

PERSONAL INFORMATION Maria Luminița SCUTARU✉ lscutaru@unitbv.ro

POSITION
IOSUD UTBV
PhD Coordinator
Doctoral studies field: Mechanical Engineering
Since 2015

EXPERTISE FIELD AND RESEARCH INTEREST AREAS
Dynamic Systems, Multibody Systems, Analytical Mechanics, Mechanics of Composite Materials

WORK EXPERIENCE

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- 01.10.2016-prezent **Professor PhD**
Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)
Educational and research activities: Teaching activities, laboratory, project, diploma project coordination, composite materials manufacturing, testing and characterizing, dissemination of research results in the field of solid mechanics and composite materials
- 01.10.2014 – 30.09.2016 **Associate prof. PhD**
Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)
▪ Educational and research activities: modal analysis and identification of mechanical structures , solid mechanics , composite materials manufacturing, testing and characterizing, dissemination of research results in the field of solid mechanics and composite materials
- 01.10.2005 -30.09.2014 **Lecturer**
Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)
Educational and research activities: multibody systems, solid mechanics , testing methods of advanced materials , dissemination of research results in the field of solid mechanics and composite materials
- 01.10.2002 - 30.09.2005 **Assistant professor**
Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)
▪ Educational and research activities: multibody systems, solid mechanics , testing methods of advanced materials , dissemination of research results in the field of solid mechanics and composite materials
- 01.03.1998 – 30.09. 2002 **University Assitant**
Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)
▪ Educational and research activities: multibody systems, solid mechanics , testing methods of advanced materials , dissemination of research results in the field of solid mechanics

EDUCATION AND TRAINING

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- September 2015 **Habilitation Thesis**
Habilitation thesis title: Models for the study of mechanical response of the solids and systems of solids
Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)
Skills in the field of scientific research - Mechanical Engineering

- 2014 **Graduate programs and professional development training**
 Transilvania University of Brasov, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)
- 2009-2014 **Blended learning training technologies and modern educational technologies for higher education**
PhD in the field of Mechanical Engineering, specialization Mechanical Engineering ISCED 8

Thesis title: Contributions to the dynamic analysis of transmissions used in small wind turbines.
 Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)

Skills in the field of scientific research - Mechanical Engineering
- 2006-2008 **Master degree - Computational Mechanics** ISCED 7

Transilvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)

Skills in the field of scientific research - Mechanical Engineering
- 1998-2006 **PhD in the field of Industrial Engineering** ISCED 8

Thesis title : Wood and wooden materials thermo insulator panels used in buildings construction
 Transilvania University of Brasov, Faculty of Wood Engineering, , 29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)

▪ Skills in the field of scientific research - Industrial Engineering
- 1992-1997 **Industrial Engineering / Bachelor** ISCED 6

Transilvania University of Brasov, Faculty of Wood Engineering,29 Eroilor Av., 500036, Brasov, Romania (www.unitbv.ro)

Skills in the field of forestry, design of furniture and finished products from wood

PERSONAL SKILLS

Mother tongue(s) Replace with mother tongue(s)

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Communication skills

- Positive and active attitude, intra- and intercultural dialogue, activities carried out as a member of research teams and project coordinator respectively

Organisational / managerial skills

- Communication skills acquired through my own teaching experience, managerial experience as well as that of a participant in national projects team;
- Mediation skills: positive and active attitudes, intra- and inter-cultural dialogue, including in the activities as a member of research teams and project coordinator respectively
- Quality Assurance Coordinator (2017- present) - Coordination of studies, analysis and reports on evaluation and quality assurance in higher education
- Membre in the Council of Mechanical Engineering Faculty (Febr. 2016-present)
- IM-IFR bachelor study program coordinator - IFR management activities at the level of the Department of Mechanical Engineering (2013 - present)
- Member of Scientific Committee of the conferences COMEC (2005,2007,2009, 2011, 2013, 2015, 2017) and COMAT (2006, 2008, 2010, 2014, 2016, 2018)
- Organizational / managerial skills based on the experience gained as a director and member in research projects

Job-related skills

8-12 sept.2008

Certificate - Courses of advanced training for engineers courses Computational and Experimental Mechanics of Advanced Materials, Udine,Italy

19-23 nov.2007

Certificate - Courses of advanced training for engineers courses, *Strain Gage Installation Workshop*, Braunschweig, GERMANIA

23 -27 oct. 2006

Certificate - Courses of advanced training for engineers courses, Dynamical Analysis of Vehicle System- Theoretical Foundations and Advanced Applications , Udine,Italy

Communication skills in English and knowledge transfer through teaching: seminar holder – Mechanics I, II (2014 - present), course holder Mechanics I (2018- present)

ADDITIONAL INFORMATION

Publications

Co-author of 1 book chapter in International Scientific Book 2008;
Author and co-author of 20 books (7 – unique author, 5 – first author)
Author and co-author of 20 articles in ISI journals;
Author and co-author of more than 70 scientific articles (articles in proceedings of international conferences ISI indexed – 10);

H Indexes

IndiceHISI:8
IndiceHScopus:8
IndiceHGS:8

ANNEXES

List of relevant publications

April 2019

Prof.hab.dr.ing.Maria Luminița SCUTARU

ANNEX to CV

LIST OF RELEVANT PUBLICATIONS (selection)**Books (selection)**

1. **Maria Luminita Scutaru**, Gheorghe Deliu – Analiza dinamică a transmisiilor folosite la turbinele eoliene de mică putere , Editura Universității Transilvania Brașov, ISBN 978-606-19-0548-5, 2015;
2. **Maria Luminita Scutaru** – Mecanica –Dinamica.Teorie și aplicații, Editura Universității Transilvania Brașov, ISBN 978-606-19-0443-3, 2014.
3. **Maria Luminita Scutaru** – Mecanica – Cinematica. Teorie și aplicații, Editura Universității Transilvania Brașov, ISBN 978-606-19-0269-9, 2013.
4. **Scutaru M.L.**, Chiru A., Vlase S., Cofaru C., Teodorescu H., Materiale plastice si compozite in ingineria autovehiculelor, Editura Matrix, ISBN 978-6-6-25-0023-8, 2013.

Chapters in international books

1. Vlase,S.,Munteanu,V., **Scutaru,L.**, Kinematical Analysis of the Multibody Systems using Topological Description, DAAAM 2008, DAAAM International Scientific Book 2008, Vol. 7, ISSN 1726-9687, ISBN 3-901509-69-0, Editor: B. Katalinic, hard cover, Publisher DAAAM International Vienna, Vienna.

Papers (selected)**ISI journals**

1. S.Vlase, M.Marin, A. Ochsner, M.L.Scutaru - Motion equation for a flexible one-dimensional element used in the dynamical analysis of a multibody system, Continuum Mechanics and Thermodynamics, May 2019, Volume 31, Issue 3, pp 715–724 (2019) 31:715–724, Published 2019, FI= 2,311
<https://doi.org/10.1007/s00161-018-0722-y>
2. S.Vlase, M.Marin, **M.L.Scutaru**, R.Munteanu - Coupled transverse and torsional vibrations in a mechanical system with two identical beams revista:AIP ADVANCES ISSN:2158-3226, Published 2017, FI=1,657
http://apps.webofknowledge.com.am.e-nformation.ro/full_record.do?product=WOS&search_mode=GeneralSearch&qid=2&SID=F1p6YOHnja vfa4jOxfN&page=1&doc=3
3. Damping and Super-Elasticity Properties of a Memory Shape Alloy NiTi Used in Automotive Engineering revista:JOURNAL OF VIBRATION ENGINEERING & TECHNOLOGIES issn:2321-3558 Published 2017, FI=0,615
http://apps.webofknowledge.com.am.e-nformation.ro/full_record.do?product=WOS&search_mode=GeneralSearch&qid=2&SID=F1p6YOHnja vfa4jOxfN&page=1&doc=4
4. **M.L.Scutaru** , B.Mitrica – Dynamical Analysis of the Mechanical System with Two Degree of Freedom Applied to the Transmission of the Wind Turbine, Mathematical Problems in Engineering, Article Number: 3821083 Published: 2016, FI=0,762 (la data publicarii articolului)
<http://www.hindawi.com/journals/mpe/2016/3821083/>
5. **M.L.Scutaru**, H.Teodorescu, S.Vlase, M.Marin - Advanced HDPE with increased stiffness used for water supply networks, Journal of Optoelectronics and Advanced Materials Volume: 17 Issue: 3-4 Pages: 484-488 Published: March-April 2015, FI=0,429
<http://joam.inoe.ro/index.php?option=magazine&op=view&idu=3690&catid=89>
6. **M. L. Scutaru**, - Toward the use of irradiation for the composite materials properties improvemen, Journal of Optoelectronics and Advanced Materials Volume: 16 Issue: 9-10 Pages: 1165-1169 Published: September-October 2014, FI=0,429
<http://joam.inoe.ro/index.php?option=magazine&op=view&idu=3568&catid=86>
7. **M. L. Scutaru**, M. Baba, M.I. Baritz – „ Irradiation influence on a new hybrid hemp bio-composite”, Journal of Optoelectronics and Advanced Materials Volume: 16 Issue: 7-8 Pages: 887- 891 Published: July-August 2014, FI=0,429
<http://joam.inoe.ro/index.php?option=magazine&op=view&idu=3524&catid=85>

8. **M.L.Scutaru**, M.Baba – “Investigation of the Mechanical Properties of Hybrid Carbon-Hemp Laminated Composites Used as Thermal Insulation for Different Industrial Applications”, *Advances in Mechanical Engineering*, Article Number: 829426 Published: 2014, FI=0,575
<http://www.hindawi.com/journals/ame/2014/829426>
9. S. Vlase, C. Danasel, **M.L. Scutaru**, M. Mihalciță, - „Finite Element Analysis of a Two-Dimensional Linear Elastic Systems with a Plane “Rigid Motion”, *Romanian Journal of Physics* Volume: 59 Issue: 5-6 Pages: 476-487 Published: 2014, FI=0,924
http://www.nipne.ro/rjp/2014_59_5-6/0476_0487.pdf
10. S. Vlase, P.P. Teodorescu, C. Itu, **M.L. Scutaru** – „Elasto-Dynamics of a Solid with a General “Rigid” Motion Using FEM Model. Part II. Analysis of a Double Cardan Joint”, *Romanian Journal of Physics* , Volume: 58 Issue: 7-8 Pages: 882-892 Published: 2013, FI=0,745
http://www.nipne.ro/rjp/2013_58_7-8/0882_0892.pdf
11. Niculita, C ; Gabor, A; Gheorghe, V Calin, MR ; **Scutaru, M.L.**—A new epoxy glass roving fabric material with a nonwoven PES fibers structure used in a composite laminates *Journal of Optoelectronics and Advanced Materials*, Volume: 15 Issue: 3-4 Pages: 176-181 Published: MAR-APR 2013, FI=0,563
<http://joam.inoe.ro/index.php?option=magazine&op=view&idu=3173&catid=76>
12. **Scutaru, Maria Luminita**; Vlase, Sorin –Some Properties of Motion Equations Describing the Nonlinear Dynamical Response of a Multibody System with Flexible Elements, *Journal of Applied Mathematics*, Article Number: 628503 DOI: 10.1155/2012/628503 Published: 2012, FI=0,834
<http://www.hindawi.com/journals/jam/2012/628503/>