

PERSONAL INFORMATION

**Carmen Bujoreanu**



📍 Technical University "Gheorghe Asachi" Iasi, Mechanical Engineering Faculty

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WORKPLACE

Technical University "Gheorghe Asachi" of Iasi, Faculty of Mechanical Engineering, Department of Mechanical Engineering, Mechatronics and Robotics (I.M.M.R.), 43 Prof. Dimitrie Mangeron Blvd., Iasi, 700050

PROFESSIONAL EXPERIENCE

2016 – present

**Professor**

Technical University "Gheorghe Asachi" of Iasi, Faculty of Mechanical Engineering, Department of Mechanical Engineering, Mechatronics and Robotics (I.M.M.R.)

2009 -2016

**Associate Professor**

Technical University "Gheorghe Asachi" of Iasi, Faculty of Mechanical Engineering, Department of Mechanical Engineering, Mechatronics and Robotics (I.M.M.R.)

2002 -2009

**Lecturer**

Technical University "Gheorghe Asachi" of Iasi, Faculty of Mechanical Engineering, Department of Machine parts and Tribology (O.M.T.)

1988-2002

**Ph.D. Student and assistant professor**

Technical University "Gheorghe Asachi" of Iasi, Faculty of Mechanical Engineering, Department of Machine parts and Tribology (O.M.T.)

**Activities and main responsibilities:** educational activities; scientific research; institutional activities

1983 -1988

**Design engineer**

Heavy Equipment Factory (Fortus) Iasi

**Activities and main responsibilities:** production and research activities in the field of machine tools.

EDUCATION AND TRAINING

2017 – present

**Habilitated professor**

PhD supervisor in the field of Mechanical Engineering (O.M. 4147/21.06 2017).Thesis title: Research and achievements in the analysis and monitoring of mechanical systems

2011 – 2013

**Master's degree** in "Energy conversion and motion control", diploma no. 2818/22.09.2014

**Achieved competences:** Robust control of systems, Adaptive control of systems, Robot control algorithms, Advanced electromagnetic and electromechanical systems.

Technical University "Gheorghe Asachi" of Iasi, Faculty of Electrical Engineering, Energy and Applied Informatics

1998 – 2003

**Ph.D. in Mechanical engineering**, diploma 1616/15.05.2003

Thesis title: Studies and research on the scuffing of elements in rolling contacts, with applications to bearings

Technical University "Gheorghe Asachi" of Iasi, Mechanical Engineering Faculty.

1978 – 1983

**Bachelor's degree in Mechanical Engineering** (head of class)

Technical University Gh. Asachi Iasi, Faculty of Machine Manufacturing, Department of Machine Tools (M.U.S.)

**Achieved competences:** Mathematics, Technical drawing, Machine parts, Strength of materials, Design of machine tools, Programming, Control of mechanical processes.

1974 -1978

**Baccalaureate Diploma** - "Roman -Voda" High School, Roman, Neamț

The special mathematics-physics class;

**Achieved competences:** mathematics, physics and general culture.

PERSONAL SKILLS

Native language Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
<b>French</b>	C1	C2	C2	C2	C2
<b>English</b>	B1	B1	B1	B1	B1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

**Communication skills** ▪ Good communication and mediator skills; Power of argumentation; Intuition; Flexibility  
They are acquired through experience of teaching various subjects in over 35 years of professional experience.

**Organisational / managerial skills** ▪ Vice-dean in charge of scientific research (2020 - 2024)  
▪ Organization of courses, workshops and international conferences (Comefim'9, Rotrib'10, ACME 2012, 2014, 2016, 2018, 2020, 2022, 2024);  
▪ Guiding and organizing the activity of Erasmus students from the Faculty of Mechanics from 2008 until now (team member);  
▪ Activation in the scientific research committee and the international relations and university image committee of the Faculty Council (member of the Faculty Council from 2008);  
▪ Preparation of internal self-evaluation files for newly established programs (Bachelor's Mechatronics specializations and Advanced Mechatronics Master's) and those ongoing beginning with 2020

**Social skills and competences** ▪ Responsibility; Discipline and punctuality; Focus on objectives and results; Intercultural adaptability; Proactive, positive attitude and involvement; Team spirit.

**Computer skills** ▪ knowledge of working with computers (Internet, e-mail, Microsoft Office, Adobe editor)  
▪ programmer in the following languages: LabVIEW, MathCAD, SolidWorks, AutoCAD.

**Professional skills** ▪ Rigor; Critical spirit of synthesis and analysis; Seriousness

**Fields of expertise** ▪ Mechanical and mechatronic systems;  
▪ Tribo-modelling of Hertzian contacts;  
▪ Dynamics and kinematics of bearings;  
▪ Experimental data acquisitions and processing;  
▪ Noise and vibration  
▪ Vibroacoustic diagnostics of systems;  
▪ Advanced computer design.

ADDITIONAL INFORMATION

**Awards** ▪ UEFISCDI (PRECISI - 2014-7680) award, 2014, for paper: 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, (2014), 192-198.  
▪ UEFISCDI (PRECISI-2017-21673) award, 2017, for paper: Bujoreanu C, Nedeff F., Benchea M., Agop M, Experimental and theoretical considerations on sound absorption performance of waste materials including the effect of backing plates, Applied Acoustics 119 (2017) 88-93.  
▪ UEFISCDI (Precisi-2018-26689) award, 2018, for paper: Bujoreanu C\*, Irimiciuc S, Benchea M, Nedeff F, Agop M, A fractal approach of the sound absorption behaviour of materials. Theoretical and experimental aspects, International Journal of Non-Linear Mechanics, 103 (2018) 128-137  
▪ UEFISCDI (PRECISI -2019-30882) award, 2019, for paper: Oancea I, Bujoreanu C; Budescu M, Benchea M, Gradinaru CM, Considerations on sound absorption coefficient of sustainable concrete with different waste Journal of Cleaner Production 203 (2018) 301-312.

Projects / Publications

- 37 research projects, being project director for 12 contracts (3 national research grants and 9 contracts with economic agents);
- 5 books published in recognized publishing houses (2 specialized books and 3 didactic books as sole author);
- 4 didactic guidelines published in recognized publishing houses and on the web.
- 110 scientific articles published as follows:: in WOS journals/volumes (32); in BDI journals/volumes (Scopus, Google Scholar, Ebsco, etc.) (49); in non-indexed magazines/volumes (29). I mention that in 80 works I am first author or corresponding author.
- In addition, it should be noted the participation in European projects:
  - Leonardo da Vinci program - contract no. RO/2003/PL91229EX with the subject: Engineering training of mechatronic type – a necessity for the informational society, 2004.
  - Contract POSDRU/87/1.3/S/64069 – FLEXFORM – Flexible professional training program on mechatronic platforms, 2010-2013.
  - Project 2SOFT/1.1/64/2020 within the program "Joint Operational Program Romania - Republic of Moldova 2014 - 2020" financed by ENI CBC - Cross border cooperation in mechatronics engineering education, acronym CBCinMEE

Citations

over 400 citations in: WOS journals (163 citations), BDI and Ph.D. theses

Invitations/Specializations

- Erasmus program at I.U.T Béthune, Université d'Artois, France (2011, 2012, 2014, 2015).
- Erasmus Program at the Technical University of Lisbon, Portugal (2019)
- Specialization in the field of organization in co-supervision of a master's degree in the field of mechatronics at the National Taiwan University of Science and Technology (2010).
- ISCIR authorized trainer diploma for lifting installations (2009) and reauthorization (2013).
- Trainer course and obtaining the graduation certificate issued by CNFPA (2009).
- Specialization at the Festo company (Germany) within the Leonardo da Vinci Program - contract no. RO/2003/PL91229EX- 2004 with the theme: Engineering training of mechatronic type – a necessity for the informational society.
- Completion of the course of Internal Auditors in the field of Quality Management System - ISO 9001:2000, June 2003, organized by the Simtex SA Certification Body Bucharest.
- Scholarship at the Institut National des Sciences Appliquées, Laboratoire de Mécanique des Contacts, Lyon (France) - in April-June 1999 under international grant no. 191/1997-1999 with the World Bank

Memberships

- Romanian Association of Tribology (ART) member
- Romanian Association of Mechanical Transmissions (ROAMET), member
- Member of the professional associations Romanian Mechatronics Society - SROMECA, and AMIS

References

- Reviewer for WoS journals: ADVANCES IN MECHANICAL ENGINEERING journal, FI= 1,161 (more than 24 reviews- ID-AME 19-0185, 0185R, AME-19- 2112, 2112R, AME-19-1974, 1074R, AME-19-1651, 1651R, AME- 19-2178, 2178R)
- Reviewer for the EUROPEAN JOURNAL OF WOOD AND WOOD PRODUCTS, FI=1.901 (2 reviews-HARW-D-19-00372, 00372R)
- Reviewer for University Politehnica of Bucharest Scientific Bulletin-Series A FI =0 (10 reports 7044R, 7144R, 7151R, 7878R, 8087,8828,9064,9080,9303,9841)  
<https://publons.com/researcher/1398564/carmen-bujoreanu/peer-review/>
- Reviewer at international conferences: (more than 40 papers) ICIENG 2022, 2024, Portugal; DIPRE - Galati; ACME - Iasi, 2008 -2024; ROTRIB - Romania, 2010-2024; IMANE - Romania 2015-2024, etc

Member of editorialboards

Advances in Mechanical Engineering, IF=1.161/2020 - Associate editor  
<https://journals.sagepub.com/editorial-board/ade>

Member of scientific committees of international conferences

- Member of the scientific committee of international conferences: IManE from 2015 to 2024, ACME 2018 to 2024
- Member of the Scientific Evaluation Committee for the awarding of prizes beginning with 2015 until now for the Best Young Romanian Researchers in Science and Engineering organized by Prof. Rada Mihalcea (USA - in the top 100 researchers) and the City Hall Cluj-Napoca municipality, <http://www.primariaclujnapoca.ro/Premiul-Tineri-Cercetatori-in-Stiinta-si-Inginerie.html>.
- Chairperson at sections of international conferences: Tehnomus 2015, ACME 2014 to 2024, IManE 2015, ImanEE 2017, ImanEE 2018

Other projects

Teaching courses in the field of professional training and retraining of adults (from 2007-present) in the mechanical field, through:

- Carmen Bujoreanu, professional training manual in the occupation Code NC: 8332.2.1 "Road and earthwork machinist", Ed. PIM, Iași, (2012), 106 pg;
- POSDRU/108/2.3/G/83119, "Qualification for change" - qualifies employees through continuous professional training, Beneficiary: S.C. METATECH-EDUCATION S.R.L. Iasi, Period: 2010-2013, team member.

References and appendices can be provided upon request:

ID orcid.org/0000-0002-5680-2788  
 WOS Researcher ID: AAM-1765-2020  
 Scopus author ID: 6508070033  
 Publons.com/a/1398564

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Carmen Bujoreanu

**Carmen Bujoreanu**  
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 tribology rolling bearings sound and vibration data acquisition

TITLU	CITAT DE	ANUL
Experimental and theoretical considerations on sound absorption performance of waste materials including the effect of backing plates C Bujoreanu, F Niedeft, M Benchea, M Agop Applied Acoustics 119, 88-93	98	2017
Considerations on sound absorption coefficient of sustainable concrete with different waste replacements I Oancea, C Bujoreanu, M Budescu, M Benchea, CM Grădinaru Journal of Cleaner Production 203, 301-312	83	2018
An overview on the applications of mechanisms in architecture. Part II: foldable plate structures IA Doroftei, C Bujoreanu, I Doroftei IOP Conference Series: Materials Science and Engineering 444 (5), 052019	19	2018
Scuffing behaviour in angular contact ball bearings C Bujoreanu, S Cretu, D Nelias	19	2003

Citat de	Toate	Din 2019
Referințe bibliografice	409	352
h-index	9	8
i10-index	8	6

Bar chart showing citation trends from 2017 to 2024. The y-axis represents the number of citations, ranging from 0 to 90. The x-axis represents the years from 2017 to 2024. The chart shows a general upward trend in citations over the period.