

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

FIȘA DE VERIFICARE
a îndeplinirii standardelor minime naționale pentru postul de profesor universitar
în vederea susținerii abilitării

Cadru didactic: **BALĂNESCU P. Dan-Teodor**

Data nașterii: **08.04.1975**

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 MENCs 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	2	DA
		N1.1	1	1	DA
		N1.3	1	1	DA
	A1.2	N2	4	12	DA
		N2.1	2	6	DA
Activitatea de cercetare CDI (A2)	A2.1 + A2.3	P1 + P2	10	23,98	DA, 239,8 %
		P1	6	23,98	DA, 399,7 %
	A2.2	N3	10	21	DA
		N3.1	5	9	DA
	A2.4 + A2.5	N4	2	2	DA
		N4.3	1	1	DA
Recunoașterea impactului activității RIA (A3)	A3.1	S1 + S2	50	623,312	DA, 1246,6 %
	A3.2	N5	10	30	DA
	A3.3	C	25	231,987	DA, 928,0 %

Criteriaul 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:

$$N1 = N1.1 + N1.2 = 1 + 1 = 2 \geq 2$$

$$N1.1 = 1 \geq 1$$

$$N1.3 = 1 \geq 1$$

Subcategorii		Realizări	Indicatori
Format tipărit / electronic [1] (minim 100 pagini)	Coordonator / prim autor	1. Bălănescu D.T. , <i>Generatoare de abur</i> , Ed. Politehniuum Iași, ISBN 978-973-621-438-7, 268 p., 49 rânduri/pagină cu Times New Roman 12, Iași, 2014	N1.1 = 1
	Co-autor	2. V.M. Homutescu, D.T. Bălănescu , <i>Echipamente termice. Ejectoare</i> , Ed. Performantica, Iași, ISBN 978-606-685-603-4, 143 p. B5 la 46 rânduri/pagină cu Arial 10, Iași, 2018	N1.2 = 1
Format electronic disponibil pe platforma universității / departamentului (autor)		1. Bălănescu D.T. , <i>Construcția și calculul cazanelor și turbinelor</i> , curs în format electronic, 2018, 156 p, 38 rânduri/pagină cu Arial 12, http://www.dan-balanescu.mec.tuiasi.ro/	N1.3 = 1

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

N2.1 = număr

N2.2 = număr

N2.3 = număr

Cerințe:

$$N2 = N2.1 + N2.2 + N2.3 = 6 + 2 + 4 = 12 \geq 4$$

$$N2.1 = 6 \geq 2$$

Subcategorii	Realizări	Indicatori
Standuri laborator (construcție/modernizări) certificate de directorul de departament	<ol style="list-style-type: none"> Stand pentru efectuarea bilanțului energetic al unui sistem de încălzire cu condensare (construcție) Stand pentru determinarea debitului caloric al unui arzător funcționând cu combustibil lichid (construcție) Stand pentru determinarea randamentului prin metoda directă a unui cazan de apă caldă cu combustibil lichid (modernizare) Stand pentru determinarea randamentului prin metoda indirectă a unui cazan de apă caldă cu combustibil gazos (construcție) Stand pentru determinarea debitului masic de aer cu tub Venturi (construcție) Modernizarea sistemului de producere a aerului comprimat pentru standurile didactice și de cercetare din laboratorul „Mașini Termice” prin echiparea cu un compresor cu șurub, cu debitul de 950 l/min 	N2.1 = 6
Îndrumar laborator / carte aplicații format tipărit sau electronic (autor, co-autor)	<ol style="list-style-type: none"> Bălănescu D.T., Homutescu V.M., <i>Generatoare de abur. Calculul termic – îndrumar pentru proiect</i>, Ed. Performantica, Iași, ISBN 978-606-685-602-7, 164 p. B5 la 48 rânduri/pagină cu Times New Roman 12, Iași, 2018 Homutescu V.M., Bălănescu D.T., <i>Termodinamica fluidelor compresibile. Îndrumar de laborator</i>, Ed. Performantica, Iași, ISBN 978-606-685-605-8, 128 p. B5 la 52 rânduri/pagină cu Arial 10, Iași, 2018 	N2.2 = 2
Aplicație informatică educațională	<ol style="list-style-type: none"> Program Mathcad pentru calculul arderii combustibililor gazoși Program Mathcad pentru calculul arderii combustibililor lichizi și solizi Program Mathcad pentru calculul festonului și primului supraîncălzitor la cazanele funcționând cu combustibili gazoși Program Mathcad pentru calculul festonului și primului supraîncălzitor la cazanele funcționând cu combustibili lichizi și solizi 	N2.3 = 4
		N2 = 11

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:

$$P1 = P1.1 + P1.2 + P1.3 + P1.4 = 23,98 + 0 + 0 + 0 = \mathbf{23,98} \geq 6$$

$$P1 + P2 = 23,98 + 0 = \mathbf{23,98} \geq 10$$

Subcategorii	Realizări	Punctaj	Indicatori
Autor corespondent / prim autor	1. Bălănescu D.T. , Homutescu V.M., <i>Effects of hydrogen-enriched methane combustion on latent heat recovery potential and environmental impact of condensing boilers</i> . Applied Thermal Engineering, Volume 197, August 2021, 117411, https://doi.org/10.1016/j.applthermaleng.2018.07.082 . Impact factor: 5,295 (2020)	$2 \cdot (0,2 + 5,295) = 10,59$	P1.1 = 23,98
	2. Bălănescu D.T. , Homutescu V.M., <i>Experimental investigation on performance of a condensing boiler and economic evaluation in real operating conditions</i> . 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)	$2 \cdot (0,2 + 5,295) = 10,59$	
	3. Bălănescu D.T. , Homutescu V.M., <i>Study on condensing boiler technology potential accounting various fuels</i> . Procedia Manufacturing, volume 23, 2019, pp 504-512, https://doi.org/10.1016/j.promfg.2019.02.246	$2 \cdot (0,2 + 0) = 0,4$	
	4. Bălănescu D.T. , Homutescu V.M., <i>Performance analysis of a gas turbine combined cycle power plant with waste heat recovery in Organic Rankine Cycle</i> . Procedia Manufacturing, volume 32, 2019, pp 520-528, https://doi.org/10.1016/j.promfg.2019.02.248	$2 \cdot (0,2 + 0) = 0,4$	
	5. Bălănescu D.T. , Homutescu V.M., <i>Agricultural Machinery Hybrid Propulsion System Based on Combined Cycle Gas and Steam Turbines</i> . 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.	$2 \cdot (0,2 + 0) = 0,4$	
	6. Bălănescu D.T. , Homutescu V.M., <i>Straw Energy Saving Solution: Power Plant Based on a Hot Air Turbine</i> . Procedia Engineering, volume 181, 2017, pp 698-705, https://doi.org/10.1016/j.proeng.2017.02.452	$2 \cdot (0,2 + 0) = 0,4$	
	7. Bălănescu D.T. , Homutescu V.M., <i>Experimental Study on the Combustion System Optimization in the Case of a 36 kW Condensing Boiler</i> . Procedia Engineering, volume 181, 2017, pp 706-711, https://doi.org/10.1016/j.proeng.2017.02.453	$2 \cdot (0,2 + 0) = 0,4$	

		8. Bălănescu D.T. , Homutescu V.M., Atanasiu M.-V., <i>Air turbine - an interesting solution for straw energy conversion into electricity</i> . IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012141, 6 pp, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012141/pdf .	2·(0,2+0) = 0,4	
		9. Bălănescu D.T. , Homutescu V.M., Atanasiu M.-V., <i>Dimensional approach on hot air turbine power plant in opened cycle for straw recycling</i> . IOP Conference Series: Materials Science and Engineering, volume 147, 2016, paper 012142, 6 pp, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/147/1/012142/pdf .	2·(0,2+0) = 0,4	
	n ≥ 4	1. -		P1.2 = 0
Co-autor	n ≤ 3	1. -		P1.3 = 0
	n ≥ 4	1. -		P1.4 = 0
				P1 = 23,98

CDI (A2.2): Articole și publicații științifice indexate BDI [4] neincluse la A2.1

N3.1 = număr

N3.2 = număr

Cerințe

N3 = N3.1 + N3.2 = 9 + 12 = **21 ≥ 10**

N3.1 = **9 ≥ 5**

Subcategoriile	Realizări	Indicatori
Autor corespondent / prim autor	<p>1. 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>. The 9th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2020, June 4 - 5, 2020, Iași, Romania, 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 (indexată SCOPUS)</p> <p>2. 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>. The 9th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2020, June 4 - 5, 2020, Iași, Romania, 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 (indexată SCOPUS)</p> <p>3. 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>. The XXIInd National Conference on Thermodynamics with International Participation, 23–24 May 2019, Galati, Romania, 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 (indexată SCOPUS)</p>	N3.1 = 9

	<p>4. Bălănescu D.T., Homutescu V.M., Lupu A.G., <i>Experimental study on enhanced heat transfer by water spraying in the cooling air flow</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 082021, 7 pp, doi: 10.1088/1757-899X/444/8/082021, IOP Publishing, http://iopscience.iop.org/article/10.1088/1757-899X/444/8/082021/pdf (indexată WOS, SCOPUS)</p> <p>5. 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, http://iopscience.iop.org/article/10.1088/1757-899X/444/8/082022/pdf (indexată WOS, SCOPUS)</p> <p>6. Bălănescu D.T., Homutescu V.M., <i>A new approach in combined cycles – low power unit for hybrid terrestrial propulsion. Performance assessment</i>. Procedia Manufacturing, 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, https://doi.org/10.1016/j.promfg.2018.03.105 (indexată WOS)</p> <p>7. Bălănescu D.T., Homutescu V.M., <i>Dimensional assessment of a low power combined cycle system for hybrid propulsion</i>. 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, https://doi.org/10.1016/j.promfg.2018.03.106 (indexată WOS, SCOPUS)</p> <p>8. Bălănescu D.T., Homutescu V. M., Vasiliu P.-D., Hrițcu C.-E., <i>Combined Cycle Units – an Alternative to Reciprocating Engines in Terrestrial Propulsion Field. Estimation of Performances</i>. 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, https://doi.org/10.4028/www.scientific.net/AMM.659.295 (indexată SCOPUS)</p> <p>9. Bălănescu D.T., Homutescu V. M., Hrițcu C.-E., Talif S.-G., <i>Combined Cycle Units for Terrestrial Propulsion. Dimensional Approach</i>. 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, https://doi.org/10.4028/www.scientific.net/AMM.659.295 (indexată SCOPUS)</p>	
Co-autor	<p>1. 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>. The 9th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2020, June 4 - 5, 2020, Iași, Romania, 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 (indexată SCOPUS)</p> <p>2. Homutescu V.M., Bălănescu D.T., Panaite C.E., Lupu A.G., <i>Kinematic Beta-Type Stirling Motor-Driven Compressor</i>. The XXIInd National Conference on Thermodynamics with International Participation, 23–24 May</p>	N3.2 = 12

2019, Galati, Romania, 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> (indexată SCOPUS)

3. Lupu A.G., Panaite C.E., Homutescu V.M., **Bălănescu D.T.**, Popescu A., *Trifold PV-T-TEG (photovoltaic-thermal-thermoelectric generators) panel characterization overview*. The XXIInd National Conference on Thermodynamics with International Participation, 23–24 May 2019, Galati, Romania, 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> (indexată SCOPUS)

4. Homutescu V.M., **Bălănescu D.T.**, Lupu A.G., *Physico-Mathematical Model for Theoretical One-Stage Heat Driven Compressor*. 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 082024, 9 pp, doi: 10.1088/1757-899X/444/8/082024, IOP Publishing, <http://iopscience.iop.org/article/10.1088/1757-899X/444/8/082024/pdf> (indexată WOS, SCOPUS)

5. Homutescu V.M., **Bălănescu D.T.**, Popescu A., *Adiabatic Behavior of the Vuilleumier Heat Pump*. 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 082025, 9 pp, doi: 10.1088/1757-899X/444/8/082025, IOP Publishing, <http://iopscience.iop.org/article/10.1088/1757-899X/444/8/082025/pdf> (indexată WOS, SCOPUS)

6. Lupu A.G., Homutescu V.M., **Bălănescu D.T.**, Popescu A., *Efficiency of solar collectors – a review*. 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 082015, 14 pp, doi: 10.1088/1757-899X/444/8/082015, IOP Publishing, <http://iopscience.iop.org/article/10.1088/1757-899X/444/8/082015/pdf> (indexată WOS, SCOPUS)

7. Lupu A.G., Homutescu V.M., **Bălănescu D.T.**, Popescu A., *A review of solar photovoltaic systems cooling technologies*. 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 082016, 24 pp, doi: 10.1088/1757-899X/444/8/082016, IOP Publishing, <http://iopscience.iop.org/article/10.1088/1757-899X/444/8/082016/pdf> (indexată WOS, SCOPUS)

8. Frățița M., Uzuneanu K., **Bălănescu D.T.**, *About I-beam versus H-beam connecting rod design using Inventor Autodesk 2018*. 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 072008, 7 pp, doi: 10.1088/1757-899X/444/7/072008, IOP Publishing, <http://iopscience.iop.org/article/10.1088/1757-899X/444/7/072008/pdf> (indexată WOS, SCOPUS)

9. 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,

	<p>https://doi.org/10.4028/www.scientific.net/AMM.659.377 (indexată SCOPUS)</p> <p>10. Homutescu V. M., Bălanescu D.T., <i>Physico-Mathematical Model of the Theoretical Gamma-Type Stirling Motor-Driven Compressor</i>. 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, https://doi.org/10.4028/www.scientific.net/AMM.659.383 (indexată SCOPUS)</p> <p>11. Rakoși E., Manolache G., Talif S.G., Bălanescu D.T., <i>COSRING-LUJET, Integrated New Concept in Automotive I.C. Engines for a Better Lubrication</i>. 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. 231-23 https://doi.org/10.4028/www.scientific.net/AMM.659.231 (indexată SCOPUS)</p> <p>12. Homutescu V.M., Bălănescu D.T., Panaite C.E., Atanasiu M.-V., <i>Variable displacement alpha-type Stirling engine</i>. 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 (indexată WOS, Scopus)</p>	
		N3 = 18

CDI (A2.4): Produse, tehnologii, platforme și servicii inovative (validate conform procedurilor specifice unităților de învățământ superior sau de cercetare)

N4.1 = număr

N4.2 = număr

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 + 1 + 1 + 0 = 2 ≥ 2

N4.3 = 1 ≥ 1

Subcategorii	Realizări	Indicatori
Coordonator / prim autor	1. -	N4.1 = 0
Co-autor	1. Dezvoltarea Laboratorului Cogenerare – Trigenerare în cadrul proiectului POSCCE-A2-O2.2.1-2009-4-ENERED, ID nr. 911, “Dezvoltarea platformei de cercetare pentru energie eficientă și durabilă – ENERED”, cofinanțat prin Fondul European de Dezvoltare Regională	N4.2 = 1

Coordonator / prim autor	1. Bălănescu D.T. , <i>Cazane de apă caldă. Cazane cu condensare</i> , Ed. Performantica, Iași, ISBN 978-606-685-605-8, 151 p, 38 rânduri/pagină cu Times New Roman 12, Iași, 2018	N4.3 = 1
Co-autor	1. -	N4.4 = 0
		N4 = 2

Criteriaul 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:

$$S1 + S2 = 2,877 + 620,435 = 623,312 \geq 50$$

Subcategorii	Realizări	Punctaj	Indicatori
Director sau responsabil partener la grant / proiect câștigat prin competiție națională sau internațională, proiecte / contracte terți	1. Bălănescu D.T. , <i>Creșterea eficienței și reducerea poluării în transporturi prin utilizarea grupurilor cogenerative binare</i> , Proiect CNCSIS tip TD, nr. 33371/2004, Cod 165/2004, temele nr. 93/2004, și 22/2005, desfășurat în perioada 2004-2005. Valoare contract – an 2004: 5600 RON; curs 01.07.2004, 4,0617 RON/Euro; 5600/4,0617 = 1379 Euro an 2005: 5400 RON; curs 29.06.2005, 3,6050 RON/Euro; 5400/3,6050 = 1498 Euro Total: 1379 + 1498 = 2877 Euro	2877 Euro = 2,877	S1 = 2,877
Membru în echipă la grant / proiect câștigat prin competiție națională sau internațională, proiecte / contracte terți	1. Dumitrașcu Gh. (responsabil partener), Bălănescu D.T. - membru în echipă, <i>Creșterea eficienței energetice a instalațiilor de biogaz prin elaborarea sistemului integrat: biogaz-microalge-biocombustibil, în cadrul conceptului de biorafinare (AlgalBiogazConceptEnergie) – ABC-ENERGIE</i> , Proiect PN-III PCCDI nr. 32/2018, desfășurat în perioada 2018-2021. Valoare contract – an 2018: 170520 RON; suma repartizată, 34104 RON; curs 02.07.2018, 4,6610 RON/Euro; 34104/4,6610 = 7317 Euro an 2019: 180810 RON; suma repartizată, 36161 RON; curs 01.07.2019, 4,7328 RON/Euro; 36161/4,7328 = 7641 Euro	24645 Euro = 24,645	

<p>an 2020: 203006 RON; suma repartizată, 40601 RON; curs 01.07.2020, 4,8372 RON/Euro; 40601/4,8372 = 8393 Euro an 2021: 33661 RON; suma repartizată, 6732 RON; curs 01.07.2021, 4,9261 RON/Euro; 6732/4,9261 = 1294 Euro Total: 7317 + 7641 + 8393 + 1294 = 24645 Euro</p>		
<p>1. Homutescu V.M. (director), Bălănescu D.T., Atanasiu M.-V., <i>Cercetări și consultanță pentru determinarea caracteristicilor termodinamice principale ale schimbătoarelor de căldură ale instalației ENERGIEWANDLER H / Researches and consultancy for establishing of the main thermodynamic requirements for the heat exchangers of the ENERGIEWANDLER H installation</i>, contract de cercetare U.T. Iași nr. 1347P/10.07.2017, beneficiar WALUKO B.V., Sündenzeestrassen nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 10.07.2017-01.11.2017. Valoare contract: 4598,20 RON; suma repartizată, 1379,46 RON; curs 30.06.2017, 4,5539 RON/Euro; 1379,46/4,5539 = 303 Euro</p>	303 Euro = 0,303	
<p>2. Homutescu V.M. (director), Bălănescu D.T., Atanasiu M.-V., <i>Cercetări și consultanță pentru stabilirea cerințelor teoretice necesare dimensionării modelului funcțional al instalației ENERGIEWANDLER H / Researches and consultancy for the establishment of the theoretical requirements needed for dimensioning the functional model of the ENERGIEWANDLER H installation</i>, contract de cercetare U.T. Iași nr. 888P/08.06.2015, beneficiar WALUKO B.V., Sündenzeestrassen nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 08.06.2015-01.11.2015. Valoare contract: 4446,40 RON; suma repartizată, 1333,92 RON; curs 01.07.2015, 4,4685 RON/Euro; 1333,92/4,4685 = 299 Euro</p>	299 Euro = 0,299	S2 = 620,43
<p>3. Homutescu V.M. (director), Bălănescu D.T., Atanasiu M.-V., <i>Dezvoltarea conceptuală a modelului fizico-matematic aferent instalației ENERGIEWANDLER H / Conceptual developing of the physico-mathematical model related to the installation ENERGIEWANDLER H</i>, contract de cercetare U.T. Iași nr. 1543P/27.10.2014, beneficiar WALUKO B.V., Sündenzeestrassen nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 27.07.2014-15.01.2015. Valoare contract: 7189,60 RON; suma repartizată, 2156,88 RON; curs 01.07.2014, 4,3845 RON/Euro; 2156,88/4,3845 = 492 Euro</p>	492 Euro = 0,492	
<p>4. Homutescu V.M. (director), Bălănescu D.T., Atanasiu M.-V., <i>Elaborarea modelului fizico-matematic aferent instalației ENERGIEWANDLER H</i>, contract de cercetare U.T. Iași nr. 991P/10.07.2014, beneficiar WALUKO B.V., Sündenzeestrassen nr. 253, 8096 BK Oldebroek, OLANDA, desfășurat în perioada 10.07.2014-01.10.2014. Valoare contract: 4343,60 RON; suma repartizată, 1303,08 RON; curs 01.07.2014, 4,3845 RON/Euro; 1303,08/4,3845 = 297 Euro</p>	297 Euro = 0,297	

	<p>5. Seghedin N.E. (director), Bălănescu D.T. - membru în echipă, <i>Dezvoltarea platformei de cercetare pentru energie eficientă și durabilă (acronim ENERED)</i>, Proiect POSCCE, axa prioritară 2 – CDI, Op.2.2.1, desfășurat în perioada 2013 – 2015. Valoare subcontract Laborator Cogenerare-Trigenerare: 1.353.550 Euro Suma repartizată: 541420 Euro</p>	541420 Euro = 541,420	
	<p>6. Dumitrașcu Gh. (director), Bălănescu D.T. - membru în echipă, <i>Studiul sistemelor energetice cu oxi-combustie</i>, Proiect CNCSIS tip A, Grant 33/2007, tema 7; Grant 77/2008, tema 12, desfășurat în perioada 2007-2008. Valoare contract – an 2007: 98000 RON; suma repartizată, 9800 RON; curs 29.06.2007, 3,1340 RON/Euro; 9800/3,1340 = 3127 Euro an 2008: 48000 RON; suma repartizată, 4800 RON; curs 01.07.2008, 3,6435 RON/Euro; 4800/3,6435 = 1317 Euro Total: 3127 + 1317 = 4444 Euro</p>	4444 Euro = 4,444	
	<p>7. Dumitrașcu Gh. (responsabil partener), Bălănescu D.T. - membru în echipă, <i>Compresor cu grad de comprimare mai mare de 9, într-o singură treaptă – COMCIP</i>, Proiect PNII Parteneriate 82090/2008, desfășurat în perioada 2008-2011. Valoare contract – an 2008: 15000 RON; suma repartizată, 1500 RON; curs 01.07.2008, 3,6435 RON/Euro; 1500/3,6435 = 412 Euro Total: 412 Euro</p>	412 Euro = 0,412	
	<p>8. Dumitrașcu Gh. (responsabil partener), Bălănescu D.T. - membru în echipă, <i>Instalație de generare a ceții pentru protecția plantelor contra factorilor nefavorabili ai mediului, utilizând camere de ardere pulsatorie – PULSOPROTECT</i>, Proiect PNII Parteneriate 51043/2007, desfășurat în perioada 2007-2010. Valoare contract – an 2007: 20000 RON; suma repartizată, 8000 RON; curs 29.06.2007, 3,1340 RON/Euro; 8000/3,1340 = 2553 Euro an 2008: 70000 RON; suma repartizată, 28000 RON; curs 01.07.2008, 3,6435 RON/Euro; 28000/3,6435 = 7685 Euro an 2009: - an 2010: 15000 RON; suma repartizată, 6000 RON; curs 01.07.2008, 4,3537 RON/Euro; 6000/4,3537 = 1378 Euro Total: 2553 + 7685 + 1378 = 11616 Euro</p>	11616 Euro = 11,616	

	<p>9. Dumitrașcu Gh. (responsabil partener), Bălănescu D.T. - membru în echipă, <i>Noi tipuri de camere de ardere policarburante cu funcționare în regim pulsatoriu – PULSOCAM</i>, CEEX 281/2006, desfășurat în perioada 2006-2008.</p> <p>Valoare contract – an 2006: 20000 RON; suma repartizată, 8000 RON; curs 30.06.2007, 3,5686 RON/Euro; $8000/3,5686 = 2242$ Euro</p> <p>an 2007: 75000 RON; suma repartizată, 30000 RON; curs 29.06.2007, 3,1340 RON/Euro; $30000/3,1340 = 9572$ Euro</p> <p>an 2008: 107500 RON; suma repartizată, 43000 RON; curs 01.07.2008, 3,6435 RON/Euro; $43000/3,6435 = 11802$ Euro</p> <p>Total: $2242 + 9572 + 11802 = 23616$ Euro</p>	23616 Euro = 23,616	
	<p>10. Dumitrașcu Gh. (responsabil partener), Bălănescu D.T. - membru în echipă, <i>Cercetări asupra utilizării biomasei în centrale cogenerative cu microturbomotoare – UBICENT</i>, CEEX 272 /2006, desfășurat în perioada 2006-2008.</p> <p>Valoare contract – an 2006: 10300 RON; suma repartizată, 1030 RON; curs 30.06.2007, 3,5686 RON/Euro; $1030/3,5686 = 289$ Euro</p> <p>an 2007: 22649 RON; suma repartizată, 2265 RON; curs 29.06.2007, 3,1340 RON/Euro; $2265/3,1340 = 723$ Euro</p> <p>an 2008: 62051 RON; suma repartizată, 6205 RON; curs 01.07.2008, 3,6435 RON/Euro; $6205/3,6435 = 1703$ Euro</p> <p>Total: $289 + 723 + 1703 = 2715$ Euro</p>	2715 Euro = 2,715	
	<p>11. Dumitrașcu Gh. (responsabil partener), Bălănescu D.T. - membru în echipă, <i>Soluție avansată pentru reducerea zgomotului produs de motoarele avioanelor de transport pasageri –TRIPLUFLUX</i>, CEEX 6-4/2005, desfășurat în perioada 2005-2007.</p> <p>Valoare contract – an 2006: 42450 RON; suma repartizată, 16980 RON; curs 30.06.2007, 3,5686 RON/Euro; $16980/3,5686 = 4758$ Euro</p> <p>an 2007: 42450 RON; suma repartizată, 16980 RON; curs 29.06.2007, 3,1340 RON/Euro; $16980/3,1340 = 5418$ Euro</p> <p>Total: $4758 + 5418 = 10176$ Euro</p>	10176 Euro = 10,176	

RIA (A3.2): Prezentarea / diseminarea rezultatelor: prezență la manifestări științifice în calitate de autor / co-autor de lucrări, profesor invitat
 N5 = număr

Cerințe:
N5 = 30 ≥ 10

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

Nr. crt.	Congrese / conferințe / workshopuri internaționale	Lucrări prezentate	Anul
1.	The 9 th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2020, June 4 - 5, 2020, Iași, Romania	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> The 9 th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2020, June 4 - 5, 2020, Iași, Romania, IOP Conference Series: Materials Science and Engineering, volume 997, 2020, paper 012139, 7 pp, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012139/pdf 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> The 9 th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2020, June 4 - 5, 2020, Iași, Romania, IOP Conference Series: Materials Science and Engineering, volume 997, 2020, paper 012140, 7 pp, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012140/pdf 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> The 9 th International Conference on Advanced Concepts in Mechanical Engineering – ACME 2020, June 4 - 5, 2020, Iași, Romania, IOP Conference Series: Materials Science and Engineering, volume 997, 2020, paper 012149, 16 pp, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012149/pdf	2020
2.	The XXII nd National Conference on Thermodynamics with International Participation, 23–24 May 2019, Galați, Romania	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> The XXII nd National Conference on Thermodynamics with International Participation, 23–24 May 2019, Galați, Romania, IOP Conference Series: Materials Science and Engineering, volume 595, 2019, paper 012040, 7 pp, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/595/1/012040/pdf Homutescu V.M., Bălănescu D.T. , Panaite C.E., Lupu A.G., <i>Kinematic Beta-Type Stirling Motor-Driven Compressor.</i> The XXII nd National Conference on Thermodynamics with International Participation, 23–24 May 2019, Galați, Romania, IOP Conference Series: Materials Science and Engineering, volume 595, 2019, paper 012029, 8 pp, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/595/1/012029/pdf 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> The XXII nd National Conference on Thermodynamics with International Participation, 23–24 May 2019, Galați, Romania, IOP Conference Series: Materials Science and Engineering, volume 595, 2019, paper 012050, 12 pp, IOP Publishing, https://iopscience.iop.org/article/10.1088/1757-899X/595/1/012050/pdf	2019
3.	12 th International Conference Interdisciplinarity in Engineering, INTER-ENG 2018, Petru Maior University of Tîrgu Mureș, Romania, 4-5 October 2018	Bălănescu D.T. , Homutescu V.M., <i>Study on condensing boiler technology potential accounting various fuels.</i> Procedia Manufacturing, volume 23, 2019, pp 504-512, 12th International Conference Interdisciplinarity in Engineering, INTER-ENG 2018; Petru Maior University of Tîrgu Mureș, Romania; 4-5 October 2018, https://doi.org/10.1016/j.promfg.2019.02.246 Bălănescu D.T. , Homutescu V.M., <i>Performance analysis of a gas turbine combined cycle power plant with waste heat recovery in Organic Rankine Cycle.</i> Procedia Manufacturing, volume 32, 2019, pp 520-528, 12th International Conference Interdisciplinarity in Engineering, INTER-ENG 2018; Petru Maior University of Tîrgu Mureș, Romania; 4-5 October 2018, https://doi.org/10.1016/j.promfg.2019.02.248	2018
4.	The 8 th International Conference On Advanced Concepts In Mechanical Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary	Bălănescu D.T. , Homutescu V.M., Popescu A., <i>Micro gas and steam turbines power generation system for hybrid electric vehicles.</i> Proceedings of the 8th International Conference On Advanced Concepts In Mechanical Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary ACME 2018 June 7 – 8, 2018, Iași, Romania, 9 pp. Bălănescu D.T. , Homutescu V.M., Lupu Ana Georgiana, <i>Experimental study on enhanced heat transfer by water spraying in the cooling air flow.</i> Proceedings of the 8th International Conference On Advanced Concepts In Mechanical Engineering,	2018

	ACME 2018 June 7 – 8, 2018, Iași, Romania	Faculty of Mechanical Engineering – 70 Years Anniversary ACME 2018 June 7 – 8, 2018, Iași, Romania, 8 pp. Homutescu V.M., Bălănescu D.T. , Lupu Ana Georgiana, <i>Physico-Mathematical Model for Theoretical One-Stage Heat-Driven Compressor</i> . Proceedings of the 8th International Conference On Advanced Concepts In Mechanical Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary ACME 2018 June 7 – 8, 2018, Iași, Romania, 9 pp. Homutescu V.M., Bălănescu D.T. , Popescu A., <i>Adiabatic Behavior of the Vuilleumier Heat Pump</i> . Proceedings of the 8th International Conference On Advanced Concepts In Mechanical Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary ACME 2018 June 7 – 8, 2018, Iași, Romania, 10 pp. Lupu A.G., Homutescu V.M., Bălănescu D.T. , Popescu A., <i>Efficiency of solar collectors – a review</i> . Proceedings of the 8th International Conference On Advanced Concepts In Mechanical Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary ACME 2018 June 7 – 8, 2018, Iași, Romania, 8 pp. Lupu A.G., Homutescu V.M., Bălănescu D.T. , Popescu A., <i>A review of solar photovoltaic systems cooling technologies</i> . Proceedings of the 8th International Conference On Advanced Concepts In Mechanical Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary ACME 2018 June 7 – 8, 2018, Iași, Romania, 8 pp. Frățița M., Uzuneanu K., Bălănescu D.T. , <i>About I-beam versus H-beam connecting rod design using Inventor Autodesk 2018</i> . Proceedings of the 8th International Conference On Advanced Concepts In Mechanical Engineering, Faculty of Mechanical Engineering – 70 Years Anniversary ACME 2018 June 7 – 8, 2018, Iași, Romania, 8 pp.	
5.	46 th International Symposium "Actual Tasks on Agricultural Engineering", Opatija, Croatia, 2018	Bălănescu D.T. , Homutescu V.M., <i>Agricultural Machinery Hybrid Propulsion System Based on Combined Cycle Gas and Steam Turbines</i> . 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
6.	11 th 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., <i>A new approach in combined cycles – low power unit for hybrid terrestrial propulsion. Performance assessment</i> . Procedia Manufacturing, 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, https://doi.org/10.1016/j.promfg.2018.03.105 Bălănescu D.T. , Homutescu V.M., <i>Dimensional assessment of a low power combined cycle system for hybrid propulsion</i> . 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, https://doi.org/10.1016/j.promfg.2018.03.106	2017
7.	The 7 th 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., <i>Air turbine - an interesting solution for straw energy conversion into electricity</i> . 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., <i>Dimensional approach on hot air turbine power plant in opened cycle for straw recycling</i> . 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 C.E., Atanasiu M.V., <i>Variable displacement alpha-type Stirling engine</i> . 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
8.	10 th International Conference Interdisciplinarity in Engineering, INTER-ENG 2016, Petru Maior University of Tîrgu Mureș, Romania, 6-7 October 2016	Bălănescu D. T. , Homutescu V.M., <i>Straw Energy saving Solution: Power Plant Based on a Hot Air Turbine</i> . 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. Bălănescu D.T. , Homutescu V.M., <i>Experimental Study on the Combustion System Optimization in the Case of a 36 kW Condensing Boiler</i> . 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.	2016
9.	7 th 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., <i>Physico-Mathematical Model of a Hot Air Engine Using Heat From Low-Temperature Renewable Sources of Energy</i> . U.P.B. Sci. Bulletin, series D, volume 78, iss. D, 2016, ISSN 1223-7027, p. 183-190.	2015
10.	The 6 th International Conference On Advanced Concepts In Mechanical Engineering, Faculty Of Mechanical Engineering - June 12-13, 2014, Iași,	Bălănescu D.T. , Homutescu V. M., Vasiliu P.-D., Hrițcu C.-E., <i>Combined Cycle Units – an Alternative to Reciprocating Engines in Terrestrial Propulsion Field. Estimation of Performances</i> . Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 289-294, DOI doi.org/10.4028/www.scientific.net/AMM.659.289 Bălănescu D.T. , Homutescu V. M., Hrițcu C.-E., Talif S.-G., <i>Combined Cycle Units for Terrestrial Propulsion. Dimensional</i>	2014

	Romania	<p><i>Approach</i>. Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 295-300, DOI 10.4028/www.scientific.net/AMM.659.295.</p> <p>Homutescu V. M., Bălănescu D.T., <i>Gamma-Type Stirling Motor-Driven Compressor</i>. 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.</p> <p>Homutescu V. M., Bălănescu D.T., <i>Physico-Mathematical Model of the Theoretical Gamma-Type Stirling Motor-Driven Compressor</i>. 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.</p> <p>Rakoși E., Manolache G., Talif S.G., Bălănescu D.T., <i>COSRING-LUJET, Integrated New Concept in Automotive I.C. Engines for a Better Lubrication</i>. Applied Mechanics and Materials Vol. 659 (2014) - Advanced Concepts Mechanical Engineering II, ISSN 1660-9336, Trans Tech Publications, Switzerland, p. 231-236, DOI 10.4028/www.scientific.net/AMM.659.231.</p>	
11.	5 th International Conference on Thermal Engines and Environmental Engineering, November 1-2, 2013, Galați, Romania	Bălănescu D.T. , Homutescu V.M., <i>Recovering Energy from Wood Wastes in a Semi-closed Cycle Power Plant</i> . Termotehnica, anul XVII, Supliment nr. 1S/2013, p. 5-8, Ed. AGIR, ISSN-L 1222-4057, ISSN (online) 2247-1871.	2013
12.	The 5 th International Conference On Advanced Concepts In Mechanical Engineering, Faculty Of Mechanical Engineering - June 14-15, 2012, Iași, Romania	Bălănescu D.T. , Vasiliu P.D., Hrițcu C.E., <i>Biowastes – from Environmental Threat to Power Generation</i> . Bul. I.P.I., Tom LIX (LXIII), Fasc. 4, 2013, p. 49-58. Bălănescu D.T. , Vasiliu P.D., Hrițcu C.E., <i>Energetic Analysis of a Biogas Combined Cycle / CHP System Based on ORENDA OG72500 Gas Turbine</i> . Bul. I.P.I., Tom LIX (LXIII), Fasc. 2, 2013, p. 39-46. Ivancu I., Dragomir-Stanciu D., Crășmaru I., Bălănescu D.T. , Rău G.O., <i>Modelling of a Plate Cross Flow Heat Exchanger</i> . Bul. I.P.I., Tom LVIII (LXII), Fasc. 4, 2012, p. 65-70.	2012
13.	Cinquieme Edition du Colloque francophone – COFRET 2010 sur l'énergie – environnement – économie & thermodynamique - al cincilea colocviu francofon, COFRET 2010, 5-7 mai 2010, Iași, Romania	Bălănescu D.T. , Homutescu V.M., <i>An Innovative Solution for Clean Terrestrial Propulsion: Small Scale Combined Cycle Unit. Performance Evaluation</i> . Bul. I.P.I., Tom L (LVI), Fasc. 3b, p. 37-46, ISSN 1011-2855. Homutescu V.M., Bălănescu D.T. , <i>Optimization of Diameter Ratio for Alpha-Type Stirling Engines</i> . Bul. I.P.I., Tom L (LVI), Fasc. 3a, p. 313-322, ISSN 1011-2855.	2010
14.	3 rd International Conference on Thermal Engines and Environmental Engineering, June 4-6, 2009, Galați, Romania	Bălănescu D.T. , Hrițcu C.E., Stan A., <i>Upgrade of the Power Adjustment System of a 24 kW Wall-Mounted Condensing Combination Boiler</i> . Proceedings of the 3 rd International Conference on Thermal Engines and Environmental Engineering, Galați, 2009, p. 22-27, ISBN 978-973-627-442-8. Bălănescu D.T. , Hrițcu C.E., Talif S.G., <i>Diagnosis of a Domestic Hot Water Preparation System Consisting of a 24 kW Wall-Mounted Boiler and an 80 l Water Tank</i> . Proceedings of the 3 rd International Conference on Thermal Engines and Environmental Engineering, Galați, 2009, p. 28-33, ISBN 978-973-627-442-8.	2008
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C1 = numărul de citări

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

C = C1 + S_{FI}

Cerințe:

C = 51 + 180,987 = 231,987 ≥ 25

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