

Curriculum Vitae**Europass**

| Personal information | |
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| First name(s) /Surname(s) | SPÎRCHEZ GHEORGHE-COSMIN |
| Address(es) | Str. Universităţii, Nr.1, Braşov |
| Telephone(s) | |
| E-mail | cosmin.spirchez@unitbv.ro |
| Nationality | |
| Date of birth | |
| Gender | Male |
| Work experience | |
| Dates | 27.02.2017 → present |
| Occupation or position held | University Lecturer |
| Main activities and responsibilities | Educational activities and scientific research |
| Name and address of employer | Transilvania University of Braşov, Faculty of Furniture Design and Wood Engineering |
| Type of business or sector | Higher education |
| Education and training | |
| Dates | 01.10.2004 –2010 |
| Title of qualification awarded | Phd thesis finalised: Contributions to modelling and optimizing the longitudinal circular saws processing of solid wood. |
| Name and type of organisation providing education and training | Transilvania University of Braşov, Faculty of Wood Engineering |
| Dates | 01.10.2002-01.10.2003 |
| Title of qualification awarded | Master degree in "Modeling and optimization woodworking" |
| Name organisation providing education and training | Transilvania University of Braşov, Faculty of Wood Engineering |
| Dates | 01.10.1997-29.06.2002 |
| Title of qualification awarded | Engineer |

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|---------------------------------|--|------------|---------|------------------|---|------------|----------------|------------|
| Mother tongue(s) | Romanian | | | | | | | |
| Languages | Understanding | | | | Speaking | | Writing | |
| | Listening | | Reading | | Spoken interaction Spoken production | | | |
| | A2 | Basic user | B1 | Independent user | A2 | Basic user | A2 | Basic user |
| Social skills and competences | Sociable, listening skills, team spirit | | | | | | | |
| Computer skills and competences | MS Office-Word, Excel, Power Point, AutoCAD, Mechanical Desktop, Internet | | | | | | | |
| Other skills and competences | Teaching module diploma | | | | | | | |
| Driving licence | B | | | | | | | |
| Additional information | 24.02.2006- Korpus Solid Edge course- degree 03.12.2008-Advanced postgraduate course using Solid Works 3D Design-degree 10.06.2010-Using portable equipment for wood working-degree 24.06.2010-National training program in scientific authorship, diploma issued within the project PhD. School of Excellence - quality-assessment research in universities and increasing the visibility of the scientific publication-degree | | | | | | | |

The selected research paper:

- Journal I.S.I. Web of Science:

- Spîrchez, C., Lunguleasa, A, Popescu, C.M., Avram, A., Ionescu, C.Ş (2023) Properties of un-torrefied and torrefied poplar plywood (PW) and Medium-Density Fiberboard (MDF), Revista Applied Sciences, 13(21), 11950;
- Drăguşanu (Japalela) V., Lunguleasa, A., Spîrchez, C., Scriba, C. (2023) Some properties of briquettes and pellets obtained from the biomass of energetic willow (*Salix viminalis* L.) in comparison with those from oak (*Quercus robur*), Revista Forests, 14, 1134;
- Spîrchez, C, Lunguleasa, A (2022) Torrefaction of spruce beech and oak pellets in order to improve calorific value, Revista Bioresources, vol.17(4), pag. 6804-6817, ISSN 1930-2126;
- Spîrchez, C, Lunguleasa, A, Ciobanu, V (2021) Evaluation of oak-specific consumption, efficiency and lower from an aesthetic veneer factory, Revista Applied Sciences, 11(9), 4300;
- Lunguleasa, A, Spîrchez, C, Rădulescu, S (2020) Using four peelletizing machines with flat die and different capacities for obtaining the best pellets from corn cobs waste, Revista Bioresources, vol.62(2), pag. 319-328, ISSN 1336-4561;

- Spîrchez, C, Lunguleasa, A, Gaceu, L (2019) Researches on grape husk waste obtained from the winery and its use as pellets for combustion, *Revista Wood Research*, vol.64(3), pag.549-556, ISSN 1336-4561;
- Lunguleasa, A, Spîrchez, C, (2019) Increasing the calorific properties of sawdust waste from pellets by torrefaction, *Revista BioResources* vol. 14(4), pag.7821-7839, ISSN 1930-2126;
- Spîrchez, C, Lunguleasa, A, Matei, M (2018) Particularities of hollow-core briquettes obtained out of spruce and oak wooden waste, *Revista Maderas Ciencia y tecnologia*, vol. 20 (1), pag. 139-152, ISSN 0717-3644;
- Croitoru, C, Spîrchez, C, Cristea, D, Lunguleasa, A, Pop, M.A., Bedo, T, Roata, I.C., Luca, M.A. (2018) Calcium carbonate and wood reinforced hybrid PVC composites, *Journal of Applied Polymer Science*, vol.135, Nr.22, ISSN 0021-8995;
- Spîrchez, C, Lunguleasa, A, Antonaru, C (2017) Experiments and modeling of the torrefaction of white wood fuel pellets, *Revista BioResources* vol. 12(4), pag.8595-8611, ISSN 1930-2126;
- Lunguleasa, A, Spîrchez, C (2017) Torrefaction of lamellar panels made oak and spruce wood species, *Revista Wood Research*, vol.62 (2), pag. 319-328, ISSN 1336-4561;
- Lunguleasa, A, Spîrchez, C (2017) Characteristics of waste bark combustion, *Revista Environmental Engineering and Management Journal*, vol.16, Nr.3, pag.685-694;
- Spîrchez, C, Lunguleasa, A, Grîu (Dobrev), T (2016) Testing model for assessment of lignocellulos-based pellets, *Revista Wood Research*, vol. 61(2), pag.331-337, ISSN 1336-4561;
- Spîrchez, C, Lunguleasa, A, (2016) Shear and crushing strengths of wood pellets, *Revista Drewno*, vol. 59, Nr. 198, pag. 87-97, ISSN 1644-3985;
- Lunguleasa, A, Spîrchez, C, Dobrev (Grîu), T (2015) Effects and modelling of sawdust torrefaction for beech pellets, *Revista BioResources* vol. 10(3), pag.4726-4739, ISSN 1930-2126;
- Lunguleasa, A, Spîrchez, C (2015) An aggregated property of wheat straw briquettes, *Revista Wood Research*, vol.60(5), pag. 845-856, ISSN 1336-4561.

Journal BDI

- Bedeleian, B, Neculăeș, I, Spîrchez, C, Răcășan, S (2021) The influence of the number and position of dowels on the bending moment capacity of heat-treated wood dowel joints, *Buletinul Universității Transilvania din Brașov*, vol.14(3), Nr.1, indexat în SCOPUS, EBSCO, CABI, pag. 67-77, ISSN 2065-2135;
- Spîrchez, C, Lunguleasa, A (2019) Comparative study of spruce and beech pellets in terms of physical, mechanical and energy properties, *Revista PRO LIGNO*, indexată CABI, EBSCO, DOAJ, DRJI, INDEX COPERNICUS, vol.15(4), pag.321-328, ISSN 2069-7436;
- Spîrchez, C, Lunguleasa, A (2017) Researches regarding the properties of an innovative wood-plastic composite, *Revista PRO LIGNO*, indexată CABI, EBSCO, DOAJ, DRJI, INDEX COPERNICUS, ISSN 2069-7436;
- Zeleniuc, O, Brenci, L, Spîrchez, C (2017) Evaluation of oriented strand board behavior on fire, *Revista PRO LIGNO*, indexată CABI, EBSCO, DOAJ, DRJI, INDEX COPERNICUS, ISSN 2069-7436;
- Lunguleasa, A, Spîrchez, C, Fotin, A (2017) Research on briquettes obtained from shredded tobacco cigarettes, as ligno-celluloses fuel, *Revista PRO LIGNO*, indexată CABI, EBSCO, DOAJ, DRJI, INDEX COPERNICUS, ISSN 2069-7436;

- Lunguleasa, A, Coşereanu, C, **Spîrchez, C**, Dobrev (Grîu), T (2016) Calorific properties of wastes from some exotic wood species, Revista PRO LIGNO, vol 12(1), indexată CABI, EBSCO, DOAJ, DRJI, INDEX COPERNICUS, ISSN 2069-7436;
- **Spîrchez, C**, Lunguleasa, A, Grîu, T (2015) Comparison between spruce and beech briquettes (as renewable source of combustible in Romania) from the perspective of physical, mechanical and energetic properties, Revista PRO LIGNO, vol 11(4), ISSN 2069-7436;
- Roşca, I.C, **Spîrchez, C**, Guiman, M.V. (2015) Study of the vibration level in case of manufacturing on a CNC machine-tool, Revista PRO LIGNO, vol 11(4), ISSN 2069-7436;
- Bădescu, L.A-M, Zeleniuc, O , Mădan, R , **Spîrchez, C** (2015) Research on the power consumption in sanding process with abrasive brushes, compared to the wide belt sanding, Revista PRO LIGNO, vol 11(4), ISSN 2069-7436;
- Lunguleasa, A, **Spîrchez, C** (2015) The characteristics of thermally MDF panels, Buletin Universitatea Transilvania din Braşov, vol 8(57) serie 2, indexat în SCOPUS, EBSCO, CABI, ISSN 2065-2135.

Scientific presentation

- **Spîrchez, C**, Lunguleasa, A, Croitoru, C (2017) The importance of insulation for wooden structure used in construction, Conference Challenges in Higher Education in the 21st Century, Sozopol-Bulgaria, 30 mai-2 june 2017;
- **Spîrchez, C**, Bădescu, L (2016) Optimizing machining conditions on circular saws spruce processing, Conference Challenges in Higher Education in the 21st Century, Sozopol-Bulgaria, 31 may-3 june 2016;
- **Spîrchez, C**, Lunguleasa, A (2015) The influence heat transfer coefficient an wood construction, Scientific Research and Education in the Air Force (AFASES), Braşov, 28-30 may 2015, vol. I, pag.597-600, ISSN 2247-3173;
- **Spîrchez, C**, Bădescu, L (2015) Analysis of the technical possibilities of circular saws to optimise machining conditions, Conference Challenges in Higher Education in the 21st Century, Sozopol-Bulgaria, 2-6 june 2015, vol. 13, pag. 152-154, ISBN 978-954-580-356-7;
- **Spîrchez, C.**, Lepădătescu, B , Gaceu, L (2015) Comparative study of different energy effectiveness of building insulation structures of wood in Romania, International Conference Standardization, Prototypes and Quality, Kocaeli-Turcia, 22-24 october 2015, pag.135-140, ISBN 978-605-83983-0-6;
- **Spîrchez, C**, Prună, M, Lunguleasa, A (2015) Calorific power an important property of wood biomass, International Symposium Agricultural and Mechanical Engineering (ISB-INMA-TEH), Bucureşti, 29-31 october 2015, pag. 135-140, ISSN 2344-4126;
- **Spîrchez, C**, Bădescu, L (2014) Research regarding spruce wood processing with circular saw blades, Proceedings International Conference on Energy and Environment Technologies and equipment, Braşov 2014, 26-28 june, ISBN 978-960-474-384-1;
- **Spîrchez, C**, Gaceu, L (2014) The use of wood in roof construction, Proceedings International Conference Challenges in Higher Education and Research in XXI-century, Sozopol-Bulgaria 2014, 3-6 june, ISBN 978-954-580-350-5;

- **Spîrchez, C, Ola, D** (2014) Research regarding passive energy houses in Romania, Proceedings International Conference on New Research in Food and Tourism (BIOATLAS), Braşov 2014, 15-17 may, ISSN 1844-8577;
- **Dănilă, A, Prună, M, Spîrchez, C** (2014) Dynamic models identification of the fireproofing wooden waste burning process, Proceedings EURASIA 2014, Waste Management Symposium, Istanbul-Turcia 2014, 28-30 april;
- **Spîrchez, C, Bădescu, L** (2013) Research regarding cutting beech wood with circular saw blades, Proceedings ICWSE, Braşov 2013, 7-9 november, ISSN 1843-2689;
- **Spîrchez, C, Bădescu, L** (2013) Variation the cutting power for longitudinal wood processing, Proceedings 9th International Scientific Conference Mechanics and Machine Elements, Sofia-Bulgaria 2013, 7-8 november;
- **Spîrchez, C, Gaceu, L** (2013) Research on natural fiber insulation for wood construction, Proceedings International Conference Challenges in Higher Education and Research in XXI-century, Sozopol-Bulgaria 2013, 4-7 iune, ISBN 978-954-580-325-3;
- **Spîrchez, C, Bădescu, L** (2013) Research on modeling in case of longitudinal beech wood processing with circular saws, Proceedings 6th International Conference on Manufacturing Engineering, Quality and Advances Production Systems in Production, Automation and Transportation Systems, Braşov 2013, 1-3 june, ISSN 978-6-91894-193-7;
- **Aldea, C, Spîrchez, C** (2012) Administering Computer Networks Using Windows Management Instrumentation Technology, Proceedings International Conference Virtual Learning (ICVL) , Braşov 2012, 2-3 november, ISSN 1844-8933,
- **Spîrchez, C, Bădescu, L, Aldea, C, Răcăşan, S** (2012) Research on size fasteners of wooden structures for construction with programming software Heco Schrauben, Proceedings International Conference Virtual Learning (ICVL) , Braşov 2012, 2-3 november, ISSN 1844-8933;
- **Răcăşan, S, Spîrchez, C** (2012) Aspects regarding the cutting power on recessing depending on the annual ring orientation, Proceedings 8th International Conference Mechanics and Machine Elements, Sofia-Bulgaria 2012, 25-26 october, ISSN 1844-8933;
- **Spîrchez, C, Țăran, N, Bădescu, L** (2012) Variation of the cutting power depending on the cutting speed and feed speed for longitudinal beech wood processing, Proceedings International Conference on Heat Transfer, Thermal Engineering and Environment, Istanbul-Turcia 2012, 21-23 august, ISBN 978-161804-114-2;
- **Spîrchez, C, Bădescu, L, Gaceu, L, Ola, D, Gorea, A, Deac, V** (2012) Technology to build a wooden cottage that combines traditional style with technical aspect modernist, Proceedings International Conference on New Research in Food and Tourism (BIOATLAS), Braşov 2012, 24-26 may, ISSN 1844-8577;

Scientific research grants and contracts

| Programme/ Project | Function | Year |
|---|-----------------|-----------|
| Research contract "Grants for young researchers" no.8038/14.07.2017, High performance torrefied pellets | Project manager | 2017-2018 |

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| from woody biomass | | |
| Research contract "Grants for the integration of master students in research teams" no. 8063/02.07.2018, Program for the quality evaluation of briquettes from sunflower seed husks | Project manager | 2018 |
| Scientific research contract for BIOPAIESOL S.R.L., no.14981/10.11.2017 | Project manager | 2017 |
| Scientific research contract Physical and caloric tests on straw briquettes, SC KTV S.R.L., no.2183/18.02.2017 | Project manager | 2017 |
| Proiect contract de cercetare științifică Testare peleți din lemn, S.C. Alfa Lemn Suceava, nr.8672/24.07.2015 | Project manager | 2015 |
| Project scientific research contract Testing of wood briquettes for RODTUD PREST S.R.L., no.11846/29.09.2017 | Member | 2017 |
| Project scientific research contract Tests on the properties of cigarette residues, S.C. Eco Life Style S.R.L., no.4273/13.04.2017 | Member | 2017 |
| Scientific research contract for the testing of lighters from tobacco waste, S.C. Eco Life Style S.R.L. no.17924/23.12.2016 | Member | 2016 |
| National project C.N.C.S.I.S.type A, Network of scientific excellence for the Romanian Wood Industry in the context of our country's integration into the European Union in 2007, code 1339/2004 | Member | 2004-2007 |
| Project CEEPUS-SK-0310-0815/2008, Non-traditional processes in production technologies and integration of study and research in Central and Eastern European universities. | Member | 2008-2015 |
| International project Efficacy evaluation of new products for timber antisapstaining during storage ARCH Timber Protection LTD Anglia | Member | 2005-2011 |
| National project Protection of wood according to quality and areas of use in order to increase the value and competitiveness of wood products, concluded with the Ministry of Economy and Trade Bucharest | Member | 2006-2008 |

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| Scientific research contract with SC Stecopal Strat 2004 Brasov | Member | 2007-2008 |
| Scientific research contract project Design of innovative solid wood furniture with bio-ecological finishes and design of production infrastructure, SC.Biomobila S.R.L. | Member | 2015 |

Patents

- Lunguleasa, A., **Spîrchez,C.**, Coşoreanu, C., Lica, D., Brenici, L. Method and device for determining the shear strength of wood pellets, Nr CBI.A/00494 din 10.07.2015, BI RO 130786 A0.
- Lunguleasa, A. Grîu, T (Dobrev), **Spîrchez,C.** Quality and marketability assessment procedure for lignocellulosic briquettes, Nr CBI. A/00827 din 11.11.2013, BI RO 129676 A0/30.07.2014.

Member of professional and scientific associations

- Member in Cost Action Management Committee 1404.

Other skills (coordination of specialisations, disciplines, laboratories)

- Basic for wood processing;
- Tools for wood processing;
- Technological devices for wood industry;
- Wood production and environmental protection;
- Computer-aided programming and design (Autocad, Mechanical Desktop, Solid Edge, Solid Works);
- Structures and Wood Constructions ;
- Management in the Wood Industry, Quality Management and Total Quality Management (Management Systems, Management Processes and Relationships, Elements of Performance Management).