UNIVERSITATEA TEHNICĂ "GHEORGHE ASACHI" DIN IAŞI
FACULTATEA DE MECANICĂ
DEPARTAMENTUL DE INGINERIE MECANICĂ, MECATRONICĂ ŞI ROBOTICĂ
Concurs pentru ocuparea postului de **Conferențiar universitar**, poz. 17
Disciplinele postului: Proiectarea asistata de calculator, Informatica aplicata, Proiectarea asistata a autovehiculelor

FIŞA DE VERIFICARE

a îndeplinirii standardelor minimale naţionale de prezentare la concurs pentru postul de Conferenţiar universitar

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Candidat: **TUFESCU Ana /** Data naşterii: Funcţia actuală: şef de lucrări, Data numirii în funcţia actuală: **1 februarie 2017**

Instituţia: **Universitatea Tehnică "Gheorghe Asachi" din Iaşi**

Notă privind îndeplinirea standardelor minimale naţionale pentru Conferenţiar universitar
(conform Ordin MENCS 6129 din 20/12/2016)
Anexa 17: Comisia Inginerie mecanică, mecatronică şi robotică

		Condiții minimale și obligatorii Conferențiar		
Domeniul de activitate		**Indicatori**	**impus**	**realizat**
Activitatea didactică / profesională (A1)	A1.1	N1	**2**	**2**
		N1.1	**0**	**2**
		N1.3	**1**	**1**
	A1.2	N2	**3**	**37**
		N2.1	**1**	**6**
Activitatea de cercetare (A2)	A2.1 + A2.3	P1+P2	**5**	**6.29**
		P1	**3**	**6.29**
	A2.2	N3	**8**	**10**
		N3.1	**3**	**4**
	A2.4 + A2.5	N4	**1**	**1**
		N4.3	**0**	**0**
Recunoașterea impactului activității (A3)	A3.1	S1 + S2	**10**	**20.32**
	A3.2	N5	**5**	**22**
	A3.3	C	**10**	**189.90**

Anexa nr. 17 – COMISIA INGINERIE MECANICĂ, MECATRONICĂ ȘI ROBOTICĂ

STANDARDE MINIMALE NECESARE ŞI OBLIGATORII PENTRU CONFERIREA TITLURILOR DIDACTICE DIN ÎNVĂŢĂMÂNTUL SUPERIOR ŞI A GRADELOR PROFESIONALE DE CERCETARE – DEZVOLTARE[1]

Nr.	Domeniul activităților	Rezultatele activităților	Subcategorii			Indicatori
1	Activitatea didactică și profesională DID (A1)	Manuale suport de curs (conform fișei disciplinei de concurs)	A1.1	Format tipărit/electronic[2] (min. 100 pag.)	Coordonator/ prim autor	N1.1 = număr
					Co-autor	N1.2 = număr
				Format electronic disponibil pe platforma universității (autor)		N1.3 = număr
		Material didactic /Dezvoltare laboratoare, aplicații	A1.2	Standuri laborator (construcție/ modernizări) certificate de directorul de departament		N2.1 = număr
				Îndrumar laborator/carte aplicații format tipărit sau electronic (autor, co-autor)		N2.2 = număr
				Aplicație informatică educațională		N2.3 = număr
2	Activitatea de cercetare științifică, dezvoltare tehnologică și inovare - CDI (A2)	Articole și publicații științifice indexate Web of Science Thomson Reuters (WOS)[3], unde n = nr.de autori și FI este factorul de impact[4]	A2.1	Autor corespondent / prim autor	n ≤3	P1.1 = 2 · (0.2 + FI)
					n ≥4	P1.2 = 2 · 3 · (0.2 + FI)/n
				Co-autor	n ≤3	P1.3 = 0.2 + FI
					n ≥4	P1.4 = 3 · (0.2 + FI)/n
		Articole și publicații științifice BDI[5] neincluse la A2.1	A2.2	Autor corespondent/prim autor		N3.1 = număr
				Co-autor		N3.2 = număr
		Brevete de invenții indexate[6]	A2.3.	Internaționale indexate în Web of Science – Derwent Innovation		P2.1 = același calcul cu A2.1 și FI = 2
				Naționale indexate OSIM		P2.2 = același calcul cu A2.1 și FI = 0.5
		Produse, tehnologii, platforme şi servicii inovative (validate conform procedurilor specifice unităților de învățământ superior sau de cercetare)	A2.4	Coordonator/prim autor		N4.1 = număr
				Co-autor		N4.2 = număr
		Monografii/cărți de specialitate[2], format tipărit/electronic (min. 100 pag.)	A2.5	Coordonator/prim autor		N4.3 = număr
				Co-autor		N4.4 = număr
3	Recunoașterea și impactul activității - RIA (A3)	Atragere resurse financiare prin granturi/proiecte/contracte terți	A3.1	Director sau responsabil partener la grant/proiect câștigat prin competiție națională sau internațională		S1[7] = sumă echivalentă în mii Euro[9]
				Membru în echipă la grant/proiect câștigat prin competiție națională sau internațională, proiecte/contracte terți		S2[8] = sumă echivalentă în mii Euro[9]
		Prezentarea/Diseminarea rezultatelor: prezență la manifestări științifice în calitate de autor/co-autor de lucrări, profesor invitat	A3.2	Congrese/conferințe/workshopuri internaționale, profesor invitat la universități/institute din străinătate		N5 = număr
		Citări în publicații BDI[5] (se exclud autocitările)	A3.3.	C1 = numărul de citări S_{FI} = suma factorilor de impact al publicațiilor WOS în care apar citările		C = C1 + SFI

[1] Intră în vigoare din anul universitar academic 2018/2019.Pentru anul academic 2017/2018 rămân valabile standardele aflate în vigoare la data de 03.10.2016.
[2] Publicația este înregistrată în fondul de carte al bibliotecii naționale sau al bibliotecilor universităților respective.
[3] Se exclud publicațiile conferințelor DAAAM și WSEAS.
[4] FI este factorul de impact al revistei la data înscrierii la concurs sau la data publicării articolului (cel mai avantajos pentru candidat). Se iau în considerare la această categorie numai revistele cu factor de impact la data publicării articolului. O revistă WOS este echivalentă cu o revistă cotată ISI cf. Ordinului de Ministru (MECTS) Nr. 4478 din 23 iunie 2011, publicat in Monitorul Oficial, Partea I, Nr. 448/27.VI.2011.
[5] Bazele de date BDI acceptate sunt: Web of Science Thomson Reuters (WOS) și SCOPUS.
[6] Un brevet se poate încadra la o singură categorie.
[7] Suma din grant/proiect încasată de instituție repartizată echipei din care directorul de grant/responsabil partener face parte (S1 include cheltuieli de: personal, logistică, deplasări, indirecte).
[8] Suma din grant/proiecte câștigate prin concurs național/internațional și proiecte/contracte terți încasată de instituție și repartizată de director/responsabil persoanei respective (S2 include cheltuieli de: personal, logistică, deplasări, indirecte).
[9] Pentru contractele derulate înainte de 01.01.1999 se va considera echivalarea: 1 EURO = 1 $ USA.

unde: P1 = P1.1 + P1.2 + P1.3 + P1.4; P2 = P2.1 + P2.2;
N1 = N1.1 + N1.2; N2 = N2.1 + N2.2 + N2.3; N3 = N3.1 + N3.2;
N4 = N4.1 + N4.2 + N4.3 + N4.4.

Detaliile criteriilor privind îndeplinirea standardelor minimale naţionale pentru Conferenţiar universitar

Nr.	Domeniul activităților	Rezultatele activităților	Indicatori	Punctaj
1	Activitatea didactică și profesională DID (A1)	**A1.1 Manuale suport de curs (conform fișei disciplinei de concurs)** N1 = N1.1 + N1.2	**N1**	**2**
		A1.1.1 **Ana Tufescu**, *Proiectarea asistată în CATIA V5. Aplicații în ingineria autovehiculelor*, editura Tehnopress, Iași, 2018, 200 pg., ISBN 978-606-687-357-4	N1.1	1
		A1.1.2 **Ana Tufescu**, *Elemente fundamentale de proiectare asistată în CATIA V5,* editura Politehnium, Iaşi, 150 pg., ISBN 978-973-621-516-2, 2023.	N1.1	1
		A1.1.3 **Ana Tufescu,** *Proiectarea asistata de calculator*, suport de curs pentru anul II licenta, 2022 (disponibil in format pdf pe Web https://mec.tuiasi.ro/studenti/informatii-utile/manuale-electronice/)	N1.3	1
		A1.2 Material didactic /Dezvoltare laboratoare, aplicații N2 = N2.1 + N2.2 + N2.3	**N2**	**37**
		N2.1 Standuri laborator (construcție/ modernizări) certificate de directorul de departament	N2.1	6
		N2.1.1 Proiectarea in modulul Qiuck Surface Reconstruction. Prelucrarea norului de puncte scanate 3D. Lucrare de laborator PCAM, 2022	N2.1	1
		N2.1.2 Dotare laborator Mecatronica avansata (3D Scanner, Sistem informatic de stocare a datelor, Monitor LED IPS 42.5, imprimantă 3D, Software ANSYS, Workstation server 2buc., echipament MPS 2013 Industry 4.0 – Festo, echipament MecLab-Festo 3buc., braţ Robotic Mitsubishi) *în valoare de 104093,95 euro, echipa de lucru - 9 membri (coordonator conf.univ.dr.ing. Gelu Ianuş)*	N2.1	1
		N2.1.3 *Siguranţa la solicitări statice a organelor de maşini*, Lucrare de laborator OM 1	N2.1	1
		N2.1.4 *Rulmenţi. Tipuri constructive. Montare şi demontare*, Lucrare de laborator OM 2	N2.1	1
		N2.1.5 *Pierderi prin frecare în rulmenţi*, Lucrare de laborator OM 2	N2.1	1

		N2.1.6 *Pierderi prin frecare în rulmenţi supuşi la încărcări combinate*, Lucrare de laborator OM 2	N2.1	1
		N2.2 Îndrumar laborator/carte aplicații format tipărit sau electronic (autor, co-autor)	N2.2	2
		N2.2.1 **Ana Tufescu,** *Indrumar de laborator. Proiectarea asistată a autovehiculelor,* disponibil *pe Web, 102 pg, 2019.* https://mec.tuiasi.ro/studenti/informatii-utile/manuale-electronice/	N2.2	1
		N2.2.2 Spiridon Cretu, Mihaela Balan, Marcelin Benchea, **Ana Tufescu**, Ciprian Stamate, *ORGANE DE MASINI. LUCRARI*, editura Tehnopress, Iasi, 2013, 250 pg, ISBN 978-606-687-014-6	N2.2	1
		N2.3 Aplicație informatică educațională	N2.3	29
		N2.1.1 *Schite plane. Constructie si editari,* Lucrare de laborator PAC, 19 pg, 2021	N2.3	1
		N2.1.2 *Proiectarea primara a pieselor 3D. Procedee de generare directa*, Lucrare de laborator PAC, 25, 2021	N2.3	1
		N2.1.3 *Proiectarea primara a pieselor 3D. Procedee indirecte de generare,* Lucrare de laborator PAC, 23 pg 2021	N2.3	1
		N2.1.4 *Realizarea desenelor de execuție 6. Cotarea organelor de masini,* Lucrare de laborator PAC, 5 pg. 2020	N2.3	1
		N2.1.5 *Realizarea desenului de ansamblu,* Lucrare de laborator PAC, 7 pg. 2020	N2.3	1
		N2.1.6 *Realizarea desenelor de execuție 1. Reprezentarea vederilor, secțiunilor, detaliilor și rupturilor,* Lucrare de laborator PAC, 20 pg,*2019,*	N2.3	1
		N2.1.7 *Realizarea desenelor de execuție 2. Cotarea in desenul tehnic,* Lucrare de laborator PAC, 16 pg, *2019*	N2.3	1
		N2.1.8 *Realizarea desenelor de execuție 3. Cotarea filetelor și a canelurilor in desenul tehnic,* Lucrare de laborator PAC, 9 pg, *2019*	N2.3	1
		N2.1.9 *Realizarea desenelor de execuție 4. Notarea stării suprafețelor și cotarea canalelor de pană,* Lucrare de laborator PAC, 14 pg, *2019*	N2.3	1
		N2.1.10 *Realizarea desenelor de execuție 5. Înscrierea pe desen a toleranţelor liniare şi unghiulare,* Lucrare de laborator PAC, 10 pg, *2019*	N2.3	1
		N2.1.11 *Proiectare prin metoda Multi-Body*, Lucrare de laborator PCAM, 2019	N2.3	1
		N2.1.12 *Proiectare în modulul Wireframe and Surface Design*, Lucrare de laborator PCAM, 2019	N2.3	1
		N2.1.13 *Proiectare în modulul Generative Surface Design,* Lucrare de laborator PCAM 2019	N2.3	1
		N2.1.14 *Proiectare în modulul Digitized Shape Editor, Lucrare de laborator PCAM* 2019	N2.3	1
		N2.1.15 *Predimensionarea angrenajului conic cu dinti drepti,* Simulare în Matlab pentru etapa din proiectul de OM 2, 2019	N2.3	1
		N2.1.16 *Calculul geometric al angrenajelor conice,* Simulare în Matlab pentru etapa din proiectul de OM 2, 2019	N2.3	1
		N2.1.17 *Verificarea angrenajelor conice,* Simulare în Matlab pentru etapa din proiectul de OM 2, 2019	N2.3	1
		N2.1.18 *Simularea paramatrică a roţii conice cu dinţii drepţi,* Simulare în CATIA V5 pentru etapa din proiectul de OM 2, 2019	N2.3	1
		N2.1.19 *Predimensionarea angrenajului cilindric cu dinţi înclinaţi,* Simulare în Matlab pentru etapa din proiectul de OM 2, 2019	N2.3	1
		N2.1.20 *Calculul geometric al angrenajelor cilindrice,* Simulare în Matlab pentru etapa din proiectul de OM 2, 2019	N2.3	1
		N2.1.21 *Verificarea angrenajelor cilindrice,* Simulare în Matlab pentru etapa din proiectul de OM 2, 2019	N2.3	1

		N2.1.22 *Simularea parametrică a roţii cilindrice cu dinţii înclinaţi,* Simulare în CATIA V5 pentru etapa din proiectul de OM 2, 2019	N2.3	1
		N2.1.23 *Proiectarea parametrică a modelelor cu parametri standardizați,* Lucrare de laborator PAA, 8 pg, 2016	N2.3	1
		N2.1.24 *Proiectarea pentru editări ulterioare. Proiectarea și modelarea frânelor și anvelopelor,* Lucrare de laborator PAA, 9 pg, 2016.	N2.3	1
		N2.1.25 *Proiectarea pentru editări ulterioare. Proiectarea și modelarea suspensiilor,* Lucrare de laborator PAA, 8 pg, 2016	N2.3	1
		N2.1.26 *Proiectarea pieselor subțiri cu grosime constantă. Principiile realizării virtuale a tablelor și modelarea structurilor bazate pe elemente subțiri,* Lucrare de laborator PAA, *7 pg,* 2016.	N2.3	1
		N2.1.27 *Proiectarea formei unui solid. Proiectarea și modelarea structurilor de caroserie,* Lucrare de laborator PAA, *7 pg,* 2016.	N2.3	1
		N2.1.28 *Proiectarea formei unui solid. Proiectarea și modelarea structurilor de bord,* Lucrare de laborator PAA, *8 pg,* 2016.	N2.3	1
		N2.1.29 *Proiectarea formei unui solid prin modul de lucru "liber". Carcase realizate prin suprafețe, folosind curbe definite,* Lucrare de laborator PAA, *8 pg,* 2016.	N2.3	1
2	Activitatea decercetare științifică, dezvoltare tehnologică și inovare -CDI (A2)	**A2.1 Articole și publicații științifice indexate Web of Science Thomson Reuters (WOS)[3]** P1 = P1.1 + P1.2 + P1.3+ P1.4	**P1**	**6.29**
		A2.1.1 **Ana Urzică (cas Tufescu),** Spiridon Creţu, Simulation of the non-gaussian roughness with specified values for the high order moments, Journal of the Balkan Tribological Association, Vol. 19, No. 3, pp. 391-400, 2013 **IF=0.318** **2x(0.2+0.318)=1.036**	P1.1	1.036
		A2.1.2 R.O. Nastasa, **A. Tufescu**, C. Munteanu, B. Istrate, A. Przybył, G. Ianus, (autor corespondent) Contact Stress Simulation for Mg-0.5Ca-xMn Alloys used for Medical Application, Arch. Metall. Mater. 67 (2022), 2, 405-408, DOI: https://doi.org/10.24425/amm.2022.137771 **IF=0.633** **2x3x(0.2+0.633)/6= 0.833**	P1.2	0.833
		A2.1.3 **Ana Tufescu**, Alice-Arina Ciocan Pendefunda, Antonela Beldiman, Oana Țănculescu, Raluca Baciu, Roxana Vasluianu, Maria Alexandra Mârțu, Nicoleta Ioanid, S*tress distribution on the periodontal support of fixed dental prosthesis with pier abutment finite element analysis*, Romanian Journal of Oral Rehabilitation, Vol. 13, No. 1 January-March 2021, pg 322-327 **2x3x(0.2+0)/9= 0.133** https://www.webofscience.com/wos/woscc/full-record/WOS:000667171800034	P1.2	0.133
		A2.1.4 **A Tufescu**, S Cretu and M R Balan, The role of roughness amplitude on depth distribution of contact stresses, IOP Sience, IOP Conf. Series: Materials Science and Engineering Vol. 147, 11 pg, 2016, **2x3x(0.2+0)/3= 0.133** doi:10.1088/1757-899X/147/1/012012. https://iopscience.iop.org/article/10.1088/1757-899X/147/1/012012	P1.2	0.4
		A2.1.5 M R Balan, **A Tufescu** and S S Cretu, (autor corespondent) A case study on relation between roughness, lubrication and fatigue life of rolling bearings, IOP Sience, IOP Conf. Series: Materials Science and Engineering Vol. 147, 12 pg, 2016, doi:10.1088/1757-899X/147/1/012013. https://iopscience.iop.org/article/10.1088/1757-899X/147/1/012013 **0.2+0**	P1.3	0.2
		A2.1.6 D Olaru, M R Balan and **A Tufescu**, Influence of the cage on friction torque in low loaded thrust ball bearing operating in dry conditions, IOP Sience, IOP Conf. Series: Materials Science and Engineering Vol. 147, 13 pg, 2016, https://iopscience.iop.org/article/10.1088/1757-899X/147/1/012027/meta **0.2+0**	P1.3	0.2
		A2.1.7 Dumitru N. Olaru, Mihaela Rodica D. Bălan, **Ana Tufescu**, Vlad Cârlescu, Gheorghe Prisacaru, Influence of the cage on the friction torque in low loaded thrust ball bearings operating in lubricated conditions, Tribology International Vol.107 pp. 294–305, 2017, https://doi.org/10.1016/j.triboint.2016.11.042 **IF=5.62** **3x(0.2+5.62)/5=3.492**	P1.4	3.492
		A2.2 Articole și publicații științifice BDI[5] neincluse la A2.1 N3 = N3.1 + N3.2	**N3**	**10**
		A2.2.1 S Lupescu, C Munteanu, **A Tufescu**, B Istrate and N Basescu, (autor corespondent) Contact stress simulation problem in case of the Mg alloys, IOP Conference Series: Materials Science and Engineering 997 (2020), 012024, ACME 2020 IOP Publishing, 2020, https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012024	N3.1	1

		A2.2.2 C Stescu, D Chicet, **A Tufescu**, B Istrate, C Munteanu, S Strugaru-Iacob, Contact stress simulation problem in case of thermal spray coatings, IOP Conference Series: Materials Science and Engineering 916, 012114, ModTech 2020 IOP Publishing, 2020 https://iopscience.iop.org/article/10.1088/1757-899X/916/1/012114	N3.2	1
		A2.2.3 C Bujoreanu, **A Tufescu**, M Benchea and G Ianuş, Experimental study of acoustic performances of reactive engine mufflers, IOP Conf. Series: Materials Science and Engineering 564, 012077 IOP Publishing, 2019, doi:10.1088/1757-899X/564/1/012077 https://iopscience.iop.org/article/10.1088/1757-899X/564/1/012077/meta	N3.2	1
		A2.2.4 D Chicet, **A Tufescu**, C Paulin, M Panțuru and C Munteanu, (autor corespondent) The Simulation of Point Contact Stress State for APS Coatings, IOP Sience, IOP Conf. Series: Materials Science and Engineering Vol. 209, 8pg, 2017, doi:10.1088/1757-899X/209/1/012044 https://iopscience.iop.org/article/10.1088/1757-899X/209/1/012044	N3.1	1
		A2.2.5 BALAN D. Mihaela Rodica, **Tufescu Ana**, BENCHEA Marcelin and OLARU N. Dumitru, (autor corespondent) Friction Torque in Low Loaded Thrust Ball Bearings, Trans Tech Publications, Switzerland, Applied Mechanics and Materials Vol. 809-810 (2015) pp 676-681,doi: 10.4028/ www.scientific.net/AMM.809-810.676	N3.1	1
		A2.2.6 Mihaela Rodica D. Balan, Luc Houpert, **Ana Tufescu**, Dumitru N. Olaru, Rolling Friction Torque in Ball-Race Contacts Operating in Mixed Lubrication Conditions, Lubricants, Vol. 3 (2015) pp 222-243, ISSN 2075-4442, doi: 10.3390/lubricants3020222 www.mdpi.com/journal/lubricants	N3.2	1
		A2.2.7 BALAN D. Mihaela Rodica, STAMATE Vasile Ciprian, HOUPERT Luc, **Tufescu Ana** and OLARU N. Dumitru, Influence of the Geometry on the Rolling Friction Torque in Lubricated Ball-Race Contacts, Trans Tech Publications, Switzerland, Applied Mechanics and Materials Vol. 658 (2014) pp 271-276, doi: 10.4028/ https://www.scientific.net/AMM.658.271	N3.2	1
		A2.2.8 POP Nicolae, CRETU Spiridon and **Tufescu Ana**, Non Hertzian Contact Model for Tooth Contact Analysis of Spur Gear with Lead Crowning, Trans Tech Publications, Switzerland, Applied Mechanics and Materials Vol. 658 (2014) pp 351-356, doi: 10.4028/ www.scientific.net/AMM.658.351	N3.2	1
		A2.2.9 Liviu Balan, **Ana Tufescu**, Dumitru Olaru, *Lubrication regimes in a spur gear transmission*, The 16th International Conferince Modern Technologies, Quality and Innovation, Proceedings of ModTech 2012, Sinaia, 24-26 may, pp.61-63, 2012 ISSN 2069-6736 https://www.webofscience.com/wos/woscc/full-record/WOS:000392261800016	N3.2	1
		A2.2.10 **Ana C. Urzica (cas Tufescu)**, Mihaela Rodica D. Balan, and Spiridon S. Cretu, Pressures distributions and depth stresses developed in concentrated contacts between elements with non-Gaussian rough surfaces, ASME 2012 11th Biennial Conference on Engineering Systems Design and Analysis, ESDA 2012, Nantes, France, 2-4 iuly, 8 pg., 2012 https://asmedigitalcollection.asme.org/ESDA/proceedings-abstract/ESDA2012/547/231780	N3.1	1
		A2.3 Brevete de invenții indexate(6)	P2	-
		A2.4 Produse, tehnologii, platforme şi servicii inovative (validate conform procedurilor specifice unităților de învățământ superior sau de cercetare) N4 = N4.1 + N4.2 + N4.3 + N4.4	**N4**	**1**
		A2.5 Monografii/cărți de specialitate(2), format tipărit/electronic		
		A2.5.1 Ianus G, Maties V., Prisacaru G, Bujoreanu C, Stirbu C, Balan R, **Tufescu A**., Stamate C, Carlescu V, "*Mecanica Fina si Mecatronica, vol II Mecatronica"*, editura Tipografia Centrala, Chişinău, 2022 , 385pg, ISBN 978-5-88554-129-9,	N4.4	1

3	Recunoașterea și impactul activității - RIA (A3)	**A3.1 Atragere resurse financiare prin granturi/proiecte/contracte terți** S=S1 + S2	**S**	**20.32**
		A3.1.1 Contract nr. 2SOFT/1.1/64/2020. *Cross Border Cooperation in Mecatronics Engineering Education* Beneficiar: - Director proiect: conf.dr.ing. Gelu Ianus, U.T. Iaşi Valoare proiect: 590000RON 0.1·(393.55/4.9204+196.51/4.9456)=**11.97** Perioada: 2021-2022 (curs mediu euro 4.9204/4.9456) (valoare anuala 3953551.9/196510.1RON) **Tufescu Ana**: membru în echipa de cercetare (10 membri)	S2	11.97

		A3.1.2 Contract nr. 2SOFT/1.2/44/2020. *Improving the Quality of Solid Biofuels Produced from Raw Material Collected from Both Sides of Prut River* Beneficiar: - Director proiect: conf.dr.ing. Gelu Ianus, U.T. Iaşi Valoare proiect: 310000RON 0.1·(265.08/4.9204+45.76/4.9456)=**6.31** Perioada: 2021-2022 (curs mediu euro 4.9204/4.9456) (valoare anuala 265082.4/45763.4RON) **Tufescu Ana**: membru în echipa de cercetare (10 membri)	S2	6.31
		A3.1.3 Contract nr. 126P/2015. *Fiabilitatea rulmentilorsi angrenajelor in raport cu conditiile de functionare si ungere* Beneficiar: - Director proiect: conf.dr.ing. Mihaela-Rodica Balan, U.T. Iaşi Valoare proiect: 36000RON 0.25·(36.29/4.4450)=**2.04** Perioada: 2015 (curs mediu euro 4.4450) (valoare anuala 36291RON) **Tufescu Ana**: membru în echipa de cercetare (4 membri)	S2	2,04
		A3.1.4 Membru in proiectul POCU/626/6/13/130661, Proiect cofinanţat din Fondul Social European prin Programul Operaţional Capital Uman 2014-2020 , Axa prioritară 6 - Educaţie şi competenţe, Obiectivul specific 6.13, Denumirea proiectului: Stagii de PRACTICă performante pentru studenții Universității Tehnice Gheorghe Asachi Iași – PRACTIC, Director de proiect: Seghedin Neculai Eugen, Valoarea proiectului: 1.600.000 RON Perioada: 2020-2022 (curs mediu euro /4.9204/4.9456) (valoare anuala 358853/718204.71/545709.62RON) Expert stagii de practică: **Ana Tufescu**		
		A3.2 Prezentarea/Diseminarea rezultatelor: prezență la manifestări științifice în calitate de autor/co-autor de lucrări, profesor invitat	**N5**	**22**
		A3.2.1 Participare la conferinţa: "The 10th International Conference on Advanced Concepts in Mechanical Engineering ACME 2022", June 9-10, 2022, Iaşi, România https://mec.tuiasi.ro/acme-2022-conference-program/ A Zamă, V Paleu, **A Tufescu** and D N Olaru *A simple method to introduce the centrifugal effects in an angular contact ball bearing* B Chiriac, C M Oprisan, **A Tufescu**, V Carlescu and D N Olaru *Friction coefficient between glass surfaces and soft Materials* C M Oprișan, B Chiriac, **A Tufescu** and D N Olaru *Static and dynamic friction coefficient in low loads and sliding speed conditions*	N5	1
		A3.2.2 Participare la conferinţa: Proc.of 25th Innovative Manufacturing Engineering & Energy, International Conference, IMANEE, 21-23 October, 2021, Iasi. http://www.imst.pub.ro/index.php/ro/arhiva-news/2058-imanee2021-conference cu lucrarea: Gelu Ianus, Denis Cojocaru, Vlad Carlescu, **Ana Tufescu** and Dumitru N. Olaru, Grease lubrication of miniature ball bearings	N5	1
		A3.2.3 Participare la conferinţa: The XIII International Congress al Romanian Dental Association for Education, Iasi, 25-27 March 2021 Nicoleta Ioanid, **Ana Tufescu**, Raluca Baciu, Roxana Vasluianu, Antonela Beldiman, Oana Țănculescu, Modelul matematic în studiul biomecanicii punților de amplitudine redusă	N5	1
		A3.2.4 Participare la conferinţa: "The 7th edition of International Conference on Innovative Research - ICIR Euroinvent 2021", May 20-21, 2021, Iaşi, România, ICIR_2021.pdf (euroinvent.org), cu lucrarea: Roxana Oana NĂSTASĂ, **Ana Tufescu,** Corneliu MUNTEANU, Bogdan ISTRATE, Gelu IANUȘ, *Contact Stress Simulation for Mg-0.5Ca-xMn Alloys Used for Medical Application*.	N5	1
		A3.2.5 Participare la conferinţa: The 10th International Conference on Tribology BALKANTRIB '20, May 20 – 22,2021, Belgrade, Serbia http://balkantrib.mas.bg.ac.rs/programme.html Andrei Zama, **Ana Tufescu**, Viorel Paleu, Dumitru N. Olaru, *Simulation program for sliding speeds and friction torque in high*	N5	1

		speed angular contact ball bearings		
		A3.2.6 Participare la conferinţa: The 16th International Conference of Constructive Design and Technological Optimization in Machine Building Field, OPROTEH 2021, Bacau, may 25-27, 2021 https://ichem.md/conferinta-stiintifica-internationala-oproteh-2021 Stefan Toma, Daniela Chicet, **Ana Tufescu**, Gabriela Toma, *Simulated behavior of thermal coated layers at point contact stress*	N5	1
		A3.2.7 Participare la conferinţa: "The 9th International Conference on Advanced Concepts in Mechanical Engineering ACME 2020", June 4-5, 2020, Iaşi, România, ACME Machine Elements and Tribology S Lupescu, C Munteanu, **A Tufescu**, B Istrate and N Basescu, *Contact stress simulation problem in case of the Mg alloys*	N5	1
		A3.2.8 Participare la conferinţa: "The 23th edition of IManEE 2019 International Conference", May 22-24, 2019, Piteşti, România, cu lucrarea A2.2.3, http://www.2019.imane.ro/program/ C Bujoreanu, **A Tufescu**, M Benchea and G Ianuş, Experimental study of acoustic performances of reactive engine mufflers,	N5	1
		A3.2.9 Participare la conferinţa: "The 3rd edition of International Conference on Innovative Research - ICIR Euroinvent 2017", May 25-26, 2017, Iaşi, România, cu lucrarea A2.2.4, ICIR_2017.pdf (euroinvent.org) D Chicet, **A Tufescu**, C Paulin, M Panțuru and C Munteanu, (autor corespondent) The Simulation of Point Contact Stress State for APS Coatings	N5	1
		A3.2.10 Participare la conferinţa: "The 7th International Conference on Advanced Concepts in Mechanical Engineering ACME2016", June 9-10, 2016, Iaşi, România, cu lucrările: ACME Machine Elements and Tribology (tuiasi.ro) **A Tufescu**, S Cretu and M R Balan, The role of roughness amplitude on depth distribution of contact stresses M R Balan, **A Tufescu** and S S Cretu, A case study on relation between roughness, lubrication and fatigue life of rolling bearings D Olaru, M R Balan and **A Tufescu**, Influence of the cage on friction torque in low loaded thrust ball bearing operating in dry conditions	N5	1
		A3.2.11 Participare la conferinta: "The 7 th International Conference Computational Mechanics and Virtual Engineering, COMEC2017", November 16-17, 2017, Brașov, România, https://sites.google.com/site/comec2017brasov/final-programme cu lucrarea: C.M.Oprisan, **A.Tufescu** , D.N.Olaru, *Simulation of the oil replenishment in a ball - race contact*	N5	1
		A3.2.12 Participare la conferinţa: "The 18th International Conference TEHNOMUS New Technologies and Products in Machines Manufacturing Technologies", May 8-9, 2015, Suceava, România, Program_final_2015.pdf (usv.ro) cu lucrarea: Mihaela Rodica Balan, **Ana Tufescu**, Marcelin Benchea, Dumitru Olaru, "*Influence of the cage on the friction in low loaded thrust ball bearings*", TEHNOMUS CONFERENCE (usv.ro)	N5	1
		A3.2.13 Participarea la conferinţa: "The 8th International Conference on Tribology BALKANTRIB'14", 30th Oct.-1st Nov., 2014, Sinaia, România, Balkantrib 2014 (upg-ploiesti.ro) cu lucrarea Mihaela Rodica D. Balan, Luc Houpert, **Ana Tufescu**, Dumitru N. Olaru, Rolling Friction Torque in Ball-Race Contacts Operating in Mixed Lubrication Conditions	N5	1
		A3.2.14 Participare la conferinţa: "The 17th International Conference TEHNOMUS New Technologies and Products in Machines Manufacturing Technologies", May 17-18, 2013, Suceava, România, Program_final_2013.pdf (usv.ro) cu lucrarile: 1 . Iuliana Rotaru, Bogdan Istrate, Marcelin Benchea, **Ana Tufescu**, Dumitru Olaru, "*Mechanical and Structural Characteristics of p(HEMA) Hydrogel for Lumbar Disc Prosthesis*", TEHNOMUS CONFERENCE (usv.ro) 2. Balan Liviu Constantin, **Tufescu Ana**, Benchea Marcelin, and Olaru Dumitru, *Improving the reliability of the gear transmission according to the tribological processes*,	N5	1
		A3.2.15 Participare la conferinţa: "The 11th Biennial Conference on Engineering Systems Design and Analysis ESDA2012", July 2-4, 2012, Nantes, France, cu lucrarea A2.2.12, ESDA2012-82491, ASME 2012 11th Biennial Conference on Engineering Systems Design and Analysis - ESDA2012	N5	1

		Ana C. Urzica (cas Tufescu), Mihaela Rodica D. Balan, and Spiridon S. Cretu, Pressures distributions and depth stresses developed in concentrated contacts between elements with non-Gaussian rough surfaces		
		A3.2.16 Participare la conferinţa: "The 16th International Conference on EHD Lubrication and Traction VAREHD16", October 25-27, 2012, Suceava, România, Preliminary.Conference.Program.[site].docx (usv.ro) cu lucrarea: Balan L., Benchea M., **Tufescu A.**, Olaru D., Creţu S., "*Local scuffing in lubricated roller contacts*", vol. 16, ISSN 1844-8917, Proceedings of VAREHD, Vol. 16, 2012 (usv.ro)	N5	1
		A3.2.17 Participare la conferinţa: "The 5th International Conference on Advanced Concepts in Mechanical Engineering ACME2012", June 14-15, 2012, Iaşi, România, ACME 2012 - The 5th International Conference (tuiasi.ro) cu lucrările: 1. Balan Liviu, **Tufescu Ana**, Bujoreanu Carmen, Olaru Dumitru and Cretu Spiridon, *Evaluation of the local gear scuffing* 2. **Tufescu Ana** and Creţu Spiridon, *Analysis of stress state developed contacting elements with non-gauss rough surfaces*	N5	1
		A3.2.18 Participare la conferinţa: "The 3rd International Conference on Diagnosis and Prediction in Mechanical Engineering Systems DIPRE2012", 31st May - 1st June, 2012, Galaţi, România, http://www.om.ugal.ro/dipre12/CD/index.htm cu lucrarea: Balan L., Benchea M., **Tufescu A**., Olaru D., "*Experimental determination of the friction coefficient in a simulated gear transmission*", pe CD ISSN 2285-1887.	N5	1
		A3.2.19 Participare la conferinţa: The 16th International Conferince Modern Technologies, Quality and Innovation, Proceedings of ModTech 2012, Sinaia, 24-26 may, cu lucrarea: Liviu Balan, **Ana Tufescu**, Dumitru Olaru, *Lubrication regimes in a spur gear transmission* https://www.webofscience.com/wos/woscc/full-record/WOS:000392261800016	N5	1
		A3.2.20 Participare la conferinţa: "The 11th International Conference on Tribology ROTRIB'10", November 4-7, 2010, Iaşi, România, ROTRIB 2010 - 11th International Conference on Tribology (tuiasi.ro) cu lucrarea: Urzică A., Creţu S. Simulation of the non-gaussian roughness with specified values for the high order moments	N5	1
		A3.2.21 Participare la conferinţa: "The 4th International Conference on Advanced Concepts in Mechanical Engineering ACME2010", June 17-18, 2010, Iaşi, România, Program_final_ACME_2010.doc (tuiasi.ro) cu lucrarea: **Ana Urzică**, Rodica Bălan, Spiridon Creţu, Simulation methods of Gaussian surfaces, Buletinul Institutului Politehnic din Iaşi, Tomul LVI (LX), Fasc. 4A, Secţia Construcţii de maşini, Editura POLITEHNIUM, Iaşi, pp. 193-198, 2010, ISSN 1011-2855	N5	1
		A3.2.22 Participare la conferinţa: "The 15th International Conference on EHD Lubrication and Traction VAREHD15", October 25-27, 2012, Suceava, România, http://www.varehd.usv.ro/Proceedings.html cu lucrarea: **Ana Urzică** & Spiridon "*A numerical procedure to generate non-gaussian rough surfaces*", vol. 15, ISSN 1844-8917, Proceedings of VAREHD, Vol. 15, 2010 (usv.ro)	N5	1
		A3.3 Citări în publicaţii BDI(5) (se exclud autocitările)	**C**	**189.90**
		A3.3.1 Gelu Ianus, Denis Cojocaru, Vlad Carlescu, **Ana Tufescu** and Dumitru N. Olaru, Grease lubrication of miniature ball bearings IOP Conference Series: Materials Science and Engineering, Volume 1235, The 25th Edition of IManEE 2021 International Conference (IMANEE 2021) 21/10/2021 - 22/10/2021 Online Cu citarile: 2+8.162=**10.162** 1. Yongkang An, Shijun Ji∗ and Ji Zhao Achieving significant burst motion based on epicycloid induction principle for stick-slip piezoelectric actuator, IEEE Transactions on Industrial Electronics https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9923584 **IF = 8.162** 2. D Cojocaru, G Ianuş, V Cârlescu, Film thickness in miniature ball bearing grease lubricated IOP Conference Series: Materials Science and Engineering, https://iopscience.iop.org/article/10.1088/1757-899X/1262/1/012005/pdf	C	10.162
		A3.3.2 C Stescu, D Chicet, **A Tufescu**, B Istrate, C Munteanu, S Strugaru-Iacob, Contact stress simulation problem in case of thermal spray coatings, IOP Conference Series: Materials Science and Engineering 916, 012114, ModTech 2020 IOP Publishing, 2020 Cu citarile:1+3.236=**4.236**	C	4.236

		1. Toma, SL (Toma, Stefan Lucian) [1] ; Chicet, DL (Chicet, Daniela-Lucia) [2] ; Cazac, AM (Cazac, Alin-Marian) [1], Numerical Calculation of the Arc-Sprayed Particles' Temperature in Transient Thermal Field, COATINGS, Volume12, Issue7, iulie 2022, **IF=3.236** https://www.webofscience.com/wos/alldb/full-record/WOS:000833785700001		
		A3.3.3 C Bujoreanu, A Tufescu, M Benchea and G Ianuş, Experimental study of acoustic performances of reactive engine mufflers, IManEE 2019, IOP Conf. Series: Materials Science and Engineering 564, 012077 IOP Publishing, 2019 Cu citarile: 1 1. JAGATH and C. P., Sudheesh Kumar, GENERAL DESIGN PRINCIPLES OF REACTIVE MUFFLERS: A REVIEW (August 6, 2022). Available at SSRN: https://ssrn.com/abstract=4296125 or http://dx.doi.org/10.2139/ssrn.4296125	C	1
		A3.3.4 Dumitru N. Olaru, Mihaela Rodica D. Bălan, **Ana Tufescu**, Vlad Cârlescu, Gheorghe Prisacaru, *Influence of the cage on the friction torque in low loaded thrust ball bearings operating in lubricated conditions,* Tribology International Vol.107 pp. 294–305, 2017. Cu citarile: 17+(3.847+2.361+4·5.62+2.185+4.93+8.934)=**61.737** 1. Chen, CR (Chen, Changrui); Deng, ZM (Deng, Zhongmin); Wang, H (Wang, Hong); He, T (He, Tian) *Simulation of Friction Fault of Lightly Loaded Flywheel Bearing Cage and Its Fault Characteristics*, Sensors, Volume 22, Issue 21, Nov. 2022 **IF=3.847** https://www.webofscience.com/wos/alldb/full-record/WOS:000881663200001 2. *Wu, PL (Wu, P. L.) ; He, CL (He, C. L.) ; Chang, Z (Chang, Z.) ; Li, XL (Li, X. L.) ; Ren, ZY (Ren, Z. Y.) ; Li, DY (Li, D. Y.); Ren, CZ Theoretical calculation models and measurement of friction torque for rolling bearings: state of the art*, JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, Volume 44 Issue 9, september 2022 **IF=2.361** https://www.webofscience.com/wos/alldb/full-record/WOS:000846221000002 3. Liu L., Liu W.,Wang K.,Wang D.,Wang Y., Zhang X. *Effects of Raceway Convexity on Friction Moment of Tapered Roller Bearings*, Journal of Physics: Conference Series, Volume 2174, Issue 124 January 2022 https://iopscience.iop.org/article/10.1088/1742-6596/2174/1/012047/pdf 4. Shuai Gao, Qinkai Han, Ningning Zhou Paolo Pennacchi, Fulei Chu, *Stability and skidding behavior of spacecraft porous oil-containing polyimide cages based on high-speed photography technology* , Tribology International, Volume 165, January 2022, 107294 **IF= 5.62** https://www.sciencedirect.com/science/article/pii/S0301679X21004424 5. V Bhardwaj, R K Pandey and V K Agarwal, *Experimental exploration for the performance improvement of a thrust ball bearing using circumferential micro-grooved races*, IOP Conference Series: Surface Topography: Metrology and Properties, Volume 9, number 3, 035017, 2021, **IF=2.185** https://iopscience.iop.org/article/10.1088/2051-672X/ac1917 6. Yang X.,Liu X.,Kou G.,Xu C.,Zhang W.,Hu R.,Wang C.,Zhao Z. *Wind turbine lubrication based on parallel control of multiple factors, Journal Europeen des Systemes Automatises*, Volume 53, Issue 5, Pages 653 - 660October 2020 https://www.iieta.org/journals/jesa/paper/10.18280/jesa.530508 7. Han C.-F.,Chang C.-S., Wu C.-J., Chu H.-Y., Horng J.-H., Wei C.-C., Lin J.-F., *Determinations of thermoelastic instability for ball-bearing-like specimens with spacers and in grease lubrications*, Tribology International Volume: 151 106415, 2020, **IF= 5.62** https://www.sciencedirect.com/science/article/pii/S0301679X20302528?via%3Dihub 8. Zhang, Xi; Xu, Hua; Chang, Wei; et al., *Torque variations of ball bearings based on dynamic model with geometrical imperfections and operating conditions*, Tribology International Volume: 133 Pages: 193-205, 2019 **IF= 5.62** https://www.sciencedirect.com/science/article/pii/S0301679X19300027?via%3Dihub 9. Xu, Li Xin; Chen, Bing Kui; Li, Chao Yang, *Dynamic modelling and contact analysis of bearing-cycloid-pinwheel transmission mechanisms used in joint rotate vector reducers*, MECHANISM AND MACHINE THEORY Volume: 137 , pp.	C	61.737

		432-458, 2019 **IF=4.93** https://www.sciencedirect.com/science/article/pii/S0094114X1930597X?via%3Dihub 10.Li, Xiaolei; Chen, Xinchun; Zhang, Chenhui; et al., *Preparation of self-lubricating NiTi alloy and its self-adaptive behavior,* Tribology International Volume: 130 Pages: 43-51, 2019 **IF= 5.62** https://www.sciencedirect.com/science/article/pii/S0301679X18304420?via%3Dihub 11.Choe, Bokseong; Lee, Jeonkook; Jeon, Doyoung; et al. *Experimental study on dynamic behavior of ball bearing cage in cryogenic environments, Part I: Effects of cage guidance and pocket clearances* , MECHANICAL SYSTEMS AND SIGNAL PROCESSING Volume: 115 Pages: 545-569 , 2019 **IF=8.934** https://www.sciencedirect.com/science/article/pii/S0888327018303509?via%3Dihub 12. Deng S.a,Hu Y.b,Sun Y.a,Xu J.b,Niu R.a,Cui Y.c, *Analysis of Frictional Power Loss Characteristics of Cylindrical Roller Bearing for Air-conditioning Vane Compressor*, Binggong Xuebao/Acta Armamentarii Volume 40, Issue 9, Pages 1943 - 19521 September 2019, www://scopus.com/ Spanu, A., Stoenescu, F., Lorenzi, M., Avram, M., *Analysis of three wheeled electric vehicle with increased stability on the road*, IOP Conference Series: Materials Science and Engineering 444(4),042010, 2018, https://iopscience.iop.org/article/10.1088/1757-899X/444/4/042010 Popescu, A.; Nazare, M. I.; Olaru, D., *Friction torque in a modified angular contact ball bearing operating at low axial loads*, Book Series: IOP Conference Series-Materials Science and Engineering, Volume: 444, Article Number: 022019, 2018, https://iopscience.iop.org/article/10.1088/1757-899X/444/2/022019 15. Spanu, A. R.; Besnea, D., *Mechatronic system for wheel geometry control*, Book Series: IOP Conference Series-Materials Science and Engineering Volume: 444 Article Number: 042011, 2018 https://iopscience.iop.org/article/10.1088/1757-899X/444/4/042011 16. Ning, F.-P., Chen, R., Yao, Y.-Y., Fan, X.-Q., Liang, J.-J., Influences of Preload and Assembly Deviation on Friction Torque of Aerospace Bearing, Binggong Xuebao/Acta Armamentarii 39(7), pp. 1436-1442, 2018, www://scopus.com/ 17. Guan Qiao, Geng Liu, Shangjun Ma, Zhenghong Shi and Teik C. Lim, Friction Torque Modelling and Efficiency Analysis of the Preloaded Inverted Planetary Roller Screw Mechanism, Proceedings of the ASME Design Engineering Technical Conference, Volume 102017 ASME 2017, ISBN: 978-0-7918-5824-0, www://scopus.com/		
		A3.3.5 D Chicet, **A Tufescu**, C Paulin, M Panțuru and C Munteanu, T*he Simulation of Point Contact Stress State for APS Coatings*, IOP Sience, IOP Conf. Series: Materials Science and Engineering Vol. 209, 8pg, 2017 Cu citarile: 4+(3.236+0.633+1.755)=**9.624** 1. Toma, SL (Toma, Stefan Lucian) [1] ; Chicet, DL (Chicet, Daniela-Lucia) [2] ; Cazac, AM (Cazac, Alin-Marian) [1], Numerical Calculation of the Arc-Sprayed Particles' Temperature in Transient Thermal Field, COATINGS, Volume12, Issue7, iulie 2022, **IF=3.236** https://www.webofscience.com/wos/alldb/full-record/WOS:000833785700001 2. Chicet, D (Chicet, D.) [1] ; Toma, S (Toma, S.) [1] ; Haraga, R (Haraga, R.) [1] ; Bejinariu, C (Bejinariu, C.) [1] Comparative rolling contact behavior of two aps coatings with different matrix, ARCHIVES OF METALLURGY AND MATERIALS, Volume 67, Issue 3, Page 869-878, 2022, **IF=0.633** https://www.webofscience.com/wos/alldb/full-record/WOS:000849223500008 3. George Mahu, Corneliu Munteanu, Bogdan Istrate, Igor Blanari, Cornelia Paleu, Cosmin Mihai Cotrut, Evaluation of the Corrosion Resistance of Some Coating Obtained by Thermal Spray in Plasma Jet, on the Surface of Some Crankshafts Made of C45 Steel. Revista de chimie, Rev. Chim., 71 (10), 2020, 211-223 **IF=1.755** https://revistadechimie.ro/Articles.asp?ID=8366 4. Cristian Stescu, Daniela Chicet, Vlad Carlescu, Ovidiu Mocanita, Corneliu Munteanu, Microstructural analysis, evaluation	C	9.624

		of the adhesion and utilization properties of plasma coatings on alloy steel substrate, Materials Today: Proceedings 19 (2019) 1081–1090 https://www.sciencedirect.com/science/article/pii/S2214785319329542?via%3Dihub		
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