

FISA INDIVIDUALA DE CALCUL A INDICATORILOR C2.1 si C2.2

Domeniul: INGINERIE MECANICA, MECATRONICA SI ROBOTICA

Cadrul didactic: **Unguresan Paula Veronica**
 Functia: **Sef de lucrari**
 Departamentul: **Inginerie Mecanica**
 Facultatea: **Mecanica**

Indicatorul C2.1 - Calitatea resursei umane

| Criteriul CDI | | | Criteriul DID | | | Criteriul RIA | | |
|---|---------------|--------------|--|---------------|--------------|--|---------------|--------------|
| Indicatori cu contribuție principală (obligatorie) în criteriu | | | | | | | | |
| Rezultate și comunicări publicate ca articole științifice (CDI-ART) | Minim CNATDCU | Punctaj | Manuale - suport curs, format tipărit sau format electronic (DID- MSC) | Minim CNATDCU | Punctaj | Management proiecte: a) Director grant național sau internațional, sau responsabil partener în consorțiu (RIA-GRA); b) Director contracte cu beneficiari din mediul economic (RIA-CTR) | Minim CNATDCU | Punctaj |
| | 3 | 37.44 | | 3 | 12.52 | | 3 | 3.36 |
| Indicatori cu contribuție complementară în criteriu | | | | | | | | |
| a) Brevete de invenție (CDI-BRV) | 2 | 1.60 | a) Laboratoare / standuri pentru activități didactice (DID-LAB) | 2 | 2.00 | Activitate de cercetare – dezvoltare – inovare în cadrul granturilor / proiectelor | 2 | 11.10 |
| b) Produse, tehnologii și servicii inovative (CDI-PTS) | | | b) Platforme informatice educaționale (DID-PIE) | | | | | |
| c) Monografiile de specialitate (CDI-MON) | | | | | | | | |
| TOTAL | 5 | 39.04 | | 5 | 14.52 | | 5 | 14.46 |

Scorul obținut la indicatorul C2.1: **13.604**

Indicatorul C2.2 - Impactul activității științifice

| Baza de date | Web of Knowledge | Scopus | Google Scholar |
|--------------|------------------|--------|----------------|
| h-index | 2 | 2 | 3 |

Scorul obținut la indicatorul C2.2: **2.20**

Decan
Prof. dr. ing. Cristian Dudescu

Director departament
Prof. dr. ing. Dan Opruța

Candidat
S.I. dr.ing. Paula Unguresan

CRITERIUL CDI

CDI-ART

| Nr. Crt | Referința bibliografică | Factor impact | Punctaj |
|------------|--|------------------|---------|
| A1 | Florin BODE, Corina GIURGEA, Victor HODOR, Paula UNGURESAN, <i>Investigation of the non-reactive flow in a swirling burner</i> , Journal Mechanika, ISSN 1392-1207, pag.42-47, Nr.5(79), 2009, WOS:000271802000006, http://zurnalas.mechanika.ktu.lt/files/mech579/Bode579.pdf http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=4&SID=4D8JCphtZzQ96pSO2Yg&page=1&doc=13 | 0.780 | 0.880 |
| C1-A1 | Sinkunas, S.; Kiela, A.; Maciulevicius, J., <i>Research of Heat Transfer in the Entrance Region of Infinite Film Flow</i> , 415-419, MECHANIKA 2010: PROCEEDINGS OF THE 15TH INTERNATIONAL CONFERENCE 2010, (Scopus, Web of Science) http://apps.webofknowledge.com/ux4ll8xu6v.useaccesscontrol.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=2&SID=4D8JCphtZzQ96pSO2Yg&page=1&doc=1 WOS:000290894100079 | - | 0.100 |
| C2-A1 | J. R. Gatabi, I. R. Gatabi, M. Soltani, P. Mohammadi, M. Dabbag, <i>An improved measurement algorithm for increasing the accuracy of sing-around type ultrasonic flow meters</i> , MECHANIKA Issue: 2 Pages: 209-213 Published: 2012 WOS:000303788600014 http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=CitingArticles&qid=19&SID=4D8JCphtZzQ96pSO2Yg&page=1&doc=1 http://dx.doi.org/10.5755/j01.mech.18.2.1560 | - | 0.100 |
| A2 | Paula UNGURESAN, Florin BODE, Mugur BALAN, Andrei CECLAN, <i>Analysys of the cogeneration implementation potential into an existing saturated steam boiler industrial plant</i> , Revista Termotehnica, ISSN-L 1222-4057, online ISSN 2247-1871, issue 1/2011, pag. 104-109, Romania; http://www.agir.ro/buletine/981.pdf (BDI: INDEX COPERNICUS INTERNATIONAL, ACADEMIC KEYS, getCITED) | - | 0.100 |
| A3 | Mugur BĂLAN, Paula UNGUREȘAN, Florin BODE, Andrei CECLAN, Lorentz JÄNTSCHI, <i>Study of energy recovery options at a Wistra ceramoc insulators oven</i> , National Conference of Thermodynamics with International Participation 26-28 May 2011, Craiova, Revista Termotehnica (Supliment), ISSN-L 1222-4057, online ISSN 2247-1871, nr 1/2011, Romania http://www.revistatermotehnica.agir.ro/files/1_2011_Energie.pdf (BDI: INDEX COPERNICUS INTERNATIONAL, ACADEMIC KEYS, getCITED) | - | 0.100 |

| | | | |
|-------|---|---|-------|
| A4 | Lavinia Socaciu, Paula Veronica Unguresan, <i>Using the Analytic Hierarchy Process to Prioritize and Select Phase Change Materials for Comfort Application in Buildings</i> - Mathematical Modelling in Civil Engineering, Volume 10, Issue 1, Pages 21–28, ISSN (Online) 2066-6934, DOI: 10.2478/mmce-2014-0003, April 2014 | - | 0.100 |
| C1-A4 | Lavinia Socaciu, Oana Giurgiu, Daniel Banyai, Mihaela Simion, PCM selection using AHP method, Energy Procedia 85 (2016) 489 – 497 , | - | 0.100 |
| C2-A4 | Lavinia Socaciu, Oana Giurgiu, Mihaela Simion, PCM Selection Using AHP Method to Maintain Thermal Comfort of the Vehicle Occupants, Energy Procedia 85 (2016) 489 – 497 | - | 0.100 |
| A5 | Lavinia Socaciu, Angela Plesa, Paula Unguresan, Oana Giurgiu, <i>Review on phase change materials for building applications</i> Leonardo Electronic Journal of Practices and Technologies, ISSN 1583-1078, Issue 25, July-December 2014,p. 179-194 | - | 0.100 |
| A6 | Marcu, I. L., Unguresan P., Nascutiu L., (2009): <i>Aspects Regarding the Alternating Flow Driven Hydraulic Systems</i> , Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium, 25-28th November 2009, Vienna, Austria, pag, 0155-0156, ISSN 1726-9679, ISBN 978-3-901509-70-4, Katalinic, B. (Ed.), Published by DAAAM International Vienna, Vienna (2009). http://connection.ebscohost.com/c/articles/47080571/aspects-regarding-alternating-flow-driven-hydraulic-systems | - | 0.100 |
| C1-A6 | N Petrescu, S Mircea, A Tronac, E Manole, (2014): <i>Some Mathematical Considerations on the Natural Protection of the Danube Delta Coastal Zone in Romania</i> , in Procedia Engineering, Volume 69, 2014, pag. 1372–1380, ISSN: 1877-7058, doi:10.1016/j.proeng.2014.03.131, http://www.sciencedirect.com/science/article/pii/S1877705814003774# | - | 0.100 |
| C2-A6 | Daniel Banyai, Ioana Sfarlea, Dan Opruta, Experimental research on variable hydraulic resistors of servo-hydraulic valves,Energy Procedia 85 (2016) 44 – 51, doi:10.1016/j.egypro.2015.12.273 | - | 0.100 |
| A7 | Plesa, Angela, Opruta D., Teborean I., Unguresan, Paula, <i>Some practical aspects regarding the flow in a plate and fins heat exchanger</i> , Experimental Fluid mechanics 2006,Proceedings, pg.157-160, ISSN 80-7372-141-4; http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=4&SID=Q2IF7zujV6fnlfzTehQ&page=1&doc=3 | - | 0.100 |

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|--------|--|-------|-------|
| A8 | Madarasan, T., Unguresan, Paula, Contributions regarding the exergetic analysis of heat exchangers, Revista Termotehnica nr.1-2/2006, An X, nr.1-2/2006, http://www.revistatermotehnica.agir.ro/numar_revista.php?id=70 ; http://www.agir.ro/buletine/1221.pdf . (BDI: INDEX COPERNICUS INTERNATIONAL, ACADEMIC KEYS, getCITED) | - | 0.100 |
| C1-A8 | Sit M.L., Sit B.M., Burciu V.I., Ioişer A.M., <i>Heat pump gas cooler control using criterion of minimum exergy losses</i> , Journal: Problems of the regional energetics, Academy of Science of Moldova, №: 2(25) 2014, ISSN 1857-0070; http://journal.ie.asm.md/assets/files/01_02_25_2014.pdf | - | 0.100 |
| C2-A8 | Hornet Mircea, Nastac Cristian, CALCULATION OF PERFORMANCE INDICATORS FOR HEAT PIPES RECOVERY UNITS WHICH OPERATE IN GAS-GAS MODE, Bulletin of the Transilvania University of Braşov • Vol. 5 (54) - 2012 Series 1: Special Issue No. 1. ISSN- 2062-2127 | - | 0.100 |
| A9 | V. HODOR, T. MADARASAN, R. BALAN, Paula UNGURESAN, Cercetari privind realizarea unor regimuri termice impuse in schimbatoarele de caldura lichid-lichid, Revista Termotehnica nr.1/2002, ISSN-L 1222-4057, 2 numere pe an BDI: INDEX COPERNICUS INTERNATIONAL, ACADEMIC KEYS, getCITED Online: ISSN 2247-1871, http://www.agir.ro/buletine/1147.pdf | - | 0.100 |
| A10 | Angela Plesa, Dan Opruta, Monica Balcau, Paula Unguresan, Mathematical model for air flow in heat exchanger sinusoidal fins, Revista Termotehnica, Nr.2/2009, pg.22-25, ISSN-L 1222-4057, BDI: INDEX COPERNICUS INTERNATIONAL, ACADEMIC KEYS, getCITED Online: ISSN 2247-1871, http://www.agir.ro/buletine/549.pdf | - | 0.100 |
| A11 | Paula Ungureşan, Dorin Petreuş, Adrian Pocola, Mugur Bălan, Potential of Solar ORC and PV Systems to Provide Electricity under Romanian Climatic Conditions, Energy Procedia. Volume 85, January 2016, Pages 584–593, doi:10.1016/j.egypro.2015.12.248 | - | 0.100 |
| C1-A11 | Christos Tzivanidis, Evangelos Bellos, Kimon A. Antonopoulos, Energetic and financial investigation of a stand-alone solar-thermal Organic Rankine Cycle power plant, Energy Conversion and Management, Volume 126, 15 October 2016, Pages 421–433 | 4.801 | 4.901 |
| C2-A11 | Rodolfo Taccani. John Besong Obi. Maurizio De Lucia. Diego Micheli. Giuseppe Toniato. Development and Experimental Characterization of a Small Scale Solar Powered Organic Rankine Cycle (ORC), Energy Procedia Volume 101, November 2016, Pages 504-511 | - | 0.100 |
| C3-A11 | Raluca Porumb, Bogdan Porumb, Mugur Balan, Numerical Investigation on Solar Absorption Chiller with LiBr-H2O Operating Conditions and Performances, Energy Procedia Volume 112, March 2017, Pages 108–117 | - | 0.100 |

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|--------|---|-------|-------|
| A12 | Bogdan Porumb, Paula Ungureșan, Lucian Fechete Tutunaru, Alexandru Șerban, Mugur Bălan, A Review of Indirect Evaporative Cooling Operating Conditions and Performances, Energy Procedia, Volume 85, January 2016, Pages 452–460, doi:10.1016/j.egypro.2015.12.226 | - | 0.100 |
| C1-A12 | Yi Chen, Honhxing Yang, Yimo Luo, Experimental study of plate type air cooler performances under four operating modes, BUILDING AND ENVIRONMENT, Volume 104, 1 August 2016, Pages 296–310 | 3.394 | 3.494 |
| C2-A12 | Yi Chen, Hongxing Yang, Yimo Luo, Parameter sensitivity analysis and configuration optimization of indirect evaporative cooler (IEC) considering condensation, Applied Energy, Volume 194, 15 May 2017, Pages 440–453 | 5.746 | 5.846 |
| C3-A12 | Octavian Pop, Lucian Fechete Tutunaru, Mugur Balan, Numerical Model for Solidification and Melting of PCM Encapsulated in Spherical Shells, Energy Procedia Volume 112, March 2017, Pages 336–343 | - | 0.100 |
| A13 | Bogdan Porumb, Paula Ungureșan, Lucian Fechete Tutunaru, Alexandru Șerban, Mugur Bălan, , A Review of Indirect Evaporative Cooling Technology, Energy Procedia, Volume 85, January 2016, Pages 461–471, doi:10.1016/j.egypro.2015.12.228 | - | 0.100 |
| C1-A13 | Yi Chen, Honhxing Yang, Yimo Luo, Experimental study of plate type air cooler performances under four operating modes, BUILDING AND ENVIRONMENT, Volume 104, 1 August 2016, Pages 296–310 | 3.394 | 3.494 |
| C2-A13 | Yi Chen, Hongxing Yang, Yimo Luo, Parameter sensitivity analysis and configuration optimization of indirect evaporative cooler (IEC) considering condensation, Applied Energy, Volume 194, 15 May 2017, Pages 440–453 | 5.746 | 5.846 |
| C3-A13 | Zeynab Emdadi , Nilofar Asim , Mohd Ambar Yarmo, Roslinda Shamsudin , Masita Mohammad and Kamaruzaman Sopian , Green Material Prospects for Passive Evaporative Cooling Systems: Geopolymers, Energies 2016, 9(8), 586, doi:10.3390/en9080586 | 2.077 | 2.177 |
| C4-A13 | Octavian Pop, Lucian Fechete Tutunaru, Mugur Balan, Numerical Model for Solidification and Melting of PCM Encapsulated in Spherical Shells, Energy Procedia Volume 112, March 2017, Pages 336–343 | - | 0.100 |
| C5-A13 | Rajat Subhra Dasa, Sanjeev Jain, Experimental investigations on a solar assisted liquid desiccant cooling system with indirect contact dehumidifier, Solar Energy, Volume 153, 1 September 2017, Pages 289–300, https://doi.org/10.1016/j.solener.2017.05.071 | 3.685 | 3.785 |
| A14 | M Simion, L Socaciu, P Unguresan, Factors which Influence the Thermal Comfort Inside of Vehicles, Energy Procedia Volume 85, January 2016, Pages 472–480 | - | 0.100 |

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|--------|--|-------|-------|
| C1-A14 | Miloš Fojtlín, Jan Fišer, Jan Pokorný, Aleš Povalač, Tomáš Urbanec, Miroslav Jícha, An innovative HVAC control system: Implementation and testing in a vehicular cabin, Journal of Thermal Biology Available online 13 April 2017 In Press, Corrected Proof — Note to users | 1.621 | 1.721 |
| C2-A14 | Lajunen, A., "Energy Efficiency and Performance of Cabin Thermal Management in Electric Vehicles," SAE Technical Paper 2017-01-0192, 2017, doi:10.4271/2017-01-0192. | - | 0.100 |
| C3-A14 | C.C.Goh ^{1,2} , L.M.Kamarudin, S.Shukri, N.S.Abdullah ,A.Zakaria, Monitoring of Carbon Dioxide (CO ₂) Accumulation in Vehicle Cabin, Conference: 2016 3rd International Conference on Electronic Design (ICED), August 2016 DOI: 10.1109/ICED.2016.7804682 | - | 0.100 |
| A15 | F. Bode, V. Hodor, T. Madarasan, P. Ungureşan, "Investigation on turbulence related to a swirling burner within its back pressure combustion chamber", Scientific Bulletin of the Politehnic University of Timisoara, Transaction on Mechanics, ISSN 1224-6077 | - | 0.000 |
| C1-A15 | Mircea DIUDEA, Victor HODOR, FLUID-DYNAMIC ANALYSIS IN VEHICLE DESIGN, Archives > Vol 56, No 4 (2013) http://atna-mam.utcluj.ro/index.php/Acta/article/view/115 ; | - | 0.100 |
| C2-A15 | Mircea Mrenes, Geometrical study for a private burner mixing pipe." Annals of DAAAM & Proceedings (2010), ISSN: 1726-9679 | - | 0.100 |
| C3-A15 | Mircea Mrenes, Simulation of gas flow in a private burner mixing pipe, Annals of DAAAM & Proceedings (2010), ISSN: 1726-9679 | - | 0.100 |
| A16 | Victor HODOR, Florin BODE, Paula UNGUREŞAN, Claudiu RATIU, CFD first prediction in designing a 50 kW swirling burner within its combustion chamber, Scientific Bulletin of the Politehnica University of Timisoara, Transaction on Mechanics, Vol.52, issue 3, ISSN 1224-6077, 2007 http://eng.upt.ro/buletin/numere/2007/2007_03.pdf | - | - |
| C1-A16 | Adi Surjosatyo , Pembakaran Gas Hasil Gasifikasi Biomassa di Premixed Gas Burner dengan Metoda 3D Computational Fluid Dynamic, Jurnal Teknik Mesin, Vol 12, No 1 (2010), ISSN 1410-9867; http://jurnalmesin.petra.ac.id/index.php/mes/article/view/18037/17944 ; | - | 0.100 |

CRITERIUL DID

DID-MSD

| Nr. Crt | Manuale suport de curs | Pagini | Punctaj |
|--|---|--------|--------------|
| 1 | Florin Bode, Paula Unguresan, Combustie si instalatii de ardere, Editura UT Pres, 2015, ISBN 978-976-662-998-3 | 446 | 8.92 |
| 2 | Paula Unguresan Florin Bode, Termodinamica aplicata, UT Press, 2017, ISBN 978-606-737-248-9, format electronic, pe CD | 180 | 3.60 |
| Total punctaj criteriul CDI-MSD | | | 12.52 |

DID-MSD

| Nr. Crt | Standuri/laboratoare pentru activități didactice | Indrumator /pag | Punctaj |
|--|---|-----------------|-------------|
| 1 | <i>Coautor Indrumator lucrari de laborator-1. Madarasan, T., Apahidean, B., Ghiran, I., Teborean, I., Balan, M., Unguresan, Paula, B.Duma, F.Bode - Indrumator pentru lucrari de termotehnica si masini termice, Editura Toderco, Cluj-Napoca, 2006, ISBN 973-7695-17-8, in format electronic, pe CD.</i> | - | 1 |
| 2 | Dezvoltare stand de laborator- Stand pentru studiul transferului de căldură și masă(Balan Mugur, Pocola Adrian, Unguresan Paula), 2016-2017 | - | 1 |
| Total punctaj criteriul CDI-MSD | | | 2.00 |

Total punctaj criteriul DID

14.52

CRITERIUL RIA

RIA – Contribuție principală în calitate de director proiect/grant

| Nr. crt | Titlul proiectului/grantului / Perioada / Beneficiar | Tip proiect | Valoare totală | Valoare incasata | Punctaj |
|---------|--|-------------|----------------|------------------|---------|
| 1 | <i>Cercetari privind optimizarea exergetica a ciclurilor termodinamice, cu aplicatie in instalatiile termoenergetice cu cogenerare , Grant CNCISIS TD nr. 250, Director de proiect, perioada 2004-2006.</i> | RIA-GRA | 13000 (RON) | 13000 | 0.260 |
| 2 | <i>Pilot study concerning the bibliographical syntesis of indirect evaporative cooling, Director de contract, Proiect de cercetare cu mediul economic international, EMEA - Thermal Management -Emerson Network Power, Bologna Area, Italy, 2013</i> | RIA-CTR | 6200 (Euro) | 6200 | 3.100 |

Total punctaj criteriul RIA - indicatori principali 3.360

RIA – Contribuție complementara - membru echipă cercetare grant/proiect

| Nr. crt | Titlul proiectului/grantului / Perioada / Beneficiar | Tip proiect | Valoare totală | Valoare incasata | Punctaj |
|---------|---|-------------|----------------|------------------|---------|
| 1 | <i>Advanced strategies for high performance indoor Environmental Quality in Operating Rooms – EQUATOR, PN-II-PT-PCCA-2011-3.2-1212, Grant PARTENERIATE of the Romanian National Authority for Scientific Research, CNCS – UEFISCDI, 2012-2016, Numar contractare UEFISCDI: 92/2012 Director proiect: dr.ing. Ilinca Nastase UTCB,</i> | RIA-GRA | 570000 (RON) | 383792 | 1.919 |
| 2 | <i>Control and numerical analysis of combustion instability using acoustic analogy, Grant CNCISIS IDEI, nr. 1071/2007, 2007-2010, director proiect dr.ing. Victor Hodor</i> | RIA-GRA | 995000 (RON) | 770000 | 3.850 |
| 3 | <i>Hidrodinamica vartejurilor si aplicatii, Grant CNCISIS A- consortiu, cod CNCISIS 33, participare in calitate de membru, perioada 2004-2007, Director Prof. Dr. Ing. Romeo Susan-Resiga, responsabil UTCN Prof. Dr. Ing. Vaida Liviu</i> | RIA-GRA | 2000000 (RON) | 47400 | 0.237 |

| | | | | | |
|---|---|---------|-----------|-----------|-------|
| 4 | <i>Studii privind utilizarea combustibililor pe baza de uleiuri vegetale ca si sursa de energie regenerabila pentru fermele agricole, PN II-21046, EnergoEcoFarm, 2007-2010</i> | RIA-GRA | 1975500.0 | 1018805.0 | 5.094 |
|---|---|---------|-----------|-----------|-------|

Total punctaj criteriul RIA - indicatori complementari 11.100

Total punctaj criteriul RIA

14.460