

Fisa de verificare a standardelor minimale pentru gradul de profesor universitar stabilite prin OM 6129 / 2016

Candidat: Conf. dr. ing. Ioan Alexandru Popan
Domeniul: INGINERIE INDUSTRIALĂ ȘI MANAGEMENT

Nr.crt.	Criteriu	Domeniul activităților	Indicator / Categorie și restricție	Minim	Realizat	Status
1	Criteriul A1	Activitatea didactică / profesională (A1)	Indice	130	133.135	DA
			Cărți / manuale / monografii / capitole în cărți de specialitate*	2	4	DA
			Suporturi de curs / Îndrumare*	4	4	DA
2	Criteriul A2	Activitatea de cercetare (A2)	Indice	300	501.4839091	DA
			Articole indexate în reviste si volume ISI*	8	8	DA
			Articole indexate în reviste si volume BDI*	8	9	DA
			Granturi/proiecte câștigate prin competiție sau contracte cu mediul socio-economic*	2	8	DA
3	Criteriul A3	Recunoașterea și impactul activității (A3)	Indice	100	446.1666667	DA

Sumar	Necesar	Realizat	Status
	530	1080.785576	INDEPLINIT
Grad de indeplinire		2.039218067	

Data:
6/3/2025

Candidat,
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Activitatea didacica si profesionala (A1)

Nr.crt	Tipul activităților	Categorii si restrictii	Subcategorii / Indicatori unitari	Descriere	Nr. de pagini sau alti indicatori	Nr. autori sau nr. editori	Punctaj realizat
1	1.1 Cărți / manuale / monografii / capitole în cărți de specialitate	1.1.1 Cărți/manuale/monografii / capitole de specialitate ca autor; (Profesor minimum 2 prim autor; Conferențiar minimum 1 prim autor)	1.1.1.1 internationale (Formula: nr. pagini/(5*nr. Autori)	a) J. Jiang, C. Pruncu, (Imperial College London, UK) " <i>Modeling and Optimization in Manufacturing</i> ", capitol <i>Dr. Ioan Alexandru Popan</i> , (Technical University of Cluj-Napoca) " <i>Modelling and optimization process by Waterjet</i> " ISBN: 978-3-527-82524-0, April 2021, Wiley , https://onlinelibrary.wiley.com/doi/book/10.1002/9783527825233	19	1	3.8
			1.1.1.2 nationale	a) Alexandru CĂREAN și Ioan Alexandru POPAN, " <i>Programarea și operarea centrelor de prelucrare CNC</i> ", ISBN 978-606-737-102-4 editura U.T.PRESS., 2015,	243	2	12.15
				b) Ioan Alexandru Popan, " <i>TĂIEREA CU JET DE APĂ A MATERIALELOR COMPOZITE</i> ", Editura Risoprint, ISBN 978-973-53-2432-2, 2019 ,	267	1	26.7
				c) Ioan Alexandru Popan, " <i>FABRICAȚIE PRIN TĂIERE ȘI FREZARE CU JET DE APĂ</i> ", ISBN 978-973-53-2339-4, Editura Risoprint, 2019,	314	1	31.4
		1.1.2 Carti ca editor	1.1.2.1 internationale 1.1.2.2 nationale				
2	1.2. Alte materiale didactice – inclusiv în format electronic	1.2.1. Suporturi de curs / Îndrumare; (Profesor: Minimum 4 din care 2 prim autor; Conferențiar: Minimum 2 din care 1 prim autor)	(Formula: nr. pagini/(20*nr. autori)	a) Ioan Alexandru Popan, Suport de curs " <i>CNC Technologies</i> " Editura Risoprint, 2019, ISBN 978-973-53-2434-6,	197	1	9.85
				b) Nicolae BĂLC, Razvan PĂCURAR, Alina POPAN, Horea CHEZAN, Ioan Alexandru POPAN, " <i>TEHNOLOGII NECONVENȚIONALE, Lucrări practice de laborator</i> ", Editura Alma Mater Cluj-Napoca, 2016, ISBN 978-606-504-202-5	121	5	1.21
				c) Emanuela Sorina Pop, Cristina Miron Borzan, Liviu Iacob Scurtu, Ioan Alexandru Popan, Nicolae Panc, Mihai Damian, Mihai Steopan, Grigore Marian Pop, Razvan Curta, Mihai Ciupan," <i>Îndrumator pentru practica studenților in atelierul mecanic</i> ", Editura UTPRESS, 2019, ISBN 978-606-737-418-6,	220	10	1.1
				d) Ioan Alexandru POPAN și Alexandru CĂREAN , " <i>Tehnologii de prelucrare prin aşchiere II - Suport de curs</i> ", Editura Risoprint, 2024, ISBN 978-973-53-3284-6,	277	2	6.925
3	1.3. Coordonare de programe de studii, organizare și coordonare programe de formare continuă	Director/ Responsabil	15				
4	1.4 Dezvoltare de noi discipline	Titular	10	a) Cutting Processing Technologies II , Program de studii: Manufacturing Engineering (Tehnologia Construcțiilor de Mașini în limba engleză) - Licență - Anul IV semestrul I, cod disciplină 57.00	10		10
				b) CNC Machining Technology , Program de studii: Manufacturing Engineering (Tehnologia Construcțiilor de Mașini în limba engleză) - Licență - Anul IV semestrul I, cod disciplină 60.00	10		10
				c) CNC Programming , Program de studii: Manufacturing Engineering (Tehnologia Construcțiilor de Mașini în limba engleză) - Licență - Anul IV semestrul II, cod disciplină 70.20	10		10
				d) Fabricația CNC în Industria 4.0 , Program de studii: Fabricație Digitală - Masterat - Anul II semestrul I, cod disciplină 14.00	10		10
5	1.5 Proiecte educationale (ERASMUS, Leonardo etc.)	Director/ Responsabil	(Formula: 10 * (ani desfasurare))				

Total punctaj A1

133.135

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6/3/2025

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Activitatea de cercetare (A2)

Nr.crt	Tipul activităților	Categorii si restrictii	Subcategorii/ Indicatori unitari	Descriere	Factor de impact sau alti indicatori	Nr. de autori (Reviste)	Punctaj realizat
1	2.1 Articole indexate în reviste ISI Thomson Reuters și în volumele unor manifestări științifice indexate ISI Thomson Reuters, vizibile în baza de date	De la ultima promovare* Minimum 8 articole, din care 3 în reviste, minimum 3 ca autor principal, pentru Profesor; Minimum 11 articole, din care 4 în reviste, minimum 4 ca autor principal, pentru CS I Pentru profesor și CS1, începând din 2018 - minimum 1 articol în reviste din zona roșie sau galbenă**** De la ultima promovare Minimum 5 articole, din care minimum 1 în reviste, minimum 2 ca autor principal, pentru Conf.; Minimum 8 articole, din care minimum 2 în reviste, minimum 3 ca autor principal, pentru CS II.	(Formula: Pentru reviste (30 + 10 * factor impact****) / (nr.de autori))	1) Ioan Alexandru Popan, N. Balc, and A. I. Popan, ‘ <i>Avoiding carbon fibre reinforced polymer delamination during abrasive water jet piercing: a new piercing method</i> ’, The International Journal of Advanced Manufacturing Technology, vol. 119, no. 1–2, pp. 1139–1152, Mar. 2022, Impact Factor: 3.4 https://link.springer.com/article/10.1007/s00170-021-08294-7 , WOS:000720236600002; https://www.webofscience.com/wos/woscc/full-record/WOS:000720236600002	3.40	3	21.333333
				2) Nicolae Alin Panc, Vlad Bocanet, Cristian Vilău, Horea Chezan, Ioan Alexandru Popan & Glad Conțiu <i>New method of fixturing the low-rigidity parts by adhesive clamping</i> . The International Journal of Advanced Manufacturing Technology 129, 2591–2608, (2023), Impact Factor: 2.9 https://doi.org/10.1007/s00170-023-12429-3 , WOS:001084667900009; https://www.webofscience.com/wos/woscc/full-record/WOS:001084667900009	2.90	6	9.8333333
				3) Popan, Ioan Alexandru, Cosmin Cosma, Alina Ioana Popan, Nicolae Panc, Daniel Filip, and Nicolae Balc. 2023. "Correction of Shape Error at Cut-In and Cut-Out Points in Abrasive Waterjet Cutting of Carbon Fiber Reinforced Polymer (CFRP)" Machines 11, no. 8: 800. Q2 (Engineering, Mechanical), Impact Factor: 2.1 https://doi.org/10.3390/machines11080800 , WOS:001057581400001, https://www.webofscience.com/wos/woscc/full-record/WOS:001057581400001	2.10	6	8.5
				4) Cosma, C.; Apostu, D.; Vilau, C.; Popan, A. ; Oltean-Dan, D.; Balc, N.; Tomoaie, G.; Benea, H. <i>Finite Element Analysis of Different Osseocartilaginous Reconstruction Techniques in Animal Model Knees</i> . Materials 2023, 16, 2546. Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) Impact Factor: 3.1 https://doi.org/10.3390/ma16072546 , WOS:000969755700001; https://www.webofscience.com/wos/woscc/full-record/WOS:000969755700001	3.10	8	7.625
				5) Popan, Ioan Alexandru, Cosmin Cosma, Alina Ioana Popan, Vlad I. Bocănet, and Nicolae Bălc. 2024. "Monitoring Equipment Malfunctions in Composite Material Machining: Acoustic Emission-Based Approach for Abrasive Waterjet Cutting" Applied Sciences 14, no. 11: 4901.Q1 (Engineering, Multidisciplinary), Impact Factor: 2.5, https://doi.org/10.3390/app14114901 , WOS:001245507100001; https://www.webofscience.com/wos/woscc/full-record/WOS:001245507100001	2.50	5	11
				6) Popan, I.A.; Bocănet, V.I.; Softic, S.; Popan, A.I.; Panc, N.; Balc,N. <i>Artificial Intelligence Model Used for Optimizing Abrasive Water Jet Machining Parameters to Minimize Delamination in Carbon Fiber-Reinforced Polymer</i> . Applied Sciences 2024, 14, 8512.Q1 (Engineering, Multidisciplinary), Impact Factor: 2.5, https://doi.org/10.3390/app14188512 , WOS:001324040300001; www.webofscience.com/wos/woscc/full-record/WOS:001324040300001	2.50	6	9.1666667
				7) Dragana Slavic, David Romero, Giuditta Pezzotta, Ugljesa Marjanovic, Borislav Savkovic, Ioan Alexandru Popan & Slavko Rakic (2024). <i>Towards Human-Centric Digital Services: A Development Framework</i> . In: Thürer, M., Riedel, R., von Cieminski, G., Romero, D. (eds) Advances in Production Management Systems. Production Management Systems for Volatile, Uncertain, Complex, and Ambiguous Environments. APMS 2024. IFIP Advances in Information and Communication Technology, vol 732. Springer, https://doi.org/10.1007/978-3-031-71637-9_13 ; WOS:001356138700013; https://www.webofscience.com/wos/woscc/full-record/WOS:001356138700013	0.00	7	4.2857143

8) Softic, S., Lüftenegger, E., Resanovic, D., Softic, S., Popan, A. (2024). <i>Leveraging Sentiment Analysis and Reporting for Re-designing Business Processes Using Large Language Models: A SentiProMo Case Study in Airline Check-In Processes</i> . In: Thüerer, M., Riedel, R., von Cieminski, G., Romero, D. (eds) Advances in Production Management Systems. Production Management Systems for Volatile, Uncertain, Complex, and Ambiguous Environments. APMS 2024. IFIP Advances in Information and Communication Technology, vol 731. Springer. https://doi.org/10.1007/978-3-031-71633-1_1 ; WOS:001356136900001; https://www.webofscience.com/wos/woscc/full-record/WOS:001356136900001	0.00	5	6
Articole indexate ISI de la ultima promovare 2020: 1-8 (Minimum 8 articole, din care 3 în reviste, minimum 3 ca autor principal, pentru Profesor)			
9) Popan, Ioan Alexandru; Bocanet, Vlad; Balci, Nicolae; Alina Ioana Popan., <i>“Investigation on Feed Rate Influence on Surface Quality in Abrasive Water Jet Cutting of Composite Materials, Monitoring Acoustic Emissions”</i> , Proceedings of the International Conference on Manufacturing Engineering and Materials (ICMEM 2018), 18–22 June, 2018, Nový Smokovec, Slovakia; Book: Advances in Manufacturing Engineering and Materials, Springer Nature Switzerland AG 2019, pp. 105–113, https://doi.org/10.1007/978-3-319-99353-9_12 , ISSN: 2195-4356; https://www.webofscience.com/wos/woscc/full-record/WOS:000462541600012	0.00	4	7.5
10) Ioan Alexandru Popan, Alina Ioana Popan, Alexandru Carean, Domnita Fratila, Adrian Trif, <i>Study on chip fragmentation and hole quality in drilling of aluminium 6061 alloy with high pressure internal cooling</i> , MATEC Web of Conferences 299, 04014 (2019) https://doi.org/10.1051/mateconf/201929904014 MTem 2019; https://www.webofscience.com/wos/woscc/full-record/WOS:000568128200049	0.00	5	6
11) Vasile Ceclan, Alexandru Popan, Sorin Grozav, Alina Popan, <i>Study on milling strategies influence on the quality characteristics in case of composite material</i> , MATEC Web of Conferences 299, 04012 (2019) https://doi.org/10.1051/mateconf/201929904012 MTem 2019; https://www.webofscience.com/wos/woscc/full-record/WOS:000568128200047	0.00	4	7.5
12) Popan, Ioan Alexandru; Balci, Nicolae; Popan, Alina Ioana, <i>“Preliminary study on occurrence of composite material delamination processed by abrasive water jet cutting”</i> , Int Conf on Manufacturing Science and Education (MSE) - Trends in New Industrial Revolution, Sibiu, Romania, June 7-9, 2017, Book Series: MATEC Web of Conferences, Vol: 121, Article no: UNSP 02010, 2017, ISSN: 2261-236X, DOI: 10.1051/mateconf/201712102010, https://www.webofscience.com/wos/woscc/full-record/WOS:000435283800028	0.00	3	10
13) Popan, Ioan Alexandru; Contiu, Glad; Campbell, Ian; <i>“Investigation on standoff distance influence on kerf characteristics in abrasive water jet cutting of composite materials”</i> ; International Conference on Modern Technologies in Manufacturing (MTem-AMaTUC), Cluj-Napoca, Romania, October 12-13, 2017, Modern Technologies in Manufacturing, Book Series: MATEC Web of Conferences, Volume: 137, Article Number: UNSP 01009, 2017, DOI: 10.1051/mateconf/201713701009; https://www.webofscience.com/wos/woscc/full-record/WOS:000435283800028	0.00	3	10
14) Popan I.A., Popan A., Cosma S.C., Carean A., <i>“Analyses of process parameters influence on the drilling process by using carbide drills for steel ST52-3”</i> , International Conference on Computing and Solutions in Manufacturing Engineering - CoSME'16, published in MATEC Web of Conferences 94, 02011, 2017, doi: 10.1051/mateconf/20179402011; https://www.webofscience.com/wos/woscc/full-record/WOS:000393034000024	0.00	4	7.5

				15) Popan, I. A.; Balc, N.; Popan, A. I. ; Carean A., Ceclan V. A. <i>“Analysis on the abrasive water-jet milling process on titanium alloys”</i> , International Conference on Production Research - Africa, Europe and the Middle East (ICPR-AEM) /International Conference on Quality and Innovation in Engineering and Management (QIEM), Cluj-Napoca, Romania, Jul 25-30, pp. 407-411, 2016; https://www.webofscience.com/wos/woscc/full-record/WOS:000436122900072	0.00	5	6
2	2.2 Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale**	De la ultima promovare* Minimum 8 pentru profesor; Minimum 11 pentru CSI; Minimum 5 pentru conferențiar; Minimum 7 pentru CS II	(Formula: 15/nr.de autori)	1) Adrian Trif , Cătălin-Alexandru Muntean, Ioan-Alexandru Popan , <i>COMPARATIVE STUDIES REGARDING MACHINING ACCURACY IN DRILLING OPERATION WITH DIFFERENT MACROGEOMETRIES</i> , ACADEMIC JOURNAL OF MANUFACTURING ENGINEERING, VOL.21, ISSUE 4/2023 , https://www.scopus.com/record/display.uri?eid=2-s2.0-85185191798&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28COMPARATIVE+STUDIES+REGARDING+MACHINING+ACCURACY+IN+DRILLING+OPERATION+WITH+DIFFERENT+MACROGEOMETRIES%29	15	3	5
				2) Ioan Alexandru POPAN , Cosmin COSMA, Alina Ioan POPAN, Adrian TRIF and Nicolae Alin PANC, <i>ABRASIVE WATER JET PIERCING SIMULATION OF CARBON FIBRE REINFORCED POLYMER</i> , ACTA TECHNICA NAPOCENSIS Series: Applied Mathematics, Mechanics, and Engineering Vol. 66, Issue II, June, 2023, https://atna-mam.utcluj.ro/index.php/Acta/article/view/2133 , https://www.webofscience.com/wos/woscc/full-record/WOS:001044548800006	15	5	3
				3) Cosmin COSMA, ILIE Raul, Mircea Cristian DUDESCU, Ioan Alexandru POPAN , Petru BERCE, Stanislav LEGUTKO, BALC Nicolae, <i>INFLUENCE OF SLM PARAMETERS ON COCR ALLOY</i> , ACTA TECHNICA NAPOCENSIS Series: Applied Mathematics, Mechanics, and Engineering Vol. 66, Issue 11, June, 2023; https://atna-mam.utcluj.ro/index.php/Acta/article/view/2134 , https://www.webofscience.com/wos/woscc/full-record/WOS:001044548800007	15	7	2.1428571
				4) Ružena KRÁLIKOVÁ, Laura DŽUNOVÁ, Adrian TRIF, Alexandru Ioan POPAN , <i>METODOLOGY OF ENERGY SAVING ILLUMINATION IN INDUSTRIAL WORKSHOPS</i> , ACADEMIC JOURNAL OF MANUFACTURING ENGINEERING, VOL.20, ISSUE 4/2022 , https://www.scopus.com/record/display.uri?eid=2-s2.0-85145950452&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28METODOLOGY+OF+ENERGY+SAVING+ILLUMINATION+IN+INDUSTRIAL+WORKSHOPS%29&sessionSearchId=10374f0a49810a24528f38ccc23ec711	15	4	3.75
				5) Raul Florin POPA and Ioan Alexandru POPAN , <i>RAPID PROTOTYPING USING CNC MILLING, CASE STUDY: JIG FOR ROBOTIC CELL „DP2022”</i> , ACADEMIC JOURNAL OF MANUFACTURING ENGINEERING, VOL.20, ISSUE 3/2022, https://www.scopus.com/record/display.uri?eid=2-s2.0-85145886548&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28RAPID+PROTOTYPING+USING+CNC+MILLING%2C+CASE+STUDY%3A+JIG+FOR+ROBOTIC%29	15	2	7.5
				6) I. A. POPAN, N. BALC, A. I. POPAN, A. CERCIU, <i>Experimental studies on turning process, using the Prime turning processing strategy, proposed by Sandvik Coromant</i> ,12th International Conference on Advanced Manufacturing Technologies IOP Conf. Series: Materials Science and Engineering 1268 012018, IOP Publishing, doi:10.1088/1757-899X/1268/1/012018 (2022), https://iopscience.iop.org/article/10.1088/1757-899X/1268/1/012018/pdf , https://www.proquest.com/docview/2739785766/44FDE8E77C5C4D5BPQ/1	15	4	3.75
				7) Ioan Alexandru POPAN , Adrian TRIF, Nicolae Alin PANC, Adrian C, <i>INVESTIGATIONS OF THE QUALITY CHARACTERISTICS OF HOLES MADE BY USING INDEXABLE DRILLS</i> , ACTA TECHNICA NAPOCENSIS Series: Applied Mathematics, Mechanics, and Engineering, Vol. 65, Issue III, September, 2022, https://atna-mam.utcluj.ro/index.php/Acta/article/view/1869 , https://www.webofscience.com/wos/woscc/full-record/WOS:000889997300006	15	4	3.75

8) Nicolae PANC, Cristian VILĂU, Alexandru POPAN, METALIC FRAMES DESIGN METHOD TO REDUCE COSTS , ACADEMIC JOURNAL OF MANUFACTURING ENGINEERING, VOL. 21, ISSUE 2/2023, https://www.ajme.ro/PDF_AJME_2023_2/L4.pdf , https://www.scopus.com/record/display.uri?eid=2-s2.0-85169340677&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28METALIC+FRAMES+DESIGN+METHOD+TO+REDUCE+COSTS%29	15	3	5
9) Alina POPAN, Ioan Alexandru POPAN, COSMIN COSMA, Vasile CECLAN, NICOLAE BALC, EXPERIMENTAL STUDY ON 3D PRINTED PARTS MADE OF CONTINUOUS FIBERGLASS REINFORCED POLYMER , ACTA TECHNICA NAPOCENSIS, Series: Applied Mathematics, Mechanics, and Engineering, 2021; https://atna-mam.utcluj.ro/index.php/Acta/article/view/1556 , https://www.webofscience.com/wos/woscc/full-record/WOS:000694719400009	15	5	3
Articole indexate BDI de la ultima promovare 2020: 1-9 (Minimum 8 pentru profesor)			
10) Fratila, Domnita; Trif, Adrian; Popan, Alexandru, "Study on chips' morphology at conventional and environmental-friendly turning of 42CrMo4 alloyed steel" , Acta Technica Napocensis, Series- Applied Mathematics Mechanics and Engineering, Volume: 62, Issue: 1, Pages: 77-86, 2019, WOS:000464577100010 ; https://www.webofscience.com/wos/woscc/full-record/WOS:000464577100010	15	3	5
11) Popan, Ioan Alexandru ; Popan, Alina, " Experimental study on manufacturing complex parts from composite materials using water jet cutting ", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics, and Engineering, Vol. 60, Issue 2, 2018, pg. 251-254, June 2017, ISSN 1221-5872, Published by UT Press, Accession Number: WOS:000416960900013 ; https://www.webofscience.com/wos/woscc/full-record/WOS:000416960900013	15	2	7.5
12) Miron, A; Arghir, M; Balc, N; Popan, A ; Miron-Borzan, C, " Determination of Cutting Head Vibrations During Abrasive Water Jet Cutting Process ", Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering, Vol. 58, Issue 3, pp. 431-434, June 2017, ISSN 1221-5872, 2015, Published by UT Press, WOS:000422406600015 , https://www.webofscience.com/wos/woscc/full-record/WOS:000422406600015	15	5	3
13) I.A. Popan, N. Balc, A. Popan and A. Carean, "Experimental study on reverse engineering in case of composite materials cut by water jet cutting" , International Conference on Innovative Manufacturing Engineering and Energy - IManE&E 2018, MATEC Web of Conferences, Vol 178, 03004, 2018, https://doi.org/10.1051/mateconf/201817803004 ; https://www.scopus.com/record/display.uri?eid=2-s2.0-85053198125&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28Experimental+study+on+reverse+engineering+in+case+of+composite+materials+cut+by+water+jet+cutting%29	15	4	3.75
14) D Fratila, A Popan, "Analysis and optimization of cutting parameters in drilling operation of EM AW-2007 aluminum alloy" , Academic Journal of Manufacturing Engineering, Vol. 16 Issue 1, pp. 19-26, 2018; https://www.scopus.com/record/display.uri?eid=2-s2.0-85044192638&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28Analysis+and+optimization+of+cutting+parameters+in+drilling+operation+of+EM+AW-2007+aluminum+alloy%29	15	2	7.5
15) D Frățilă, A Trif, A Popan, "Analysis of cutting forces at dry and near-dry turning of AISI 316l stainless steel" , Academic Journal of Manufacturing Engineering, Vol. 16 Issue 4, pp. 13-19, 2018; https://openurl.ebsco.com/EPDB%3Agcd%3A16%3A22391760/detailv2?sid=ebsco%3Aplink%3AresulItem&id=ebsco%3Agcd%3A136705075&bquery=Analysis%20of%20cutting%20forces%20at%20dry%20and%20near-dry%20turning%20of%20AISI%20316l%20stainless%20steel&page=1&link_origin=www.ebsco.com	15	3	5

16) C Cosma, N Balc, P Berce, A Popan , A Cosma, A Burde, "Direct manufacturing of customized implants from biometals, by 3D printing" Academic Journal of Manufacturing Engineering, Vol. 15, Issue 4, 2017; https://ajme.ro/content.php?vol=14&year=2016&issue=4&offset=0 , https://openurl.ebsco.com/EPDB%3Agcd%3A2%3A22391682/detailv2?sid=ebsco%3Aplink%3Aresult&id=ebsco%3Agcd%3A127066728&bquery=Direct%20manufacturing%20of%20customized%20implants%20from%20biometals%2C%20by%203D%20printing&page=1&link_origin=www.ebsco.com	15	6	2.5
17) Popan I.A. , Balc N, Popan A., „ CNC Machining of the Complex Copper Electrodes ”, Journal: Acta Universitatis Cibiniensis – Technical Series, Vol. LXVI 2015, Volume 66, Issue 1, Pages 153–158, ISSN (Online) 1583-7149, DOI: 10.1515/aucts-2015-0045; https://www.proquest.com/docview/3155976897/DF470E45FD2349A2PQ/1?sourcetype=Scholarly%20Journals	15	3	5
18) Popan I.A. , Balc N., Popan A., Fratila D., Trif A., „ Surface Roughness Prediction During Dry Turning of Austenitic Stainless Steel AISI 304 ”, Applied Mechanics and Materials Vol 808 (2015) pp 54-99, (2015) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.808.54; https://www.proquest.com/docview/1735348722/32DAD637F60E482APQ/1?sourcetype=Scholarly%20Journals	15	5	3
19) Popan I.A. , Balc N., Luca B., Popan A., Carean A., „ The Accuracy of the Plastic Parts Milling Process Executed by a Six Axes Robot ”, Applied Mechanics and Materials Vol 808 (2015) pp 339-344, (2015) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.808.339; https://www.proquest.com/docview/1901735767/1F0771BE4C3B4BCFPQ/1?sourcetype=Scholarly%20Journals	15	5	3
20) Popan I.A. , Balc N., Carean A., Luca A., Miron A., „ Research on Abrasive Water Jet Milling of The Planar Surfaces, Slots and Profiles ”, ICAMaT 2014 - 7th International Conference on Advanced Manufacturing Technologies, 23-24 October 2014, POLITEHNICA University of Bucharest, Applied Mechanics and Materials Vol 760 (2015) pp 409-414, (2015) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.760.409; https://www.proquest.com/docview/1682499679/9785C69A6D9345ABPQ/1?sourcetype=Scholarly%20Journals	15	5	3
21) Miron A, Arghir M, Balc N, Popan I.A. , Miron-Borzan C, „ Determination of cutting head vibrations during abrasive water jet cutting process ”, ACTA TEHNICA NAPOCENSIS, Series: Applied mathematics and mechanics, 58, Issue 3, 2015, Editura UT Press, ISSN 1221-5872, Pag.431-434; Categorie revista CNCSIS/B+; https://atna-mam.utcluj.ro/index.php/Acta/article/view/705 , https://www.webofscience.com/wos/woscc/full-record/WOS:000422406600015	15	5	3
22) Luca A. , Balc N. , Popan I.A. , Ceclan V., Panc N., „ Improving the quality of the parts made by rapid metal casting process ”, Academic Journal of Manufacturing Engineering, AJME-2014, Vol. 12, Issue 1, ISSN 1583-7904, pg. 82-86; http://www.eng.upt.ro/auif/ajme.php ; https://openurl.ebsco.com/EPDB%3Agcd%3A14%3A22391438/detailv2?sid=ebsco%3Aebsco.com%3Asearch&id=ebsco%3Agcd%3A97234849&bquery=Improving%20the%20quality%20of%20the%20parts%20made%20by%20rapid%20metal%20casting%20process&page=1&link_origin=www.ebsco.com	15	3	5

23) Popan Ioan Alexandru, Carean Alexandru, Luca Alina, Ceclan Vasile, Balc Nicolae, “Research on 3D metal sculpturing by water jet cutting versus CNC machining” , Proceedings of the 11th International Conference, Modern Technology in Manufacturing, MTem 2013, 17th-19th October 2013, Cluj-Napoca, ISBN 978-606-8372-02-0, Published in Academic Journal of Manufacturing Engineering, AJME-2013 , Vol. 11, Issue 4, ISSN 1583-7904, pg. 42-47; http://www.eng.upt.ro/auif/ajme.php ; https://openurl.ebsco.com/EPDB%3Agcd%3A5%3A22391413/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A94967489&bquery=Research%20on%203D%20metal%20sculpturing%20by%20water%20jet%20cutting%20versus%20CNC%20machining&page=1&link_origin=www.ebsco.com	15	5	3
24) Carean A., Popan I.A. , Carean M., “Studies about thread milling programming methods” , Proceedings of the 11th International Conference, Modern Technology in Manufacturing, MTem 2013, 17th-19th October 2013, Cluj-Napoca, ISBN 978-606-8372-02-0, Published in Academic Journal of Manufacturing Engineering, AJME-2013 , Vol. 11, Issue 3, ISSN 1583-7904, pg. 50-55; http://www.eng.upt.ro/auif/ajme.php ; https://openurl.ebsco.com/EPDB%3Agcd%3A1%3A22391393/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A97897189&bquery=Studies%20about%20thread%20milling%20programming%20methods&page=1&link_origin=www.ebsco.com	15	3	5
25) Popan Alexandru, Balc Nicolae, Carean Alexandru, Luca Alina, Miron Alin, “Research to improve the surface roughness of the parts made by water jet milling” , The 6th International conference on Manufacturing Science and Education, MSE 2013, 12-15 June, 2012, Sibiu, Romania. Published in Academic Journal of Manufacturing Engineering, AJME-2013 , Vol. 11, Issue 2, ISSN 1583-7904, pg. 105-109; http://www.eng.upt.ro/auif/ajme.php ; https://openurl.ebsco.com/EPDB%3Agcd%3A5%3A22391381/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A88315027&bquery=Research%20to%20improve%20the%20surface%20roughness%20of%20the%20parts%20made%20by%20water%20jet%20milling&page=1&link_origin=www.google.com	15	5	3
26) Luca Alina, Balc Nicolae, Popan Alexandru , Borzan Cristina Stefana, “Research to improve the surface quality of metal parts made by investment casting” , The 6th International conference on Manufacturing Science and Education, MSE 2013, 12-15 June, 2012, Sibiu, Romania. Published in Academic Journal of Manufacturing Engineering, AJME-2013 , Vol. 11, Issue 2, ISSN 1583-7904, pg. 74-79; http://www.eng.upt.ro/auif/ajme.php ; https://openurl.ebsco.com/EPDB%3Agcd%3A11%3A22391371/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A88315022&bquery=Research%20to%20improve%20the%20surface%20quality%20of%20metal%20parts%20made%20by%20investment%20casting&page=1&link_origin=www.google.com	15	4	3.75
27) Luca Alina, Balc Nicolae, Popan Alexandru , Panc Nicolae, “The influence of investment casting process parameters of complex parts” , The 3rd International conference on Computing and Solutions in Manufacturing Engineering, COSME’12, 25th-26th October 2012, Brasov, Romania. Published in Academic Journal of Manufacturing Engineering, AJME-2012 , Vol. X, Issue 3, ISSN 1583-7904, pg. 57-62, http://www.eng.upt.ro/auif/ajme.php ; https://openurl.ebsco.com/EPDB%3Agcd%3A16%3A22391312/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A88304184&bquery=The%20influence%20of%20investment%20casting%20process%20parameters%20of%20complex%20parts&page=1&link_origin=www.google.com	15	4	3.75

28) Balc Nicolae, Popan Alexandru , Berce Petru, Luca Alina, “ <i>Research on water jet milling strategies</i> ”, <i>Academic Journal of Manufacturing Engineering</i> , AJME-2012, Vol. X, Issue 1, ISSN 1583-7904, pg. 12-17; http://www.eng.upt.ro/auif/ajme.php ; https://openurl.ebsco.com/EPDB%3Agcd%3A13%3A22391261/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A88304600&bquery=Research%20on%20water%20jet%20milling%20strategies&page=1&link_origin=www.google.com	15	4	3.75
29) I.A. Popan, N. Balc, A. Carean, A. Luca, V. Ceclan, “ <i>Developing a New Program to Calculate the Optimum Water Jet Cutting Parameters</i> ”, <i>Academic Journal of Manufacturing Engineering</i> , AJME, Vol. IX, Issue 3, ISSN 1583-7904, pp. 17-22, 2011; https://openurl.ebsco.com/EPDB%3Agcd%3A9%3A22391225/detailv2?sid=ebsco%3Aplink%3Aascholar&id=ebsco%3Agcd%3A88304564&crl=f&link_origin=www.google.com	15	5	3
30) V. Ceclan, N. Balc, A. Miron, C. Borzan, I.A. Popan, “ <i>Numerical simulation of the tube bending process and validation of the results</i> ”, <i>Academic Journal of Manufacturing Engineering</i> , AJME, Vol. IX, Issue 3, ISSN 1583-7904, pag. 32-37, 2011; https://openurl.ebsco.com/EPDB%3Agcd%3A1%3A22391233/detailv2?sid=ebsco%3Aplink%3Aascholar&id=ebsco%3Agcd%3A88304567&crl=c&link_origin=www.google.com	15	5	3
31) A. Luca, N. Balc, I. Drstvensek, I.A. Popan, “ <i>Analysis of aluminum parts for accuracy improvement in vacuum casting process</i> ”, <i>Academic Journal of Manufacturing Engineering</i> , AJME, Vol. IX, Issue 3, ISSN 1583-7904, pag. 75-80, 2011; https://openurl.ebsco.com/EPDB%3Agcd%3A10%3A22391242/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A88304576&bquery=Analysis%20of%20aluminum%20parts%20for%20accuracy%20improvement%20in%20vacuum%20casting%20process&page=1&link_origin=www.google.com	15	4	3.75
32) Balc Nicolae, Balas Monica, Popan Alexandru , Luca Alina, “ <i>Methods of improving the efficiency of the EDM-wire cutting</i> ”, Annual Session of Scientific Papers IMT Oradea 2010, 27-28 Mai 2010, Oradea-Felix Spa, Romania, Annals Of Oradea University. Fascicle Of Management And Technological Engineering Volume XIX (IX), IMT 2010, CNCIS "Clasa B+", ISSN 1583-0691, CD-Pag.4.69-72; https://www.semanticscholar.org/paper/METHODS-OF-IMPROVING-THE-EFFICIENCY-OF-THE-EDM-WIRE-Nicolae-Monica/a4062d0a11a321521cdbc6318f7b066cf112e6b2	15	4	3.75
33) Popan Alexandru , Balc Nicolae, Luca Alina, Balas Monica, “ <i>Competitive 2D Machining Using the WJC Process</i> ”, Annual Session of Scientific Papers IMT Oradea 2010, 27-28 Mai 2010, Oradea-Felix Spa, Romania, Annals of Oradea University. Fascicle Of Management And Technological Engineering Volume XIX (IX), IMT 2010, CNCIS "Clasa B+", ISSN 1583-0691, CD-Pag.4.86-90; https://www.semanticscholar.org/paper/COMPETITIVE-2D-MACHINING-USING-THE-WJC-PROCESS-Alexandru-Nicolae/70eadc55faf12be2d3baa958b00e7e951f147c42	15	4	3.75
34) I.A. Popan, N.O. Balc, A. Luca, R. Curta, “ <i>A modeling study of the WJC etching process of steel and stainless steel materials</i> ”, The 3rd International Conference on Additive Technologies (iCAT), Annals of DAAAM for 2010 & Proceedings of the 21st International DAAAM Symposium, ISBN 978-3-901509-73-5, ISSN 1726-9679, Editor B. Katalinic, Published by DAAAM International, Vienna, Austria, ISBN 978-3-901509-73-5, pp 1345-1346, 2010; https://openurl.ebsco.com/EPDB%3Agcd%3A15%3A25522847/detailv2?sid=ebsco%3Aplink%3Aresult-item&id=ebsco%3Agcd%3A55675130&bquery=A%20modeling%20study%20of%20the%20WJC%20%20etching%20process%20of%20steel%20and%20stainless%20steel%20materials&page=1&link_origin=www.google.com	15	4	3.75

				35) A.I. Luca, N.O. Balc, I.A. Popan , N. Panc, “ <i>Dimensional accuracy analysis in casting using easily fusible models</i> ”, Annals of DAAAM for 2010 & Proceedings of the 21st International DAAAM Symposium, ISBN 978-3-901509-73-5, ISSN 1726-9679, pp. 1509-1510, Published by DAAAM International, Vienna, Austria 2010; https://openurl.ebsco.com/EPDB%3Agcd%3A1%3A25522929/detailv2?sid=ebsco%3Aplink%3Aresultitem&id=ebsco%3Agcd%3A55675212&bquery=Dimensional%20accuracy%20analysis%20in%20casting%20using%20easily%20fusible%20models&page=1&link_origin=www.google.com	15	4	3.75
3	2.3 Articole în extenso în reviste/volumele unor manifestări științifice naționale/internaționale neindexate	Se admit max. doua articole la aceeași editie	(Formula: Pentru reviste (6 / (nr. autori)) (Formula: Pentru volume conferințe (4/ (nr. autori))	a) etc.	4	0	
				1. Ioan Alexandru Popan, Nicolae Balc, Alina Ioana Popan, <i>Study on manufacturing implants of biocomposite materials by water jet cutting</i> , 7 TH INTERNATIONAL CONFERENCE ON ADDITIVE TECHNOLOGIES - iCAT, Proceedings of 7th International Conference on Additive Technologies, pag. 48, ISBN 978-961-288-790-2, Maribor, Slovenia, 2018	4	3	1.3333333
				2. Popan I.A. , Balc N., Carean A., Popan I.A., “ <i>The analysis of CNC manufacturing of the 3D complex parts</i> ”, 16th International Scientific Conference - Automation in Production, Planning and Manufacturing, 27-29 April 2015, Zilina-Oscadnica, Slovakia, ISBN 978-80-89276-47-9, pg. 117-122;	4	4	1
				3. Miron A.V., Balc N., Popan I.A. , Grozav, S., Miron-Borzan C.S., “ <i>Research on abrasive waterjet machining of composite materials</i> ”, 16th International Scientific Conference - Automation in Production, Planning and Manufacturing, 27-29 April 2015, Zilina, Slovakia, ISBN 978-80-89276-47-9, pg. 83-87;	4	5	0.8
				4. Luca, A., Balc, N., Grozav, S., Popan, I.A. , Borzan C.Ș., “ <i>Manufacture of metallic parts by vacuum casting process</i> ”, 14th International Scientific Conference - Automation in Production, Planning and Manufacturing, 19-23 April 2014, Zilina-Oscadnica, Slovakia, ISBN 978-80-89276-41-7, pg. 108-111;	4	5	0.8
				5. Popan, I.A. ; Grozav, S.; Luca, A.; Ceclan; V., Trif A., “ <i>The analysis of software solution used in abrasive water jet cutting process</i> ”, 14th International Scientific Conference - Automation in Production, Planning and Manufacturing, 19-23 April 2014, Zilina-Oscadnica, Slovakia, ISBN 978-80-89276-41-7, pg. 142-145;	4	5	0.8
				6. Trif, A.; Borzan, M.; Fratila, D.; Ceclan, V.; Popescu, A. ; Popan, I.A. , “ <i>Research regarding the influence of temperature on carbide inserts in turning process</i> ”, 14th International Scientific Conference - Automation in Production, Planning and Manufacturing, 19-23 April 2014, Zilina-Oscadnica, Slovakia, ISBN 978-80-89276-41-7, pg. 170-173;	4	6	0.6666667
				7. Popan, I.A. ; Grozav, S.; Luca A., Ceclan, V., “ <i>Manufacturing 3D complex parts using abrasive water jet milling technology</i> ”, 14th International Scientific Conference - Automation In Production, Planning and Manufacturing, 22-24. April 2013, Zilina-Turcianske Teplice, Slovakia, ISBN 978-80-89276-41-7, pg. 148-153.	4	4	1
				8. Ceclan, V., Grozav, S., Borzan, C.S., Popan, I.A. , Maries, M., “ <i>Numerical simulation of bending and hydroforming processes of tubular parts</i> ”, 14th International Scientific Conference - Automation In Production, Planning and Manufacturing, 22-24. April 2013, Zilina-Turcianske Teplice, Slovakia, ISBN 978-80-89276-41-7, pg. 19-23.	4	5	0.8
				9. Luca Alina, Balc Nicolae, Popan Ioan Alexandru , Pacurar Razvan, “ <i>Research Regarding the Optimal Feeder Design in Vacuum Casting Process</i> ” The 4th International Conference on Additive Technologies; DAAAM Specialized Conference September, 19th – 22th, 2012, Maribor, Slovenia, iCAT 2012, , ISSN 1992-5093, ISBN 3-901509-92-5.	4	4	1

4	2.4 Proprietate intelectuală, brevete de invenție și inovatie, etc.		10. Popan I.A. , Balc N., Luca A.a, Pacurar R., “A New Method for Manufacturing Complex Parts Using Abrasive Water Jet Technology” The 4th International Conference on Additive Technologies; DAAAM Specialized Conference September, 19th – 22th, 2012, Maribor, Slovenia, iCAT 2012, ISSN 1992-5093, ISBN 3-901509-92-5.	4	4	1
			11. Popan Alexandru , Balc Nicolae, Carean Alexandru, Luca Alina, “New industrial applications of the abrasive water jet processing” , The 3rd International conference on Computing and Solutions in Manufacturing Engineering, COSME’12, 25th-26th October 2012, Brasov, Romania. Published in	4	4	1
			12. Luca Alina, Balc Nicolae, Drstvensek Igor, Popan Alexandru , “Mathematical modeling of aluminum vacuum casting process” , Proceedings of the 10th international conference modern technology in manufacturing, MTem 2011, 6th-8th October 2011, Cluj-Napoca, ISBN 978-606-8372-02-0, Pag.157-160;	4	4	1
			13. Alexandru Popan , Nicolae Balc, Alina Luca, Carean Alexandru, “A New Software Solution for Abrasive Water Jet Cutting” , Proceedings of the 10th international conference modern technology in manufacturing, MTem 2011, 6th-8th October 2011, Cluj-Napoca, ISBN 978-606-8372-02-0, Pag. 271-274;	4	4	1
			14. Balc Nicolae, Popan Alexandru , Berce Petru, Luca Alina, „Software solution for abrasive water jet milling process”, 15th International Research/Expert Conference “Trends in the Development of Machinery and Associated Technology”, TMT 2011, Prague, Czech Republic, 12-18 September 2011, ISSN 1840-4944, Pag. 77-80; http://www.tmt.unze.ba ;	4	4	1
			15. Luca Alina, Balc Nicolae, Popan Alexandru , Balas Monica, “Competitive manufacturing of 3D complex metal parts, made by investment casting” , Annual Session of Scientific Papers IMT 2010, 27-28 Mai 2010, Oradea-Felix Spa, Romania, Annals Of Oradea University. Fascicle Of Management And Technological Engineering Volume XIX (IX), 2010, CNCIS "Clasa B+", ISSN 1583-0691, CD-Pag., 4.73-79;	4	4	1
			16. Balc Nicolae, Luca Alina, Popan Alexandru , Panc Nicolae, “Investment casting for small volume production of aluminium parts” , Proceedings of the 4th international conference on manufacturing science and education MSE 2009, 4th-6th June, Sibiu, Romania, Vol.1, ISSN 1843-2522, Pag.143-146;	4	4	1
			17. Balc Nicolae, Popan Alexandru , Luca Alina, “Rapid prototyping of abrasive water jet cutting” , Proceedings of the 4th international conference on manufacturing science and education MSE 2009, 4th-6th June, Sibiu, Romania, Vol.1, ISSN 1843-2522, Pag.147-150;	4	3	1.3333333
			18. Luca Alina, Balc Nicolae, Popan Alexandru , Carean Alexandru, “Studies on improving the investment casting process by optimizing the gating and wax tree form” , Proceedings of the 9th international conference modern technology in manufacturing, MTem 2009, 8th-10th October 2009, Cluj-Napoca, ISBN 973-7937-07-04, Pag.157-160;	4	5	0.8
			19. Popan I.A. , Balc Nicolae, Luca Alina, Carean Alexandru, “Software solution for accurate abrasive water jet cutting” , Proceedings of the 9th international conference modern technologie in manufacturing, MTem 2009, 8th-10th October 2009, Cluj-Napoca, ISBN 973-7937-07-04, Pag.249-252;	4	4	1
5	2.5 Granturi/proiecte câștigate prin competiție sau contracte cu mediul socio-economic (în valoare de minimum 25000 lei, justificată cu documente care să ateste încasarea sumei)	2.5.1 Director/ Responsabil - Minimum 2D sau 4R pentru Profesor/ CS I; Minimum 1D sau 2R pentru Conferențiar/ CS II; Pentru cerințele minimale, în cazul proiectelor de cercetare/inovare finanțate prin	2.4.1 internaționale	a) etc.		
			2.4.2 naționale (Formula: 20/nr.de	a) etc.		
5			2.5.1.1 internaționale	a) etc.		
			2.5.1.2 naționale (Formula: 10*val*** / 10 mii €)	a) Proiect Bridge Grant: „Dezvoltarea posibilităților de prelucrare a materialelor compozite avansate prin tăiere de precizie cu jet de apă” - PreMCo, Nr. UTCN 27981/28.10.2016, Nr. UEFISCDI 99BG/01.10.2016, Perioada: 01.10.2016-30.09.2018, Buget: 460.000 RON (102.272,22 EURO, calculat la cursul de 4,4978 RON/EURO conform BNR la data de 28.10.2016). Director proiect: S.L. dr. ing. Alexandru Popan.	102272.22	102.27222

programele cadru ale Uniunii Europene de tip FP6, FP7, H2020, calitatea de R - reprezentant al instituției este echivalentă cu cea de D - director de proiect / contract.

2.5.2 Membru in echipa

2.5.2.1
internationale

b) Contract de Cercetare-Dezvoltare-Inovare nr. 21067 din data de 04.09.2020, cu titlul „ Cercetări privind îmbunătățirea tehnologiei de fabricație a electrozilor din cupru și realizarea unui set de electrozi ”. Durata: 2020. Beneficiarul contractului: S.C. NAPOSINT PRODCOM S.R.L. Valoarea proiectului: 24.555,00 RON (5.063,72 EURO, calculat la cursul de 4,8492 RON/EURO din data de 04.09.2020). Director: S.I. dr. ing. Ioan Alexandru Popan.	5,063.72		5.06372
c) Contract de Cercetare-Dezvoltare-Inovare nr. 868, data 14.01.2025, cu titlul „ Cercetări privind dezvoltarea sculelor de înșurubat din carbură metalică reciclată .” Durata proiectului este 15.01.2025 - 30.07.2025. Beneficiarul contractului este S.C. TOOLS & TECHNICAL SOLUTION S.R.L. Valoarea totală a proiectului este de 26.000 RON, din care au fost încasați 25.100 RON (echivalentul a 5,046.03 EURO, calculat la cursul EURO de 4.9742 conform datei de 14.01.2025). Directorul proiectului este Conf. dr. ing. Ioan Alexandru Popan.	5,046.03		5.04603
d) Proiect Competiție Internă, CI 2017, Nr. UTCN 16652/12.07.2017, Nr. DMCDI Contract: 2001. Proiectul este un Grant de Cercetare, Dezvoltare, Inovare, Competiția 2017, desfășurat în perioada 2017-2018, având titlul „ Îmbunătățirea caracteristicilor de calitate ale pieselor tăiate cu jet de apă, pe baza analizei emisiei acustice .” Valoarea totală a proiectului este de 20.000 RON (echivalentul a 4.374,64 EURO, calculat la cursul EURO 4.5718 BNR din data de 12.07.2017). Directorul proiectului este S.L. dr. ing. Alexandru Popan.	4,374.64		4.374644
e) Contract prestări servicii de cercetare, cu titlul „ Proiectarea unui echipament automat de fabricare prin presare a pulberilor pentru obținerea filtrelor sinterizate, fabricarea prototipului și a unui echipament automat .”, Nr. Contract: 17570/2016, data 19.07.2016, Durata: 2016-2018, Beneficiar contract: S.C. KLEVER SYSTEM S.R.L., Valoarea proiectului: 72.000 RON (încasat 8.400 RON, echivalentul a 1.877,64 EURO, calculat la cursul EURO BNR de 4,4737 din data de 19.07.2016). Director proiect: S.I. dr. ing. Ioan Alexandru Popan	1,877.64		1.87764
f) Contract prestări servicii de cercetare, cu titlul „ Cercetări privind fabricația electrozilor din cupru pentru fabricarea matrițelor de presare a pulberilor metalice, fabricarea electrozilor .”, Nr. Contract: 17564/2016, data 19.07.2016, Durata: 2016, Beneficiar contract: S.C. SINTEROM S.A., Valoarea proiectului: 12.000 RON (echivalentul a 2.682,34 EURO, calculat la cursul EURO de 4,4737 din data de 19.07.2016), Director proiect: S.I. dr. ing. Ioan Alexandru Popan	2,682.34		2.682343
g) Contract prestări servicii de cercetare, cu titlul „ Cercetări privind îmbunătățirea calității suprafeței electrozilor din cupru și realizarea electrozilor pentru fabricarea matriței de presare a pulberilor ‘distanțier’ .”, Nr. Contract: 17566/2016, data 19.07.2016, Durata: 2016, Beneficiar contract: S.C. NAPOSINT PRODCOM S.R.L., Valoarea proiectului: 11.904 RON (echivalentul a 2.660,88 EURO, calculat la cursul EURO de 4,4737 din data de 19.07.2016), Director proiect: S.I. dr. ing. Ioan Alexandru Popan	2,660.88		2.66088
h) Contract prestări servicii de cercetare, cu titlul „ Cercetări privind fabricația pieselor complexe din aluminiu prin tăiere și frezare cu jet de apă, fabricarea prototipului ‘Scut HD’ .”, Nr. Contract: 17563/2016, data 19.07.2016, Durata: 2016, Beneficiar contract: S.C. Moto Protect HD S.R.L., Valoarea proiectului: 1.200 RON (echivalentul a 268,23 EURO, calculat la cursul EURO de 4,4737 din data de 19.07.2016), Director proiect: S.I. dr. ing. Ioan Alexandru Popan	268.23		0.26823
i) Contract prestări servicii de cercetare, cu titlul „ Cercetări privind proiectarea și fabricația unui dispozitiv de protecție a automobilelor în cazul coliziunilor frontale .”, Nr. Contract: 17565/2016, data 19.07.2016, Durata: 2016, Beneficiar contract: S.C. Offroadtuning S.R.L., Valoarea proiectului: 1.200 RON (echivalentul a 268,23 EURO, calculat la cursul EURO de 4,4737 din data de 19.07.2016), Director proiect: S.I. dr. ing. Ioan Alexandru Popan	268.23		0.26823
a) Proiect HORIZON 2020 – DiCoMI, “ <i>Directional Composites through Manufacturing Innovation</i> ”, GA Nr. 778068, Perioada 2018-2023, Director proiect: Prof. Nicolae Bâlc, http://www.dicomi.eu ;	4	5	20

			(Formula: 4*nr.ani participare in proiect)	b) Proiect FP7 – Adm-ERA, " Reinforcing Additive Manufacturing research cooperation between the Central Metallurgical Research and Development Institute and the European Research Area ", nr. 295016, Perioada: 2011 – 2013, Coordonator UTCN – Prof. Nicolae Bâlc;	4	0.1666	0.6664
				c) Proiect H 2020, AMaTUC, " Boosting the scientific excellence and innovation capacity in additive manufacturing of the Technical University of Cluj-Napoca ", Nr.691787/01.01.2016 (01.01.2016-31.12.2018), Buget: 999.443,75 Euro, Dir. proiect: Prof.dr.ing. N. Balc;	4	3	12
			2.5.2.2 nationale (Formula: 2*nr.ani participare in proiect)	a) Proiect national, „ Transilvania Digital Innovation Hub ” (TDIH), ID/Cod MySMIS: 161789 Nr. contract de finanțare: 1_EDIH/23.11.2023 Beneficiar/Partener: ASOCIAȚIA TRANSILVANIA IT/Universitatea Tehnică din Cluj-Napoca Manager proiect Partener 5 UTCN: Prof.dr.ing. Ioan Marius PURCAR	2	0.875	1.75
				b) Proiect IDEI COMPLEXE – PCCE, nr. 5/2010, cu titlul " Noi Materiale Biocompatibile destinate implanturilor personalizate fabricate prin SLS si SLM " (BIOMAPIM), Statutul în cadrul proiectului – Asistent cercetare, Perioada de desfasurare a proiectului: 01.06.2011-30.10.2013,	2	1.916667	3.833334
				c) Proiect national, 'PECIFCO – PCCA Project, " Implanturi cranio-faciale personalizate obtinute prin prototipare inovativa 3D din materiale compozite ranforsate cu fibra de sticla ", UEFISCDI Contract no. 115/2014, proiect code PN-II-PT-PCCA-2013-4-0917, TUCN Coordonator, Prof.dr.eng. Nicolae Bâlc;	2	3	6
				d) Proiect Competitie Echipe Tinere: Cercetări fundamentale și experimentale privind prelucrarea materialelor avansate precum materialele compozite armate cu fibre de carbon ; 2014-2015 - Teme Strategice de Cercetare Pentru Echipe Tinere - tip 1.2, nr. 29545/9.12.14, Director: S.I.dr.ing. Pop Grigore.	2	1	2
6	2.6 Coordonare/dezvoltare laborator/centru cercetare	Responsabil	40	a) Laborator de fabricatie prin aşchiere TCM (laborator didactic şi de cercetare)	40		40

Total punctaj A2

501.48391

Data:
6/3/2025

Candidat,
Conf. dr. ing. Ioan Alexandru Popan

*) de la ultima promovare pentru posturi didactice şi de cercetare sau în ultimii 5 ani pentru candidații din afara sistemului de învățământ; pentru abilitare: de la ultima promovare sau în ultimii 5 ani;

**) bazele de date internaționale (BDI) luate în considerare pentru articolele publicate în reviste şi publicate în volumele unor manifestări științifice, cu excepția articolelor publicate în reviste cotate ISI, sunt cele recunoscute pe plan științific internațional precum: ACM, Cabi, CEEOL, CiteSeerX, Compendex/Engineering Village, CRCnetBASE, CrossRef, Current Contents, CSA, DBLP, DOAJ, EBSCO, EdITLib, Emerald, ERIC, Genamics, GeoBase, GEOREF, IEEE Xplore, IFAC-PapersOnLine, Index Copernicus, INSPEC/IET, J-Gate, Library of Congress, MathSciNet, ProQuest, PubMed, Referativnai Jurnal, RePEc, Elsevier/Scopus, Elsevier/Science Direct, Springerlink, Ulrichsweb, WorldCat, Wiley, Zenodo, Zentralblatt, Scientific.net, Seek Digital Library. De asemenea, sunt luate în considerare şi alte baze de date recunoscute CNCS, iar în privința revistelor buletinele științifice cotate CNCS B+;

***) Se va lua în considerare, din bugetul total al proiectului, suma care revine instituției din partea căreia este Responsabil calculată la cursul de schimb oficial la data contractării;

****) Se aplică doar începând din 2018 şi se referă la întreaga activitate;

*****) Factorul de impact – în anul publicării.

Recunoașterea și impactul activității (A3)

Nr.crt	Tipul activităților	Categorii si restrictii	Subcategorii/ Indicatori unitari	Descriere	Coeficient	Nr. autori articol citat sau alti indicatori	Punctaj realizat
1	3.1 Vizibilitate în baze de date internaționale	Număr de citări în publicații (fără autocitări)	3.1.1 Citări în articole indexate ISI (Formula: 10/nr. autori articol citat)	Ioan Alexandru Popan, N. Balç, and A. I. Popan, ‘Avoiding carbon fibre reinforced polymer delamination during abrasive water jet piercing: a new piercing method’, The International Journal of Advanced Manufacturing Technology, vol. 119, no. 1–2, pp. 1139–1152, Mar. 2022, doi: 10.1007/s00170-021-08294-7., WOS:000720236600002 1. Norbert Geier, Jinyang Xu, Dániel István Poór, Jan Hendrik Dege, J Paulo Davim, A review on advanced cutting tools and technologies for edge trimming of carbon fibre reinforced polymer (CFRP) composites, Composites Part B: Engineering, Volume 266, 2023,111037, ISSN 1359-8368, https://doi.org/10.1016/j.compositesb.2023.111037 , WOS:001098175500001, https://www.webofscience.com/wos/woscc/full-record/WOS:001098175500001 2. Jiao, J.; Cheng, X.; Wang, J.; Sheng, L.; Zhang, Y.; Xu, J.; Jing, C.; Sun, S.; Xia, H.; Ru, H. A Review of Research Progress on Machining Carbon Fiber-Reinforced Composites with Lasers. Micromachines 2023, 14, 24. https://doi.org/10.3390/mi14010024 , WOS:000918961100001, https://www.webofscience.com/wos/woscc/full-record/WOS:000918961100001 3. Szada-Borzyszkowska, M., Kacalak, W., Banaszek, K. et al. Assessment of the effectiveness of high-pressure water jet machining generated using self-excited pulsating heads. Int J Adv Manuf Technol 133, 5029–5051 (2024). https://doi.org/10.1007/s00170-024-14040-6 , WOS:001257459800003, https://www.webofscience.com/wos/woscc/full-record/WOS:001257459800003 4. Perec, Andrzej, et al. "Process optimization by applying the response surface methodology (RSM) to the abrasive suspension water jet cutting of phenolic composites." 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					10	3	3.33333333
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			13. Claude, Alexis, Chalvin Maxime, Campocasso Sébastien, Hugel Vincent, Substrate shapes generation for additive manufacturing of medical corsets tailored to various patient morphologies, Procedia CIRP, Volume 125, Pages 266 - 2712024 6th CIRP Conference on BioManufacturing, BioM, Dresden 11 June 2024, https://www.scopus.com/record/display.uri?eid=2-s2.0-85204384845&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28Substrate+shapes+generation+for+additive+manufacturing+of+medical+corsets+tailored+to+various+patient+morphologies%29	5	5	1
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2	3.2 Prezentări efectuate ca invitat/invitată în plenul unor manifestări științifice naționale și		3.2.1 în străinătate a) 3.2.2 în țară (Forma			
			a) Prezentare: Alexandru Popan "Prelucrare sub jet de apă: studii de caz și perspective", "Smart Manufacturing" - Forum Demo Metal, Brașov, 25-28 Mai 2016; etc.	10		10
3	3.3 (a) Membru în colectivele de redacție sau comitete științifice ale revistelor și manifestărilor științifice, organizator de manifestări științifice; (b) Recenzent pentru reviste și manifestări științifice naționale și internaționale indexate ISI		3.3.1 indexate ISI (1)	10		10
			1) Recenzent pentru revista: Advanced Engineering Materials , Wiley, Journal Rank: Q2 , Impact Factor: 3.4 (2023), https://onlinelibrary.wiley.com/journal/15272648	10		10
			2) Recenzent pentru revista: Cogent Engineering , Taylor & Francis, Journal Rank: Q2 , Impact Factor: 2.1 (2023) https://www.tandfonline.com/journals/oaen20	10		10
			3) Recenzent pentru revista: Sensors , MDPI, Journal Rank: JCR - Q1 (Instrumentation), Impact Factor: 3.4 (2023) https://www.mdpi.com/journal/sensors	10		10
			4) Recenzent pentru revista: Machines , MDPI, Journal Rank: JCR - Q2 (Engineering, Mechanical) , Impact Factor: 2.1 (2023) https://www.mdpi.com/journal/machines	10		10
			5) Recenzent pentru revista: Applied Sciences , MDPI, Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering) , Impact Factor: 2.5 (2023) https://www.mdpi.com/journal/applsci	10		10
			6) Recenzent pentru revista: Materials , MDPI, Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) , Impact Factor: 3.1 (2023), https://www.mdpi.com/journal/materials	10		10
			7) Recenzent pentru revista: Coatings , MDPI, Journal Rank: JCR - Q2 (Physics, Applied), Impact Factor: 2.9 (2023), https://www.mdpi.com/journal/coatings	10		10
			8) Recenzent pentru revista: Symmetry , MDPI, Journal Rank: JCR - Q2 (Multidisciplinary Sciences) , Impact Factor: 2.2 (2023), https://www.mdpi.com/journal/symmetry	10		10
			9) Recenzent pentru revista: Sustainability , MDPI, Journal Rank: JCR - Q1 (Geography, Planning and Development) Mechanical) , Impact Factor: 3.3 (2023), https://www.mdpi.com/journal/sustainability	10		10
			10) Recenzent pentru revista: Journal of Manufacturing and Materials Processing , MDPI, Journal Rank: JCR - Q1 (Engineering, Mechanical), Impact Factor: 3.3 (2023), https://www.mdpi.com/journal/jmmp	10		10
			11) Recenzent pentru revista: Electronics , MDPI, Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Control and Systems Engineering) Impact Factor: 2.6 (2023), https://www.mdpi.com/journal/electronics	10		10
			12) Recenzent pentru revista: International Journal of Industrial Engineering and Management , Impact Factor 2.4 (2023) https://ijiemjournal.uns.ac.rs/index.php/ijiem/index	10		10
			13) Recenzent pentru revista: Computation , MDPI, JCR - Q2 (Mathematics, Interdisciplinary Applications) / CiteScore - Q2 (Applied Mathematics), Impact Factor: 1.9 (2023), https://www.mdpi.com/journal/computation	10		10
			14) Recenzent pentru revista: Lubricants , MDPI, Q2 (Engineering, Mechanical), Impact Factor 3.1 (2023), https://www.mdpi.com/journal/lubricants	10		10
			15) Membru in comitetul de organizare al conferintei: "INTERNATIONAL CONFERENCE ON MODERN TECHNOLOGIES IN MANUFACTURING" MTem https://mtem.utcluj.ro/comitees/ - volum indexat ISI	10		10
			16) Membru in comitetul stiintific al conferintei: "INTERNATIONAL CONFERENCE ON MODERN TECHNOLOGIES IN MANUFACTURING" MTem https://mtem.utcluj.ro/comitees/ - volum indexat ISI	10		10

				17) Recenzent pentru conferinta: "INTERNATIONAL CONFERENCE ON MODERN TECHNOLOGIES IN MANUFACTURING" MTem https://mtem.utcluj.ro/comitees/ - volum indexat ISI	10		10
				18) Membru in comitetul stiintific al conferintei: CUTTING TOOLS 2024, Trnava, https://konferencia.masamrad.sk/vedecka-rada/?lang=en	10		10
				19) Membru in comitetul stiintific al conferintei: "Manufacturing Science and Education " MSE 2025 https://conferences.ulbsibiu.ro/mse/ - volum indexat ISI in Special Issue of the Journal Acta Technica Napocensis (Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING)	10		10
				20) Recenzent pentru conferinta: "Manufacturing Science and Education " MSE 2025 https://conferences.ulbsibiu.ro/mse/ - volum indexat ISI in Special Issue of the Journal Acta Technica Napocensis (Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING)	10		10
				etc.			
			3.3.2 indexate BDI	a)			
				etc.			
			3.3.3 nationale si internationale	a)			
				etc.			
4	3.4 Experiență de management, analiză și evaluare în cercetare și/sau învățământ		3.4.1 Conducere (Formula: 5*ani	a) Președintele Biroului Electoral, din cadrul Facultății Construcții de Mașini	5	2	10
				etc.			
			3.4.2 Membru (Formula: 2*ani desfasurare)	a)			
				etc.			
5	3.5 Premii		3.5.1 Academia Română (Formula:	a)			
				etc.			
			3.5.2 ASAS, AOSR, academii de	a)			
				etc.			
			3.5.3 Premii internationale (Formula: 10)	a) The Best paper at the 13th International Conference on Modern Technologies in Manufacturing (MTem-AMaTUC), 2017 Cluj-Napoca: Popan, Ioan Alexandru; Contiu, Glad; Campbell, Ian " Investigation on standoff distance influence on kerf characteristics in abrasive water jet cutting of composite materials "	10		10
				etc.			
			3.5.4 Premii nationale in	a)			
				etc.			
6	3.6 Membru în academii, organizații, asociații profesionale de prestigiu, naționale și internaționale, apartenență la organizații din domeniul educației și cercetării	3.6.1 Academia Ro	(Formula: 100)	a)			
		3.6.2 ASAS, AOSR și academii de	(Formula: 20)	a)			
				etc.			
		3.6.3 Conducere asociatii profesionale	3.6.3.1 internationale	a)			
				etc.			
			3.6.3.2 nationale (F	a)			
				etc.			
		3.6.4 Asociatii profesionale	3.6.4.1 internationale	a)			
				etc.			
			3.6.4.2 nationale (F	a) Membru în ASOCIAȚIA UNIVERSITARĂ DE INGINERIA FABRICAȚIEI (AUIF)	3		3
				etc.			
		3.6.5 Organizatii în domeniul educației și cercetării	3.6.5.1 Conducere	a)			
				etc.			
			3.6.5.2 Membru (F	a)			
				etc.			

Total punctaj A3

446.166667

Data:
6/3/2025

Candidat,
Conf. dr. ing. Ioan Alexandru Popan

