



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Sorin VLASE**

E-mail svlase@unitbv.ro

Nationality Romanian

Gender Male

**Desired employment /
Occupational field** **Full professor in Mechanics/Research and Education**

Mecanica, 1980 - prezent.

Advanced Finite Element Method, 1994 - 1995 (în limba engleză) în cadrul programului TEMPUS, cursuri post universitare.

Metoda elementelor finite, 1985, 1986, 1996-2006, cursuri postuniversitare.

Mecanică computațională, 1999 – 2012

Mecanica structurilor, 2001-2004.

Mecanica tehnică, IDD 2002-2007.

Sisteme dinamice nelineare, 2005-2009, master.

Metode numerice aplicate în inginerie, 2009- 2015

Stabilitate 2015-prezent

Elasticitate si Plasticitate 2019-prezent

Work experience

Date 1996- up today - Full professor;
1991-1996-Assoc. professor;
1984-1991- Lecturer;
1980-1984- Assistant prof.;
1976-1980- Research engineer in Automotive Research Institute, Brasov and Automotive Factory ROMAN SA Brasov

Occupation or position held Full professor
2004-2011 Head of Department of Mechanics,
2011-2012 Head of Department of Automotive Engineering and Mechanics
2012- 2020, Head of Department of Mechanical Engineering

Main activities and responsibilities Lectures in Mechanics, Computational Mechanics, Finite Element Method, Mechanical Stability, Numerical Methods, Kinematics and Dynamics of Multibody Systems.

Name and address of employer Transilvania University of Brasov

Type of business or sector Research and Education

Education and training

Dates	2015 Habilitation, University of Pitesti, Romania, Domain: Automotive Engineering (First habilitation in AE in Romania) 1989 PhD Thesis, Transilvania University of Brasov; 1977-1982 Licence in mathematics, Faculty of Mathematics and Informatics, University of Bucharest; 1971-1976 MSc, domain Mechanical Engineering (Automotive Engineering), Faculty of Mechanical Engineering, Transilvania University of Brasov; 1967-1971, High School Andrei Saguna Brasov; (1969,1971-premiat la faza națională a Olimpiadei de Fizică,1970,1971- premiat la concursul național al Gazetei Matematice, Pozitia 6 si 11 pe tara)
Title of qualification awarded	B.Sc., M.Sc., Ph.D., Habilitation
Principal subjects/occupational skills covered	Mechanics, Computational Mechanics, Finite Element Method, Vibrations, Multibody Systems
Name and type of organisation providing education and training	Transilvania University of Brasov
Level in national or international classification	Domain Mechanical Engineering at Transilvania University: Category A (best)

Specializări în străinătate:

1990, septembrie, cursuri CISM, Szombothely, Ungaria.
1992, mai-iunie, bursă DAAD, Technische Gesamthochschule Wuppertal, Germania;
1993, mai - august, bursă PROMETEU, Technische Universität, München, Germania-metoda elementelor finite aplicată în cazul materialelor compozite;
1994, iulie-august, bursă TEMPUS, Universitatea Tehnică din Atena, Grecia;
1994, octombrie - decembrie, bursă TEMPUS, IMG-94-RO-1102/1994, Technische Universität, Stuttgart, Germania;
1999, iunie, bursă SOCRATES, Technische Universität, Stuttgart, Germania;
1999, iunie, bursă TEMPUS, Universität Gesamthochschule Wuppertal, Germania- metoda elementelor finite aplicată la sisteme dinamice;
2001, iunie, bursă SOCRATES, Technische Universität Karlsruhe, Germania;
2002, iunie, participant invitat la workshop-ul organizat de NATO - Virtual Nonlinear Multibody System, Praga.
2006, octombrie, cursuri CISM, Udine, Italia.
2006, decembrie, cursuri la Academia Hottinger, Darmstadt, Germania.
2007, mai, cursuri ZACE, Nonlinear Finite Element Method, Berlin, Germania.
2007, octombrie, cursuri Bruel&Kjaer, Munchen, Germania.
2008, iunie, cursuri CISM, Udine, Italia.

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (*)

Language

Language

Understanding			Speaking			Writing	
Listening		Reading	Spoken interaction		Spoken production		
B	English	B	B	C		B	
A	French	B	A	B		B	
B	German	B	B	C		C	

(*) [Common European Framework of Reference for Languages](http://www.cedefop.europa.eu)

Social skills and competences

Organisational skills and competences

Organiser of ten international conferences, participation in the scientific and organization committees for more as 30 conferences.

Organizer of the International Conferences:

The 1st Int. Conf. COMPUTATIONAL MECH. and VIRTUAL ENG. - COMEC2005, Brasov ROMANIA
The 2nd Int. Conf. COMPUTATIONAL MECH. and VIRTUAL ENG. - COMEC2007, Brasov ROMANIA
The 3rd Int. Conf. COMPUTATIONAL MECH. and VIRTUAL ENG. - COMEC2009, Brasov ROMANIA
The 4th Int. Conf. COMPUTATIONAL MECH. and VIRTUAL ENG. - COMEC2011, Brasov ROMANIA
The 5th Int. Conf. COMPUTATIONAL MECH. and VIRTUAL ENG. - COMEC2013, Brasov ROMANIA
The 6th Int. Conf. COMPUTATIONAL MECH. and VIRTUAL ENG. - COMEC2015, Brasov ROMANIA
The 1st Int. Conf. ADVANCED COMPOSITE MAT. ENG. - COMAT2006, Brasov, ROMANIA
The 2nd Int. Conf. ADVANCED COMPOSITE MAT. ENG. - COMAT2008, Brasov, ROMANIA
The 3rd Int. Conf. ADVANCED COMPOSITE MAT. ENG. - COMAT2010, Brasov, ROMANIA
The 4th Int. Conf. ADVANCED COMPOSITE MAT. ENG. - COMAT2012, Brasov, ROMANIA
The 5th Int. Conf. ADVANCED COMPOSITE MAT. ENG. - COMAT2014, Brasov, ROMANIA

1. First **INTERNATIONAL CONFERENCE ON COMPUTATIONAL MECHANICS AND VIRTUAL ENGINEERING**, COMEC-2005, Brasov, octombrie, 2005. Președintele Comitetului de organizare.
2. **INTERNATIONAL WORKSHOP ON COMPUTATIONAL MECHANICS**, Brașov, octombrie, 2006.
3. Conferința Națională: **TENDINȚE MODERNE ÎN MECANICĂ**, Universitatea TRANSILVANIA Brașov, mai 2005.
4. The 1st International Conference **ADVANCED COMPOSITES MATERIALS ENGINEERING**, Brașov, octombrie, 2006. Președintele comitetului de organizare
5. Organizator a 2nd **INTERNATIONAL CONFERENCE ON COMPUTATIONAL MECHANICS AND VIRTUAL ENGINEERING**, COMEC-2007, Brașov, octombrie, 2007.
6. The 2nd International Conference **ADVANCED COMPOSITES MATERIALS ENGINEERING-COMAT2008**, Brașov, octombrie, 2008. Președintele comitetului de organizare.
7. Organizator a 3rd **INTERNATIONAL CONFERENCE ON COMPUTATIONAL MECHANICS AND VIRTUAL ENGINEERING**, COMEC-2009, Brașov, octombrie, 2009.
8. The 3rd International Conference **ADVANCED COMPOSITES MATERIALS ENGINEERING-COMAT2010**, Brașov, octombrie, 2010. Președintele comitetului de organizare.

și membru în comitetul științific sau de organizare (selectie):

1. 5th **BALKAN SCHOOL IN NUCLEAR PHYSICS**, Brașov, 2006, september, în comitetul de organizare.
2. Membru in comitetul științific la a **XXXII-a Conferință Națională de Mecanica Solidului de la Chișinău**, 28-30 septembrie, 2007.
3. Membru al comitetului științific al conferinței internaționale **CONFERENCE on MULTIBODY SYSTEMS' DYNAMICS**, Pitești, octombrie, 2007. CDSM -I, Pitești, 25-26 October 2007.
4. Conferința Națională **OPTIMED 2006**, iunie, Brașov, în comitetul de organizare.
5. Chairman la o secție la conferința internațională **CONAT**, 2004;
6. **NATIONAL CONFERENCE on MECHANICS OF SOLIDS**, CNMS -XXXII, Pitești, 11-13 September 2008, în comitetul științific.
7. **TOPICS IN ADVANCED TEORETICAL AND APPLIED MECHANICS**, The 3rd **WSEAS INTERNATIONAL CONFERENCE ON TEORETICAL AND APPLIED MECHANICS (MECHANICS 07)**, Tenerife, Canary Islands, Spain, December 14-16, 2007. în comitetul științific. <http://www.wseas.org/conferences/2007/tenerife/mechanics/committee.htm>
8. **MATEMATICAL METHOD AND COMPUTATIONAL TECHNIQUES IN SCIENCE AND RESEARCH**, 3rd **WSEAS Int. Conf. on DYNAMICAL SYSTEMS and CONTROL (CONTROL '07)**, Arcachon, France, 13-15 October 2007. În comitetul științific. <http://www.wseas.us/conferences/2007/france/control/committee.htm>
9. **6th WSEAS Int. Conf. on NON-LINEAR ANALYSIS, NON-LINEAR SYSTEMS AND CHAOS (NOLASC '07)**. Arcachon, France, October 2007. În comitetul științific. <http://www.wseas.us/conferences/2007/france/nolasc/committee.htm>
10. **The 3rd WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES (EDUTE'07)**, Arcachon, France, October 13-15, 2007. <http://www.wseas.org/conferences/2007/france/edute/committee.htm>
11. **The 9th WSEAS International Conference on MATHEMATICAL METHODS AND COMPUTATIONAL TECHNIQUES IN ELECTRICAL ENGINEERING (MMACTEE '07)**, Arcachon, France, October 13-15, 2007. <http://www.wseas.us/conferences/2007/france/mmactee/committee.htm>
12. **The 7th WSEAS International Conference on WAVELET ANALYSIS &**
13. **MULTIRATE SYSTEMS (WAMUS'07)**, Arcachon, France, October 13-15, 2007. <http://www.wseas.us/conferences/2007/france/wamus/committee.htm>

Technical skills and competences	Mechanics, Computational Mechanics, Finite Element Method, Analytical Mechanics
Computer skills and competences	Using common Windows programmes at medium level, FORTRAN, Matlab, FEM programmes
Artistic skills and competences	
Other skills and competences	
Driving licence	B, C categories, Romania

Additional information

Hirsch Index:
(WoS) = 30; Scopus 28; Google Scholar 33
Visiting Professor la Technische Universität München, decembrie, 1993.
ASME member, membru al Asociației Inginerilor din Statele Unite, 1994.
Membru ARTENS
Membru EUROMECH (2006)
Membru în The International Association of Engineers (IAENG), Nr: 61721.
Membru SIAR, 2006
Membru în Asociația Română de Mecanica Sistemelor Multicorp, ARMSM, 2007

Annexes

May 2026

VLASE SORIN

PUBLISHED WORKS

Books (21) - selection

1. Vlase, S., Finite Element Elastodynamic. Editura LUX LIBRIS, 1996.
2. Vlase, S., Mechanics. Statics/Kinematics/Dynamics Ed. INFOMARKET, 2004,2007,2005.
3. Vlase, S., Computational Mechanics. Ed. INFOMARKET, 2006. ISBN 973-8204-75-5
4. Vlase,S., s.a., Composite Materials. Computational Methods. Editura Universității TRANSILVANIA, 2007. ISBN 978-973-635-890-6.
5. Vlase,S., Teodorescu-Drăghicescu,H.,Scutaru,L.,ș.a., Kinematics and Dynamics. Problems. Ed. Infomarket, 2009.
6. Chiru, A., Scutaru, L., Vlase, S., Cofaru, C., Composite Materials in Automotive Engineering, TRANSILVANIA Univ. Press, 2013.
7. Vlase S., Mechanical Identifiability in Automotive Engineering. Derc Publishing House, 2015, Boston.
8. Vlase, S., Marin, M., Ochsner, A., Eigenvalues and eigenvectors in Applied Mechanics, Springer, 2018.
9. Vlase, S. Statics for Engineers, Springer, 2025.

Chapter in books (5)- selection

1. Vlase, S., Finite Element Analysis of the Planar Mechanisms: Numerical Aspects. In Applied Mechanics - 4. Elsevier, 1992,p.90-100.
2. Teodorescu H., Vlase, S., Rosu, D., Ulea, M. , Residual Internal Stresses determined Experimentally in Hollow Composite Laminates , in E. E. Gdoutos (Editor), Experimental Analysis of Nano and Engineering Materials and Structures. Springer. Alexandroupolis, Greece, July 1-6, 2007, Springer, Dordrecht, The Netherlands, ISBN 978-1-4020-6.

Editor (15)- selection

1. **S. Vlase**, S.Lache, Gh. Radu, The 2nd International Conference ADVANCED COMPOSITES MATERIALS ENGINEERING, Ed. Universității TRANSILVANIA din Brașov, 2008.
2. **S. Vlase**, A. Chiru, The 2nd International Conference COMPUTATIONAL MECHANICS and VIRTUAL ENGINEERING, COMEC2007. Ed. Universității TRANSILVANIA, Brașov,2007.
3. **S. Vlase**, A. Chiru, Yasushi Niitsu, The 3rd International Conference COMPUTATIONAL MECHANICS and VIRTUAL ENGINEERING, COMEC2009. Ed. Universității TRANSILVANIA, Brașov,2009.
4. D. Bigoni, **S. Vlase**, A. Chiru, The 3rd International Conference COMAT2010 - ADVANCED COMPOSITES MATERIALS ENGINEERING, Ed. **Infomarket**, 2010.
5. **S. Vlase**, C. Papalettere, The 3rd International Conference COMPUTATIONAL MECHANICS and VIRTUAL ENGINEERING, COMEC2011. Ed. Lux Libris, Brașov, 2011.

Didactical books (14)

Papers ISI indexed (WOS) (282)

Papers published in international proceedings (53)

Papers published to international conferences(55)

Papers in romanian 133 (40+93)

Journals, Universities journals, Journal of Romanian Academy(40):

National conferences (93):

PROJECTS AND GRANTS

NATIONAL GRANTS (55) (selections):

1. Title: **Modeling and Simulation of Mechanical Behavior, using FEA, of the Composite Materials to Identify the Elastics/Viscoelastic properties.**
Number of project: CEEX MODULUL I 42/2005. Director: **VLASE SORIN**
2. Title: **Modern Results and Tendencies in the Mechanics of Polymeric Composite reinforced with Fibres**
Number of project: CEEX Modulul III, 35/2006, Director: **VLASE SORIN**
3. Title: **Nonlinear Analysis, Experimental Analysis and Optimal Control of the Multibody Systems with Elastic Elements, with Application in Mechanical Engineering – ADEL**
Number of project: CEEX MODULUL I, 61/2006. Director: **VLASE SORIN**
4. Title: **Virtual Analysis of the Multibody Systems with Applications in Automotive Engineering**
Number of project: 930/2007, CNCSIS, Tip A, 2007. Director: **VLASE SORIN**
5. Title contract: **Promoting the Interdisciplinarity Research in the Field of the Multibody Systems in the frame of FP7- CISEM.**
Number of project: 12555/2006, CEEX Modulul III, Director: **VLASE SORIN**

6. Title: **White Noise in Urban Environment**
Number of project :4165AK/2007, Director **VLASE SORIN**
7. Title: **Dezvoltare laborator interdisciplinar pentru modelarea si identificarea mecanica a materialelor compozite multifunctionale avansate- COMLAB.O2.1.**
Number of project: **IMPACT 784-iunie 2007**, Director: **VLASE SORIN**
8. Title: **Cresterea fiabilitatii rulmentilor utilizati in industria autovehiculelor. AUTORUL. O1.1.**
Number of project: **IMPACT-1358/2008 – sesiunea iunie 2008**, Director: **VLASE SORIN**
9. Title: **The 2nd Advanced Composite Materials Engineering - COMAT2008.**
Number of project: 710/2008 – MCT, Director: **VLASE SORIN**
10. Title: **Noise Map for the City Targu-Mures.** Director: **VLASE SORIN**

INTERNATIONAL GRANTS

1. NATO-EV: CPB.EAP.EV.982300/21/ 2006. FINITE ELEMENT ANALYSIS OF FIBROUS COMPOZITE MATERIALS
Director: **VLASE SORIN**

Selecție:

- **Rezultate moderne și tendințe în mecanica materialelor compozite polimerice armate cu fibre.** CEEEX Modulul III, 35/2006.
- **Cercetări avansate în mecanica computațională și ingineria virtuală.** CEEEX MODULUL III, 23/2006.
- **Analiza nelineară și experimentală și controlul optimal al sistemelor mecanice multicorp cu elemente elastice, cu aplicație în construcția de mașini și robotică – ADEL.** CEEEX MODULUL I, 61/2006.
- **Identificarea și utilizarea unui software avansat pentru modelare (cu modul chimic) inclusiv pentru poluanți secundari (ozon, compusi organici, volatili),** 4167AK/2007
- **Analiza virtuală a sistemelor multicorp cu aplicație în proiectarea autovehiculelor (reprezentări simbolice și simulare numerică).** 930/2007, CNCSIS, Tip A, 2007.
- **Determinarea zonelor liniștite din aglomerări.** 3138AK/2007
- **Dezvoltare laborator interdisciplinar de formare și cercetare pentru analiza dinamica experimentală a sistemelor mecanice multicorp utilizate în aplicații industriale avansate – DINALAB. IMPACT-1022 – septembrie 2007**