

PERSONAL INFORMATION **Horațiu TEODORESCU-DRĂGHICESCU**


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Sex Male | Date of birth 07/08/1960 | Nationality Romanian

OCCUPATIONAL FIELD

Academic education

WORK EXPERIENCE

from Oct. 2015

Professor

Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Blvd., 500036 Brasov

- Teaching courses: Experimental Methods in Mechanical Engineering (licence studies, year III); Experimental Methods in Civil Engineering (MEMC Master of Science, year I)
- Teaching and research activities in the field of Mechanics of Composite Materials, Polymer Matrix Composite Structures with applications in automotive and machine construction industries

Type of business or sector: Academic

from Oct. 2007–to Oct. 2015

Associate Professor

Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Blvd., 500036 Brasov

- Seminars coordinator in: Advanced Notions of Dynamic Systems (STIM Master of Science, year II); Up-to-date Methods in Testing Advanced Materials (ATV Master of Science)
- Teaching and research activities in the field of Mechanics of Composite Materials, Polymer Matrix Composite Structures with applications in automotive and machine construction industries

Type of business or sector: Academic

from Feb. 2006–to Oct. 2007

Lecturer

Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Blvd., 500036 Brasov

- Teaching courses: Up-to-date Methods in Testing Advanced Materials (ATV Master of Science)
- Teaching and research activities in the field of Mechanics of Composite Materials, Polymer Matrix Composite Structures with applications in automotive and machine construction industries

Type of business or sector: Academic

from Oct. 2005–to Feb. 2006

Assistant

Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department, 29 Eroilor Blvd., 500036 Brasov

- Teaching courses: Up-to-date Methods in Testing Advanced Materials (ATV Master of Science)
- Teaching and research activities in the field of Mechanics of Composite Materials, Polymer Matrix Composite Structures with applications in automotive and machine construction industries

Type of business or sector: Academic

from 2002 – to 2005

Quality Manager

from 2000 – to 2002	<p>Compozite Ltd., 3 Fântâni Str., 500482 Brasov</p> <ul style="list-style-type: none"> ▪ Implementation of ISO 9001 Quality Management System ▪ Design and research activities in the field of Composite Materials, Polymer Matrix Composite Structures with applications in aerospace, automotive and telecommunications industries <p>Type of business or sector: Research, Design, Production Design Manager</p>
from 1987 – to 2000	<p>SC Metaloplast SA, Brasov</p> <ul style="list-style-type: none"> ▪ Coordinator of design projects in the field of tools, devices and molds ▪ Research activities in the field of Composite Materials, Polymer Matrix Composite Structures with various applications <p>Type of business or sector: Design, Production Main Technology Engineer 3rd rank</p>
from 1985 - 1987	<p>Research and Development Institute for Mechanical Equipment ICDEM, Bucharest, 107-111 Oltenitei Blvd., Sector 4, Bucharest</p> <ul style="list-style-type: none"> ▪ Research, Design and Testing of Mechanical Equipments ▪ Research activities in the field of Composite Materials, Polymer Matrix Composite Structures with applications in defense industry <p>Type of business or sector: Research, Design Design Engineer</p> <p>Automotive Enterprise IMASA, Sfântu Gheorghe</p> <ul style="list-style-type: none"> ▪ Design of tools, devices and molds

EDUCATION AND TRAINING

from 29 Sep. 2015	<p>Habilitation degree</p> <p>Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanical Engineering Department</p> <ul style="list-style-type: none"> ▪ Habilitation thesis: Contributions to The Mechanics of Polymer Matrix Composite Materials
from 8 Sep. – to 12 Sep. 2008	<p>Training course in Computational and Experimental Mechanics</p> <p>CISM, Udine, Italy</p> <ul style="list-style-type: none"> ▪ Advanced courses for engineers „Computational and Experimental Mechanics of Advanced Materials
from 19 Nov. – to 23 Nov. 2007	<p>Training course in Optical Measuring Techniques</p> <p>GOM GmbH, Braunschweig, Germany</p> <ul style="list-style-type: none"> ▪ Advanced courses for engineers „Optical Measuring Techniques GOM”
from 2005 – to 2006	<p>Master of Science in Computational Mechanics</p> <p>Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanics Department</p> <ul style="list-style-type: none"> ▪ Master thesis: Contributions to the mechanics of polymer matrix composite structures
from June – to July 2002	<p>Training in Manufacturing Technologies of Composite Structures</p> <p>WOLFANGEL GmbH, Germany</p> <ul style="list-style-type: none"> ▪ Manufacturing Technologies of Polymer matrix Composite Structures
from 1995 – to 2001	<p>PhD degree in Mechanical Engineering</p> <p>Transylvania University of Brasov, Faculty of Mechanical Engineering, Strength of Materials and Vibrations Department</p> <ul style="list-style-type: none"> ▪ PhD thesis: Contributions to the increase of loading capability of fibers reinforced composite tubes by introduction of supplementary internal stresses
from 1980 – to 1985	<p>Mechanical Engineer degree</p> <p>Transylvania University of Brasov, Faculty of Technology of Machine Construction</p> <ul style="list-style-type: none"> ▪ Mechanical Engineer degree obtained with mark 10

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
German	B1/B2	B1/B2	B1/B2	B1/B2	B1/B2
Language certificate released by Goethe Institute, Bucharest					
English	B1/B2	B1/B2	B1/B2	B1/B2	B1/B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- Team spirit and good communication skills acquired through experience as manager or member of 20 research projects (manager – 3 research grants)
- Communication skills and competences concerning the knowledge transmission and continuing education gained through experience in the teaching activities within the “Transilvania” University of Brasov, since 2005

Organisational / managerial skills

- Experimental characterization/identification/evaluation of the behaviour/ (mechanical, thermal, electrical) properties of mechanical structures and advanced materials
- Mechanical methods for advanced/multi-layered polymer based composite materials characterization

- Job-related skills**
- Composite materials (particle/fibre) manufacturing based on self-developed/known technologies
 - Industrial abilities in mechanical engineering

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Independent user	Independent user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- good command of Nexygen Plus materials testing software

Other skills

- Member in organizing committee of COMEC (2005,2007,2009, 2011, 2013) and COMAT (2006, 2008, 2010, 2012, 2014) conferences with international contribution
- Coordinator of Mechanical Testing Laboratory, Department of Mechanical Engineering within Transylvania University of Brasov

Driving licence category: B

ADDITIONAL INFORMATION

- Publications:** ▪ Author and co-author of more than 120 scientific articles (13 articles in ISI journals, more than 20 papers ISI indexed). Author and co-author of 8 books
- Research projects:** ▪ Manager or member of 20 research projects (manager – 3 research grants)
- Patents:** ▪ Scutaru M.L., Corneliu Cofaru, **Teodorescu-Draghicescu Horatiu**, Baba Marius, Dogaru Florin - Material compozit hibrid carbon-câneapă și procedeu de obținere al acestuia cu aplicație în industria auto și constructoare de mașini, Patent abstract published in BOPI 4/2104 & Espacenet 2014
- Scutaru M.L., Corneliu Cofaru, **Teodorescu-Draghicescu Horatiu**, Baba Marius, Dogaru Florin - Material compozit hibrid sticlă – țesătură din câneapă și procedeu de obținere al acestuia cu aplicație în industria auto și constructoare de mașini, Patent abstract published in BOPI 8/2104 & Espacenet 2014

A. PhD Thesis

PhD in Mechanical Engineering, diploma no. 1085/13.09.2001 released by National Education Ministry, serial B no. 0003960

Thesis title: *Contributions to increase the load-bearing capacity of fiber-reinforced composite tubes by introducing additional internal stresses*

Habilitation in Mechanical Engineering. Thesis title: *Contributions to the mechanics of polymer matrix composite materials*

B. Books and chapters in books published in the last 10 years

1. M.L. Scutaru, A. Chiru, S. Vlase, C. Cofaru, **H. Teodorescu-Draghicescu**, *Materiale plastice și compozite în ingineria autovehiculelor*, Editura MATRIX ROM, București, 2013, ISBN 978-606-25-0023-8 (in Romanian)
2. **H. Teodorescu-Draghicescu**, A. Modrea, *Mecanica materialelor compozite*, Editura Universității Transilvania din Brașov, 2013, ISBN 978-606-19-0300-9 (in Romanian)
3. **H. Teodorescu-Draghicescu**, *Mecanică Experimentală*. Editura Universității Transilvania din Brașov, 2015, ISBN 978-606-19-0528-7 (in Romanian)

C. ISI/BDI papers published in the last 10 years (selection of 5 papers)

1. Stanciu, M.D., **Teodorescu-Draghicescu, H.**, Vlase, S., Mihalcica, M., Cosnita, M., Savin, A. (2024). Multiscale assessment of artificial aging treatment of polysaccharides from tone wood species. *International Journal of Biological Macromolecules*, 274 133310. doi: 10.1016/j.ijbiomac.2024.133310
2. **Teodorescu-Draghicescu, H.**, Scutaru, M.L., Vlase, S. (2023). Finite-Element-Analysis-Based Study of a Failure Phenomenon in HDPE Pipes. *Materials*, 16 (21):6944. doi: 10.3390/ma16216944
3. Motoc, D.L., **Teodorescu-Draghicescu, H.**, Florea, D., Preda, I., Ispas, N. (2020). Insights into Mechanical and Thermal Properties of Additively Manufactured PLA Samples Triggered by Automotive Industry Demands. *Materiale Plastice*, 57 (4), 193-201. doi: 10.37358/Mat.Plast.1964
4. Stanciu, M.D., **Teodorescu-Draghicescu, H.**, Vlase, S. (2020). Degradation of Mechanical Properties of Pine Wood Under Symmetric Axial Cyclic Loading Parallel to Grain. *Polymers*, 12, 2176. 1-15. doi: 10.3390/polym12102176
5. Stanciu, M.D., **Teodorescu-Draghicescu, H.**, Tamas, F., Terciu, O.M. (2020). Mechanical and Rheological Behaviour of Composites Reinforced with Natural Fibres. *Polymers*, 12, 1402. 1-21. doi: 10.3390/polym12061402

Date: 01.01.2025

Signature:

Prof.dr.eng. Horațiu TEODORESCU-DRĂGHICESCU