$ lei 2011: 4032 lei, curs mediu 2011, 4.2379 leu/Euro, $4032/4.2379 = \mathbf{951,4}$ Euro</p>	<p>103 + 304 + 951 = 1358 = 1,358</p>	
	<p>Gugiuman Gh., Homutescu V.M. ș.a., Elaborare rețete tehnologice de mixturi asfaltice și analize probe din mixturi asfaltice. Contract nr. 188P/2008, beneficiar SC CITADIN SA Iași, 26.570 lei. etapa IV-B, 1862 lei manoperă HVM / 2370 lei total manoperă / total I estimat fără TVA 4043 / 5014 lei totalul devizului parte HVM din manopera totală (din contract) $1862/2370 = 0,785$; parte HVM din total deviz $0.785 \cdot 4043 = 3173$ lei 2008: 3173 lei, curs mediu 2008, 3.6827 leu/Euro, $3173/3.6827 = \mathbf{861,8}$ Euro etapele VIII, IX, X, XI, 4787 lei manoperă HVM / 10796 lei total manoperă / total I estimat fără TVA 17383 / 21556 lei totalul devizului parte HVM din manopera totală (din contract) $4787/10796 = 0,443$; parte HVM din total deviz $0.443 \cdot 17383 = 7701$ lei 2010: 7701 lei, curs mediu 2010, 4.2099 leu/Euro, $7701/4.2099 = \mathbf{1829,2}$ Euro</p>	<p>861 + 1829 = 2690 = 2.690</p>	
	<p>Gugiuman Gh., Homutescu V.M. ș.a., Elaborare rețete tehnologice de mixturi asfaltice și analize probe din mixturi asfaltice. Contract nr. 858P/2008, beneficiar SC EKY-SAM, 9.997 lei. etapa III-A, 2306 lei manoperă HVM / 2362 lei total manoperă / total I estimat fără TVA 4032 / 5000 lei totalul devizului parte HVM din manopera totală (din contract) $2306/2362 = 0,976$; parte HVM din total deviz $0.976 \cdot 4032 = 3935$ lei 2008: 3935 lei, curs mediu 2008, 3.6827 leu/Euro, $3935/3.6827 = \mathbf{1068,6}$ Euro etapa III-B, IV, 1019 lei manoperă HVM / 2407 lei total manoperă / total I estimat fără TVA 4029 / 4997 lei totalul devizului parte HVM din manopera totală (din contract) $1019/2407 = 0,423$; parte HVM din total deviz $0.423 \cdot 4029 = 1704$ lei 2008: 1704 lei, curs mediu 2008, 3.6827 leu/Euro, $1704/3.6827 = \mathbf{462,9}$ Euro</p>	<p>1068 + 462 = 1530 = 1,530</p>	
	<p>Gugiuman Gh., Homutescu V.M., Elaborare rețete tehnologice de mixturi asfaltice și analize probe din mixturi asfaltice. Contract 957P/2008, beneficiar SC EUROCONSTRUCT GROUP SRL Iași, total 9.111 lei etapa II, 1259 lei manoperă HVM / 1908 lei total manoperă / total I estimat fără TVA 3112 / 3860 lei totalul devizului parte HVM din manopera totală (din contract) $1259/1908 = 0,659$; parte HVM din total deviz $0.659 \cdot 3112 = 2051$ lei 2008: 2051 lei, curs mediu 2008, 3.6827 leu/Euro, $2051/3.6827 = \mathbf{557,0}$ Euro</p>	<p>557 = 0,557</p>	

	<p>Gugiuman Gh., Homutescu V.M. ș.a., Contract nr. 3887P/2007, beneficiar SC EUROCONSTRUCT GROUP SRL Iași, 3.326 lei.</p> <p>639 lei manoperă HVM / 1562 lei total manoperă / total I estimat fără TVA 2682 / 3326 lei totalul devizului parte HVM din manopera totală (din contract) $639/1562 = 0,409$; parte HVM din total deviz $0.409 \cdot 2682 = 1097$ lei</p> <p>2007: 1097 lei, curs mediu 2007, 3.3373 leu/Euro, $1097/3.3373 = \mathbf{328,7}$ Euro</p>	328 = 0,328	
	<p>Gugiuman Gh., Homutescu V.M., Analize probe din mixturi asfaltice. Contract 162P/2007, beneficiar S.C. CITADIN S.A. Iași, total 63.246 lei.</p> <p>etapele I, II, III, IV, V, VI, VII-A, 3883 lei manoperă HVM / 13224 lei total manoperă / total I estimat fără TVA 21088 / 26150 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $3883/13224 = 0,293$; parte HVM din total deviz $0.293 \cdot 21088 = 6179$ lei</p> <p>2007: 6179 lei, curs mediu 2007, 3.3373 leu/Euro, $6179/3.3373 = \mathbf{1851,5}$ Euro</p> <p>etapele X-B, XI-A, 1100 lei manoperă HVM / 2552 lei total manoperă / total I estimat fără TVA 4032 / 5000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $1100/2552 = 0,431$; parte HVM din total deviz $0.431 \cdot 4032 = 1737$ lei</p> <p>2007: 1737 lei, curs mediu 2007, 3.3373 leu/Euro, $1737/3.3373 = \mathbf{520,7}$ Euro</p> <p>etapele XI-B, XII, XIII, XIV-A, 2155 lei manoperă HVM / 3580 lei total manoperă / total I estimat fără TVA 8064 / 10000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $2155/3580 = 0,601$; parte HVM din total deviz $0.601 \cdot 8064 = 4846$ lei</p> <p>2008: 4846 lei, curs mediu 2008, 3.6827 leu/Euro, $4846/3.6827 = \mathbf{1315,9}$ Euro</p> <p>etapa XIV-B, 1967 lei manoperă HVM / 2548 lei total manoperă / total I estimat fără TVA 4877 / 6048 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $1967/2548 = 0,771$; parte HVM din total deviz $0.771 \cdot 4877 = 3760$ lei</p> <p>2008: 3760 lei, curs mediu 2008, 3.6827 leu/Euro, $3760/3.6827 = \mathbf{1021,1}$ Euro</p>	$1851 + 520 + 1315 + 1021 = 4707 = 4,707$	
	<p>Gugiuman Gh., Homutescu V.M. și alții, Elaborare rețete tehnologice de mixturi asfaltice, analize probe de materiale și de mixturi asfaltice. Contract 2096P/2006, beneficiar S.C. EKY-SAM S.R.L. Tîrgu-Frumos, Iași, 2.500 lei.</p> <p>etapa I-A, 666 lei manoperă HVM / 1357 lei total manoperă / total I estimat fără TVA 2016 / 2500 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $666/1357 = 0,490$; parte HVM din total deviz $0.490 \cdot 2016 = 987$ lei</p> <p>2006: 987 lei, curs mediu 2006, 3.5245 leu/Euro, $987/3.5245 = \mathbf{280,3}$ Euro</p>	280 = 0,280	

	<p>Gugiuman Gh., Savitescu Gh., Homutescu V.M., Analize probe din mixturi asfaltice (IX-B+X+XI-A). Contract 405P/2006, beneficiar S.C. CITADIN S.A. Iași, total deviz 77.044 lei.</p> <p>etapa V-B, VI-A, 752 lei manoperă HVM / 2988 lei total manoperă / total I estimat fără TVA 4032 / 5000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $752/2988 = 0,251$; parte HVM din total deviz $0.251 \cdot 4032 = 1012$ lei</p> <p>2006: 1012 lei, curs mediu 2006, 3.5245 leu/Euro, $1012/3.5245 = \mathbf{287,1}$ Euro</p> <p>etapa VIII-B, IX-A, 125 lei manoperă HVM / 270 lei total manoperă / total I estimat fără TVA 4677 / 5800 lei totalul devizului</p> <p>etapa IX-B, X, XI-A, 915 lei manoperă HVM / 3234 lei total manoperă / total I estimat fără TVA 8064 / 10000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $915/3234 = 0,282$; parte HVM din total deviz $0.282 \cdot 8064 = 2274$ lei</p> <p>2007: 2274 lei, curs mediu 2007, 3.3373 leu/Euro, $2274/3.3373 = \mathbf{681,4}$ Euro</p>	<p>$287 + 681 = 968 = 0,968$</p>	
	<p>Gugiuman Gh., Homutescu V.M. și alții, Stabilire rețete tehnologice de mixturi asfaltice și analize mixturi asfaltice (I + IIA, XB + XI + XII). Contract 61P/2005, beneficiar CITADIN- DSPM Iași, 13.690 lei.</p> <p>etapele I, II-A, 885 lei manoperă HVM / 2468 lei total manoperă / total I estimat fără TVA 4032 / 5000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $885/2468 = 0,358$; parte HVM din total deviz $0.358 \cdot 4032 = 1443$ lei</p> <p>2005: 1443 lei, curs mediu 2005, 3.6234 leu/Euro, $1443/3.6234 = \mathbf{398,4}$ Euro</p> <p>etapele X-B, XI, XII, 619 lei manoperă HVM / 4197 lei total manoperă / total I estimat fără TVA 7008 / 8690 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $619/4197 = 0,147$; parte HVM din total deviz $0.147 \cdot 7008 = 1030$ lei</p> <p>2005: 1030 lei, curs mediu 2005, 3.6234 leu/Euro, $1030/3.6234 = \mathbf{284,3}$ Euro</p>	<p>$398 + 284 = 682 = 0,682$</p>	
	<p>Gugiuman Gh., Homutescu V.M. și alții, Analize probe de mixturi asfaltice. Contract 127P/2005, Beneficiar Primăria Municipiului Dorohoi, total 8.443.146 lei.</p> <p>535210 lei manoperă HVM / 4224460 lei total manoperă / total I fără TVA 7095100 / 8443146 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $535210 / 4224460 = 0,126$; parte HVM din total deviz $0.126 \cdot 7095100 = 857932$ lei</p> <p>2005: 857932 lei, curs mediu 2005, 36234 leu/Euro, $857932/36234 = \mathbf{23,7}$ Euro</p>	<p>$23 = 0,023$</p>	
	<p>Gugiuman Gh., Homutescu C.A., Homutescu V.M. și alții, Întocmirea rețetelor de fabricație a mixturilor asfaltice. Contract 415P/2005, beneficiar S.C. Drumuri și Poduri Covasna, 38.595.203 lei.</p> <p>10384200 lei manoperă HVM / 21869732 lei total manoperă / total I fără TVA 32432500 / 38595203 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) $10384200 / 21869732 = 0,474$; parte HVM din total deviz $0.474 \cdot 32432500 = 15373000$ lei</p> <p>2005: 15373000 lei, curs mediu 2005, 36234 leu/Euro, $15373000/36234 = \mathbf{424,3}$ Euro</p>	<p>$424 = 0,424$</p>	

	<p>Gugiuman G., Homutescu V.M. și alții, Analize carote din îmbrăcăminți bituminoase. Contract 3560P/2004. Beneficiar SC. COREVAS SA Vaslui, total încasat 12.751.169 lei. 1.010.425 lei manoperă HVM / 2.699.900 lei total manoperă / total I fără TVA 10.715.268 / 12.751.169 lei totalul devizului parte HVM din manopera totală (din contract) 1.010.425 / 2.699.900 = 0,374; parte HVM din total deviz 0.374*10.715.268 = 4.007.510 lei 2004: 4.007.510 lei, curs mediu 2004, 40532 leu/Euro, 4.007.510/40532 = 98,9 Euro</p>	98 = 0,098	
	<p>Gugiuman G., Homutescu V.M. și alții, Analize probe de mixturi asfaltice. Contract 1026P/2003, beneficiar CITADIN. D.S.P.M. Iași, total încasat (2003, 2004) al etapelor la care am participat 281.860.218 lei. etapa II, 10.009.205 lei manoperă HVM / 21.009.025 lei total manoperă / total I fără TVA 31.468.364 / 37.447.354 lei totalul devizului parte HVM din manopera totală (din contract) 10.009.205 / 21.009.025 = 0,476; parte HVM din total deviz 0.476*31.468.364 = 14.978.941 lei 2003: 14.978.941 lei, curs mediu 2003, 37.555 leu/Euro, 14.978.941/37.555 = 398,8 Euro etapele III, IV, 7.734.775 lei manoperă HVM / 29.951.301 lei total manoperă / total I fără TVA 52.814.553 / 62.849.319 lei totalul devizului parte HVM din manopera totală (din contract) 7.734.775 / 29.951.301 = 0,258; parte HVM din total deviz 0.258*52.814.553 = 13.626.154 lei 2004: 13.626.154 lei, curs mediu 2004, 40.532 leu/Euro, 13.626.154/40.532 = 336,2 Euro etapa IV, 31.870.292 lei manoperă HVM / 34.735.380 lei total manoperă / total I fără TVA 56.832.363 / 67.630.513 lei totalul devizului parte HVM din manopera totală (din contract) 31.870.292 / 34.735.380 = 0,917; parte HVM din total deviz 0.917*56.832.363 = 52.115.277 lei 2004: 52.115.277 lei, curs mediu 2004, 40.532 leu/Euro, 52.115.277/40.532 = 1285,8 Euro etapa V, 2.955.160 lei manoperă HVM / 11.366.080 lei total manoperă / total I fără TVA 56.832.363 / 31.161.142 lei totalul devizului parte HVM din manopera totală (din contract) 2.955.160 / 11.366.080 = 0,260; parte HVM din total deviz 0.260*31.161.142 = 8.101.897 lei 2005: 8.101.897 lei, curs mediu 2005, 36.234 leu/Euro, 8.101.897/36.234 = 223,6 Euro etapa VI, 2.476.916 lei manoperă HVM / 7.973.000 lei total manoperă / total I fără TVA 18.493.959 / 22.007.812 lei totalul devizului parte HVM din manopera totală (din contract) 2.476.916 / 7.973.000 = 0,310; parte HVM din total deviz 0.310*18.493.959 = 5.733.127 lei 2005: 5.733.127 lei, curs mediu 2005, 36.234 leu/Euro, 5.733.127/36.234 = 158,2 Euro etapa VII-A, 2.095.852 lei manoperă HVM / 12.987.286 lei total manoperă / total I fără TVA 25.210.084 / 30.000.000 lei totalul devizului parte HVM din manopera totală (din contract) 2.095.852 / 12.987.286 = 0,161; parte HVM din total deviz 0.161*25.210.084 = 4.058.823 lei 2005: 4.058.823 lei, curs mediu 2005, 36.234 leu/Euro, 4.058.823/36.234 = 112,0 Euro etapa XIII-B, 11.003.223 lei manoperă HVM / 13.956.795 lei total manoperă / total I fără TVA 20.877.445 / 24.844.160 lei totalul devizului parte HVM din manopera totală (din contract) 11.003.223 / 13.956.795 = 0,788; parte HVM din total deviz 0.788*20.877.445 = 16.451.426 lei 2005: 16.451.426 lei, curs mediu 2005, 36.234 leu/Euro, 16.451.426/36.234 = 454,0 Euro</p>	<p>398 + 336 + 1285 + 223 + 158 + 112 + 454 = 2966 = 2,966</p>	

	<p>Gugiuman G., Homutescu V.M. și alții, Elaborare rețete tehnologice de mixturi asfaltice. Contract 301P/2002, beneficiar CITADIN. D.S.P.M. Iași.</p> <p>5.250.960 lei manoperă HVM / 21.677.210 lei total manoperă / 160.827.775 lei totalul devizului parte HVM din manopera totală (din contract) 5.250.960 / 21.677.210 = 0,242; parte HVM din total deviz 0.242*50.000.000 = 12.100.000 lei</p> <p>2002: 12.100.000 lei, curs mediu 2003, 31.255 leu/Euro, 12.100.000 / 31.255 = 387,1 Euro</p>	387 = 0,387	
	<p>Gugiuman Gh., Gălușcă Narciza-Izabela, Homutescu V.M., Elaborare rețete de mixturi asfaltice (la cald și la rece) și analize probe din mixturi asfaltice. Contract 109P/2001, încasat 281.389.196 lei.</p> <p>etapa I, 2.124.640 lei manoperă HVM / 10.085.116 lei total manoperă / total I fără TVA 28.585.882 / 34.017.200 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) 2.124.640 / 10.085.116 = 0,210; parte HVM din total deviz 0.210*28.585.882 = 6.003.035 lei</p> <p>2002: 6.003.035 lei, curs mediu 2002, 31.255 leu/Euro, 6.003.035 / 31.255 = 192,1 Euro</p> <p>etapa IV-B, V, VI, VII-A, 7.247.168 lei manoperă HVM / 19.989.770 lei total manoperă / total I fără TVA 105.042.016 / 125.000.000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) 7.247.168 / 19.989.770 = 0,362; parte HVM din total deviz 0.362*45.000.000 = 16.290.000 lei</p> <p>2002 16.290.000 lei, curs mediu 2002, 31.255 leu/Euro, 16.290.000 / 31.255 = 521,2 Euro</p> <p>etapa VII-B, 6.054.648 lei manoperă HVM / 16.360.396 lei total manoperă / / total I fără TVA 37.875.630 45.072.149 lei totalul devizului + HCA 666.000</p> <p>parte HVM din manopera totală (din contract) 6.054.648 / 16.360.396 = 0,370; parte HVM din total deviz 0.370*37.875.630 = 14.013.983 lei</p> <p>2002: 14.013.983 lei, curs mediu 2002, 31.255 leu/Euro, 14.013.983 / 31.255 = 448,4 Euro</p>	192 + 521 + 448 = 1161 = 1,161	
	<p>Gugiuman Gh., Homutescu V.M., Rețete tehnologice de mixturi asfaltice și analize probe din mixturi asfaltice. Contract 1133P/2000, beneficiar CITADIN DSPM Iași, total încasat 283.602.000 lei.</p> <p>etapa III-B, 1.702.624 lei manoperă HVM / 9.087.136 lei total manoperă / total I fără TVA 16.806.722 / 20.000.000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) 1.702.624 / 9.087.136 = 0,187; parte HVM din total deviz 0.187*16.806.722 = 3.142.857 lei</p> <p>2002: 3.142.857 lei, curs mediu 2002, 31.255 leu/Euro, 3.142.857 / 31.255 = 100,6 Euro</p> <p>etapa III-C, V-A, 5.618.458 lei manoperă HVM / 9.432.141 lei total manoperă / total I fără TVA 25.210.008 / 30.000.000 lei totalul devizului + HCA 3.160.653</p> <p>parte HVM din manopera totală (din contract) 5.618.458 / 9.432.141 = 0,595; parte HVM din total deviz 0.595*25.210.008 = 15.000.000 lei</p> <p>2002: 15.000.000 lei, curs mediu 2002, 31.255 leu/Euro, 15.000.000 / 31.255 = 480,0 Euro</p> <p>etapa VII, 4.934.000 lei manoperă HVM / 14.281.218 lei total manoperă / total I fără TVA 31.988.235 / 38.066.000 lei totalul devizului</p> <p>parte HVM din manopera totală (din contract) 4.934.000 / 14.281.218 = 0,345; parte HVM din total deviz 0.345*31.988.235 = 11.035.941 lei</p> <p>2002: 11.035.941 lei, curs mediu 2002, 31.255 leu/Euro, 11.035.941 / 31.255 = 353,1 Euro</p>	100 + 480 + 353 = 953 = 0,953	

RIA (A3.2): Prezentarea / diseminarea rezultatelor: prezență la manifestări științifice în calitate de autor / co-autor de lucrări, profesor invitat

N5 = număr

Cerințe:

N5 = 26 ≥ 10

Congrese / conferințe / workshopuri internaționale, profesor invitat la universități / institute din străinătate

Nr. crt.	Congrese / conferințe / workshopuri internaționale	Lucrări prezentate	Anul
1	Conferința Internațională TURBO '96, organizator COMOTI București	Zubcu V., Dragomir-Stanciu D., Homutescu V.M. , Posibilități de utilizare a cazanului CR 16 într-un ciclu combinat abur – gaze. Analele Conferinței Internaționale TURBO '96, București, ISBN 973-0-00247-6, p. 9...12.	1996
2	Conferința Internațională TURBO '98, organizator COMOTI București	Zubcu V., Zubcu D. S., Dragomir-Stanciu D., Homutescu V.M. , Instalație de cogenerare cu componente recuperate. Condiții de compatibilitate. Analele Conferinței internaționale TURBO '98, București, Vol. I, Ed. PRINTECH, ISBN 973-9402-20-8, p. 122...127.	1998
3	The 2 nd International Conference of Electric and Power Engineering, „EPE 2002”, octombrie 2002	Homutescu C. A., Dragomir - Stanciu D., Homutescu V. M. , Homutescu A., Perspectives on Microcogeneration of Heat and Power using Free Piston Stirling Engines. The 2 nd International Conference of Electric and Power Engineering, „EPE 2002”, în Bul. I.P.I., Tom XLVIII (LII), Fasc. 5A, p. 111 ... 116, ISSN 0258-9109.	2002
4	The 3rd International Conference of Electric and Power Engineering, „EPE 2004”, 7-8 octombrie 2004	Bălănescu D.T., Ursescu D., Zubcu V., Homutescu V.M. , Possibilities To Use The Hot Air Turbines In Wood Waste-Fueled Power Plant. The 3rd International Conference of Electric and Power Engineering, „EPE 2004”, 7-8 octombrie 2004, în Bul. I.P.I., Tom L (LIV), Fasc. 5A, p. 209 ... 214, ISSN 1223-8139. Homutescu V.M. , Jugureanu E., Bălănescu D.T., Homutescu A., Power And Heat Cogeneration Using Variable Displacement Stirling Engine, The 3rd International Conference of Electric and Power Engineering, „EPE 2004”, 7-8 octombrie 2004, în Bul. I.P.I., Tom L (LIV), Fasc. 5A, p. 223 ... 228, ISSN 1223-8139. Bălănescu D.T., Homutescu V.M. , Small Scale Combined Cycle Units – Clean Power Systems For Terrestrial Propulsion. The 3rd International Conference of Electric and Power Engineering, „EPE 2004”, 7-8 octombrie 2004, în Bul. I.P.I., Tom L (LIV), Fasc. 5C, p. 1113 ... 1118, ISSN 1223-8139.	2004
5	First International Conference On Advanced Concepts In Mechanical Engineering, Faculty Of Mechanical Engineering - June 2004, Iași, Romania	Homutescu C.A., Jugureanu E., Homutescu V.M. , Atanasiu M., Correlations between the powers of the Evaporator, Compressors and Condenser in Vapour Compression Refrigerators. First International Conference “Advanced Concepts in Mechanical Engineering”, Iași, iunie 2004, în Bul. I.P.I., Tom L (LIV), Fasc. 6C, p. 85 ... 89, ISSN 1011-2855, lucrarea ACME 04615. Jugureanu E., Homutescu V.M. , Homutescu A., Atanasiu M., Shock Wave Occurence. First International Conference “Advanced Concepts in Mechanical Engineering”, Iași, iunie 2004, în Bul. I.P.I., Tom L (LIV), Fasc. 6C, p. 91 ... 96, ISSN 1011-2855, lucrarea ACME 04616. Homutescu V.M. , Jugureanu E., Homutescu C.A., Homutescu A., An Isothermal Model for Vuilleumier Machines. First International Conference “Advanced Concepts in Mechanical Engineering”, Iași, iunie 2004, în Bul. I.P.I., Tom L (LIV), Fasc. 6C, p. 111 ... 116, ISSN 1011-2855, lucrarea ACME 04619.	2004
6	trans & MOTAUTO'05+ International Conference, November 2005, Veliko Tîrnovo	Homutescu V.M. , Bălănescu D.-T., Adiabatic Behavior of a Variable Displacement Stirling Engine. trans & MOTAUTO'05+ International Conference, November 2005, Veliko Tîrnovo, Proceedings, Vol. I, ISBN 954-9322-09-2, Publisher: Scientific-technical union of mechanical engineering, Sofia, 2005, p. 97...100. Bălănescu D.-T., Homutescu V.M. , Small Scale Combined Cycle Mobile Unit with Postcombustion and Based on a Regenerative Gas Cycle. trans & MOTAUTO'05+ International Conference, November 2005, Veliko Tîrnovo, Proceedings, Vol. II, ISBN 954-9322-10-6, Publisher: Scientific-technical union of mechanical engineering, Sofia, 2005, p. 180...183.	2005
7	The 5 th International Conference on Electromechanical and Power Systems SIELMEN 2005, October 2005, Chișinău, Rep. of Moldova	Homutescu V.M. , Homutescu A., Bălănescu D.-T., Semi-Adiabatic Physico-Mathematical Model of the Vuilleumier Heat Pump. Proceedings of the 5 th International Conference on Electromechanical and Power Systems SIELMEN 2005, October 2005, Chișinău, Rep. of Moldova, Vol. I, p. 510-513, ISBN GEN 973-716-208-0. Bălănescu D.-T., Manolache Gh., Homutescu V.M. , Small Scale Combined Cycle Mobile Unit with Postcombustion Chamber and Based on a Gas Turboengine with Heat Exchanger: Performance Estimations. Proceedings of the 5 th International	2005

		Conference on Electromechanical and Power Systems SIELMEN 2005, October 2005, Chişinău, Rep. of Moldova, Vol. I, p. 506-509, ISBN GEN 973-716-208-0.	
8	The 4th International Conference of Electrical and Power Engineering, „EPE 2006”, 12-14 October 2006	Homutescu V.M. , Theoretical Thermal acted Heat Pump, The 4th International Conference of Electrical and Power Engineering, „EPE 2006”, 12-14 October 2006, în Bul. I.P.I., Tom LII (LVI), Fasc. 5C, p. 1261 ... 1268, ISSN 1223-8139.	2006
9	The 2nd International Conference On Advanced Concepts In Mechanical Engineering, Faculty Of Mechanical Engineering - June 16 – 17, 2006, Iaşi, Romania	Bălănescu D.T., Homutescu V.M. , Small Scale Combined Cycle Units Mobile Unit Based on a Two Pressure Levels Steam Turboengine. The 2nd International Conference "Advanced Concepts in Mechanical Engineering", 16-17 iunie 2006, în Bul. I.P.I., Tom LII (LVI), Fasc. 6C, p. 121 ... 126, ISSN 1011-2855. Homutescu V.M. , Bălănescu D.T., Theoretical Realization of the Stirling Cycle on Two Pistons Machines. The 2nd International Conference "Advanced Concepts in Mechanical Engineering", 16-17 iunie 2006, în Bul. I.P.I., Tom LII (LVI), Fasc. 6C, p. 143 ... 150, ISSN 1011-2855. Homutescu V.M. , Jugureanu E., Homutescu A., Adiabatic Physico-Mathematical Model of the Vuilleumier Thermal-Acted Heat Pump. The 2nd International Conference "Advanced Concepts in Mechanical Engineering", 16-17 iunie 2006, în Bul. I.P.I., Tom LII (LVI), Fasc. 6C, p. 151 ... 156, ISSN 1011-2855.	2006
10	2 nd International Conference on Thermal Engines and Environmental Engineering MET IME 2007, June 2007, Galaţi	Bălănescu D.-T., Homutescu V.M. , Wall-Hung Non-Condensing Combination Boilers – Performance Assesment. 2 nd International Conference on Thermal Engines and Environmental Engineering MET IME 2007, June 2007, Galaţi, Proceedings, vol. 2, ISBN 978-973-1724-17-1, Zigotto Publishers, Galaţi, p. 59...62. Homutescu V.M. , Bălănescu D.-T., Semi-Adiabatic Physico-Mathematical Model for Gamma-Type Stirling Engines. 2 nd International Conference on Thermal Engines and Environmental Engineering MET IME 2007, June 2007, Galaţi, Proceedings, vol. 2, ISBN 978-973-1724-17-1, Zigotto Publishers, Galaţi, p. 213...220.	2007
11	6 th International Conference on Electromechanical and Power Systems, October 2007, Chişinău, Republic of Moldova	Bălănescu D.-T., Homutescu V.M. , Atanasiu M.V., Compact Condensing System with Heat Exchange Surface and Water Injection for Small Scale Combined Cycle Modile Units. 6 th International Conference on Electromechanical and Power Systems, October 2007, Chişinău, Republic of Moldova, published in Annals of the University of Craiova, nr.31, Vo. I, ISSN 1842-4805, Publisher: Editura Universitaria, Craiova, 2007, p. 323...327. Homutescu V.M. , Bălănescu D.-T., Homutescu A., Physico-mathematical Model with Friction Losses for Vuilleumier Machines. 6 th International Conference on Electromechanical and Power Systems, October 2007, Chişinău, Republic of Moldova, published in Annals of the University of Craiova, nr.31, Vo. II, ISSN 1842-4805, Publisher: Editura Universitaria, Craiova, 2007, p. 237...242.	2007
12	The 3rd International Conference On Advanced Concepts In Mechanical Engineering, Faculty Of Mechanical Engineering - June 5 – 6, 2008, Iaşi, Romania	Homutescu V.M. , Optimization of Diameter Ratio for the Vuilleumier Machine Based on the Isothermal Functioning. The 3rd International Conference "Advanced Concepts in Mechanical Engineering", 5-6 iunie 2008, în Bul. I.P.I., Tom LIV (LVIII), Fasc. 2, p. 475 ... 482, ISSN 1011-2855.	2008
13	6th IASME/WSEAS International Conference on HEAT TRANSFER, THERMAL ENGINEERING and ENVIRONMENT (HTE'08) Rhodes, Greece, August 20-22	Horbanic B., Dumitraşcu Gh., Homutescu V. M. , Gas Turbine System with Interstage Cooling and Steam Injection Using Oxy-combustion. 6th IASME/WSEAS International Conference on HEAT TRANSFER, THERMAL ENGINEERING and ENVIRONMENT (HTE'08) Rhodes, Greece, August 20-22, 2008, ISSN: 1790-5095, ISBN: 978-960-6766-97-8, p. 120-125.	2008
14	Colloque francophone COFRET'08, 11 – 13 June 2008, Nantes - France	Homutescu V.M. , Dumitraşcu Gh., Horbanic B, Evaluation of the Work Lost Due to Leaks Through Cylinder - Displacer Gap. COFRET'08, 11 – 13 June 2008, Nantes - France, ISSN 2.6905267.61.5	2008
15	Cinquieme Edition du Colloque francophone – COFRET 2010 sur l'énergie – environnement – économie & thermodynamique - al cincilea colocviu francofon, COFRET 2010, Iaşi, 5-7 mai 2010	Homutescu V.M. , Bălănescu D.-T., Optimization of Diameter Ratio for Alpha-Type Stirling Engines. Al cincilea colocviu francofon, COFRET 2010, Iaşi, 5-7 mai 2010, în Bul. I.P.I., Tom L (LVI), Fasc. 3a, p. 313 ... 322, ISSN 1011-2855. Bălănescu D.-T., Homutescu V.M. , An Innovative Solution for Clean Terrestrial Propulsion: Small Scale Combined Cycle Unit. Performance Evaluation. COFRET 2010, Iaşi, 5-7 mai 2010, în Bul. I.P.I., Tom L (LVI), Fasc. 3b, p. 37 ... 46, ISSN 1011-2855.	2010
16	The 5th International Conference On Advanced Concepts In Mechanical Engineering, Faculty Of Mechanical Engineering - June 14 – 15, 2012, Iaşi,	Homutescu V.M. , Maximum Performances of the Stirling Machine Working as Motor-Driven Compressor. 5th International Conference "Advanced Concepts in Mechanical Engineering", Iaşi, 14-15 iunie 2012, Bul. I.P.I., Tom LIX (LXIII), Fasc. 3, 2013, p. 27 ... 38.	2012

	Romania		
17	5 th International Conference on Thermal Engines and Environmental Engineering, November 1-2, 2013, Galați, Romania	Bălănescu D.-T., Homutescu V. M. , Recovering energy from wood wastes in a semi-closed cycle power plant. 5 th International Conference on Thermal Engines and Environmental Engineering, November 1-2, 2013, Galați, Romania, Termotehnica, supliment 1/2013, p. 5-8, București, ISSN 1222-4057.	2013
18	The 6 th International Conference On Advanced Concepts In Mechanical Engineering, Faculty Of Mechanical Engineering - June 12 – 13, 2014, Iași, Romania	Bălănescu D.-T., Homutescu V. M. , Vasiliu P.-D., Hrițcu C.-E., Combined Cycle Units – an Alternative to Reciprocating Engines in Terrestrial Propulsion Field. Estimation of Performances. Conferința științifică internațională ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 289-294. Bălănescu D.-T., Homutescu V. M. , Hrițcu C.-E., Talif S.-G., Combined Cycle Units for Terrestrial Propulsion. Dimensional Approach. Conferința științifică internațională ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 295-300. Homutescu V. M. , Bălănescu D.-T., Gamma-Type Stirling Motor-Driven Compressor. International Scientific Conference ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 377-382, DOI 10.4028/www.scientific.net/AMM.659.377. Homutescu V. M. , Bălănescu D.-T., Physico-Mathematical Model of the Theoretical Gamma-Type Stirling Motor-Driven Compressor. International Scientific Conference ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 383-388, DOI 10.4028/www.scientific.net/AMM.659.383.	2014
19	7th International Conference on Energy and Environment „Clean and Safe Power” CIEM 2015, Iași, 22-23 October 2015	Homutescu V. M. , Bălănescu D.-T., Panaite Carmen Ema, Atanasiu M.-V., Physico-Mathematical Model of a Hot Air Engine Using Heat From Low-Temperature Renewable Sources of Energy. 7th International Conference on Energy and Environment „Clean and Safe Power” CIEM 2015, Iași, 22-23 October 2015, U.P.B. Sci. Bulletin, series D, volume 78, iss. D, 2016, ISSN 1223-7027, p. 183-190.	2015
20	10th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016; Petru Maior University of Tîrgu Mureș, Romania; 6 October 2016 through 7 October 2016	Bălănescu D.-T., Homutescu V.M. , Straw Energy saving Solution: Power Plant Based on a Hot Air Turbine. Procedia Engineering, volume 181, 2017, pp 698-705, 10th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016; Petru Maior University of Tîrgu Mureș, Romania; 6 October 2016 through 7 October 2016. Bălănescu D.-T., Homutescu V.M. , Experimental Study on the Combustion System Optimization in the Case of a 36 kW Condensing Boiler. Procedia Engineering, volume 181, 2017, pp 706-711, 10th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016; Petru Maior University of Tîrgu Mureș, Romania; 6 October 2016 through 7 October 2016.	2016
21	The 7th International Conference On Advanced Concepts In Mechanical Engineering - Dimitrie Mangeron Jubilee - Acme 2016, June 9 – 10, 2016, Iași, Romania	Bălănescu D.-T., Homutescu V.M. , Atanasiu M.-V., Air turbine - an interesting solution for straw energy conversion into electricity. IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012141, 6 pp, doi: 10.1088/1757-899X/147/1/012141, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012141/pdf . Bălănescu D.-T., Homutescu V.M. , Atanasiu M.-V., Dimensional approach on hot air turbine power plant in opened cycle for straw recycling. IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012142, 6 pp, doi: 10.1088/1757-899X/147/1/012142, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012142/pdf . Homutescu V.M. , Bălănescu D.-T., Panaite Carmen Ema, Atanasiu M.-V., Variable displacement alpha-type Stirling engine. IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012143, 7 pp, doi:10.1088/1757-899X/147/1/012143, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012143/pdf .	2016
22	11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017; Petru Maior University of Tîrgu Mureș, Romania; 5-6 October 2017	Bălănescu D.-T., Homutescu V.M. , A new approach in combined cycles – low power unit for hybrid terrestrial propulsion. Performance assessment. Procedia Engineering, volume 22, 2018, pp 730-737, 11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017; Petru Maior University of Tîrgu Mureș, Romania; 5-6 October 2017. Bălănescu D.-T., Homutescu V.M. , Dimensional assessment of a low power combined cycle system for hybrid propulsion. Procedia Engineering, volume 22, 2018, pp 738-746, 11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017; Petru Maior University of Tîrgu Mureș, Romania; 5-6 October 2017.	2017
23	46 th International Symposium "Actual Tasks on Agricultural Engineering", Opatija, Croatia, 2018	Bălănescu D.-T., Homutescu V.M. , Agricultural Machinery Hybrid Propulsion System Based on Combined Cycle Gas and Steam Turbines. Proceedings of the 46 th International Symposium "Actual Tasks on Agricultural Engineering", Opatija, Croatia, 2018, pp. 57-66, ISSN 1848-442, published by University of Zagreb, Faculty of Agriculture, Department of Agricultural Engineering.	2018
24	The 8th International Conference On Advanced Concepts In Mechanical	Homutescu V.M. , Bălănescu D.-T., Lupu Ana Georgiana, Physico-Mathematical Model for Theoretical One-Stage Heat-Driven Compressor. IOP Conference Series: Materials Science and Engineering, acceptată pentru publicare, 2018, 9 pp, IOP	2018

	Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary Acme 2018 June 7 – 8, 2018, Iași, Romania	<p>Publishing.</p> <p>Homutescu V.M., Bălănescu D.-T., Popescu A., Adiabatic Behavior of the Vuilleumier Heat Pump. IOP Conference Series: Materials Science and Engineering, acceptată pentru publicare, 2018, 10 pp, IOP Publishing.</p> <p>Bălănescu D.-T., Homutescu V.M., Popescu A., Micro gas and steam turbines power generation system for hybrid electric vehicles. IOP Conference Series: Materials Science and Engineering, acceptată pentru publicare, 2018, 9 pp, IOP Publishing.</p> <p>Bălănescu D.-T., Homutescu V.M., Lupu Ana Georgiana, Experimental study on enhanced heat transfer by water spraying in the cooling air flow. IOP Conference Series: Materials Science and Engineering, acceptată pentru publicare, 2018, 8 pp, IOP Publishing.</p> <p>Lupu Ana Georgiana, Homutescu V.M., Bălănescu D.-T., Popescu A., Efficiency of solar collectors – a review. IOP Conference Series: Materials Science and Engineering, acceptată pentru publicare, 2018, 8 pp, IOP Publishing.</p> <p>Lupu Ana Georgiana, Homutescu V.M., Bălănescu D.-T., Popescu A., A review of solar photovoltaic systems cooling technologies. IOP Conference Series: Materials Science and Engineering, acceptată pentru publicare, 2018, 8 pp, IOP Publishing.</p> <p>Panaite Carmen-Ema, Popescu A., Homutescu V.M., Uzuneanu Krisztina, Performance assessment of a solar-powered adsorption air conditioning system. IOP Conference Series: Materials Science and Engineering, acceptată pentru publicare, 2018, 10 pp, IOP Publishing.</p>	
25	The XXII nd National Conference on Thermodynamics with International Participation, 23–24 May 2019, Galați, Romania	<p>Bălănescu D.T., Homutescu V.M., Panaite C.E., Popescu A., <i>Study on performance of an innovative power system for hybrid propulsion consisting in a gas turbine with heat exchanger and steam turbine</i>. IOP Conference Series: Materials Science and Engineering, volume 595, 2019, paper 012040, 7 pp, doi: 10.1088/1757-899X/595/1/012040, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/595/1/012040/pdf</p> <p>Homutescu V.M., Bălănescu D.T., Panaite C.E., Lupu A.G., <i>Kinematic Beta-Type Stirling Motor-Driven Compressor</i>. IOP Conference Series: Materials Science and Engineering, volume 595, 2019, paper 012029, 8 pp, doi: 10.1088/1757-899X/595/1/012029, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/595/1/012029/pdf</p> <p>Lupu A.G., Panaite C.E., Homutescu V.M., Bălănescu D.T., Popescu A., <i>Trifold PV-T-TEG (photovoltaic-thermal-thermoelectric generators) panel characterization overview</i>. IOP Conference Series: Materials Science and Engineering, volume 595, 2019, paper 012050, 12 pp, doi: 10.1088/1757-899X/595/1/012050, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/595/1/012050/pdf</p>	2019
26	The 9 th International Conference On Advanced Concepts In Mechanical Engineering, ACME 2020 June 4 – 5, 2020, Iași, Romania	<p>Bălănescu D.T., Homutescu V.M., Ianuș G., Popescu A., <i>In situ study on the condensate latent heat recovery and its economic impact in the case of a 60 kW condensing boilers system</i>. IOP Conference Series: Materials Science and Engineering, volume 997, 2020, paper 012139, 7 pp, doi: 10.1088/1757-899X/997/1/012139, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012139/pdf</p> <p>Bălănescu D.T., Homutescu V.M., Ianuș G., Lupu A.G., <i>Study on the in situ performance of a 60 kW condensing gas boilers thermal installation and economic assessment</i>. IOP Conference Series: Materials Science and Engineering, volume 997, 2020, paper 012140, 7 pp, doi: 10.1088/1757-899X/997/1/012140, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012140/pdf</p> <p>Lupu A.G., Homutescu V.M., Bălănescu D.T., Popescu A., <i>Hybrid PV-TE-T modules: life cycle analysis and end of life assessment</i>. IOP Conference Series: Materials Science and Engineering, volume 997, 2020, paper 012149, 16 pp, doi: 10.1088/1757-899X/997/1/012149, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012149/pdf</p>	2020

RIA (A3.3): Citări în publicații BDI [5] (se exclud autocitățile)

C₁ = numărul de citări

S_{FI} = suma factorilor de impact ai publicațiilor WOS în care apar citările

C = C₁ + S_{FI}

Cerințe:

C = 62 + 293,232 = 355,232 > 25

Formular TUIASI.POB.10-F5.4.1

Articol citat	Articol care citează	Factor de impact al publicației
Homutescu V.M. , Bălănescu D.-T., Homutescu A., Physico-mathematical Model with Friction Losses for Vuilleumier Machines. 6 th International Conference on Electromechanical and Power Systems, October 2007, Chișinău, Republic of Moldova, published in Annals of the University of Craiova, nr.31, Vo. II, ISSN 1842-4805, Publisher: Editura Universitaria, Craiova, 2007, p. 237...242.	Guo T., Jiang T., Zou P., Luo B., Hofbauer P., Liu J., Huang Y., Analytical model for Vuilleumier cycle. International Journal of Refrigeration, vol. 113, pp. 126-135, https://doi.org/10.1016/j.ijrefrig.2020.01.026 , [impact factor 3.461 (2019), 3.629 (2020), 3.655 (5 years, 2019), 3.853 (5 years, 2020)]; cited as reference [Homutescu].	3.629
Homutescu V.M. , Dumitrașcu Gh., Horbaniuc B, Evaluation of the Work Lost Due to Leaks Through Cylinder - Displacer Gap. COFRET'08, 11 – 13 June 2008, Nantes - France, ISSN 2.6905267.61.5, articol publicat și de revista Termotehnica, nr. 2/2008, p.70-74, București, ISSN 1222-4057.	Li, R.J., Grosu, Lavinia, Queiros-Conde, D., Losses effect on the performance of a Gamma type Stirling engine. Energy Conversion and Management, vol. 114, pp. 28-37, DOI: 10.1016/j.enconman.2016.02.007, published: April 15th 2016, [impact factor 4.801 (2015), 4.631 (5 years, 2015)] [impact factor 6.377 (2017), 6.161 (5 years, 2017), impact factor 8.208 (2019), 7.447 (5 years, 2019)]; impact factor 9.709 (2020), 8.954 (5 years, 2020)]; cited as reference [20].	9.709
	Martaj, Nadia, Grosu, Lavinia, Rochelle, P., Mathieu, A., Feidt, M., Simulation of a Stirling Engine used for a Micro Solar Power Plant: 0-D Modelling, Comparison with 1-D Modelling. Environmental Engineering And Management Journal, vol. 15, issue: 8, pp. 1889-1895, published: August 2016, impact factor 1.008 (2015), 1.186 (2018), 0.916 (2020) [0.795 (5 years, 2015), 0.936 (5 years, 2018), 0.869 (5 years, 2020)]; cited as reference [7].	0.916
	Li R.J., Grosu Lavinia, Li W., New polytropic model to predict the performance of beta and gamma type Stirling engine. Energy, vol. 128, 1 st of June 2017, pp 62–76, DOI: 10.1016/j.energy.2017.04.001, impact factor 4.520 (2016), 5.182 (5 years, 2016); impact factor 7.147 (2020), 6.845 (5 years, 2020); cited as reference [36].	7.147
	Udeh, G T, Michailos, S, Ingham, D, Hughes, K J, Ma, L, Pourkashanian, M, A new non-ideal second order thermal model with additional loss effects for simulating beta Stirling engines. ENERGY CONVERSION AND MANAGEMENT, Volume: 206, Article Number: 112493, DOI: 10.1016/j.enconman.2020.112493, Published: FEB 15 2020, impact factor 8.208 (2019), 7.447 (5 years, 2019), 9.709 (2020), 8.954 (5 years, 2020); cited as reference [62].	9.709
	Udeh, G T, Michailos, S, Ingham, D, Hughes, K J, Ma, L, Pourkashanian, M, A techno-enviro-economic assessment of a biomass fuelled micro-CCHP driven by a hybrid Stirling and ORC engine. Volume: 227, Article Number: 113601, DOI: 10.1016/j.enconman.2020.113601, Published: JAN 1 2021, impact factor 8.208 (2019), 7.447 (5 years, 2019) 9.709 (2020), 8.954 (5 years, 2020); Accession Number: WOS:000603341600006 cited as reference [31].	9.709
Horbaniuc B., Dumitrașcu Gh., Homutescu V. M. , Gas Turbine System with Interstage Cooling and Steam Injection Using Oxy-combustion. 6th IASME/WSEAS International Conference on HEAT TRANSFER, THERMAL ENGINEERING and ENVIRONMENT (HTE'08) Rhodes, Greece, August 20-22, 2008, ISSN: 1790-5095, ISBN: 978-960-6766-97-8, p. 120-125.	Kler A. M., Zakharov Yu. B., Potanina Yu. M., Estimate for Interstage Water Injection in Air Compressor Incorporated into Gas-Turbine Cycles and Combined Power Plants Cycles. Thermophysics and Aeromechanics, volume 24, issue 3, pages 483-491, published May 2017, DOI: 10.1134/S0869864317030155, impact factor 0.747 (2016), 1.023 (2020), 0.644 (5 years, 2016), 0.872 (5 years, 2020); cited as reference [2].	1.023

<p>Homutescu V.M., Bălănescu D.-T., Optimization of Diameter Ratio for Alpha-Type Stirling Engines. Al cincilea colocviu francofon, COFRET 2010, Iași, 5-7 mai 2010, în Bul. I.P.I., Tom L (LVI), Fasc. 3a, p. 313 ... 322, ISSN 1011-2855.</p>	<p>Muhammad Hassan, Hussain Ahmed Tariq, Muhammad Anwar, Talha Irfan Khan, Asif Israr, Design and Fabrication of Stirling Engine for Solar Power Application, J. Energy Resour. Technol. (JOURNAL OF ENERGY RESOURCES TECHNOLOGY-TRANSACTIONS OF THE ASME) Nov 2021, 143(11): 111302 (7 pages), [impact factor 3.183 (2019), 2.903 (2020), 2.65 (5 years, 2019), 2.596 (5 years, 2020)] reference [15]</p>	<p>2.903</p>
<p>Homutescu V.M., Bălănescu D.-T., Panaite Carmen Ema, Atanasiu M.-V., Variable displacement alpha-type Stirling engine. IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012143, 7 pp, doi:10.1088/1757-899X/147/1/012143, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012143/pdf.</p>	<p>Kadri, Y., Abdallah, H.H., Performance evaluation of a stand-alone solar dish Stirling system for power generation suitable for off-grid rural electrification. Energy Conversion and Management, vol. 129, pp. 140-156, DOI: 10.1016/j.enconman.2016.10.024, published: December 1st 2016, [impact factor 4.801 (2015), 4.631 (5 years, 2015)] [impact factor 6.377 (2017), 6.161 (5 years, 2017)], impact factor 9.709 (2020), 8.954 (5 years, 2020); cited as reference [84].</p>	<p>9.709</p>
	<p>Uzuneanu Krisztina, Theoretical study on performance of a combined gas and steam turbine propulsion system for road transport. IOP Conf. Ser.: Mater. Sci. Eng. 444 082026, 2018, doi:10.1088/1757-899X/444/8/082026, 7 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România; cited as reference [14].</p>	<p>-</p>
<p>Bălănescu D.-T., Homutescu V.M., Straw Energy saving Solution: Power Plant Based on a Hot Air Turbine. Procedia Engineering, volume 181, 2017, ISSN 1877-7058, pp 698-705, DOI: 10.1016/j.proeng.2017.02.452, Accession Number: WOS:000404612700097, 10th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016; Petru Maior University of Tîrgu Mureș, Romania; 6 October 2016 through 7 October 2016. indexat WoS (2018), SCOPUS (2018), Science Direct (2018), Crossref (2018), WorldCat (2018), Google Academic (2018)</p>	<p>Pędzik Marta, Janiszewska Dominika, Rogozinski T., Alternative lignocellulosic raw materials in particleboard production: A review. October 2021, Industrial Crops and Products 174, DOI: 10.1016/j.indcrop. 2021.114162, Impact Factor: 5.645 (2020); 5-Year Impact Factor: 5.749 (2020), cited as reference [Bălănescu].</p>	<p>5.645</p>
<p>Bălănescu D.-T., Homutescu V.M., Experimental Study on the Combustion System Optimization in the Case of a 36 kW Condensing Boiler. Procedia Engineering, volume 181, 2017, pp 706-711, 10th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016; Petru Maior University of Tîrgu Mureș, Romania; 6-7 October 2016.</p>	<p>Gao Jianmin, Sun Zhihao, Wang Zhiqiang, Wang Xin, Guan Jian, Qi Guoli, Wang Zhongwei, Du Qian, Qin Yukun, Measurement method and influencing factors of temperature and humidity of condensed flue gas based on in situ flue gas heat tracing. Measurement, vol. 120, pp. 100-106, DOI: https://doi.org/10.1016/j.measurement.2018.01.067, published: May 2018, impact factor 2.359 (2016), 3.927 (2020), 2.255 (5 years, 2016), 3.778 (5 years, 2020); cited as reference [9].</p>	<p>3.927</p>
	<p>Hossein Soltanian, Mohammad Zabetian Targhi, Hadi Pashdarshahri, Chemiluminescence usage in finding optimum operating range of multi-hole burners. Energy, Volume 180, 1 August 2019, Pages 398-404. DOI: https://doi.org/10.1016/j.energy.2019.05.104, impact factor 5.537 (2018), 5.747 (5 years, 2018), impact factor 7.147 (2020), 6.845 (5 years, 2020); cited as reference [4].</p>	<p>7.147</p>
	<p>Papakostas K.T., Pitsavou F., Condensing boilers and variable speed pumps as a refurbishment option for heating systems in residential buildings - Energy and economic evaluation. IOP Conf. Ser.: Mater. Sci. Eng. 444 082001, 2018, doi:10.1088/1757-899X/444/8/082001, 14 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România.</p>	<p>-</p>

Bălănescu D.-T., Homutescu V. M. , Hrițcu C.-E., Talif S.-G., Combined Cycle Units for Terrestrial Propulsion. Dimensional Approach. Conferința științifică internațională ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 295-300.	Uzuneanu Krisztina, Theoretical study on performance of a combined gas and steam turbine propulsion system for road transport. IOP Conf. Ser.: Mater. Sci. Eng. 444 082026, 2018, doi:10.1088/1757-899X/444/8/082026, 7 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România; cited as reference [19].	-
Bălănescu D.-T., Homutescu V. M. , Vasiliu P.-D., Hrițcu C.-E., Combined Cycle Units – an Alternative to Reciprocating Engines in Terrestrial Propulsion Field. Estimation of Performances. Conferința științifică internațională ACME 2014, Iași, Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 289-294.	Uzuneanu Krisztina, Theoretical study on performance of a combined gas and steam turbine propulsion system for road transport. IOP Conf. Ser.: Mater. Sci. Eng. 444 082026, 2018, doi:10.1088/1757-899X/444/8/082026, 7 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România; cited as reference [18].	-
Bălănescu D.-T., Homutescu V.M. , An Innovative Solution for Clean Terrestrial Propulsion: Small Scale Combined Cycle Unit. Performance Evaluation. COFRET 2010, Iași, 5-7 mai 2010, în Bul. I.P.I., Tom L (LVI), Fasc. 3b, p. 37 ... 46, ISSN 1011-2855.	Uzuneanu Krisztina, Theoretical study on performance of a combined gas and steam turbine propulsion system for road transport. IOP Conf. Ser.: Mater. Sci. Eng. 444 082026, 2018, doi:10.1088/1757-899X/444/8/082026, 7 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România; cited as reference [17].	-
Bălănescu D.-T., Homutescu V.M. , Dimensional assessment of a low power combined cycle system for hybrid propulsion. Procedia Manufacturing, volume 22, 2018, pp 738-746, 11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017; Petru Maior University of Tîrgu Mureș, Romania; 5-6 October 2017.	Uzuneanu Krisztina, Theoretical study on performance of a combined gas and steam turbine propulsion system for road transport. IOP Conf. Ser.: Mater. Sci. Eng. 444 082026, 2018, doi:10.1088/1757-899X/444/8/082026, 7 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România; cited as reference [21].	-
Bălănescu D.-T., Homutescu V.M. , A new approach in combined cycles – low power unit for hybrid terrestrial propulsion. Performance assessment. Procedia Manufacturing, volume 22, 2018, pp 730-737, 11th International Conference Interdisciplinarity in Engineering, INTER-ENG 2017; Petru Maior University of Tîrgu Mureș, Romania; 2017.	Uzuneanu Krisztina, Theoretical study on performance of a combined gas and steam turbine propulsion system for road transport. IOP Conf. Ser.: Mater. Sci. Eng. 444 082026, 2018, doi:10.1088/1757-899X/444/8/082026, 7 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, 7-8 iunie 2018, Iași, România; cited as reference [20].	-
Bălănescu D.-T., Homutescu V.M. , Experimental investigation on performance of a condensing boiler and economic evaluation in real operating conditions. Applied Thermal Engineering, Volume 143, October 2018, Pages 48-58, https://doi.org/10.1016/j.applthermaleng.2018.07.082 .	Schiro F., Stoppato Anna, Experimental investigation of emissions and flame stability for steel and metal fiber cylindrical premixed burners. Combustion Science and Technology, vol. 191, issue 3, pp 453-471. DOI: 10.1080/00102202.2018.1500556 impact factor 1.132 (2017), 2.174 (2020), 1.512 (5 years, 2017), 1.946 (5 years, 2020); cited as reference [5].	2.174
	Jamil S.R., Wang L., Che D., Techno-economic analysis of a novel hybrid heat pump system to recover waste heat and condensate from the low-temperature boiler exhaust gas. International Journal of Energy Research, John Wiley & Sons Ltd, online ISSN:1099-114X, DOI: https://doi.org/10.1002/er.5172 , published: 31 January 2020, impact factor 3.343 (2018), 5.164 (2020), 3.017 (5 years, 2018), 4.913 (5 years, 2020); cited as reference [9].	5.164

	Russo D., Spreafico C., Assessing domestic environmental impacts through LCA using data from the scientific literature. Journal of Cleaner Production, Elsevier, ISSN: 0959-6526, DOI: https://doi.org/10.1016/j.jclepro.2020.121883 , Available online 29 April 2020, impact factor 6.395 (2018), 9.297 (2020), 7.051 (5 years, 2018), 9.444 (5 years, 2020); cited as reference [4].	9.297
	Luo J., Xue W., Shao H., Thermo-economic comparison of coal-fired boiler-based and groundwater-heat-pump based heating and cooling solution – A Case study on a greenhouse in Hubei, China. Energy and Buildings, ISSN: 0378-7788, DOI: https://doi.org/10.1016/j.enbuild.2020.110214 , Available online 7 June 2020, impact factor 4,495 (2018), 5.879 (2020), 4,823 (5 years, 2018), 6,175 (5 years, 2020); cited as reference [26].	5.879
	Semih Yilmaz, Dilek Kumlutas, Utku Alp Yücekaya, Ahmet Yakup Cumbul, Prediction of the equilibrium compositions in the combustion products of a domestic boiler, Energy, 233, Available online 4 June 2021, 121123, Journal Pre-proof, https://doi.org/10.1016/j.energy.2021.121123 , Impact Factor: 6.082 (2019), 7.147 (2020), 6.845 (5 years, 2020); cited as reference [20].	7.147
	Javier Mariani, Sergio D. Keegan, Guillermo Barreto, Improving the thermal efficiency of balanced flue gas space heaters currently marketed in Argentina. October 2021, Energy for Sustainable Development 64(5):1-7, DOI: 10.1016/j.esd.2021.06.006, Impact Factor: 5.223 (2020), (5 years 4.845, 2020), cited as reference [Balanesu].	5.223
	Malebo Mollo, Andrei Kolesnikov, Simultaneous reduction of NOx emission and SOx emission aided by improved efficiency of a Once-Through Benson Type Coal Boiler. February 2022, Energy, DOI: 10.1016/j.energy.2022.123551, impact factor 7.147 (2020), 6.845 (5 years, 2020); cited as reference [18].	7.147
	Schiro F., Stoppato A., Benato A., <i>Potentialities of hydrogen enriched natural gas for residential heating decarbonization and impact analysis on premixed boilers</i> . E3S Web of Conferences, volume 116, 2019, paper 00072, 8 pp, DOI: https://doi.org/10.1051/e3sconf/201911600072 ; cited as reference [13] – SCOPUS index	-
	Variyenli H.I., Khanlari A., <i>Analyzing the environmental effects of conventional and condensing combi boilers using natural gas</i> . Journal of Polytechnic-Politeknik Dergisi, Volume: 2 Issue: 4 Pages: 1277-1284, Published: Dec 2020, DOI: https://doi.org/10.2339/politeknik.592313 ; cited as reference [16] – WOS index	-
	Schiro F., Stoppato A., Benato A., Modelling and analyzing the impact of hydrogen enriched natural gas on domestic gas boilers in a decarbonization perspective. Carbon Resources Conversion, vol. 3, pp 122-129, DOI: https://doi.org/10.1016/j.crcon.2020.08.001 , Available online 14 August 2020, cited as reference [35] – SCOPUS Index	-
	Arslan O., Ucar M., <i>Assessment of improvement potential of a condensed combi boiler via advanced exergy analysis</i> . Thermal Science and Engineering Progress, In press Elsevier, DOI: https://doi.org/10.1016/j.tsep.2021.100853 , Available online 23 January 2021, cited as reference [8] – SCOPUS Index	-
Homutescu V.M. , Bălănescu D.-T.*, Popescu A., Adiabatic Behavior of the Vuilleumier Heat Pump. IOP Conf. Ser.: Mater. Sci. Eng. 444 082025, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-	Liu Q., Luo B., Yang J., Gao Q., Liu J., Huang Y., Ren C., Theoretical Analysis of Vuilleumier's Hypothetical Engine and Cooler, Energies, Vol. 14 (18), 5923, 2021, https://doi.org/10.3390/en14185923 , impact factor 3,004 (2020), 3,085 (5 years); cited as reference [22]	3,004

899X/444/8/082025, Accession Number: WOS:000467443600153, 10 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018, Iași, România. indexat Web of Science (2019)	Yingbai Xie, Mengtao Zhang, Multi-Objective Optimization of the Vuilleumier Heat Pump under Adiabatic Condition, May 2021, IOP Conference Series Earth and Environmental Science 772(1):012040, DOI: 10.1088/1755-1315/772/1/012040, cited as reference [5].	
Lupu A.G., Homutescu V.M, Bălănescu D.T. , Popescu A., <i>A review of solar photovoltaic systems cooling technologies</i> . The 8 th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2018, June 7 – 8, 2018, Iași, Romania, IOP Conference Series: Materials Science and Engineering, volume 444, 2018, paper 082016, 24 pp, DOI: 10.1088/1757-899X/444/8/082016 , IOP Publishing	Dongliang Zhao, Ablimit Aili, Yao Zhai, Shaoyu Xu, Gang Tan, Xiaobo Yin, and Ronggui Yang, Radiative sky cooling: Fundamental principles, materials, and applications. Applied Physics Reviews (June 2019) 6(2):021306, DOI: 10.1063/1.5087281 impact factor 12.894 (2017), 12.75 (2018), 19.162 (2020), 15.421 (5 years, 2017), 16.463 (5 years, 2018), 19.201 (5 years, 2020); cited as reference [165].	19.162
	Lagunov A., Ladvishchenko A., Terekhin V., <i>Study of Solar Cells at Low Temperatures in the Arctic</i> . 2019 International Multi-Conference on Industrial Engineering and Modern Technologies (FarEastCon), 1-4 october 2019, Vladivostok, Russia, published by Institute of Electrical and Electronics Engineers (IEEE), 5 pp, DOI: 10.1109/FarEastCon.2019.8933866 ; cited as reference [20] – SCOPUS index	-
	Dixit K. K., Yadav I., Gupta G. K., Maurya S. K., <i>A Review on Cooling Techniques Used For Photovoltaic Panels</i> . 2020 International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC), 28-29 Feb. 2020, Mathura, Uttar Pradesh, India, published by Institute of Electrical and Electronics Engineers (IEEE), 5 pp, DOI: 10.1109/PARC49193.2020.236626 ; cited as reference [5] – SCOPUS index	-
	Akbar Maleki, Arman Haghighi, Mamdouh El Haj Assad, Ibrahim Mahariq, Mohammad Alhuyi Nazari, A review on the approaches employed for cooling PV cells. Solar Energy, Volume 209, October 2020, pages 170-185, DOI: https://doi.org/10.1016/j.solener.2020.08.083 impact factor 4.608 (2019), 5.742 (2020), 4.744 (5 years, 2019), 5.619 (5 years, 2020); cited as reference [Lupu].	5.742
	Taye B. Z., Nebey A. H., Workineh T. G., <i>Design of floating solar PV system for typical household on Debre Mariam Island</i> Cogent Engineering, (2020), 7, 1: 1829275, DOI: https://doi.org/10.1080/23311916.2020.1829275 ; cited as reference [Lupu] – WOS index	-
	Khordehghah N., Żabnieńska-Góra A., Jouhara H., <i>Energy performance analysis of a PV/T system coupled with domestic hot water system</i> . ChemEngineering 4(2),22, 2020, pp. 1-14 DOI: https://doi.org/10.3390/chemengineering4020022 ; cited as reference [7]	-
	Farooq A.S., Zhang P., Gao Y., Gulfam R., Emerging radiative materials and prospective applications of radiative sky cooling - A review, Renewable & Sustainable Energy Reviews, vol. 144, 2021, 110910, 20 pp, DOI: https://doi.org/10.1016/j.rser.2021.110910 , impact factor 12,11 (2019), 14.982 (2020), 12,348 (5 years, 2019), 14,916 (5 years, 2020); cited as reference [136]	14.982
	Aneli S., Arena R., Gagliano A., <i>Numerical Simulations of a PV Module with Phase Change Material (PV-PCM) under Variable Weather Conditions</i> , International Journal of Heat and Technology Published: 2021, pp. 643-652, 20 pp, DOI: https://doi.org/10.18280/ijht.390236 ; cited as reference [5] – WOS index	-
	Ke Wang, Guoling Luo, Xiaowei Guo, Shaorong Li, Zhijun Liu, Cheng Yang, Radiative cooling of commercial silicon solar cells using a pyramid-textured PDMS film. September 2021, Solar Energy 225:245-251, DOI: 10.1016/j.solener.2021.07.025, IF 5.742 (2020) 5.619 (5 years, 2020); cited as reference [Lupu].	5.742

	Martin Raju, Rakesh Narayana Sarma, Abhilash Suryan, Prasanth P. Nair, Sandro Nižetić, Investigation of optimal water utilization for water spray cooled photovoltaic panel: A three-dimensional computational study. June 2022, Sustainable Energy Technologies and Assessments 51(3):101975, DOI: 10.1016/j.seta.2022.101975, impact factor 5.353 (2020), 5.044 (5 years, 2020)	5.353
	Arani Rajendra Prasad, Ramalingam Shankar, Chandrashekhar K. Patil, Alagar Karthick, Amit Kumar and Robbi Rahim, Performance enhancement of solar photovoltaic system for roof top garden. Environmental Science and Pollution Research, May 2021, Springer, DOI: 10.1007/s11356-021-14191-z, impact factor 3.056 (2019), 4.223 (2020), 3.306 (5 years, 2019), 4.306 (5 years, 2020), cited as reference [Lupu].	4.223
Lupu Ana Georgiana, Homutescu V.M. , Bălănescu D.-T., Popescu A., Efficiency of solar collectors – a review. IOP Conf. Ser.: Mater. Sci. Eng. 444 082015, 2018, ISSN (online) 1757-899X, ISSN (paper) 1757-8981, doi:10.1088/1757-899X/444/8/082015, Accession Number: WOS:000467443600143, 8 p, The 8th International Conference on Advanced Concepts in Mechanical Engineering ACME 2018. indexat Web of Science (2019)	Osman, I. S. and Hariri, N. G. Thermal Investigation and Optimized Design of a Novel Solar Self-Driven Thermomechanical Actuator. Sustainability 2022, 14, 5078. https://doi.org/10.3390/su14095078 , impact factor 3.251 (2020), cited as reference [33]	3.251
Bălănescu D.T. , Homutescu V.M., Popescu A., <i>Micro gas and steam turbines power generation system for hybrid electric vehicles</i> . The 8th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2018, June 7 – 8, 2018, Iași, Romania, IOP Conference Series: Materials Science and Engineering, volume 444, 2018, paper 082022, 9 pp, DOI: 10.1088/1757-899X/444/8/082022, IOP Publishing	Agrawal P., Wells G.G., Aguilar R.L., Mc Hale G., Sefiane K, Beyond Leidenfrost levitation: A thin-film boiling engine for controlled power generation, Applied Energy 287, 116556, 2021, 10 pp, DOI: https://doi.org/10.1016/j.apenergy.2021.116556 , impact factor 8,848 (2019), 9.746 (2020), 9,086 (5 years, 2019), 9,953 (5 years, 2020); cited as reference [15].	9.746
	Saifei Zhang, Chunhua Zhang, Yong Liu, Wei Wu, Han Wu, Shihua Yuan, Parametric Simulations on Leakage and Performance of a Miniature Free-Piston Generator (MFPG). August 2021, Applied Sciences 11(16):7742, DOI: 10.3390/app11167742, Impact Factor: 2.679 (2020); 5-Year Impact Factor: 2.736 (2020), cited as reference [26].	2.679
Bălănescu D.-T., Homutescu V.M. , Performance analysis of a gas turbine combined cycle power plant with waste heat recovery in Organic Rankine Cycle, volume 32, 2019, pp 520-528, 12th International Conference Interdisciplinarity in Engineering, INTER-ENG 2018; Petru Maior University of Tîrgu Mureș, Romania; October 2018, ISSN: 2351-9789, DOI: 10.1016/j.promfg.2019.02.248, Accession Number: WOS:000471295800071. indexat Web of Science (2019), indexat SCOPUS (2019),	Matuszewska Dominika, Olczak P., Evaluation of Using Gas Turbine to Increase Efficiency of the Organic Rankine Cycle (ORC), March 2020 Energies 13(6):1499, DOI: 10.3390/en13061499 impact factor 2.707 (2018), 3.004 (2020); 5-Year Impact Factor: 2.990 (2018), 3.085 (2020); cited as reference [23].	3.004
	Mohammadi K., Ellingwood K., Powell K., A novel triple power cycle featuring a gas turbine cycle with supercritical carbon dioxide and organic Rankine cycles: Thermoeconomic analysis and optimization, Energy Conversion and Management, vol. 220, DOI: https://doi.org/10.1016/j.enconman.2020.113123 , impact factor 8.208 (2019), 7.81 (2018), 9.709 (2020), 8.954 (5 years, 2020); cited as reference [16].	9.709
	Zhang H., Liu Y., Liu X., Duan C., Energy and exergy analysis of a new cogeneration system based on an organic Rankine cycle and absorption heat pump in the coal-fired power plant, Energy Conversion and Management, vol. 223, 113293, 2020, DOI: https://doi.org/10.1016/j.enconman.2020.113293 , impact factor 8,208 (2019), 7,447 (5 years, 2019), 9.709 (2020), 8.954 (5 years, 2020); cited as reference [21].	9.709

Science Direct (2019), Google Academic (2019)	Hongsheng Zhang, Xingang Liu, Yifeng Liu, Chenghong Duan, Zhan Dou, Jiyun Qin, Energy and exergy analyses of a novel cogeneration system coupled with absorption heat pump and organic Rankine cycle based on a direct air cooling coal-fired power plant. August 2021, Energy 229(2):120641, DOI: 10.1016/j.energy.2021.120641, impact factor 6.082 (2019), 6.046 (5 years, 2019), 7.147 (2020), 6.845 (5 years, 2020); cited as reference [17].	7.147
	Gul M., Kalam M.A., Mujtaba M.A., Alam S., Nasir Bashir M., Javed I., Aziz U., Rizwan Farid M., Tahir Hassan M., Iqbal S., Multi-objective-optimization of process parameters of industrial-gas-turbine fueled with natural gas by using Grey-Taguchi and ANN methods for better performance, Energy Reports, vol. 6, pp. 2394-2402, 2020, DOI: https://doi.org/ 10.1016/j. egypt.2020.08.002 , impact factor 3,595 (2019), 6.87 (2020), 7.13 (5 years, 2020); cited as reference Balanescu [8].	6.87
	Ting Chen, Anping Wan, Ke Li, Xingwei Xiang, Qinglong Zhou, Qing Zuo, Liang Zhang, Energy and exergy analyses of a combined cycle power plant with inlet fuel heating. Thermal Science, 2021, 13 pages, online first: October 2021, https://doi.org/10.2298/TSCI210628296C , Impact Factor: 1.625 (2020), 5-Year Impact Factor: 1.701 (2020)	1.625
	Muhammad Reshaeel, Adeel Javed, Ahmad Jamil, Majid Ali, Mariam Mahmood, Adeel Waqas, Multiparametric optimization of a reheated organic Rankine cycle for waste heat recovery based repowering of a degraded combined cycle gas turbine power plant. Energy Conversion and Management, Volume 254, 15 February 2022, 115237, impact factor 9.709 (2020), 8.954 (5 years, 2020); cited as reference [36].	9.709
	Zhang H., Liu X., Hao R., Liu C., Liu Y., Duan C., Qin J., Thermodynamic performance study on gas-steam cogeneration systems with different configurations based on condensed waste heat utilization. Energy, vol. 250, 123836, DOI: https://doi.org/10.1016/j.energy.2022.123836 , 1 July 2022, impact factor 7.147 (2020), 6.845 (5 years, 2020); cited as reference [20]	7.147
	Kindra V., Rogalev N., Rogalev A., Naumov V. and Ekaterina Sabanova, Thermodynamic Optimization of Low-Temperature Cycles for the Power Industry, April 2022, Energies 15(8) 2979; https://doi.org/10.3390/en15092979 , impact factor 2.707 (2018), 3.004 (2020); 5-Year Impact Factor: 2.990 (2018), 3.085 (2020); cited as reference [10].	3.004
	Ruochen Liu, Remi Tsiava, Shenqi Xu, Dezhen Chen, Experimental study of char gasification characteristics with high temperature flue gas. Journal of the Energy Institute 97(5), Volume 97, August 2021, Pages 187-193, DOI: 10.1016/j.joei.2021.04.015, Impact Factor: 4.748 (2019), 6.186 (2020), 5-Year Impact Factor: 4.557 (2019), 5.912 (2020), cited as reference [9].	5.912
Lupu A.-G., Homutescu V.M., Bălănescu D.-T. and Popescu A., <i>Trifold PV-T-TEG (photovoltaic-thermal-thermoelectric generators) panel characterization overview</i> . The XXIIInd National Conference on Thermodynamics with International Participation – NACOT 2019, May 22 - 24, 2019, Galați, IOP Conference Series: Materials Science and Engineering, volume 595, 2019, paper 012050, 7 pp, IOP Publishing	Xin Wen, J. Ji, Zhiying Song, Zhaomeng Li, Hao Xie, Jun Wang, Comparison analysis of two different concentrated photovoltaic/thermal-TEG hybrid systems. April 2021, Energy Conversion and Management 234(3): 113940, DOI: 10.1016/j.enconman.2021.113940, impact factor 8,208 (2019), 7,447 (5 years, 2019), 9.709 (2020), 8.954 (5 years, 2020); cited as reference [25].	9.709

Bălănescu D.-T., Homutescu V.M. , Study on Condensing Boiler Technology Potential Accounting Various Fuels. Procedia Engineering, volume 32, 2019, pp 504-512, 12th International Conference Interdisciplinarity in Engineering, INTER-ENG 2018; Petru Maior University of Tîrgu Mureș, Romania; October 2018, ISSN: 2351-9789, DOI: 10.1016/j.promfg.2019.02.246, Accession Number: WOS:000471295800073. indexat Web of Science (2019)	Semih Yilmaz, Dilek Kumlutas, Utku Alp Yücekaya, Ahmet Yakup Cumbul, Prediction of the equilibrium compositions in the combustion products of a domestic boiler, Energy, Available online 4 June 2021, 121123, https://doi.org/10.1016/j.energy.2021.121123 , Impact Factor: 6.082 (2019), 7.147 (2020), 6.845 (5 years, 2020) cited as reference [15].	7.147
	Hongyang Wei, Shifang Huang, Xiaosong Zhang, Experimental and simulation study on heat and mass transfer characteristics in direct-contact total heat exchanger for flue gas heat recovery. October 2021, Applied Thermal Engineering, DOI: 10.1016/j.applthermaleng.2021.117657, impact factor 5.295 (2020), 5.175 (5 years, 2020)	5.295
	Curto D., Franzitta V., Guercio A., Panno D., Energy Retrofit. A Case Study—Santi Romano Dormitory on the Palermo University. Sustainability 13(24):13524, December 2021, DOI: 10.3390/su132413524, impact factor 3.251 (2020), 3.474 (5 years, 2020) cited as reference [26].	3.251
Bălănescu D.-T., Homutescu V.M.* (autor corespondent), Effects of hydrogen-enriched methane combustion on latent heat recovery potential and environmental impact of condensing boilers. Applied Thermal Engineering, Available online 5 August 2021, Volume 197, October 2021, 117411, https://doi.org/10.1016/j.applthermaleng.2021.117411 , impact factor: 5.295	Kabir S. B., Khalekuzzaman M., Hossain N., Jamal M., Alam M. A., Abomohra A. E. F., Progress in biohythane production from microalgae-wastewater sludge co-digestion: An integrated biorefinery approach. Biotechnology Advances, 2022, Available online 4 March 2022, 107933, DOI: https://doi.org/10.1016/j.biotechadv.2022.107933 , impact factor 14,227 (2020), 16,301 (5 years, 2020); cited as reference [Bălănescu and Homutescu].	14,227
	Antonescu N., Stănescu D.-P. and Calotă R., CO2 Emissions Reduction through Increasing H2 Participation in Gaseous Combustible—Condensing Boilers Functional Response. Appl. Sci. (Basel) 2022, 12, 3831. https://doi.org/10.3390/app12083831 , impact factor 2,679 (2020), 2,736 (5 years, 2020); cited as reference [9].	2,679
Număr de citări C1 = 62		S_{FI} = 293,232
		C = 355,232

Data: 16.05.2022

Candidat: conf.univ.dr.habil.ing. Vlad Mario Homutescu