Curriculum Vitae



PERSONAL INFORMATION Horaţiu TEODORESCU-DRĂGHICESCU



University Transilvania of Brasov

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draghicescu.teodorescu@unitbv.ro

Sex Male | Date of birth

| 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 **Assistant**

from Oct. 2005-to Feb. 2006

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

Compozite Ltd., 3 Fântânii Str., 500482 Brasov

- 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

Type of business or sector: Research, Design, Production

from 2000 - to 2002 **Design Manager**

SC Metaloplast SA, Brasov

- 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

Type of business or sector: Design, Production Main Technology Engineer 3rd rank

Research and Development Institute for Mechanical Equipment ICDEM, Bucharest, 107-111 Oltenitei Blvd., Sector 4, Bucharest

- Research, Design and Testing of Mechanical Equipments
- Research activities in the field of Composite Materials, Polymer Matrix Composite Structures with applications in defense industry

Type of business or sector: Research, Design

from 1985 - 1987 **Design Engineer**

Automotive Enterprise IMASA, Sfântu Gheorghe

Design of tools, devices and molds

EDUCATION AND TRAINING

Habilitation degree

Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanical **Engineering Department**

- Habilitation thesis: Contributions to The Mechanics of Polymer Matrix Composite Materials

from 8 Sep. – to 12 Sep. 2008

Training course in Computational and Experimental Mechanics

CISM, Udine, Italy

- Advanced courses for engineers "Computational and Experimental Mechanics of **Advanced Materials**

Training course in Optical Measuring Techniques

GOM GmbH, Braunschweig, Germany

Advanced courses for engineers "Optical Measuring Techniques GOM"

from 2005 - to 2006 Master of Science in Computational Mechanics

> Transylvania University of Brasov, Faculty of Mechanical Engineering, Mechanics Department

 Master thesis: Contributions to the mechanics of polymer matrix composite structures Training in Manufacturing Technologies of Composite Structures

WOLFANGEL GmbH, Germany

Manufacturing Technologies of Polymer matrix Composite Structures

PhD degree in Mechanical Engineering

Transylvania University of Brasov, Faculty of Mechanical Engineering, Strength of Materials and Vibrations Department

PhD thesis: Contributions to the increase of loading capability of fibers reinforced composite tubes by introduction of supplementary internal stresses

from 1980 - to 1985 Mechanical Engineer degree

Transylvania University of Brasov, Faculty of Technology of Machine Construction

Mechanical Engineer degree obtained with mark 10

from 1987 - to 2000

from 29 Sep. 2015

from 19 Nov. - to 23 Nov. 2007

from June - to July 2002

from 1995 - to 2001

Mother tongue(s)

Romanian

Other language(s)

German

English

| UNDERSTANDING | | SPEAKING | | WRITING | | |
|--|---------|--------------------|-------------------|---------|--|--|
| Listening | Reading | Spoken interaction | Spoken production | | | |
| B1/B2 | B1/B2 | B1/B2 | B1/B2 | B1/B2 | | |
| Language certificate released by Goethe Institute, Bucharest | | | | | | |
| B1/B2 | B1/B2 | B1/B2 | B1/B2 | B1/B2 | | |
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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 <u>Digital competences</u> - <u>Self-assessment grid</u>

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:

Fublications.

Patents:

Research projects:

- 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
- Manager or member of 20 research projects (manager 3 research grants)
- Scutaru M.L., Corneliu Cofaru, Teodorescu-Draghicescu Horatiu, Baba Marius, Dogaru Florin - Material compozit hybrid carbon-cânepă şi procedeu de obţinere al acestuia cu aplicaţie în industria auto şi constructoare de maşini, Patent abstract published in BOPI 4/2104 & Espacenet 2014
- Scutaru M.L., Corneliu Cofaru, Teodorescu-Draghicescu Horatiu, Baba Marius, Dogaru Florin - Material compozit hybrid sticlă – ţesătură din cânepă şi procedeu de obţinere al acestuia cu aplicaţie în industria auto şi constructoare de maşini, 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.

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-Drăghicescu, *Materiale plastice şi compozite în ingineria autovehiculelor*, Editura MATRIX ROM, Bucureşti, 2013, ISBN 978-606-25-0023-8 (in Romanian)
- 2. H. Teodorescu-Drăghicescu, A. Modrea, *Mecanica materialelor compozite*, Editura Universității Transilvania din Brasov, 2013, ISBN 978-606-19-0300-9 (in Romanian)
- 3. H. Teodorescu-Drăghicescu, *Mecanică Experimentală*. Editura Universității Transilvania din Braşov, 2015, ISBN 978-606-19-0528-7 (in Romanian)

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

- Teodorescu-Drăghicescu, H., Vlase, S. Homogenization and Averaging Methods to Predict Elastic Properties of Pre-Impregnated Composite Materials. Computational Materials Science, Vol. 50, Issue 4, February 2011, ISSN: 0927-0256, Elsevier, p. 1310-1314, Proceedings of the 19th International Workshop on Computational Mechanics of Materials - IWCMM 19, Edited by Eduard-Marius Craciun, Niculae Peride and Siegfried Schmauder. http://www.sciencedirect.com/science/article/pii/S0927025610002533
- 2. H. Teodorescu-Draghicescu, M. L. Scutaru, D. Rosu, M. R. Calin, P. Grigore New Advanced Sandwich Composite with twill weave carbon and EPS, Journal of Optoelectronics and Advanced Materials (J OPTOELECTRON ADV M), Vol. 15, No. 3-4, March-April 2013, INOE Publishing House, p. 199-203, ISSN: 1454-4164. http://joam.inoe.ro/index.php?option=magazine&op=view&idu=3177&catid=76
- 3. H. Teodorescu-Draghicescu, S. Vlase, M.D. Stanciu, I. Curtu, M. Mihalcica Advanced Pultruded Glass Fibers-Reinforced Isophtalic Polyester Resin, Materiale Plastice, Vol. 52, No. 1, March 2015, p. 62-64, ISSN: 0025-5289. http://www.revmaterialeplastice.ro/pdf/cuprins%2012015.pdf
- **4.** D. L. Motoc, **H. Teodorescu-Draghicescu**, D. Florea, I. Preda, N. Ispas Insights into Mechanical and Thermal Properties of Additively Manufactured PLA Samples Triggered by Automotive Industry Demands, Mater. Plast., 57 (4), 2020, 193-201; https://doi.org/10.37358/Mat.Plast.1964
- M. D. Stanciu, H. Teodorescu-Draghicescu, I. C. Rosca Mechanical Properties of GFRPs Exposed to Tensile, Compression and Tensile—Tensile Cyclic Tests, Polymers 2021, 13, 898, https://doi.org/10.3390/polym13060898, p. 1-13.

Date: 23.09.2022 Signature:

Prof.dr.eng. Horaţiu TEODORESCU-DRĂGHICESCU