

PERSONAL INFORMATION

Rusu (married Șerdean) Maria Florina



 103-105 Muncii Bvd., Cluj-Napoca, 400641, România

 florina.rusu@omt.utcluj.ro

Sex Female | Date of birth 10/06/1986 | Nationality Romanian

WORK EXPERIENCE

2015-present Lecturer

Technical University of Cluj-Napoca, Romania
Faculty of Machine Building,
Department of Mechanical Systems Engineering
▪ Subjects: Mechanics I, II; Computer Programming I, II

2012-present Research Assistant

MiNaS Laboratory
Technical University of Cluj-Napoca, Romania
Faculty of Machine Building,
Department of Mechanical Systems Engineering

2013-2015 Assistant Professor

Technical University of Cluj-Napoca, Romania
Faculty of Machine Building,
Department of Mechanical Systems Engineering
▪ Subjects: Mechanics I, II; Computer Programming I, II

2011-2014 Mathematics Teacher

Theoretical Christian High School "Pro Deo"
Str. Alexandru Vaida Voievod nr. 55A, Cluj-Napoca, jud. Cluj, România

EDUCATION AND TRAINING

2011-2014 **PhD in Industrial Engineering**
Technical University of Cluj-Napoca, Romania
Domain: Industrial Engineering
Title: Optimizations under uncertainty with applications in rolling bearing industry

2008-2011 **Bachelor's Degree in Economics**
Babes-Bolyai University, Cluj-Napoca, Romania

Faculty of Economics and Business Administration
Specialization: Accounting and Management Informatics

- Accounting
- Management Informatics
- Mathematics applied in Economics
- Statistics
- Marketing
- Finances

2008-2010 **Master's Degree in Data Bases**

Babes-Bolyai University, Cluj-Napoca, Romania
Faculty of Mathematics and Computer Science

- Databases
- Integrated Communications Networks
- Distributed Systems
- Computer Networking
- Web programming

2005-2008 **Bachelor's Degree in Mathematics**

Babes-Bolyai University, Cluj-Napoca, Romania
Faculty of Mathematics and Computer Science

- Mathematics
- Assembly programming
- Computer programming

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Replace with language	B2	C1	C1	C1	B2
Replace with language	B1	B1	B1	A2	A2

Communication skills ▪ good communication skills gained through my experience as a teacher, assistant professor and lecturer

Organizational / managerial skills ▪ I coordinated a team of volunteers from a humanitarian foundation while helping some children in need
▪ I coordinated the development of an E-learning Platform while studying to obtain a Bachelor's Degree.

Job-related skills ▪ identification of learning styles and their implications upon teaching-learning-evaluation strategies
▪ implementation of teaching-learning plans centered on the student

Computer skills ▪ C#, .NET, Matlab
▪ Microsoft Office™ tools

Other skills ▪ Playing the flute

Driving license ▪ B

ADDITIONAL INFORMATION

- Publications
- Presentations
- Projects
- Conferences
- Seminars
- Honours and awards
- Memberships
- References

Publications:

- I. Negrean, K. Kacso, C. Schonstein, A. Duca, **F. Rusu**, Mechanics. Theory and Applications, UTPRESS, Cluj-Napoca, 2015.
- Adina CRISAN, **Florina RUSU**, Radu MORARIU-GLIGOR, Kalman KACSO, *Studiul diferitelor tipuri de frecări cu aplicații în ingineria mecanică*, capitol în *Organe de Mașini – Metodologie de predare a disciplinei la diferite specializări* editată de C. Bîrleanu, S. Haragâș, M. Pustan, Editura Risoprint, ISBN 978-973-53-1793-5, Cluj-Napoca, 2016, pp. 155-198
- Radu MORARIU-GLIGOR, **Florina RUSU**, Proiectarea asistată de calculator a arcurilor elicoidale cilindrice de compresiune, capitol în *Organe de Mașini – Metodologie de predare a disciplinei la diferite specializări* editată de C. Bîrleanu, S. Haragâș, M. Pustan, Editura Risoprint, ISBN 978-973-53-1793-5, Cluj-Napoca, 2016, pp. 199-214
- Marius PUSTAN, Cristian DUDESCU, Corina BIRLEANU and **Florina RUSU** (2017). Nanocharacterization of the Mechanical and Tribological Behavior of MEMS Micromembranes, chapter in Nanomechanics, Prof. Alexander Vakhrushev (Ed.), InTech, DOI: 10.5772/intechopen.68292.

Lucrări ISI reprezentative:

- Marius PUSTAN, Corina BIRLEANU, **Florina RUSU**, Cristian DUDESCU, Ovidiu BELCIN, Size effect on the microbridges quality factor tested in free air space, 15th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2014, ISBN:978-1-4799-4790-4
- **Florina RUSU**, Marius PUSTAN, Corina BIRLEANU, Raluca MULLER, Rodica VOICU, Angela BARACU, Analysis of the surface effects on adhesion in MEMS structures, Applied Surface Science, 358, 2015, 634-640
- Lucian TUDOSE, **Florina RUSU**, Cristina TUDOSE, Optimal design under uncertainty of bearing arrangements, Mechanism and Machine Theory, 98, 2016, pp. 164-179
- **Florina Maria RUSU**, Violeta Valentina MERIE, Ioana Mihaela PINTEA, Andreea MOLEA, Adhesion analysis for chromium nitride thin films deposited by reactive magnetron sputtering, IOP Conf. Series: Materials Science and Engineering 147 (2016) 012023, pp. 1-7, doi:10.1088/1757-899X/147/1/012023
- Marius PUSTAN, Cristian DUDESCU, Corina BÎRLEANU, **Florina RUSU**, Radu CHIOREAN, Ștefan CRĂCIUN, Effect of geometrical dimensions on the tribomechanical response of a gold micromembrane with bent beam hinges, IOP Conf. Series: Materials Science and Engineering 147 (2016) 012022, pp. 1-9, doi:10.1088/1757-899X/147/1/012022

Projects:

- Elaborarea și nano-caracterizarea unor filme subțiri de nitrură de niobiu pentru aplicații MEMS (NioMEMS), nr. contract 2003/12.07.2017, cod CI2017_CM_1, director proiect S.L. Dr. Mat. Florina Maria Șerdean
- Cercetări privind elaborarea și caracterizarea unor filme subțiri metalice și ceramice pentru aplicații MEMS, Cod PN-II-RU-TE- 2014-4-0136, director proiect asist.dr.ing. Violeta Merie
- Proiectarea avansată a micromembranelor cu multiple grade de libertate pentru aplicații optice MEMS, Cod PN-II-RU-TE- 2014-4-1271, director proiect prof.dr.ing. Pustan Marius
- Caracterizarea Nanomecanică și Nanotribologică pentru Proiectarea Fiabilă a Rezonatoarelor MEMS, Cod. PN-II-RU-TE-2011-3-0106/2011-2013, director proiect Prof.dr.ing. Pustan Marius

Conferences:

- 4th International Conference in Advanced Engineering in Mechanical Systems (ADEMS 2013), Cluj-Napoca, Romania, October 24th-25th, 2013
- 13th European Conf. on Spacecraft Structures, Materials & Environmental Testing, Braunschweig, Germany, April 1st–4th , 2014
- 6th International Conference on Advanced Concepts in Mechanical Engineering (ACME 2014), Iași, Romania, June 12th -13th , 2014
- International Conference on Production Research - Regional Conference Africa, Europe and the Middle East and 3rd International Conference on Quality and Innovation in Engineering and Management (ICPR- AEM 2014), Cluj-Napoca, Romania, July 1st -5th, 2014
- 9th International Conference on Materials, Science and Engineering, Brașov, Romania, March 5th - 7th , 2015
- International Conference of Mechanical Engineering, ICOME 2015, Craiova, Romania, October 7th - 9th, 2015
- 7th International Conference on Advanced Concepts in Mechanical Engineering (ACME 2016), Iași, Romania, June 8th -12th , 2016
- 10th International Conference on Materials, Science and Engineering, Brașov, Romania, March 8th - 11th, 2017
- 5th INTERNATIONAL CONFERENCE ON POWDER METALLURGY & ADVANCED MATERIALS, Cluj-Napoca, Romania, September 17th -20th, 2017
- 13th INTERNATIONAL CONFERENCE ON MODERN TECHNOLOGIES IN MANUFACTURING, Cluj-Napoca, Romania, September 12th -13th, 2017
- 41st International Conference on Mechanics of Solids, Acoustics and Vibrations "Prof. P.P. Teodorescu", Cluj-Napoca, Romania, October 26th-27th, 2017
- 4th International Conference on Structural Nano Composites (NanoStruc 2018), Berlin, Germany, May 23rd – 24th, 2018
- 8th International Conference on Advanced Concepts in Mechanical Engineering (ACME 2018), Iași, Romania, June 6th -8th, 2018
- The IVth International Congress of Automotive and Transport Engineering (AMMA 2018), Cluj-Napoca, Romania, October 17th -19th, 2018