

PERSONAL INFORMATION Bedelean loan Bogdan

የ Universității no. 1, building H, room HII5a, , Brașov, 500036, Romania

- **\$** 0372 910037
- 🔀 bedelean@unitbv.ro
- https://www.researchgate.net/profile/Bogdan_Bedelean

Sex Male | Nationality Romanian

CURRENT JOB De

Transilvania University of Brașov, Department of Wood Processing and Design of Wood Products, Faculty of Furniture Design and Wood Engineering

PROFESSIONAL EXPERIENCE

Period	2020 - present		
Management function Period Position held	Vice-Dean for Scientific Research and Informatization		
	Faculty of Furniture Design and Wood Engineering		
	Transilvania University of Brașov,		
	Universității no. 1, Brașov, 500036, Romania		
	2013 - present		
	Lecturer		
	Faculty of Furniture Design and Wood Engineering		
	Transilvania University of Brașov,		
	Universității no. 1, Brașov, 500036, Romania		
Courses and practical activities	Technological transport system in wood industry, Applied Informatics, Automation in wood industry,		
Period Position held	Design of experiments and data analysis, Computer Aided Design.		
	Research activities in wood drying and wooden joints.		
	2009 - 2013		
	Teaching assistant		
	Faculty of Furniture Design and Wood Engineering		
	Transilvania University of Brașov,		
Courses and practical activities	Universității no. 1, Brașov, 500036, Romania		
	Technological transport system in wood industry, Thermal Treatments of Wood, Computer Aided Design,		
	Tolerances and dimensional control.		
	Research activities in wood drying field.		



	2023 – Python programming language course, IT Factory, Romania.
	2023 – Statistics course , Transilvania University of Brașov, Romania
Qualification / diploma obtained	2011 – Scientific Writing course, University of British Columbia, Faculty of Forestry,
	Canada
	2009 – Wood drying course
	University of British Columbia, Faculty of Forestry, Canada
	2009 – English language course (medium level)
	Transilvania University of Brașov, Centre for Modern Language Learning
	2008 - Obtaining the qualification of teacher
	Transilvania University of Brașov, Teacher Training Department
	2007 - Advanced 3D design using SolidWorks
	Transilvania University of Brașov
	2004 – 2009 Doctoral degree in industrial engineering
	Transilvania University of Brașov, Faculty of Furniture Design and Wood Engineering
	Aerodynamic study of wood drying kilns
	2004 – 2005 Diploma of advanced studies
	Transilvania University of Brașov, Faculty of Furniture Design and Wood Engineering
	Modeling and optimization of woodworking processes
	1999 – 2004 Engineer degree
	Transilvania University of Brașov, Faculty of Furniture Design and Wood Engineering
	Wood processing

PERSONAL SKILLS

Mother tongue

Romanian

FOREIGN LANGUAGES

UNDERSTANDING		SPEAKING		WRITTING		
Listening	Reading	Conversation	Oral speech			
B2	B2	B2	B2	B2		
Certificat de competență lingvistică. Nivelul B2.						
Niveluri: A1/2: Basic user; B1/2: Independent user; C1/2: Experienced user						
Common European Framework of Reference for Languages						

Skills

English

Communication

- communication skills acquired through teaching experience in higher education

vice dean

Organizational/managerial skills

- study program coordinator (Woodworking Engineering part time)
- member of the Faculty Council (2015 2019, 2023 present)
- member of the Department Council (2019-2023, 2023-present)
- secretary admissions committee
- research project director

Skills acquired at work

- educational skills
- research skills
- computer skills



Computer skills • knowledge of programs: Word, Excel, PowerPoint, Access (Microsoft 365)

- using cloud productivity suites (Microsoft 365 and Google Workspace)
- SolidWorks
- AutoCAD
- SPSS
- Python

Other skills • wood drying

- data analysis and modeling
- designing of wood dust control systems
- computer aided design of furniture

Driver's license B

MORE INFORMATION

Publications

Books and teaching guides

- Bedelean B. 2018. Technological transport in the wood industry. Exhausting systems. Publishing house of Transilvania University of Brasov. ISBN:978-606-19-1032-8.
- Bedelean B. 2015. Air circulation in wood drying kiln. Publishing house of Transilvania University of Brasov ISBN:978–606-19-0607-9.
- Bedelean B. Câmpean M. 2013. Thermal treatments of wood. Guide for practical work. Publishing house of Transilvania University of Brasov. ISBN: 978-606-19-0230-9.

Scientific papers (selection)

- Bedelean, B., Ispas, M., Răcășan S. 2023. Combining Artificial Neural Network and Response Surface Methodology to Optimize the Drilling Operating Parameters of MDF Panels. Forests 14 (11), pp/1-19.
- Bedelean, B., Ispas, M., Răcăşan S. 2023. Applying the Artificial Neural Network and Response Surface Methodology to Optimize the Drilling Process of Plywood. Appl. Sci. 13 (20), pp.1–16.
- Bedelean, B., Ispas, M., Răcăşan S., Baba, M.N. 2022. Optimization of Wood Particleboard Drilling Operating Parameters by Means of the Artificial Neural Network Modeling Technique and Response Surface Methodology. Forests 13 (7), pp. 1-13.
- Bedelean, B., Cociș, R. 2021. The influence of the freezing and thawing process on the bending moment capacity of L-shaped heat-treated wood dowel joints. Bulletin of the Transilvania University of Brasov, Series II: Forestry, Wood Industry, Agricultural Food Engineering, 14-63(2), pp. 51–60.
- Bedelean, B.I., Neculăeş, I., Spîrchez, C.G., Răcăşan, S. 2021. The Influence of the Number and Position of Dowels on the Bending Moment Capacity of Heat-treated Wood Dowel Joints. Bulletin of the Transilvania University of Brasov, Series II: Forestry, Wood Industry, Agricultural Food Engineeringthis, 14–63(1), pp. 67–76.
- Porojan, M., Brandstetter, M., Ispas, M., Bedelean, B., Câmpean M. 2021. Research concerning the bending properties of reconstituted spruce lumber boards, obtained by edge-cutting at 45° and gluing. Applied Sciences (Switzerland), 11(21), 1-12.
- Răcășan, S. Bedelean, B., Georgescu, S., Varodi, A.M. 2020. Comparison Between Artificial Neural Networks and Response Surface Methodology to Predict the Bending Moment Capacity of Heat-treated Wood Dowel Joints. . Bioresources 15 (3): 5764-5775.
- Georgescu, S., Varodi, A.M., Răcășan S., Bedelean, B. 2019. Effect of the dowel length, dowel diameter, and adhesive consumption on bending moment capacity of heat-treated wood dowel joints. Bioresources 14 (3):6619-6632



- Bedelean B. 2018. Application of artificial neural networks and Monte Carlo method for predicting the reliability of RF phytosanitary treatment of wood. European Journal of Wood and Wood Products 76(4): 1113-1120
- Bedelean B. 2017. Optimisation techniques to compare various selected drying schedules for larch timber. European Journal of Wood and Wood Products 75 (6):939-948.
- Sova D., Bedelean B., Sandu V. 2016. Application of Response Surface Methodology to Optimization of Wood Drying Conditions in a Pilot-Scale Kiln. Baltic Forestry 22(2): 348-356.
- Bedelean B., Muntean S., Câmpean M. 2016. Analysis of Drying Kiln Aerodynamics Based on a Full Three-Dimensional Turbulent Numerical Computation. Drvna Industrija 67(1):53-64.
- Bedelean B. Lăzărescu C. Avramidis S. 2015. Predicting RF heating rate during pasteurization of green softwoods using artificial neural networks and Monte Carlo method. Wood Research 60 (1): 83 - 94

Conferences

- Papers presented at conferences (selection)
- Bedelean B., Spirchez C. 2023. Bending moment capacity of L-shaped heat-treated wood joints: A comparative study between dowels and biscuits. International conference Wood Science and Engineering in the Third Millenium (ICWSE 2023), November 2– 4, Brasov, Romania.
- Bedelean B., Şova D. 2019. A novel method for assembling a wood drying schedule based on design of experiments. International conference Wood Science and Engineering in the Third Millenium (ICWSE 2019), November 5– 8, Brasov, Romania.
- Georgescu S, Bedelean B. 2017. Effect of heat treatment on compresive and tensile strength of end to edge butt joint. ICWSE 2017, Brasov, Romania.
- Bedelean B, Sova D. 2014. Influence of air parameters on drying time and energy consumption during thermo-hydro processing of wood, Final COST Action FP0904, Conference on "Recent Advances in the Field of TH and THM Wood Treatment" at the Lulea University of Technology
- Bedelean B, Olarescu C, Campean M. 2014. Predicting the Compression Strength Parallel to Grain of Heat Treated Wood Using Artificial Neural Networks: A Preliminary Study. 57th SWST International Convention 7th Wood Structure and Properties Conference 6th, European Hardwood Conference
- Bedelean B. Sova D. 2009. Decrease energy consumption during timber drying. EDG conference, Bled, Slovenia. Improvement of Wood Drying Quality by Conventional and Advanced Drying Techniques.

Research projects Project Manager

Grants

- Contributions to the aerodynamic study of wood drying kilns to increase the efficiency of electricity and heat use. CNCSIS financier, contract no: TD 318, period: 2007 – 2008, 2 years.
- Exploratory analysis of heat-treated wood joints. UnitBv financier.
- Analiza exploratorie a îmbinărilor din lemn termotratat, UnitBv financier. Grant for young researchers.

Member in research projects / contracts

and research contracts

- Digital transformation manager: leading companies in Furniture value chain to implement their digital transformation strategy, perioada 2019-2021, finanțator UE-ERASMUS +, nr.contract: PN: 601011-EPP-1-2018-1-ES-EPPKA2-SSA, ani desfășurare:3, director de proiect: Prof.dr.ing. Lidia Gurău.
- Furniture sector Avant-garde Creativity and Entrepreneurship Training, perioada:2018-2021 finantator:UE
 ERASMUS + nrctr:PN: 2018-1-IT01-KA202-006734, ani desfasurare:3, director de proiect: Prof.dr.ing. Lidia Gurău.
- Application of the method of thermodynamics of irreversible processes to optimize the drying process of capillary-porous materials, period: 2009 – 2010, UEFISCDI financier, contract no: PN II – ID – PCE – 2008, 2 years, project manager: Conf.dr.ing. Daniela Sova.
- Research on technology improvement and production of products with improved functional performance for S.C. Holzindustrie Schweighofer BACO S.R.L, period: 2015 - 2016, Holzindustrie Schweighofer BACO S.R.L, nr. contract:8743/27.07.2016, 1 year, project manager: Prof.dr.ing. Mihai ISPAS.
- Studies and research on steaming, predrying and drying beech friezes, period 2007 2008, 1 year, project manager: Prof.dr.ing. Ştefan Alexandru.



Recognition and impact of the activity

Reviewer for national and international journals and scientific events