

Curriculum vitae Europass

Informații personale

Nume / Prenume **OLARU DUMITRU**

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Nationality Româna

Date of birth 19/10/1951

Gender Barbat

Locul de muncă vizat / Domeniul ocupațional

Universitatea Tehnică "Gheorghe Asachi" din Iași, Facultatea de mecanică, Departamentul de Inginerie Mecanică, Mecatronică și Robotică,

Titular cursuri de:

Tribologie -anul II Mecanică, Tribologia sistemului roată – șină – anul II Master STCF, Tribotehnica sistemelor mecanice-anul IV IM

Educație

Experiența profesională

Dates 01/08/1975 - 01/02/1979

Occupation or position held INGINER MECANIC

Main activities and responsibilities ACTIVITATI DE PROIECTARE SI DE PRODUCTIE

Name and address of employer IMN- GALATI; TEROM- IASI,

Type of business or sector INGINER MECANIC

Dates 01/02/1979 - 01/10/1986

Occupation or position held ASISTENT UNIVERSITAR

Main activities and responsibilities ACTIVITATI DIDACTICE SI DE CERCETARE

Name and address of employer INSTITUTUL POLITEHNIC IASI
BLD. COPOU, IASI (Romania)

Type of business or sector ACTIVITATI DIDACTICE SI DE CERCETARE

Dates 01/10/1986 - 01/10/1993

Occupation or position held SEF LUCRARI

Main activities and responsibilities ACTIVITATI DIDACTICE SI DE CERCETARE

Name and address of employer INSTITUTUL POLITEHNIC IASI
BLD. COPOU, IASI (ROMANIA)

Type of business or sector ACTIVITATI DIDACTICE SI DE CERCETARE

Dates 01/10/1993 - 01/10/1999

Occupation or position held CONFERENTIAR UNIVERSITAR



Main activities and responsibilities	ACTIVITATI DIDACTICE SI DE CERCETARE
Name and address of employer	UNIVERSITATEA TEHNICA "GHEORGHE ASACHI" 61-63, BLD. D. MANGERON, 700050 IASI (Romania)
Type of business or sector	ACTIVITATI DIDACTICE SI DE CERCETARE
Dates	01/10/1999 -01/10/2022
Occupation or position held	PROFESOR UNIVERSITAR TITULAR
Dates	01/10/2022 – PREZENT
Occupation or position held	PROFESOR EMERIT, CONDUCATOR DE DOCTORAT
Main activities and responsibilities	ACTIVITATI DIDACTICE, DE CERCETARE SI MANAGEMENT LA FACULTATEA DE MECANICA; Profesor conducător de doctorat din 2004 cu 13 teze de doctorat susținute și confirmate până în prezent; Prodecan facultate: 1997-2004; Sef catedra OMM: 2008-2012; Sef Departament IMMR: 2012-2016; Prodecan Facultatea de Mecanică: 04.2016 – 07.2020 ACTIVITATI DE MANAGEMENT LA U.T.IASI; MEMBRU IN SENATUL U.T.IASI: 2008-2012; MEMBRU IN SENATUL U.T.IASI: 04.2016-01. 2020. Președinte Comisie de Învățământ a Senatului; ACTIVITATI IN COMISII LA MECS Membru în CNATDCU Comisia 17- Inginerie Mecanică – 2007-2010; Membru în CNATDCU Comisia 17- Inginerie Mecanică – 05.2016 – 09.2018;
Name and address of employer	UNIVERSITATEA TEHNICA "GHEORGHE ASACHI" DIN IASI FACULTATEA DE MECANICĂ 53, BLD.Prof. Dr. Doc. D. MANGERON, 700050 IASI
Type of business or sector	ACTIVITATI DIDACTICE, DE CERCETARE, DE MANAGEMENT
Educație și formare	
Dates	01/10/1970 - 01/07/1975
Title of qualification awarded	INGINER
Principal subjects / occupational skills covered	INGINERIE MECANICA
Name and type of organisation providing education and training	INSTITUTUL POLITEHNIC IASI, FACULTATEA DE MECANICA (UNIVERSITATE) BLD. COPOU, IASI (Romania)
Dates	01/10/1985 - 15/07/1992
Title of qualification awarded	DOCTORAT
Principal subjects / occupational skills covered	ORGANE DE MASINI SI TRIBOLOGIE
Name and type of organisation providing education and training	INSTITUTUL POLITEHNIC IASI, FACULTATEA DE MECANICA (UNIVERSITATE) BLD.COPOU, IASI (Romania)
Dates	4-19 iulie 1994
Title of qualification awarded	CURSURI DE SPECIALIZARE
Principal subjects / occupational skills covered	DESIGN FOR QUALITY
Name and type of organisation providing education and training	UNIVERSITATEA DIN BOLONIA - ITALIA
Dates	Iulie – Septembrie 2001 (3 luni)

Title of qualification awarded	SPECIALIZARE CU BURSA DAAD																																								
Principal subjects / occupational skills covered	TRIBOLOGY OF LINEAR GUIDANCE SYSTEMS																																								
Name and type of organisation providing education and training	HTW des Saarlandes, Saarbrucken, Germania; INA Homburg, Germania																																								
Dates	August – Septembrie 2004 (2 luni)																																								
Title of qualification awarded	SPECIALIZARE CU BURSA DAAD																																								
Principal subjects / occupational skills covered	TRIBOLOGY OF MECHATRONICS MICROSYSTEMS																																								
Name and type of organisation providing education and training	HTW des Saarlandes, Saarbrucken, Germania;																																								
Aptitudini și competențe personale																																									
Limba maternă	ROMANA																																								
Other language(s)																																									
Self-assessment																																									
European level (*)																																									
English																																									
French																																									
	<table><tr><th colspan="4">Understanding</th><th colspan="4">Speaking</th><th colspan="2">Writing</th></tr><tr><th colspan="2">Listening</th><th colspan="2">Reading</th><th colspan="2">Spoken interaction</th><th colspan="2">Spoken production</th><th colspan="2"></th></tr><tr><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td><td>B1</td><td>Independent user</td></tr><tr><td>A2</td><td>Basic User</td><td>A2</td><td>Basic User</td><td>A2</td><td>Basic User</td><td>A2</td><td>Basic User</td><td>A2</td><td>Basic User</td></tr></table>	Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User
Understanding				Speaking				Writing																																	
Listening		Reading		Spoken interaction		Spoken production																																			
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A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User	A2	Basic User																																
	(*) Common European Framework of Reference (CEF) level																																								
Social skills and competences	Spirit de echipa; Capacitate de adaptare la medii multiculturale obtinuta prin stagii de cercetare si vizite la universitati din strainatate (University of Bologna, HTW des Saarlandes, INSA Lyon, Twente University, Olanda,) Capacitate buna de comunicare.																																								
Organisational skills and competences	PRODECAN DE FACULTATE ,SEF CATEDRA , DIRECTOR DEPARTAMENT,MEMBRU IN SENATUL U.T.IASI, MEMBRU IN COMISIE CNATDCU, EVALUATOR CNCISIS																																								
Technical skills and competences	COMPETENTE IN URMATOARELE DOMENII: ORGANE DE MASINI, TRIBOLOGIE, BIOTRIBOLOGIE, MICROTRIBOLOGIE; MECATRONICA, MICROSISTEME MECATRONICE; CONDUCATOR DE DOCTORAT IN DOMENIUL INGINERIE MECANICA CU 15 TEZE SUSTINUTE																																								
Computer skills and competences	O BUNA STAPANIRE A UTILITARELOR:(Word™, Excel™PowerPoint™, MathCAD)																																								
Annexes	- Autor și co-autor la 12 manuale, îndrumare și monografii dintre care două monografii au primit Premiul Academiei Române (Rumneți. Proiectare și tehnologie vol. I si Vol.II, Coordonator prof. Mihai Gafițanu, Ed. Tehnică, București,1985); - Autor și co-autor la 20 articole publicate în reviste WOS cu factor de impact (Wear, Tribology Letters, International Tribology, Lubrication Science, Sensors,Tribology Transaction,																																								

Materials Science and Engineering: C, Mechanism and Machine Theory, Lubricants);

- Autor și co-autor la 51 lucrări indexate WOS și BDI în perioada (2005- 2025), în reviste și în volume ale unor conferințe internaționale: **ACME 2010, 2012, 2014, 2016, 2018, 2020, 2022, 2024-Iași, IMANEE-2021 -Iași MODTECH 2011-Rep. Moldova, MODTECH 2012 Sinaia, IEEE –EHB 2011, 2013-Iași, MECAHITECH 2010-Bucuresti; DIPRE 2012 Galați;**
- Autor și co-autor la peste 50 lucrări publicate în volume ale unor conferințe internaționale de tribologie: **ROTRIB'24** Bucuresti, **MMT Symposium**, 26-28 June 2024, Guimaraes, Portugal, **BALKANTRIB'20**-Belgrad, **ROTRIB'2019**-Cluj Napoca, **BALKANTRIB 2014-Sinaia, ROTRIB 2010-Iasi, ROTRIB 2007- București, ROTRIB 2003 Galați, Colviul Internațional de Tribologie- Esslingen, Germania: 2002, 2000, 1998, 1996; BALKANTRIB 1999 Sinaia, NORDTRIB 1994-Uppsala, EUROTRIB 1993 Budapesta,**
- Autor și co-autor la peste 80 lucrări publicate în reviste românești și în volume ale unor conferințe naționale neindexate BDI.
- 358 citări în publicații SCOPUS din care 150 citări sunt în reviste WOS cu factor de impact.
- Punctaj total conform Anexa 17, CNATDCU (O.M. 6129/20.12.2016) = **761,796**
-
- **h-index WOS =7; h-index Scopus =10, h-index Google Scholar = 13**
-

Data: 15.06. 2025

Semnatura,

LISTA DE LUCRĂRI (SELECȚIE)

Prof. em. dr. ing. Dumitru OLARU

Lista lucrărilor publicate (și în fază de recenzie) în reviste WOS cu factor de impact

1. **D.N.Olaru** and M.D.Gafitanu: *Starvation in Ball Bearings*, **Wear**, 170 (1993), 219-234;
[https://doi.org/10.1016/0043-1648\(93\)90243-F](https://doi.org/10.1016/0043-1648(93)90243-F)
2. **D.N.Olaru** and M.D.Gafitanu: *Lubrication Safety in High-Speed Ball Bearings*, **Lubrication Science**, 9-4, August 1997, pp 365- 389;
<https://doi.org/10.1002/lis.3010090404>
3. **D.N.Olaru** and M.D.Gafitanu: *A New Methodology to Estimate Starvation in Ball Bearings*, **Tribotest Journal**, 4-1, 1997, p.93- 106;
<https://doi.org/10.1002/tt.3020040106>
4. M.D.Gafitanu, **D.N.Olaru** und M.C.Coceu: *Die Verluste Wegen Der Reibung In Radial-Axial –Kugellagern Bei Hohen Drehzahlen*, **Wear**, 160 (1993), 51-60;
[https://doi.org/10.1016/0043-1648\(93\)90405-B](https://doi.org/10.1016/0043-1648(93)90405-B)
5. Bercea, I., Cretu, Sp., Bercea, M. **Olaru, D.N.**; *Simulating Roller- Cage Pocket Friction in a Tapered Roller Bearing*, **European Journal Mech.Engineering**, vol.43, No.4, 1998, p.189-194; ISSN [1371-6980](https://doi.org/10.1016/0043-1648(93)90405-B)
<http://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&idt=1623107>
6. Bercea, M. Bercea, I. **Olaru, D., N.**, Nelias, D.: *Polyethylene as an Additive for Minearl Oils- Part I: Influence of the Polymer Concentration on the Film-Forming Properties in Rolling Bearings*, **STLE -TRIBOLOGY TRANSACTIONS**, Vol.42, 1999, 4, p.851-859;
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7. Bercea, M., Bercea, I., Nelias, D., **Olaru, D.N.**, *The Tribological Behavior of Mineral Oils Additived with Polyethylene*, **LUBRICATION SCIENCE**, 11-3, May 1999 (11), p.247-270;
<https://doi.org/10.1002/ls.3010110304>
8. Gh. Manolache, Sp. Cretu, **D.N.Olaru**, C.G. Bujoreanu, *A study of thermal phenomena in the piston-ring and cylinder-sleeve tribosystem of an internal combustion engine and flash temperature calculation*, **LUBRICATION SCIENCE**, 12-2, Feb. 2000, p.115-131.
<https://doi.org/10.1002/ls.3010120202>
9. C.Oprisan, **D.N.Olaru**, D.Leohchi, *A New Method to Simulate the Elastic Interactions in the Tribosystems of a Multi-Bar Mechanism*, **TRIBOTEST JOURNAL**, 9-2, December 2002 (9), p.157-169.
<https://doi.org/10.1002/tt.3020090207>
10. O. Dodun, **D. Olaru**, G. Nagî, F. Negoescu and M. Coteață, *Experimental study regarding electrostatic spray coating of solid lubricant for gears*, **INTERNATIONAL JOURNAL OF MATERIAL FORMING**, **Volume 1, Supplement 1** (2008), **1335-1338**, (SpringerLink)
<https://doi.org/10.1007/s12289-008-0110-4>
11. **Olaru, D.N**; Stamate, C; Prisacaru, G. - *Rolling Friction in a MicroTribosystem*, **TRIBOLOGY LETTERS**, Volume: 35, Issue: 3, 2009, Pages: 205-210;
<https://doi.org/10.1007/s11249-009-9449-z>
12. **Dumitru N. Olaru**, Ciprian Stamate, Alina Dumitrascu, Gheorghe Prisacaru - *New microtribometer for rolling friction*, **WEAR**, Volume 271, Issues 5–6, 22 June 2011, Pages 842-852
<https://doi.org/10.1016/j.wear.2011.03.007>
13. V. Cârlescu, **D. Olaru**, F. Breabăn, Gh. Prisăcaru - *Comparative study of electromechanical response in some dielectric elastomers*, **JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS**, Vol.13, 2011.
https://www.academia.edu/54036224/Optoelectronics_and_Advanced_Materials_Rapid_Communications?uc-sb-sw=66203911
14. Iuliana Rotaru, Carmen Bujoreanu, Adrian Bele, Maria Cazacu, **Dumitru Olaru**, *Experimental testing on free vibration behaviour for silicone rubbers proposed within lumbar disc prosthesis*, **Materials Science and Engineering: C**, Volume 42, September (2014), Pages 192-198.
<https://doi.org/10.1016/j.msec.2014.05.021>
15. Mihaela Rodica D. Bălan, Vasile Ciprian Stamate, Luc Houpert, **Dumitru N. Olaru**, *The influence of the lubricant viscosity on the rolling friction torque*, **TRIBOLOGY INTERNATIONAL** 72 (2014) 1–12;
<https://doi.org/10.1016/j.triboint.2013.11.017> Get rights and content
16. Rotaru Iuliana, **Olaru Dumitru**, *Mechanical behaviour of p (HEMA)hydrogel for disc prosthesis on lumbar spine*, **JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS**, 2014, Vol. 16, No. 7-8, pp. 881 – 886.
https://www.academia.edu/54036224/Optoelectronics_and_Advanced_Materials_Rapid_Communications?uc-sb-sw=66203911
17. **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**, Volume 107, March 2017, Pages 294–305, (Online 11,2016)
<https://doi.org/10.1016/j.triboint.2016.11.042>
18. Vlad Cârlescu, **Dumitru N. Olaru**, Gheorghe Prisacaru, Cezar Oprisan and José Machado, *Sensors and Actuators on Determining Parameters for Being Considered in Selection of Elastomers for Biomimetic Hands*, **SENSORS**, (2017), Jun; 17(6): 1190, Published online 2017 May 23
<https://doi.org/10.3390/s17061190>
19. Andrei Popescu, Luc Houpert, **Dumitru N Olaru**, *Four approaches for calculating power losses in an angular contact ball bearing*, **MECHANISM AND MACHINE THEORY**, (2020), **Volume 144**, February 2020, 103669.
<https://doi.org/10.1016/j.mechmachtheory.2019.103669>
20. Cojocaru, D.; Ianus, G., Cârlescu, V., Chiriac, B., Olaru, D., (2025) Friction Torque in Miniature Ball Bearings. **Lubricants**, 2025, 13, 12. <https://doi.org/10.3390/lubricants13010012>

[Dimitru Olaru - Google Scholar](#)

[scholar.google.com/citations?user=MOA56IsAAAAJ&hl=en&oi=sra](#)

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Dimitru Olaru

Other names

Emeritus Professor of Tribology, Technical University "Gheorghe Asachi" Iasi, Romania
Verified email at academic.tuiasi.ro
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	All	Since 2020
Citations	792	394
h-index	13	9
i10-index	19	9

TITLE	CITED BY	YEAR
A new model to estimate friction torque in a ball screw system D Olaru, GC Puiu, LC Balan, V Puiu Product engineering: eco-design, technologies and green energy, 333-346	83	2005
The influence of the lubricant viscosity on the rolling friction torque MRD Bălan, VC Stamate, L Houpert, DN Olaru Tribology International 72, 1-12	73	2014
Starvation in ball bearings DN Olaru, MD Găfitanu Wear 170 (2), 219-234	39	1993
Four approaches for calculating power losses in an angular contact ball bearing	38	2020