

Personal data

Academic title Associate Professor
Scientific title PhD

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Education

1978 - 1982 “Andrei Saguna” High-school in Brasov
1982 – 1987 *TRANSILVANIA* University of Brasov, Faculty of Wood Industry
Study programme: Furniture design
2004 Buckinghamshire Chilterns University College- Brunel University,
Great Britain, PhD (recognized in Romania under the domain of
Engineering Sciences)
Thesis title: “A Study of the Roughness of Sanded Wood Surfaces”
(in English)

Professional experience

1987– 1990 Production engineer, Furniture factory IPL Gheorgheni
1990 – 1996 Production and design engineer “MAGURA” Codlea
1996-1998 Authorized design engineer: self employment – furniture design
1998-2005 Assistant, *TRANSILVANIA* University of Brasov, Faculty of Wood
Industry
2005-2008 Lecturer, *TRANSILVANIA* University of Brasov, Faculty of Wood
Industry
2008 - present Associate Professor, *TRANSILVANIA* University of Brasov, Faculty
of Wood Industry

Publications (selection)

Doctoral thesis:

Gurau, L. 2004. The Roughness of Sanded Wood Surfaces. Doctoral thesis. Forest Products Research Centre. Buckinghamshire Chilterns University College. Brunel University, 400 pages

Articles in ISI journals:

Gurau, L., Mansfield-Williams, H., Irle, M. (2005) Processing Roughness of Sanded Wood Surfaces. *Holz als Roh und Werkstoff* 63(1): 43-52

Gurau, L., Mansfield-Williams, H., Irle, M (2006) Filtering the Roughness of a Sanded Wood Surface. *Holz als Roh und Werkstoff* 64(5): 363-371

Gurau, L., Mansfield-Williams, H., Irle, M. (2007). Separation of Processing Roughness from Anatomical Irregularities and Fuzziness to Evaluate the Effect of Grit Size on Sanded European Oak. *Forest Products Journal* 57(1-2): 110-116

Gurau, L., Cionca, M., Mansfield-Williams, H., Sawyer, G., Zeleniuc, O (2008) Comparison of the mechanical properties of branch and stem wood for three species. *Wood and Fiber Science* 40(4): 647-656

Gurau, L., Mansfield-Williams, H, Irle, M, Cionca, M. (2009). Form error removal of sanded wood surfaces. *European Journal of Wood and Wood Products (Holz als Roh und Werkstoff)* 67 (2): 219-227

Gurau, L., Cionca, M., Timar, C. and Olarescu, A. (2009). Compression strength of branch wood as alternative eco-material to stem wood. *Environmental Engineering and Management Journal* 8(4): 685-690

Timar, M.C., Beldean, E., Porojan, M. and **Gurau, L. (2009).** Field testing and microscopy- important tools for a realistic long-term evaluation of wood improvement treatments. *Environmental Engineering and Management Journal* 8(4): 669-678

Timar, M.C. **Gurau, L***, Porojan, M., Beldean, E. (2013). Microscopic identification of wood species. An important step in furniture conservation. *European Journal of Science and Theology* 9(4): 243-252

Gurau, L., Mansfield-Williams, H., Irle, M. (2013) The influence of measuring resolution on the subsequent roughness parameters of sanded wood surfaces. *European Journal of Wood and Wood Products (Holz als Roh und Werkstoff)* 71(1): 5-11

Gurau, L, Timar, M.C., Porojan, M., Ioras, F. (2013) Image processing method as a supporting tool for wood species identification. *Wood and Fibre Science*: 45(3): 1-11

Gurau, L., Mansfield-Williams, H., Irle, M. (2014). Convergence of the robust Gaussian regression filter applied to sanded wood surfaces. *Wood Science and Technology* 48(6): 1139-1154

Gurau, L., Csiha C., Mansfield-Williams, H. (2015). Processing roughness of sanded beech surfaces. *European Journal of Wood and Wood Products (Holz als Roh und Werkstoff)* 73(3): 395-398

Timar, M.C., Varodi, A., **Gurau L. (2016)** Comparative study of photodegradation of six wood species after short time UV exposure. *Wood Science and Technology* 50(1): 135-163

Books in national and international Printing Houses (selection):

Gurau, L(2007) Quantitative Evaluation of the Sanding Quality in Furniture Manufacturing. Ed. Univ. Transilvania, Brasov, pg. 266. ISBN 978-973-598-126-6.

Gurau, L., Mansfield-Williams, H., Irle, M. (2011) Evaluating the Roughness of Sanded Wood Surfaces. Book Chapter 6., 51 pages. In: *Wood Machining*. Edited by J. Paulo Davim, University of Aveiro, Portugal. ISBN: 9781848213159. May 2011, pp.288, Publishing house: ISTE-Wiley (UK). ISBN: 9781848213159

Gurau, L., Mansfield-Williams, H., Irle, M. (2012) A quantitative method to measure the surface roughness of sanded wood products. Book Chapter pp.1-23 In: *Wood and Wood Products*. Series: Materials and Manufacturing Technology, Edited by J. Paulo Davim, University of Aveiro, Portugal, pp 140., Publishing house: NOVA Science Publishers, Inc., Hauppauge, New York, USA. ISBN: 978-1-62081-973-9

Gurau, L. (2012) Tehnologii neconventionale in industria lemnului. Ed. Univ. Transilvania, Brasov, pg. 252. ISBN 978-606-19-0094-7

Articles in journals indexed in international databases (selection):

Gurau, L., Mansfield-Williams, H., Irle, M- (2005). The Influence of Wood Anatomy on Evaluating the Roughness of Sanded Solid Wood. *IWSc-Journal of the Institute of Wood Science*.17-2 (issue 98), pg. 65-74. United Kingdom. ISSN: 0020-3203

Gurau, L., Mansfield-Williams, H., Irle, M. (2005). Qualitative and Quantitative Comparisons of Sanded Wood Roughness Measurements taken with Laser Triangulation and Stylus Scanning. *Roczniki Akademii Rolniczej w Poznaniu CCCLXVIII. Technologia Drewna*. 40: 181-192. Edited by: Wydawnictwo Akademii Rolniczej Im. Augusta Cieszkowskiego W Poznaniu. Poznan. PL ISSN 1506-4034.

Gurau, L, Cionca, M., Zeleniuc, O. (2006). Physical, Mechanical Properties and Chemical Composition of Branch Wood, as a Secondary Resource, Compared to Wood from Stem. *Bulletin of the Transilvania University of Brasov*. Vol.13 (48). Pp. 297-304, ISSN 1223-9631.

Gurau, L., Timar, M.C., Cionca, M, Olarescu, A. and Dumitrascu, R. (2010). An Objective Method to Analyse some Microscopic Characteristics of two Secondary Beech Wood Resources. *PRO Ligno* 6(1): 35-45. Online ISSN 2069-7430, ISSN-L 1841-4737.

Gurau, L., Campean, M., Olarescu, A., Porojan, M., Marton, N. (2012). The effect of the heat treatment of Sessile oak wood (*Quercus petrea* L) from young trees on the properties of panels with transversal grain. *PRO Ligno* 8(2): 53-67, Online ISSN 2069-7430, ISSN-L 1841-4737. Ed. Univ. Transilvania Brasov

Gurau, L., Irle, M., Mansfield-Williams, H. (2012). Minimising the computation time of using a Robust Gaussian Regression Filter on sanded wood surfaces. *PRO Ligno* 8(3): 3-11. Online ISSN 2069-7430, ISSN-L 1841-4737.

Gurau, L. (2013). Analysis of roughness of sanded oak and beech surfaces. *PRO Ligno* 9(4): 741-750, Online ISSN 2069-7430, ISSN-L 1841-4737.

Gurau, L. (2014). The influence of earlywood and latewood upon the processing roughness parameters at sanding. *PRO Ligno* 10(3): 26-33, Online ISSN 2069-7430, ISSN-L 1841-4737.

Gurau, L. (2015). Replacing outlying wood anatomy in the evaluation of processing roughness data at sanding. *PRO Ligno* 11(3): 11-20, Online ISSN 2069-7430, ISSN-L 1841-4737

Articles in conference proceedings indexed in ISI Web of Knowledge (selection):

Gurau, L., Mansfield-Williams, H. and Irle, M. 2002. An Analysis of Wood Surface Roughness Data. In: Frank C Beall (Ed): *Proc. of the 13th International Symposium on Nondestructive Testing of Wood*. 19-21 August 2002, Berkeley Campus. California, USA, pag.17-25. ISBN 1 892529 31 9 [ISI Proceedings].

Gurau, L, Cionca, M., Olarescu, A and Zeleniuc, O. 2008. New Method to Objectively Evaluate the Effect of Sanding on Wood Surfaces. In Proc of: *The First International Scientific Conference “Wood Processing and Furniture Production in South East and Central Europe: Innovation and Competitiveness 2008”*. June 25-27, 2008. Faculty of Forestry, Belgrade University. Belgrade, Serbia. ISBN 978-86-7299-149-9, pp.55-64, vol.1-[in ISI Web of Knowledge].

Inventions:

Cionca, M; Olarescu, A, **Gurau, L.** 2010. Eco-panels of cross texture made of branches of deciduous trees, method and process for making the same/ Eco-panouri cu textura transversala din crengi de foioase. *Metoda si procedeul de obtinere a acestora*”. Patent.no: RO 125678-A2. Publication date:. Dervent primary accession number: 2010-M69346[65]. ISI Web of Knowledge.

Cionca, M., **Gurau**, L., Olarescu, A., Zeleniuc, O. 2012. Panou si procedeu de obtinere a acestuia. Brevet de inventie nr.123471_B1/ 30.08.2012. Oficiul de stat pentru inventii si marci (Rezumat publicat în BOPI 8/2012 – Secțiunea Inventii).

Olarescu A., Cionca M.C., Badescu L.A., **Gurau** L., Campean. 2013. Panel, which is obtained from timber cut from thin sessile oak trunks resulting from forestry thinning operations. Brevet de inventie nr. RO 128819-A0/ 30.09.2013. Derwent primary accession number: 2013-Q10140[78]. ISI Web of Knowledge

h-index in Web of Science: 4

Research projects (selection):

Project	Role	Period
Project granted by the CNCSIS (The National Council of Scientific Research in the Higher Education) type A 450/2006: Eco-conception and eco-technology for furniture and other wood made products obtained from natural secondary resources	member	2006-2008
International project 186/25.07.2006: Designers' Saturday: Thinking with your hands. Designing with your hands.	member	2006-2007
Project PN2 IDEI(IDEAS) 856/2009 Development and implementation of an advanced scientific research methodology for sustainable wood (furniture) restoration-conservation and ecodesign	member	2009
Project PN2 IDEI(IDEAS) 146/2007 Modelling to sustainable promotion of wooden products and technologies with impact on the environment quality	member	2007-2010

Miscellaneous training

- MathCad 2000 Professional, UK, 2000-2003
- programming in C++ BORLAND 5, UK, 2002
- Linguistic competence certificate- English- Transilvania University of Brasov, 2008
- “ISO 9000:2000:Lead auditor training course” certified by IQA-IRCA- training at BM TRADA in the UK

Fields of competence

- Metrology of wood surfaces (the quality of processed wood surfaces)
- Wood properties (physical, mechanical, acoustic, thermal, wood behaviour to electromagnetic radiation etc)
- Wood microscopy
- Furniture design, eco-design and technology
- Eco-technologies in wood industry

Other activities

- Scientific reviewer to international journals:
 - *Wood Science and Technology*-ISI journal. Journal of the International Academy of Wood Science ISSN 0043-7719

- *Wood and Fiber Science*- ISI journal. ISSN 0735-6161
- *European Journal of Wood and Wood Products* (Holz als Roh- und Werkstoff)- ISI journal, ISSN: 0018-3768 (print version), ISSN: 1436-736X (electronic version)
- *BioResources* ISI journal. (<http://www.bioresourcesjournal.com>), Lucian A. Lucia and Martin A. Hubbe, Co-Editors. North Carolina State University, ISSN: 1930-2126
- *Journal of Adhesion Science and Technology*, ISI journal, ISSN 0169-4243 (Print), 1568-5616 (Online)
- *Wood Material Science and Engineering*, <http://www.tandfonline.com/toc/swoo20/current> ISSN: 1748-0272 (Print), 1748-0280 (Online), Indexed in Taylor & Francis
- Editor asociat la “*International Journal of Surface Engineering and interdisciplinary Materials Science*” (IJSEIMS)- (published semi-annually-IGI Global) DOI: 10.4018/IJSEIMS
- *The International Journal of Manufacturing, Materials, and Mechanical Engineering* (IJMMME)- (quarterly issued- IGI Global) DOI: 10.4018/IJMMME, ISSN: 2156-1680, EISSN: 2156-1672, indexed in SCOPUS
- *Scientific Research and Essays*, www.academicjournals.org/SRE, Dr. N.J. Tonukari, Editor. ISSN 1992-2248, indexed in DOAJ
- *International Journal of Conservation Science*, <http://www.ijcs.uaic.ro/> , Print ISSN: 2067-533X; Online ISSN: 2067-8223, Ed: Ion Sandu, indexed in SCOPUS
- *Bulletin of the Transilvania University of Brasov* , SERIES II-WOOD INDUSTRY , <http://webbut.unitbv.ro/Bulletin/> , ISSN 2065-2135 (Print), ISSN 2065-2143 (CD-ROM), Published by Transilvania University Press, Brasov, Romania, indexed in SCOPUS
- *PRO LIGNO*, ONLINE ISSN 2069-7430; ISSN-L 1841-4737, indexed in EBSCO, CABI, Academic Search Complete, DOAJ
- Member from 2004 of the editorial board (from 2012 executive editor) of the PRO LIGNO journal, indexed by EBSCO, CABI, Academic Search Complete, DOAJ, ISSN 1841-4737
- Vice-dean of the Faculty of Wood Engineering (from May 2012)
- Member of the Research center 11 „Furniture Eco-Design, Restoration and Certification in Wood Industry” at the R&D Institute of the Transilvania University of Brasov
- International conferences coordinator ICWSE 2013 (7-9 November 2013) and ICWSE 2015 (5-7 November 2015)
- Member of the National Council for the Attestation of Academic Titles, Diplomas and Certificates (CNADTCU) “Industrial engineering and management” (28.03.2011-6.09.2012)
- Member of The Research Council of the Transilvania University of Brasov (From Oct.2012)
- Member of The Editorial Council of The Transilvania University (from Dec.2012)
- Faculty Erasmus coordinator (2004- May 2012)
- Coordinator of the undergraduate study program: Wood Products Engineering and Design (from Oct.2011)
- Course leader: „Unconventional technologies in wood industry” and „Wood properties”- for undergraduate students, „Furniture design and ergonomoy” and „New trends in furniture design”, for master students.

Foreign languages

English-very good

Prof. Lidia GURAU, PhD