

Candidat: dr. ing Florentina Bunea

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Loretta

FISA DE INDEPLINIRE A STANDARDELOR MINIMALE OBLIGATORII PENTRU OBTINEREA ABILITARII - INGINERIE MECANICĂ

Anexa nr. 17 - COMISIA DE INGINERIE MECANICĂ

STANDARDE MINIMALE NECESARE ȘI OBLIGATORII PENTRU CONFERIREA TITLURILOR DIDACTICE DIN ÎNVĂȚĂMÂNTUL SUPERIOR ȘI A GRADELOR PROFESIONALE DE CERCETARE – DEZVOLTARE

Nr.	Domeniul activitatilor		Subcategorii				Indicator	Punctaj
1	A1	Activitatea didactica si profesionala DID1	A 1.1	Materiale suport de curs (conform fisa disciplina concurs)	Format electronic/tiparit min 100pag	Coordonator / Prim autor	N1.1	1
					Format electronic/tiparit min 100pag	Co-autor	N1.2	0
					Format electronic disponibil pe platforma universitatii / departamentului (autor)		N1.3	1
			A1.2	Material didactic / Dezvoltare laboratoare aplicatii	Standuri laborator (constructie / modernizari) certificate de directorul de departament		N2.1	4
					Indrumator laborator / carte aplicatii format tiparit sau electronic		N2.2	2
					Aplicatie informatica educationala		N2.3	0
					Activitatea de cercetare stiintifica, dezvoltare tehnologica si inovare CDI	A2.1	Articole si publicatii stiintifice indexate Web of Science unde n este numarul de autor si FI	Autor corespondent/prim
n>=4	P1.2	8.256						
Co-autor	n<=3	P1.3	0					
	n>=4	P1.4	2.19					
	A2.2	Articole si publicatii BDI neincluse la A2.1	Autor corespondent/prim autor		N3.1	9		
			Co-autor		N3.2	17		

2	A2		A2.3	Brevete de inventii indexate	Internationale indexate in Web of Science - Derwent Inovation		P2.1	11.44
					Nationale Indexate OSIM		P2.2	0
			A2.4	Produse, tehnologii, platforme si servicii inovative (validate conform procedurilor specifice unitatilor de invatamant superior sau cercetare)	Coordonator / Prim autor	nr	N4.1	2
					Co-autor	nr	N4.2	2
			A2.5	Monografii / carti de specialitate format tiparit sau electronic	Coordonator / Prim autor	nr	N4.3	1
					Co-autor	nr	N4.4	0
3	A3	Recunoastere a si impactul activitatii RIA	A3.1	Atragere resurse financiare prin granturi / proiecte / contracte terti	Director sau responsabil partener la grant / proiect castigat prin competitie nationala sau internationala	suma echivalenta in mii de eur	S1	503.7
					Membru in echipa grant / proiect castigat prin competitie nationala sau internationala / contracte terti	suma echivalenta in mii de eur	S2	162.3
			A3.2	Prezentarea / Diseminarea rezultatelor: prezenta la manifestari stiintifice in calitate de autor/co-autor de lucrari, profesor invitat	Congrese / Conferinte / Workhopuri internationale, profesor invitat la universitati / institute din strainatate	nr	N5	20
			A3.3	Citari in publicatii BDI (se exclud autocitarile)	C1 = nr de citari Sfi=suma factorilor de impact al publicatiilor WOS in care apar citarile	C=C1+Sfi	C	356.06

Materiale suport de curs (conform fisa disciplina concurs) Format electronic/tiparit min 100p. primautor		
A1.1	Bunea F., Dancă P.A., Năstase I., Determinarea vitezelor în curgeri cu ajutorul imaginilor de particule – PIV. Noțiuni generale și aplicații, 2021, editie electronică, 152p. Biblioteca Nationala a Romaniei, ISBN 978-973-0-34566-7	1
N1.1	Materiale suport de curs (conform fisa disciplina concurs) Format electronic/tiparit min 100pag coautor	
N1.2	Bunea F., Aplicatii in Mecanica fluidelor, Suport curs in editie electronica (CD), 50 p. Bucuresti, Biblioteca Nationala a Romaniei, ISBN 978-973-19838-6, 2015	0
N1.3	Material didactic / Dezvoltare laboratoare aplicatii. Standuri laborator (constructie / modernizari) certificate de directorul de departament	1
A1.2	Stand pentru studiul curgerilor bifazice, rotationale, cu gradient advers de presiune	
N2.1	Instalatie de laborator pentru determinarea caracteristicilor hidrodinamice ale difuzorilor de bule	1
N2.1	Stand de testare a modelelor la scala de turbine hidraulice axiale	1
N2.1	Instalatie experimentală pentru studiul amestecurilor bifazice	1
	Total N2.1	4
N2.2	Mândrea L., Băran G., Bunea F., Oprina G., Băbuțanu CA., 2012, Mecanica fluidelor – lucrări de laborator, Ed. Politehnica Press, 137 pagini. ISBN 978-606-515-384-4	1
N2.2	Mândrea L., Băran G., Bunea F., Oprina G., Băbuțanu CA., Culegere de probleme de Mecanica Fluidelor, 2013, Ed. Politehnica Press, 167 pag, ISBN 978-606-515-532-9.	1
	Total N2.2	2
N2.3		0

A2.1 Articole si publicatii stiintifice indexate Web of Science cu FI

Nr crt	Nr autori	Referința bibliografică	Factor impact (FI)	Punctaj	Nr autori
		Autor corespondent/prim autor			
1	n<=3	Bunea F., Nedelcu A, Ciocan G.D., 2017, "Prediction of water aeration efficiency in high turbulent flow", Desalination and Water Treatment, vol. 85, p. 55-62, DOI: 10.5004/dwt.2017.20774, ISSN 1944-3994	1.631	3.662	3
2		Murgan I., Bunea F.*, Ciocan G.D., Experimental PIV and LIF characterization of a bubble column flow, 2017, Flow Measurement and Instrumentation, 54, 2017, p. 224–235, DOI 10.1016/j.flowmeasinst.2017.02.004	1.203	2.806	3
			P1.1	6.468	
1	n>=4	Bunea F., Ciocan G.D., Nedelcu A., Bucur D.M., Dunca G., Chihaiia R., 2017, Experimental setup for the study of new aeration devices in hydraulic turbines, Environmental Engineering and Management Journal, May 2017, Vol.16, No. 5, p. p1033-1040, ISSN:1582-9596	1.096	1.296	6
2		Bucur D.M., Bunea F*, Ciocan G.D., Băran G., Isbășoiu E.C., 2010, Water parameters evolution in a hydroelectric site, Environmental Engineering and Management Journal, Vol. 9, No. 11, p. 1539-1544, ISSN 1582-9596,	1.435	1.034	5
3		Bunea F., Ciocan G.D., Oprina G., Băran G., Băbuțanu C.A., 2010, Hydropower impact on water quality, Environmental Engineering and Management Journal, Vol. 9, No. 11, p. 1459-1464, ISSN 1582-9596	1.435	1.962	5
4		Bunea F.; Ciocan, G.D.; Bucur, D.M.; Dunca, G.; Nedelcu, A. Hydraulic Turbine Performance Assessment with Implementation of an Innovative Aeration System. Water 2021, 13(18), 2459; ISSN: 2073-4441, https://doi.org/10.3390/w13182459	3.103	3.964	5
			P1.2	8.256	
		coautor			
1	n>=4	Pîslaru-Dănescu L., Morega A.M., Morega M., Bunea F., Popa M., Babutanu, C.A., A New Type of Linear Magnetostrictive Motor, Electrical Engineering Journal, Archiv für Elektrotechnik, Springer, June 2017, Vol. 99, Iss. 2, pp 601–613, ISSN: 0948-7921, eISSN: 1432-0487, DOI: 10.1007/s00202-016-0388-z	0.662	0.431	6
2		Mândrea L., Băbuțanu C. A., Băran Gh., Oprina G., Bunea F., 2010, Draft tube length influence on the flow inside reactors with intubated impeller, Revista Română de Chimie, Vol. 61, nr. 11, p. 1105-1107, ISSN 0034-7752	0.693	0.536	5
3		Oprina G., Bunea F., Pincovski I., Mândrea L., 2010, Aspects of hydrodynamics and mass transfer in diffused aeration systems, Environmental Engineering and Management Journal (ISI), 2010, vol. 9, nr. 4, ISSN 1582-9596, p. 565-572	1.435	1.226	4
			P1.4	2.193	
			P1	16.917	

Articole si publicatii BDI neincluse la A2.1 (WOS si Scopus)

Autor corespondent/prim autor		BDI	punctaj
1	Bucur D M, Dunca G, Bunea F*, Chihaiia R A, Grecu I S, Mitruț R, Experimental investigation of small axial hydro-kinetic turbines, 31st IAHR Symposium on Hydraulic Machinery and Systems, IAHR 2022, IOP Conf. Ser.: Earth Environ. Sci. 1079 012020, doi:10.1088/1755-1315/1079/1/012019	Wos, Scopus	1
2	Danca P.A. ,Bunea F., Nicolaie S., Nedelcu A, Tanase N., Babutanu C. A., Study of Hydrokinetic Turbine Shrouds, 10th International Conference on Energy and Environment (CIEM) 2021, 14-15 october, Bucharest, DOI: 10.1109/CIEM52821.2021.9614929	Scopus	1
3	Nedelcu A, Bunea F *, Danca P, Chihaiia R A, Babutanu C A, Marin D, Ciocan G D, Experimental research on a hydrokinetic turbine model, ID106, Conference of the Sustainable Solutions for Energy and Environment (EENVIRO 2020), Bucharest 21-23 oct., 2021 IOP Conf. Ser.: Earth Environ. Sci. 664 012061, DOI 10.1088/1755-1315/664/1/01206, ISSN 1755-1308	Scopus	1
4	Dancă P, Băbuțanu CA, Bunea F*, Nedelcu A, Mixing Flow Characteristics in cylindrical tank, ID 105, EENVIRO 2020, Bucharest 21-23 oct., IOP Conference Series: Earth and Environmental Science, ISSN 1755-1307, 664, (1), 2021, DOI 10.1088/1755-1315/664/1/012060	Wos	1
5	Bunea F, Ciocan GD, Nedelcu A, Assessment of cavitation regime in divergent vortex flows, IOP Conf. Series: Earth and Environmental Science240 (2019) 062027, doi:10.1088/1755-1315/240/6/062027 ISSN: 1755-1307	Wos	1
6	Bucur DM, Dunca G, Bunea F*, Ciocan GD, Experimental analysis of the operation of a small Francis turbine equipped with an innovative aeration device, 29 th IAHR Symp.on Hydraulic Machinery and Systems, September 16-21 Kyoto, Japan,IOP Conf. Series: Earth and Environmental Science240 (2019) 042010, doi:10.1088/1755-1315/240/4/042010	Wos	1
7	I.Murgan, F. Bunea*, A. Nedelcu, G. D. Ciocan, Experimental setup to study two phase flows for environmental applications, 9-13 octombrie, Cluj 2018 EENVIRO Conference on Sustainable Solutions for Energy and Environment, E3S Web of Conferences 85, 07010 (2019), DOI: 10.1051/e3sconf/20198507010, WOS:000468021200069, e-ISSN: 2267-1242	Wos	1
8	F. Bunea and G. D. Ciocan (September 19th 2018). Experimental Study of Standard Aeration Efficiency in a Bubble Column, Desalination and Water Treatment Murat Eyvaz and Ebubekir Yüksel, IntechOpen, DOI: 10.5772/intechopen.76696	Wos	1
9	Bunea F., Ciocan G.D., Bucur D.M., Dunca G., Aeration solution of water used by hydraulic turbines to respect the environmental policies, published in: Electrical and Power Engineering, 2014 International Conf. and Exposition on, publisher IEEE, p. 1015-1020, DOI 10.1109/ICEPE.2014.6970062, ISSN 978-1-4799-5849-8 ISI, WOS:000353565300185	Wos	1
10	Bunea F., Oprina G, Nicolae B., Baran G., (2012), The influence of the velocity induced by an aeration grid upon oxygen transfer, 5th International Conference on Energy and Environment CIEM2011, Bucharest, Romania, 3-4 November 2011, UPB Sci.Bull., serie D, vol. 74, nr. 1, p. 125-132, ISSN 1454-2358,	Scopus	1
11	Bunea F., Houde S., Ciocan G.D., Oprina G., Baran G., Pincovchi I., Aspects concerning the quality of aeration for environmental friendly turbines, 25th IAHR2010 Symp. on Hydraulic Machinery and Systems, IOP Conf. Series: Earth and Environmental Sci. 12 (2010) 012035, WOS:000327474800011, doi:10.1088/1755-1315/12/1/012035	Scopus	1
12	Bunea F., Oprina G., Lazaroiu Gh., Babutanu C.A., Pincovschi I. Technical and economical aspects of the new waste water treatment technologies, 5th International Conference Management of Technological Changes 2007, Alexandroupolis, Greece,25-26 August, v. I, ISBN 978-960-8932-1-2, WOS:000252696000056	WOS	1
13	Bunea F., Cazacu M.D., Numerical solve of permanent laminar two-dimensional flow at the entrance into a channel, U.P.B., Sci. Bull., Series D, Vol. 67, No. 4, p. 69-77, 2005, ISSN 1454-2358	Scopus	1

		total	9
Coautor			
1	Boncescu C, Robescu D, Munteanu A, Murgescu I, Bunea F, Optimization of energy consumption for the wastewater treatment plant using photovoltaic power system, UPB Sci. Bull., Series C, 84 (1), p 275-384, 2022, ISSN 2286-3540	WOS, Scopus	1
2	Bucur DM, Dunca G, Bunea F, Ciocan GD, IOP Conf. Series: Earth and Environmental Science 240 (2019) 042010, doi:10.1088/1755-1315/240/4/042010	WOS	1
3	Chihaia R. A., Bunea F., Oprina G., El-Leathey L.A., Power Prediction Method Applicable to Horizontal Axis Hydrokinetic Turbines, IEEE 2017 International Conf. on Energy and Environment, October 2017, Bucharest, pp. 221-225. doi: 10.1109/CIEM.2017.8120825, WOS:000427610300047, ISSN: 2067-0907	WOS	1
4	Bucur D.M., Dunca G., Bunea F., Călinoiu C., Aeration process influence over the operation of a small hydro turbine - generator unit, 10th International Symposium On Advanced Topics In Electrical Engineering (ATEE), 23-25 March 2017, Bucharest, Publisher: IEEE, DOI: 10.1109/ATEE.2017.7905045, ISSN: 1843-8571, WOS:000403399400145	WOS	1
5	R. A. Chihaia, L.A. El-Leathey, S. Nicolaie, F. Bunea, G. Oprina, Study Regarding the influence of Orifice Diameter on an Ecological Water Intake, Energy and Clean Technologies Conference Proceedings, SGEM 2016, Vol. 1, International Multidisciplinary Scientific GeoConference-SGEM, 28 iunie - 6 iulie 2016, Albena, Bulgaria, p. 669 - 676, ISSN 1314-2704, WOS:000391348600087	WOS	1
6	Digulescu A., Ioana C., Bunea F., Nedelcu A., Candel I., Vasile G., Serbanescu A., Cavitation characterization using wide band signals in an acoustic active sensing system, OCEANS'16 MTS/IEEE Monterey, California, USA, 19 - 22 Sep 2016, DOI: 10.1109/OCEANS.2016.7761114, Publisher: IEEE, ISBN: 978-1-5090-1537-5, WOS:000399929000120	WOS	1
7	Murgan I., Candel I., Ioana C., Digulescu A., Bunea F., Ciocan G. D., Anghel A., Flow velocity profiling using acoustic time of flight flow metering based on wide band signals and beamforming techniques, IOP Conf. Series: Earth and Environmental Science 49 (2016) Article no. 062003, IOP Publishing, 28th IAHR Symposium on Hydraulic Machinery and Systems, Grenoble, July 4-8th, DOI:10.1088/1755-1315/49/6/062003, ISSN: 1755-1307 WOS:000400156200062	WOS	1
8	Digulescu A., Murgan I., Bunea F., Ciocan G., Bucur D., Dunca G., Candel I., Ioana C., Cavitating vortex characterization based on acoustic signal detection, IOP Conf. Series: Earth and Environmental Science 49 (2016) 082009, IOP Publishing, 28th IAHR Symposium on Hydraulic Machinery and Systems, Grenoble, paper 260, July 4-8th, DOI:10.1088/1755-1315/49/8/082009, ISSN: 1755-1307, WOS:000400156200114	WOS	1
9	Digulescu A., Teodor P., Candel I., Bunea F., G. Dunca, Bucur D., Ioana C., On the vortex parameter estimation using wide band signals in active acoustic system, OCEANS 2014 - TAIPEI, China, 7-10 Aprilie 2014, IEEE Conference Publications, Print ISBN: 978-1-4799-3645-8, INSPEC Accession Number 14760894, DOI: 10.1109/OCEANS-TAIPEI.2014.6964552, WOS:000412588000267	WOS	1
10	Candel I., Bunea F., Dunca G., Bucur D.M., Ioana C., Reeb B., Ciocan G.D., Detection of cavitation vortex in hydraulic turbines using acoustic techniques, 27th IAHR Symp. on Hydraulic Machinery and Systems, 22-26 sep. 2014, Montreal, IOP Conf. Series - Earth and Env. Sci., vol. 22, Iss. 5, Article No: UNSP 052007, ISSN: 1755-1307, DOI:10.1088/1755-1315/22/5/052007, WOS:000347441900140	WOS	1
11	Cirlor T.M., Bunea F., Ciocan G.D., Panaitescu V., 2013, Statistical analysis of the flow induced by the injection of air, UPB Scientific Bulletin, Series D, Vol. 75, Iss. 1, p. 249-257, ISSN 1454-2358	Scopus	1
12	Tanase N., Bunea F, Ciocan GD, (2012), Numerical simulation of the flow in the draft tube of the Kaplan turbine, 5th International Conference on Energy and Environment CIEM2011, Bucharest, Romania, 3-4 November 2011, Ed. Politehnica Press, UPB Sci. Bull., serie D, vol. 74, nr. 1, p. 83-90, ISSN 1454-2358,	Scopus	1
13	Mândrea L., Chihaia R., Bunea F., Oprina G., Voicu G., Ivan C., (2012), The Modernization of the Secondary Intakes Draxin and Cascoe, 5th International Conference on Energy and Environment CIEM2011, Bucharest, Romania, 3-4 Nov. 2011, UPB Sci. Bull., Ed. Politehnica Press, serie D, iss. 2, vol. 74, p. 273-280, ISSN 1454-2358,	Scopus	1

14	Ciocan GD, Bunea F., Houde S., Deschênes C., (2012), Measurement technique for air-water disperse system study 5TH International Conference on Energy and Environment CIEM2011, Bucharest, Romania, 3-4 Nov.2011, UPB Sci. Bull., serie D, p. 115-124, vol. 74, nr. 1, ISSN 1454-2358	Scopus	1
16	Baran G., Safta CA, Bunea F., Oprina G., Stages of noises and vibration to a butterfly valve in working with cavitation, UPB Sci. Bull., Series D, Vol. 70, No. 4, p. 15-22, 2008, ISSN 1454-2358	Scopus	1
17	Pincovski I., Oprina G., Bunea F., Băran Gh., Methods for determining flow regimes in bubble columns with fine pore diffusers, Proceeding of the 5th International Conference Management of Technological Changes 2007, Alexandroupolis, Greece, on 25-26 August 2007, v. I, ISBN 978-960-8932-1-2, WOS:000252696000073	WOS	1
18	Băran Gh., Băbuțanu C.A., Bunea F., Oprina G., Lucian Mândrea, Optimizing the operation of biogas plants, CIEM2007, 22 – 23 of november 2007, UPB Sci. Bull., Series C, Vol. 69, No. 4, p. 61-68, ISSN 1454-234x	Scopus	1
19	Pincovski I., Oprina G., Bunea F., The effect of superficial gas velocity on bubble size distribution in diffused aeration systems, CIEM 2007, Bucharest, 22 – 23 November 2007, UPB Sci. Bull., Series C, Vol. 69, No. 4, p. 465-472, ISSN 1454-234x,	Scopus	1
total			17

A2.1 Brevete de inventii indexate

Nr. crt	Nr autori	Referința bibliografică	Factor impact	Punctaj	Nr autori	Derwent Primary Accession Number:
		autor principal				
1	n<=3	Bunea F., Oprina G., Baran G., Instalatie de laborator pentru determinarea caracteristicilor hidrodinamice ale difuzorilor de bule, Brevet de inventie nr. RO 125997 B1 /28.02.2012, OSIM, (medaliat cu bronz la salonul de inventii INVENTICA 2009)	2.000	4.400	3	2011-B57068
2		Bunea F., Ciocan G.D., Stand pentru studiul curgerilor bifazice, rotationale, cu gradient advers de presiune, Brevet de inventie nr. 131118/30.10.2018. Gold medal at: EUREKA, Barcelona, 2017 and Salon International des Inventions Genève, 2017; Other awards at PRO INVENT 2017 and National Exhibition of the Romanian Inventions	2.000	4.400	2	2016-31878X
3	n>=4	Bunea F., Ciocan G.D., Nedelcu A, Bucur D.M., Dunca G., Codescu S., Water aeration system for the hydraulic turbines (СИСТЕМА АЭРАЦИИ ВОДЫ ДЛЯ ГИДРАВЛИЧЕСКИХ ТУРБИН), Eurasian Patent no 036765/17.12.2020 B1, Diplôme et Médaille „Inventateur 2018 pour l’avenir de L’Europe” and Silver medal Geneva 2018	2.000	2.200	6	2018-15985M
		cereri de brevet				
		Bunea F., Ciocan G.D., Nedelcu A, Bucur D.M., Dunca G., Codescu S., Sistem de aerare a apei pentru turbine hidraulice, OSIM no. A/00688 / 20.09.2017, BOPI nr.2/2018, ACCEPT primit	0		6	2018-15985M
		Total (autor principal)	P2.1	8.800		
			P2.2	0.000		
			P2.3	0.000		
		coautor	P2.4			
1	n>=4	Oprina G., Ilie C, Popa M., Baran G., Bunea F., Simulator pentru determinarea parametrilor optimi ai containerelor de transport animale acvatice, Patent no 126155/ 30.08.2018	2.000	1.320	5	2011-E11960
2		Pîslaru-Dănescu L., Morega A.M., Morega M., Lipan L.C., Bunea F., Motor sonic magnetostrictiv cu modul electronic de actionare, brevet RO 129685, Hotararea nr 6/23 din 30.03.2016, Gold medal al INVENTIKA, 15-18 October 2014, Gold medal al PRO INVENT 2015, 25-27 Martie, Cluj-Napoca and Silver medal al Eureka, Brussels, 19 nov.2016	2.000	1.320	5	2014-P50886
		cereri brevet				
5		Nicolaie S., Mihaescu G.M., Bunea F., Popescu M., Chihaiia R., Babutanu C.A., Dumitru C., Macamete E., Guțu M., Ilie C.I., Fuiorea I., Microhidrocentrală cu două turbine contrarotitoare cu curgere transversala, Cerere brevet de inventie OSIM nr. A/00615 din 28.08.2018, ACCEPT primit			11	2019-45292J
		Total (coautor)	P2.4	2.640		
		Total	P2	11.44		

**Produse, tehnologii, platforme si servicii inovative (validate conform
A 2.4. procedurilor specifice unitatilor de invatamant superior sau cercetare)**

Autor principal		Punctaj
N4.1	Difuzor ceramic poros utilizat în procesele de aerare. Document de certificare internă nr. 13/12.09.2006, în baza cercetărilor efectuate în cadrul contractului de cercetare 411/2004 (director proiect F. Bunea)	1
N4.1	Ansamblu dispozitiv de aerare a apei turbinate ECOTURB. Model demonstrator aplicat PV de constituire, instalare si punere in functiune la CHE Mihăilești, 25.10.2016, din cadrul PN II-PT-PCCA-2013-4-0814 - ECOTURB (director proiect F. Bunea)	1
TOTAL		2
Coautor		
N4.1	Sistem autonom energetic cu alimentare electrica a lămpilor de semnalizare luminoasă pe cursurile de apă tip SAE-L SLCA-10. în baza cercetărilor efectuate în cadrul contractului C 04/2001-2003 (<i>Baliză fluvială autonomă din punct de vedere energetic, cu semnalizare luminoasă, utilizabilă pe Dunăre</i> , membru in echipa), director proiect Nicolaie S	1
N4.1	Generator de bule cu micro-orificii perforate de diametru constant GMB. PV de certificare internă nr. 31/12/09.2011, în baza cercetărilor efectuate în cadrul contractului Nucleu 0935-0101/2009, responsabil subtema G. Oprina	1
TOTAL		2
A.2.5 Monografii/ carti de specialitate, format tiparit/ electronic (min. 100 p.)		
N4.3	Bunea F, Nedelcu A, Curgeri bifazice in procese de transfer de masa, Ed Conspress, ISBN 978-973-100-510-2, 117 p	1

A3.1. Atragere resurse financiare prin granturi / proiecte / contracte terți			
Nr. crt	Director sau responsabil partener la grant / proiect castigat prin competitie nationala sau internationala	mii euro	EUR lei
1	Curgeri axial simetrice induse, Induced axial-symmetric flows, CNCSIS ID_25, PN-II-ID-PCE-2007-1, contract 232/2007-2010, director de proiect	209	209287 711577
2	Curgerea fluidelor prin debitmetre și instalațiile lor de etalonare, Contract nr. EN 060401, CNCSIS 454/2004-2005, director de proiect	2	2249 7870
3	Realizarea și atestarea difuzorilor ceramici poroși pentru oxigenarea apelor reziduale în stațiile de epurare din aglomerările urbane – DIFUCEROXI, Contract nr. 411/2004-2006, Ministerul Educației și Cercetării, PNCDI, Programul MENER, director de proiect	45	45250 181000
4	“Asistenta tehnica pentru pregatirea aplicatiei de finantare si a documentatiilor de atribuire pentru proiectul regional de dezvoltare a infrastructurii de apa si apa uzata din Judetul Dambovita în perioada 2014-2020”, 2014-2015, Contract prestari servicii, ROMAIR CONSULTING S.R.L, pentru un Proiect cofinantat prin Fondul European de Dezvoltare Regionala, Autoritate Contractanta S.C. COMPANIA DE APA TARGOVISTE - DAMBOVITA S.A., Autoritate de Management: Ministerul Mediului si Schimbarilor Climatice, Directia Generala AM POS Mediu, contract nr. 272/2014, 3115/2014 Director de proiect	7	6600 29760
5	Sistem inovativ de aerare a apei turbinate în vederea menținerii condițiilor necesare vieții acvatice, Acronim ECOTURB, competitia PN II-PT-PCCA-2013-4-0814, UEFISCDI, 2014-2017, ctr. 88/2014, Director de proiect	111	111166 500247
6	Technical assistance and operation of the free surface channel in order to obtain the velocity profiles using acoustic sensors, contract. No. 3566/04.08.2015 (nr. Int. 1101/2015), pursuant to the quotation no. 2942/10.07.2015, Employer: SARL SIGITEC, France, Director de proiect	0.5	509 -
7	Creșterea eficienței echipamentelor de producere a energiei din surse regenerabile prin utilizarea a noi metode de caracterizare a curgerii fluidelor de lucru, Responsabil de proiect, Program Nucleu 2019-2022: Materiale, metode, tehnologii, dispozitive și echipamente specifice ingineriei electrice pentru creșterea competitivității agenților economici și dezvoltarea durabilă a societății, Acronim: ELECTRO-ECO-TECH, contract no. 46N/2019 – PN19310201	212	211758 1037615
8	Turbină hidrocinetică pretabilă cursurilor de ape naturale și artificiale, cu cădere mică, MICROHIDRO, contract subsidiar de cercetare industrială și/sau dezvoltare experimentală în colaborare efectivă între organizația de cercetare și întreprindere 126-D4/2020, in cadrul contractului Transfer de cunoștințe către mediul privat în domeniul energie având la bază experiența științifică a ICPE-CA TRANSENERG, ID / Cod My SMIS: P_40_432 / 105567, Responsabil proiect	130	129600 648000
9	Sistem energetic ecologic pentru utilizarea energiei hidrocinetice a curenților de apă de cădere foarte mică ctr. 478PED/2020, PN-III-P2-2.1-PED-2019-3247, Responsabil proiect	56	56000 280000
10	i-Turb sistem inteligent integrat pentru obținerea celui mai bun echilibru între potențialul ecologic al apei și randamentul turbinei, PN-III-CERC-CO-PTE-2-2019, 2022-2024, ctr. 73 PTE/30.06.2022, responsabil de proiect	68	67610 338050
	total	504	503688 2468069
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1	Baliză fluvială autonomă din punct de vedere energetic, cu semnalizare luminoasă, utilizabilă pe Dunăre, AMTRANS – C 04/2001-2003, beneficiar ICPE-CA SA, director proiect Nicolee S.	0.3	278 972.5
2	Optimizarea proceselor de transfer de oxigen prin utilizarea difuzorilor poroși în tehnologiile de epurare biologică, Ctr. nr. 301/2003-2005, MENER, MEC, 2003-2005	0.3	335 1172
3	Mișcări relative în mașini și echipamente, CNCSIS tip A, Finantare:MEC, 2004-2006, Retea pilot de cercetare - experimentare a unui nou proces de productie bazat pe predictia defectelor on-line pentru mentenanta integrata si fiabilitate, aplicabile unei instalatii de	0.9	868 3036.36
4	detritiere, CEEX – 139/2006, 2006 – 2008	4.3	4286 15000
5	Hidrodinamica și transferul de masă la coloane de bule fine cu aplicare în tehnologii avansate de mediu- TEHNOMED, contract X2C05/2006, AMTRANS, MEC, 2006-2008	16.1	16143 56500

6	Determinarea rezervei strategice de apa din lacurile de acumulare prin metode telematice si analiza gradului de colmatare, CEEX, cod MEC PC-D05-PT00-378, 101/03.10.2005, Relansin, 2005-2008	7	7459.46	27600
7	Noi tehnologii ecologice de valorificare energetică a deșeurilor biodegradabile sub formă de gaze combustibile cu aplicare la stații de epurare mici, DEBICOMB, CNMP, Contract nr. 31-041/2007, Finanțare: Buget de Stat - MEC, Programul Parteneriate, 2007-2010	15	14864.9	55000
8	Materiale, tehnologii, echipamente, sisteme, dispozitive pentru o inginerie electrică durabilă - MATER; capitolul Micro-instalatii de conversie a energiei din surse regenerabile (eolian, solar, biomasa), pretabile zonelor izolate, PN 06 30, MEC, 2007-2008,	2.9	2857.14	11429
9	Inginerie electrica pentru societate - INGENIOS; capitolul Componente și sisteme microelectromecanice (MEMS) realizate prin tehnologii specifice cu aplicații în medicină, microfluidică și în realizarea de micromotoare și microactuatori, PN 09 35, Nucleu, Finanțare: Buget de Stat – MEC, 2009-2010	20.2	20191.6	80766.6
10	Studiul hidro-gazo-dinamicii sistemelor difazice pentru îmbunătățirea calitatii apei din avalul turbinelor hidraulice - CNCIS IDEI, ID_1701, nr. 705/2009, 2009-2011	36	36486	160537
11	Creșterea eficienței echipamentelor și proceselor tehnologice pentru conversia energetică din resurse regenerabile, Proiect PN 09350201/2009 NUCLEU, Obiectiv - Cercetări privind optimizarea funcționării reactoarelor de fermentare anaeroba în instalațiile de obținere a biogazului, durată 2009 – 2011,	24	24366	107212
12	Îmbunătățirea regimului de curgere la captările secundare ale amenajării Dâmbovița - Clăbucet, ctr 21/2011, ctr int.1055/2011, Finanțator Hidroelectrică	1	1127	4960
13	Sistem de generare a energiei electrice utilizand turbina eoliana cu dublu efect, pentru asigurarea autonomiei energetice in aplicatii specifice -DOUBLE T-VAX,Proiect PN-II-PCCA Nr. 39/2012, 2012-2016, Finanțator ANCSI, 2012-2016 MEN	1.5	1546	6957
14	Noi tipuri de actuatori specifici aplicatiilor spatiale, Programul de Cercetare-Dezvoltare-Inovare pentru Tehnologie Spațială și Cercetare Avansată , Agentia Spatiala Romana (ROSA), STAR nr. 88/2013, 2013-2015	1.8	1771	8500
15	Sistem hibrid de recoltare a energiei din mediul inconjurator prin conversie fotovoltaica si piezoelectrica, transformareDC/DC cu integrare MEMS si stocare adaptive, contract 63/2014, director proiect Pislaru Danescu L., beneficiar UEFISCDI, perioada 2014-2016,	3	3030	13333
16	“Generator termoelectric de eficienta inalta, operat pulsatoriu bazat pe supercondensatori incarcabili termic, utilizabil ca sursa de putere pentru lansatoare” STAR nr 151/2017(4332/2017)	1.4	1409	6480
17	Transfer de cunoștințe către mediul privat în domeniul energie având la bază experiența științifică a ICPE-CA, Transenerg, POC 2014-2020, P_40_432 / 105567, ctr. 126/16.09.2016, cod SMIS 105567	4	4018	19286
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Total	213.063

TOTAL A.2

356.063



Domeniul de activitate	Indicator	Punctaj obtinut	Punctaj minim grila	Procent realizat raportat la punctajul minim [%]	Stare indicator
Activitatea didactica / profesionala (A1)	A1.1	N1	2	2	100.00%
		N1.1	1	1	100.00%
		N1.3	1	1	100.00%
	A1.2	N.2	6	4	150.00%
		N2.1	4	2	200.00%
Activitatea de cercetare (A2)	A2.1+A2.3	P1+P2	28.36	10	283.57%
		P1	16.92	6	281.95%
	A2.2	N3	26	10	260.00%
		N3.1	9	5	180.00%
	A2.4+A2.5	N4	5	2	250.00%
		N4.3	1	1	100.00%
Recunoasterea impactului activitatii (A3)	A3.1	S1+S2	665.95	50	1331.91%
	A3.2	N5	20	10	200.00%
	A3.3	C	356.063	25	1424.25%
1142.29			129	885.50%	

relatie

$N1 = N1.1 + N1.2 + N1.3$

$N2 = N2.1 + N2.2 + N2.3$

$P1 = P1.1 + P1.2 + P1.3 + P1.4$

$P2 = P2.1 + P2.2$

$N3 = N3.1 + N3.2$

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