

INFORMAȚII PERSONALE



SCUTARU Maria Luminița

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|Sex Female || Nationality Român

DOMENIUL OCUPAȚIONAL

Educație academică

WORK EXPERIENCE

2016- present [University Professor - Ph.D.Coordinator](#)

2014-2016 [University Associate Professor](#)

2005-2014 [University Lecturer](#)

2000-2005 [University Assistant](#)

1998-2000 [University Junior Assistant](#)

Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Brașov, România, www.unitbv.ro, Faculty of Mechanical Engineering, Department of Mechanical Engineering

- Teaching lectures, laboratory and project activities, scientific research
- **Business or sector:** education and scientific research

2019-present [Head of Mechanical Engineering Department](#)

Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Brașov, România, www.unitbv.ro, Faculty of Mechanical Engineering, Department of Mechanical Engineering

Business or sector: management, education and scientific research

2017-present [Coordinator of the Quality Assurance Office](#)

Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Brașov, România, www.unitbv.ro,

- Assuring the appropriate framework for carrying on the academic activities evaluation and coordination of the evaluation process
- Assuring coordination of study activities, analyzes and reports on quality assurance

Business or sector: evaluation and quality assurance in higher education

2016-present [Coordinator of the master's degree program STIM -IFR](#)

Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Brașov, România, www.unitbv.ro,

- Management of IFR activities at the faculty level;

Business or sector education, higher education

- 2013-present **Coordinator of bachelor degree program IM-IFR**
Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Braşov, România, www.unitbv.ro,
▪ Management of IFR activities at the faculty level ;
Business or sector education, higher education

EDUCATION AND TRAINING

- 2015 **Certificate of ability in field of Mechanical Engineering**
Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Braşov, România, www.unitbv.ro,
Skills in the field of scientific research
- 2014 **Attestation certificate of professional competencies**
Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Braşov, România, www.unitbv.ro,
Blended-learning training technologies and modern educational technologies for university education
- 2010-2013 **Postdoctorat - POSTDOC-DD, ID59323**
Transilvania University of Brasov, B-dul Eroilor nr. 29, 500283 Braşov, România, www.unitbv.ro, Faculty of
Mechanical Engineering
Research activity in the field of composite materials with application in field of mechanical engineering
- 2009-2014 **Ph.D. in Engineering Science, field of Mechanical Engineering** Level 8 EQF
Universitatea Transilvania din Braşov, Facultatea de Inginerie Mecanică
▪ Skills in the field of scientific research
- 2006-2008 **Master in Mechanical Engineering** Level 7 EQF
Universitatea Transilvania din Braşov, Facultatea de Inginerie Mecanică
▪ Skills in the field of scientific research
- 1998-2006 **Ph.D. in Engineering Science, field of Industrial Engineering** Level 8 EQF
Universitatea Transilvania din Braşov, Facultatea de Industrializarea Lemnului
▪ Skills in the field of scientific research
- 1992-1997 **Engineer** Level 6 EQF
Universitatea Transilvania din Braşov, Facultatea de Industrializarea Lemnului
▪ Forestry skills

PERSONAL SKILLS

Mother Language	Romanian				
Other Language	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken Interaction	Spoken production	
Limba engleză	B2 independent user	B2 independent user	B2 independent user	B2 independent user	B2 independent user
	Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user Common European Framework of Reference for Languages				
Communication skills	<p>Good communication skills gained through personal experience as university professor, management experience and that of participant in many project teams at national and international level;</p> <p>Mediation skills: positive and active attitude, within the activities carried out as a member in research teams and project coordinator</p>				
Organisational /managerial skills	<p>Good organizational / managerial skills trained on the basis of the experience gained as coordinator of study programs but also as coordinator of DAC (Quality Assurance Office)</p> <p>Good organizational / managerial skills trained on the basis of experience gained as a coordinator of scientific research project</p>				
Computer skills	good command of e-office tools, internet , Matlab, linear and non-linear multi-scale material modelling				
Post-graduate courses and other training	<p>8-12 sept. 2008, Computational and Experimental Mechanics of Advanced Materials, Udine, ITALIA</p> <p>19-23 nov. 2007, Optical Measuring Techniques GOM, Braunschweig, GERMANIA</p> <p>9-12. dec. 2006, Strain Gage Installation Workshop, Darmstadt, GERMANIA</p> <p>23 -27 oct. 2006, Dynamical Analysis of Vehicle System- Theoretical Foundations and Advanced Applications, Udine, ITALIA</p>				
Professional associations affiliation	<p>EUROMECH – 2006</p> <p>SMRTA – 2014</p>				
Other skills	<ul style="list-style-type: none"> ▪ Organizer of the International Conferences COMEC(2005,2007,2009, 2011, 2013, 2015, 2017, 2019, 2021) COMAT (2006, 2008, 2010, 2012, 2014,16, 2018) ▪ Organizer of the 9th International Conference an Advanced Composite Materials Engineering – COMAT 2022 ▪ Coordinator of the Mechanical Engineering program – Bachelor Studies IM-IFR (2013-present) ▪ Coordinator of the Mechanical Engineering program – Master Studies (2016-present) ▪ Member of the Faculty Council (febr.2016-present) ▪ Member of the Senat of University (sept. 2016-present) ▪ Coordinator of the Quality Assurance Office - DAC (oct.2017-present) ▪ Member in Council for Doctoral University Studies (2020-present) 				
Driving licence	▪ B				

ADDITIONAL INFORMATION

Publications	<ul style="list-style-type: none">• Author and co-author of over 20 specialty books• Author and co - author in over 100 scientific papers in the field of mechanics and composites (72 paperes in ISI journals)
Indici Hirsch	IndiceHISI: 10 IndiceHScopus: 9 IndiceHGS: 11
Annex	Selected scientific papers/books/chapters in international books

Last up-date:
2022

Prof.hab.dr.ing.M.L.SCUTARU

Annex

Books (Selection)

1. Sorin Vlase, Simona Lache, **Maria Luminița Scutaru**, Mircea Mihălcică, Mihaela Violeta Munteanu, Mechanics Problems - Statics, Editura Universitații Transilvania Brașov, ISBN 978-606-19-1062-5, 2018
2. **Maria Luminita Scutaru** – Mechanics-Kinematics-Dynamics, Theory and Applications –E-learning course format, Editura Universitații Transilvania Brașov, ISBN 978-606-19-0851-6, 2016
3. **Maria Luminita Scutaru** – Mechanical Elements for Engineers, Editura Universitații Transilvania Brașov, ISBN 978-606-19-0852-3, 2016
4. **Maria Luminita Scutaru**, Gheorghe Deliu – Dynamics analysis of transmission used in low power wind turbines , Editura Universitații Transilvania Brașov, ISBN 978-606-19-0548-5, 2015.
5. **Scutaru M.L.**, Chiru A., Vlase S., Cofaru C., Teodorescu H., Plastics and composite materials used in automotive engineering, Editura Matrix, ISBN 978-6-6-25-0023-8, 2013.
6. **Maria- Lumini a Scutaru** – Heat transfer through sandwich panels used in house constructions, Editura Universității Transilvania Brasov, ISBN 978-973-635-877-7 2007.

Chapters in international publishing house books (selection)

1. Vlase,S.,Munteanu,V., **Scutaru,L.**, Kinematical Analysis of the Multibody Systems using Topological Description, 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.
2. Catalin Iulian Pruncu, Maria Luminita Scutaru , Failure Mechanisms of Fiber Composites, Hybrid Fiber Composites: Materials, Manufacturing, Process Engineering, pg 99-116, <https://doi.org/10.1002/9783527824571.ch6>, 2019

Papers inxed in ISI Web of Science-selection (selection)

1. **M.L.Scutaru**, Pruncu C.I., Mathematical Modeling and Simulation in Mechanics and Dynamic Systems, MATHEMATICS, 2022, FI=2,258
2. Ishfaq K, Asad M., Harris M., Alfaify A., Anwar S., Lamberti L., **Scutaru M.L.**, EDM of Ti-6Al-4V under Nano-Graphene Mixed Dielectric: A Detailed Investigation on Axial and Radial Dimensional Overcuts, NANOMATERIALS, 2022, FI=5,076
3. Montassar S., Maustabchir H., Elkhalfi A., **Scutaru M.L.**, Vlase S, Fracture Modelling of a Cracked Pressurized Cylindrical Structure by Using Extended Iso-Geometric Analysis (X-IGA), MATHEMATICS, 2021, FI=2,258

4. Singh B., Kumar R., Chohan J.S, Singh S., Pruncu C.I, **Scutaru M.L.**, Muntean R., Investigations on Melt Flow Rate and Tensile Behaviour of Single, Double and Triple-Sized Copper Reinforced Thermoplastic Composites, *Materials*, 2021, FI=3,623
5. Sorin Vlase, Marin Marin. Iuliu Negrean, **Maria Luminița Scutaru**, New analytical formalisms used in finite element analysis of robots with elastic elements, *JOURNAL OF TAIBAH UNIVERSITY FOR SCIENCE*, 2020, FI=1,863
6. Munteanu MV, Mihalca M, Itu C, Vlase S, **Scutaru M.L.**, Mechanical design of interaction chamber for the ELIADE array at ELI-NP, *AIP ADVANCES*, 2020, FI=1,337
7. Itu C, **Scutaru M.L.**, Pruncu CI, Muntean R, Kinematic and Dynamic Response of a Novel Engine Mechanism Design Driven by an Oscillation Arm, *APPLIED SCIENCES-BASEL*, 2020, FI=2,474
8. **Scutaru Maria Luminita**, Vlase Sorin, Marin Marin, Modrea Arina, New analytical method based on dynamic response of planar mechanical elastic systems, *BOUNDARY VALUE PROBLEMS*, 2020, FI=1,794
9. Mitu Gabriel Leonard, Chircan Eliza, **Scutaru Maria Luminita**, Vlase Sorin, Kane's Formalism Used to the Vibration Analysis of a Wind Water Pump, *Symmetry-Basel*, 2020, FI=2,645
10. Vlase Sorin, Marin Marin, **Scutaru Maria Luminita**, Maggi's Equations Used in the Finite Element Analysis of the Multibody Systems with Elastic Elements, *MATHEMATICS*, 2020, FI=1,747
11. Vlase Sorin, Marin Marin, **Scutaru Maria Luminita**, Maggi's Equations Used in the Finite Element Analysis of the Multibody Systems with Elastic Elements, *MATHEMATICS*, 2020, FI=1,747
12. Vlase Sorin, Marin Marin, **Scutaru Maria Luminita**, Scarlatescu Dumitru Daniel, Csatlós Carol Study on the Mechanical Responses of Plastic Pipes Made of High Density Polyethylene (HDPE) in Water Supply Network, *APPLIED SCIENCES-BASEL*, 2020, FI=2,474
13. Eliza Chircan, **Maria Luminița Scutaru**, Catalin Iulian Pruncu, Two-Dimensional Finite Element in General Plane Motion Used in the Analysis of Multi-Body Systems, *Symmetry-Basel Journal, Symmetry in Applied Continuous Mechanics*, 2019, FI=2,143
14. Sorin Vlase, Mircea Mihălcică, **Maria Luminița Scutaru**, Determining the Functional Parameters of a Simple Speed Regulator, *Romanian journal of acoustics and vibration*, Vol 16, pg. 10-14, 2019, FI=0,74
15. Vlase S., Marin M, Ocshnar A., **Scutaru M.L.** Motion equation for a flexible one-dimensional element used in the dynamical analysis of a multibody system, *Springer, Continuum mechanics and thermodynamics*, Vol 31, pg 715-724, 2019, FI=1,578
16. A.Chiru, V.Gheorghita, S.Vlase **M.L.Scutaru**, M.Marin – Damping and Super-Elasticity Properties of a Memory Shape Alloy NiTi Used in Automotive Engineering *Journal of Vibration Engineering & Technologies*, Vol.5, No 3 Published: 2017, FI=0,325
17. S.Vlase, M.Marin, **M.L.Scutaru**, I.R.Munteanu– Coupled transverse and torsional vibrations in a mechanical system with two identical beams, *AIP Advances*, Published: 2017, FI=1,653
18. **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)
19. **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
20. 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
21. **M.L.Scutaru**, M.Baba –Investigation of the Mechanical Properties of Hybrid Carbon-Hemp Laminated Composites Used as Thermal Insulation for Different Industrial Application, *Advances in Mechanical Engineering*, Article Number: 829426 Published: 2014, FI=0,575
22. **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
23. **M. L. Scutaru**, - Toward the use of irradiation for the composite materials properties improvement, *Journal of Optoelectronics and Advanced Materials* Volume: 16 Issue: 9-10, Pages: 1165-1169 Published: September-October 2014, FI=0,429
24. **M. L. Scutaru**, M. Baritz, B. P. Galfi- Radiation influence on micro-structural mechanics of an advanced hemp carbon hybrid composite *Optoelectronics and Advanced Materials* Volume: 8 Issue: 11-12 Pages: 1145-1149 Published: Nov. – Dec. 2014, FI=0,394
25. Teodorescu-Draghicescu, H.; **Scutaru, M. L.**; Rosu, D.; et al. – New Advanced Sandwich Composite with twill weave carbon and EPS *Journal of Optoelectronics and Advanced Materials* Volume: 15 Issue: 3-4 Pages: 199-203 Published: MAR-APR 2013, FI=0,563
26. 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
27. 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

