## PERSONAL INFORMATION

Ioan SZÁVA

eet@unitbv.ro

**POSITION**
**IOSUD UTBv**

PhD Coordinator
Doctoral studies field: Mechanical Engineering
Since 2001

**EXPERTISE FIELD AND RESEARCH INTEREST AREAS**

Strength of materials, Mechanical vibration, Experimental methods of stress-strain states of the solid bodies

## WORK EXPERIENCE

Replace with dates (from - to)

Since October, 2019 – retired
2000- 2019 - full university professor of Strength of Materials, Mechanical Vibrations and Experimental Methods of the Solid Bodies at Transylvania University of Brasov;
1994-2000 - Assoc. professor at Transylvania University of Brasov;
1981-1994 - Lecturer at University of Brasov;
1975-1981 - Assistant; at University of Brasov ;
All at the same university, 29, Eroilor Avenue, Brașov - 500036, Romania, www.unitbv.ro

1972-1975 - research engineer in an Automotive Research Institute, Brasov

Main field of interest: stress-strain state evaluation with classical methods of the solid bodies, manufactured from isotropic, anisotropic and orthotropic materials; since 2007, the same area, but involving modern experimental optical methods, such ESPI (Electronic Speckle pattern Interferometry) and VIC (Video Image Correlation)

## EDUCATION AND TRAINING

Replace with dates (from - to)

1993 PhD thesis, Transylvania University of Brasov;
1986-1987 Post-university courses on Experimental methods, Politehnica Institute of Bucharest;
1967-1972 - engineer degree, Automotive Engineering, University of Brasov

Replace with EQF (or other) level if relevant

Strength of materials, Mechanical vibrations, Experimental methods of the solid bodies, Internal combustion engines

## PERSONAL SKILLS

**Mother tongue(s)**

Hungarian

**Other language(s)**

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---|---|---|---|---|---|
| | Listening | Reading | Spoken interaction | Spoken production | |
| English | B1 | B1 | B1 | B1 | B1 |
| French | A1 | A1 | A1 | A1 | A1 |

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

**Communication skills**

Replace with your communication skills. Specify in what context they were acquired. Example:

- good communication skills gained through my experience as manager of over 15 research Grants

**Organisational / managerial skills**

- Since 2011 I was involved in organizing, under the Technical University of Kosice, Slovakia, in a Summer School for 3 years in Composite materials' advanced problems.

**Job-related skills**

Strength of Materials, Vibrations, Experimental Methods of Solid Bodies;
Since 2001 I am PhD leader with 6 finalized-, and other one actual PhD student;

- I am involved mainly in Experimental Methods of the Solid Bodies (stress and strain fields' evaluation in static-, quasi-dynamic and dynamic conditions), i.e. engine parts, wood-based materials, human bones, tissues, composite materials, etc., using between others Video Image Correlation, ESPI/Shearograpahy and Electric Strain Gauges methods.

**Digital skills**

| SELF-ASSESSMENT | | | | |
|---|---|---|---|---|
| Information processing | Communication | Content creation | Safety | Problem solving |
| Basic user | Basic user | | | Basic user |

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

- good command of office suite (word processor, spread sheet, presentation software)
- good command of photo editing software gained as an amateur photographer

**Other skills**

Replace with other relevant skills not already mentioned. Specify in what context they were acquired. Example:

- carpentry

## ADDITIONAL INFORMATION

**Publications of scientific papers**

1. Dániel-Tamás Száva, Bálint Bögözi, Ioan Száva, Mihail Tarcolea, Raluca Monica Comaneanu, Alina Ormenisan, *Plastic Materials Used In Experimental Investigations Regarding Dental Implants Biomechanics*, Materiale Plastice, ISSN: 0025-5289, http://www.revmaterialeplastice.ro/, Vol. 52, Nr. 2, 2015, pp. 221-224.
2. Száva,I., Vlase, S., Gálfi,B.P., Munteanu, I.R., Ionescu, D., *Evaluation of the clean softwood components' longitudinal young's moduli by means of overall measurements*, Wood Research, ISSN: 1336-4561, Vol. 60, Nr. 4, 2015, pp. 555-566.
3. Száva,I.,Kakucs,A.,Jármai,K.,Dani,P.,Varga,B.,Gálfi,B.P., *Numerical approach and preliminary experimental results of intumescent paints' behaviors at medium temperatures. Metalurgia International* Vol. XIV (2009), ISI-cited journal, Special issue No. 2. pp. 83-86. ISSN 1582-2214
4. Varga,B.,Dani,P.,Kakucs,A.,Száva,I.,Jármai,K.,Gálfi,B.P., Intumescent paint fire protected steel structures elements' internal stress state experimental approach, using dilatometer, Metalurgia International Vol. XIV (2009), ISI-cited journal, Special issue No. 2. pp. 87-90. ISSN 1582-2214.
5. Borbás L., Száva I., Gálfi B., Kakucs A., *A New Approach in the Poisson Ratios Establishing of the Soft-Wood Materials Components*, TRANSACTIONS of FAMENA, Vol. 36, No. 2, University of Zagreb, Croatia, 2012, ISSN 1333-1124, pp. 23-30.
6. Vlase, S., Purcărea, R., Theodorescu-Drăghicescu, H., Călin, M.R., Száva, I., Mihălcică, M., *Behavior of a New Heliopol-Stratimat 300 Composite Laminate*, Journal of Optoelectronics and Advanced Materials, Vol.7. No.7-8, July-August 2013, pp. 569-572. ISSN 1842-6573.
7. I. Száva, A. Modrea, B.P. Gálfi, R. Munteanu, *Glass Fabric-reinforced Polyte 440-M888 Composite Laminated Subjected to Tensile Load on Warp Direction*, 8th International Conference Interdisciplinarity in Engineering, INTER-ENG 2014, 9-10 October, 2014, Târgu-Mureş, published in Procedia Technology, 19 (2015), 254-259, Science Direct, Elsevier.
8. D.T. Száva, B. Bögözi, B.P. Gálfi, I. Száva, R.D. Ionescu, R. Munteanu, *Dental Implants Analyis by Means of Video Image Correalation Method*, 8th International Conference Interdisciplinarity in Engineering, INTER-ENG 2014, 9-10 October, 2014, Târgu-Mureş, published in Procedia Technology, 19 (2015), 950-957, Science Direct, Elsevier.
9. Száva, I., Jármai, K., Vlase, S., Dani, P., Kakucs A., Gálfi B., Dinu, S., Popa, S.C., *Experimental investigation on one most used steel joint with intumescent paint*, Volume of the International Conf. Design, Fabrication and Economy of Metal Structures, 2013, University of Miskolc, Hungary, April 24-26, 2013, Springer Verlag, Berlin Heidelberg, ISBN 978-3-642-36690-1; ISBN (eBook):978-3-642-36691-8. http://link.springer.com/book/10.1007%2F978-3-642-36691-8

**Hirsch Index: 2**

**Publication of books/books' chapters**

**1.** Kormanikova, Eva, Sejnoha, M., Száva, I., Kotrasova, Kamila, Dogaru Fl., Sicakova, Alena, Valenta, R., *Selected Chapters of Mechanics of Composite Materials, Vol. I.,* 2011, Edited at Technical University of Kosice, Slovakia, ERASMUS Intensive Programmes- Lifelong Learning Programme 2011...2013, Chapter 4 (Experimental Methods Applied on Composite Materials...pp. 145-188), ISBN-978-80-89284-86-3, EAN-9788089284863.

**2.** Šejnoha, M., Kormaníková, E., Száva, I. et al., *Selected chapters of Mechanics of Composite Materials II*, Chapter 3 (Composite Materials' Experimental Investigation Methods...pp. 107-160), Czech Technical University in Prague, Czech Republic, 2012, ISBN 978-80-01-05068-2.

3. Száva, I., Šejnoha, M., Kormaníková, E., et al., *Selected chapters of Mechanics of Composite Materials III*, Chapter 1 (Classical and modern experimental investigation methods, pp. 1..64), DERC Publishing House, Tweksbury (Boston), Massachusetts, U.S.A., 2013, ISBN 978-1-939757-01-2.

**4.** I.Száva, I.Curtu, V.Ciofoaia, Luca-Motoc, Dana, *Experimental Methods in the Dynamics of the Mechanical Structures* (in Romanian: *Metode Experimentale în dinamica structurilor mecanice)*, vol. I., II., Transylvania University Press, Braşov, published in 2000 and 2001, ISBN: 973-974-40-3; 973-8124-60-3.

5. Gálfi, B.P., Száva, I., *Analytical and Experimental Studies of the Wood; Mechanical Characteristics* (in Romanian: *Studiul analitic şi experimental al lemnului -caracteristici mecanice-*), Lux Libris Publishing House, Brasov, Romania, 2013, ISBN-978-973-131-245-3 CIP: 674 (498) (075.8)

6. Száva, I., Gálfi, B.P., Experimental Study of the Wood; Modern Investigation Methods (in Romanian: *Studiul experimental al lemnului –metode moderne de investigare-*), Lux Libris Publishing House, Brasov, Romania, ISBN-978-973-131-246-0, CIP: 674 (498) (075.8)

7. Ionescu, D.R., Száva, I., Researches regarding on the optimisation of the mechanical characteristics of the composite materials used in the manufacturing of the vertical axis eolian turbines blades (in Romanian: *Cercetări privind optimizarea caracteristicilor mecanice ale materialelor compozite, destinate palelor unor turbine eoliene cu ax vertica*l), Transylvania University Press, Braşov, 2014, ISBN: 978-606-19-0408-2