

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Sorin VLASE**
 Address(es) 30, Castelului Street, 500014, Brasov, ROMANIA
 Telephone(s) Mobile: +40 722 64 30 20
 Fax(es) +40 268 418992
 E-mail svlase@unitbv.ro; svlase@yahoo.com
 Nationality Romanian
 Date of birth 10.07.1952, Campulung Moldovenesc, Suceava
 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 Matematiche, 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, Szombathely, 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 <i>European level (*)</i>																																																			
Language																																																			
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	<table border="1"> <thead> <tr> <th colspan="4">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>B</td> <td>English</td> <td>B</td> <td></td> <td>B</td> <td></td> <td>C</td> <td></td> <td>B</td> <td></td> </tr> <tr> <td>A</td> <td>French</td> <td>B</td> <td></td> <td>A</td> <td></td> <td>B</td> <td></td> <td>B</td> <td></td> </tr> <tr> <td>B</td> <td>German</td> <td>B</td> <td></td> <td>B</td> <td></td> <td>C</td> <td></td> <td>C</td> <td></td> </tr> </tbody> </table>	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	
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	(*) Common European Framework of Reference for Languages																																																		
Social 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. Preşedintele Comitetului de organizare.
2. **INTERNATIONAL WORKSHOP ON COMPUTATIONAL MECHANICS**, Braşov, octombrie, 2006.
3. Conferinţa Naţională: **TENDINŢE MODERNE ÎN MECANICĂ**, Universitatea TRANSILVANIA Braşov, mai 2005.
4. The 1st International Conference **ADVANCED COMPOSITES MATERIALS ENGINEERING**, Braşov, octombrie, 2006. Preşedintele comitetului de organizare
5. Organizator a 2nd **INTERNATIONAL CONFERENCE ON COMPUTATIONAL MECHANICS AND VIRTUAL ENGINEERING**, COMEC-2007, Braşov, octombrie, 2007.
6. The 2nd International Conference **ADVANCED COMPOSITES MATERIALS ENGINEERING-COMAT2008**, Braşov, octombrie, 2008. Preşedintele comitetului de organizare.
7. Organizator a 3rd **INTERNATIONAL CONFERENCE ON COMPUTATIONAL MECHANICS AND VIRTUAL ENGINEERING**, COMEC-2009, Braşov, octombrie, 2009.
8. The 3rd International Conference **ADVANCED COMPOSITES MATERIALS ENGINEERING-COMAT2010**, Braşov, octombrie, 2010. Preşedintele comitetului de organizare.

şi membru în comitetul ştiinţific sau de organizare:

1. 5th **BALKAN SCHOOL IN NUCLEAR PHYSICS**, Braşov, 2006, september, în comitetul de organizare.
2. Membru în comitetul ştiinţific la a **XXXII-a Conferinţă Naţională de Mecanica Solidului de la Chişinău**, 28-30 septembrie, 2007.
3. Membru al comitetului ştiinţific al conferinţei internaţionale **CONFERENCE on MULTIBODY SYSTEMS' DYNAMICS**, Piteşti, octombrie, 2007. CDSM -I, Piteşti, 25-26 October 2007.
4. Conferinţa Naţională **OPTIMED 2006**, iunie, Braşov, în comitetul de organizare.
5. Chairman la o secţie la conferinţa internaţională **CONAT**, 2004;
6. **NATIONAL CONFERENCE on MECHANICS OF SOLIDS**, CNMS -XXXII, Piteşti, 11-13 September 2008, în comitetul ştiinţific.
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 ştiinţific. <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 ştiinţific. <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 ştiinţific. <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**

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	

VLASE SORIN

PUBLISHED WORKS

Books (21) - selection

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

Chapter in books (5)- selection

1. Vlas, S., Finite Element Analysis of the Planar Mechanisms: Numerical Aspects. In Applied Mechanics - 4. Elsevier, 1992, p.90-100.
2. Teodorescu H., Vlas, 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 (10)- selection

1. **S. Vlas**, S.Lache, Gh. Radu, The 2nd International Conference ADVANCED COMPOSITES MATERIALS ENGINEERING, Ed. Universității TRANSILVANIA din Brașov, 2008.
2. **S. Vlas**, A. Chiru, The 2nd International Conference COMPUTATIONAL MECHANICS and VIRTUAL ENGINEERING, COMEC2007. Ed. Universității TRANSILVANIA, Brașov, 2007.
3. **S. Vlas**, A. Chiru, Yasushi Niitsu, The 3rd International Conference COMPUTATIONAL MECHANICS and VIRTUAL ENGINEERING, COMEC2009. Ed. Universității TRANSILVANIA, Brașov, 2009.
4. D. Bigoni, **S. Vlas**, 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, Braşov, 2011.

Didactical books (14)

Papers ISI indexed (WOS) (268)

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 Enviroment**
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.** CEEX Modulul III, 35/2006.
- **Cercetări avansate în mecanica computațională și ingineria virtuală.** CEEX 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.** CEEX MODULUL I, 61/2006.
- **Identificarea si utilizarea unui software avansat pentru modelare (cu modul chimic) inclusiv pentru poluanti 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 si cercetare pentru analiza dinamica experimentală a sistemelor mecanice multicorp utilizate in aplicatii industriale avansate – DINALAB. IMPACT-1022 –septembrie 2007