

Curriculum Vitae



Name: BARBU Marius Cătălin

Affiliation:

Professor at Faculty of Wood Engineering, “Transilvania” University Braşov, Romania, since 2002
Professor at the Dept. for Forest Products and Timber Construction, Salzburg Univ. for Applied Sciences, Austria, since 2011
Extraordinary Professor at the Dept. for Forestry and Wood Science, University of Stellenbosch, South Africa, since 2014
Adjunct Professor at Center for Renewable Carbon, University of Tennessee, Knoxville, USA, since 2014
Visiting professor at the Dept. of Environment and Forest Resource Science, Faculty for Agriculture, Univ. Shizuoka, since 2014

Citation:

Double career in University and Industry (R&D) concerning the studies of design of wood panels, development and implementation of prototypes, optimization of the manufacturing processes, and reduction of the environment impact for the wood panels industry. Leading projects on different levels from lab to industrial scale including the first production runs and patent applications. Teaching as invited or associate professor in 4 languages at the main established European universities providing courses in the wood science and technology. Recognized European expert in wood composites.

Curriculum Vitae:

Studies: Faculty for Wood Industry, “Transilvania” University of Braşov (1987-1992)
1st Doctorate Thesis: “Transilvania” University of Braşov, Romania (December 1995).
2nd Doctorate Thesis: University for Natural Sciences (Boku), Vienna (March 1997 with honors).
Degree: Dr. Dipl.-Eng. in Wood Science and Technology (Supervisor: Prof. A. Mitisor, Braşov, February 1996)
Dr. Rer. Nat. in Technical Natural Sciences (Supervisor: Prof. H. Resch, Vienna, June 1997)
Foreign Languages: English, French, German, Italian, Romanian (native).

Professional positions:

1992-1997: University assistant at the Wood Industry Faculty of “Transilvania” University Braşov. Area of interest: Laminated Wood Composites, Plywood, PB and MDF.
1998-2000: Lecturer at same Faculty in Braşov
1997-2000: Senior Researcher at the Institute for Wood Research – “Boku” Vienna.
2000-2002: Assistant Professor for Technology of Wood Composites at the same Faculty in Braşov
2001-2006: Head of R&D for BinderHolz Group (6 factories, 1300 people, 300 mil.€/a), Fügen/Tyrol, Austria
2002-now: Professor for Technology of Wood Composites at the same Faculty in Braşov
2006-2011: Professor at the Faculty for Natural Sciences, University of Hamburg
2011-now: Professor for Technology of Wood Processing at the Salzburg University of Applied Sciences, Campus Kuchl for Bachelor Studies “Wood Technology and Construction” and Master Studies “Wood Technologies and Economics”
2013-now: Head of Department for Forest Products Technology at the Salzburg University of Applied Sciences

Coordination:

1995-2000: Coordinator of S.5.05.02 “Recycling and Recycled Products” of Division 5 “Forest Products”, IUFRO
2000-2005: Coordinator of S.5.05.00: “Composites and Reconstituted Products” of Division 5 of IUFRO
2005-2009: Coordinator of Working Group 1: “Process optimization and process innovation”, COST E49 “Processes and performance of wood-based panels”, Brussels
2005-2010: Coordinator of WG 5.05: “Composites and Reconstituted Products” of Division 5 of IUFRO
2009: Scientific Director of the 1st Asian Training on Wood based Composites organized by International Wood Academy Hamburg in Nakon Si Thammarat, Thailand
2011: Scientific Director of the 2nd Asian Training on Wood based Composites organized by International Wood Academy Hamburg in Nakon Si Thammarat, Thailand
2011-now: Coordinator of WG 5.04: “Wood Processing” of Division 5 of IUFRO
2013-now: Vice-president and founder of the European Section of Forest Products Society
2014: Scientific Director of the 1st Euro-Asian Short Training Course on Wood based Composites organized in Trabzon, Turkey

Visits and Internationals:

1992-now: over 40 Research Institutes and University on Forestry and Wood Science sector worldwide visited
1999-2015: Chairman and Keynote-Speaker of Scientific/Working Sessions of European Panel Products Symposiums, IUFRO Congresses and World Conferences, National Wood Producers Symposium, COST E49 meetings

Curriculum Vitae

Membership:

1995-2002 and 2013-now: Forest Products Society, Madison, USA
1999, 2014: Society for Wood Science and Technology, Madison, USA
2006: Board of experts for the ERA Wood Wisdom 2006 for the 7th Framework Program, Helsinki
2006-2009: NA 042-04-03 AA of the DIN German Institute for Norms Committee for the Wood Products

Scientific Referee and Editorial Boards

2005-now: Redaction Committee of "Holztechnologie", Dresden, Carl Hanser Verlag München, ISSN 0018-3881
2005-now: Journal "Building and Environment", Elsevier Ltd. Oxford, ISSN 0360-1323
2005-now: Journal "Holz als Roh- und Werkstoff", Springer Verlag München, ISSN 0018-3768
2006-now: "Journal of Materials Processing Technology", Elsevier Ltd. Oxford, ISSN 0924-0136
2008-now: Journal "Sensors", MDPI, Basel, ISSN 1424-8220
2009-now: Journal "Holzforschung", Walter de Gruyter, Berlin, Germany, ISSN: 0018-3830
2010-now: Journal "ProLigno", Editura Universitatii "Transilvania" din Brasov, ISSN 1841-4737
2010-now: "Forest Products Journal", Forest Products Society, Madison, USA, ISSN: 0015-7473
2011-now: Journal "Cellulose", Springer, ISSN 0969-0239
2011-now: Reviewer of Journal of Reinforced Plastics and Composites, Sage Publishers, ISSN: 0731-6844
2011-now: "International Wood Products" Journal, Maney Publishing, ISSN: 2042-6453
2011-now: Journal for "Polymer Degradation and Stability", Elsevier, ISSN 0141-3910
2011-now: Redaction Committee of the "Annals of Forestry Research", Câmpulung Moldovenesc, Romania
2011-now: "Journal of Forestry", Karadeniz Technical University
2011-now: Journal "Scientific Research and Essays", <http://www.academicjournals.org/SRE> ISSN 1992-2248
2011-now: "Parlar Scientific Publications (PSP)". Fresenius Environmental Bulletin. www.psp-parlar.de
2012-now: "Journal of Adhesion Science and Technology"
2012-now: "Journal of Composites – Part B". Elsevier
2012-now: "Journal of Materials Science and Engineering". David Publishing Company
2012-now: "Journal of Environmental Science and Engineering"
2012-now: "Journal of Tropical Forest Science (JTFS)". FRIM
2012-now: "Journal of Wood Chemistry and Technology"

Principal Academia Achievements

Teaching 15 courses, 10 labs and seminary and 10 field trips with students from Austria, Croatia, Germany, France, Finland, Hungary, Romania, Slovenia, Thailand
Supervision: 36 diplomas, 31 bachelors, 22 masters, 5 PhD theses of students from Austria, France, Germany, Iran, Moldova, Romania, Thailand and Turkey

Principal Scientific Achievements

Pioneer research work in Europe on the use of *Mischanthus* chips in combination with reinforcing fabrics for high performance panels in construction;
Optimization of light MDF production at lab and industrial scale for the 1st time in the Alps region;
Development of HPL made from resinated wood fiber at lab scale and in continuous process ... European patent;
Development of a pilot plant for combined waste water and air cleaning for the MDF process ... world premiere;
Investigation, design, development of prototype equipments for:
Preheating of fiber mats in continuous process using steam injection, Powder coating of MDF, Slicing of wood lamellas, Non-destructive effective grading of timber for GLT, Finger-jointing large wall elements, Low waste high speed horizontal belt saws, Superior use of ashes generated from wood in biomass power plant, Very light fiberboards for insulation in dry process, One stage continuous production of light sandwich boards (patent application), Coconut husks fiber for HPL production based on prepregs, Bamboo strands for OSL production, Coconut palm for engineered products, Bark for insulation panels and pallets parts etc.

Number of publications:

- over 65 in international journals
- over 30 in Romanian journals
- 3 international patents and 1 patent application
- 5 chapters and 4 books
- over 150 in proceedings of international conferences and congresses
- over 15 in Romanian proceedings
- over 25 research project reports

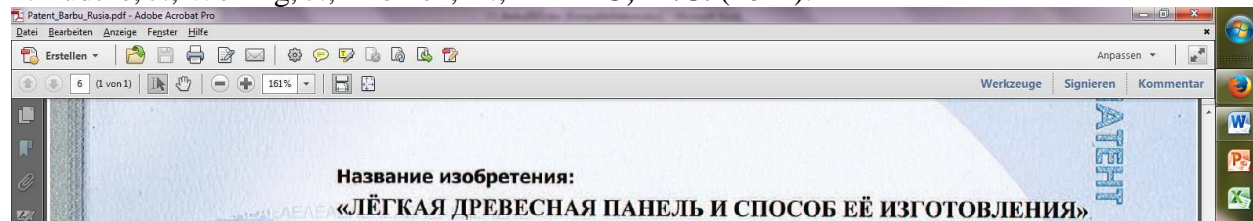
PUBLISHED PAPERS in JOURNALS and PROCEEDINGS

PUBLISHED BOOKS (9):

1. Mitisor, A.; **BARBU**, M.; Curtu, I. (1996): Moulding of wood, University Transilvania of Braşov (Romanian, 127 pag.).
2. **BARBU**, M.C. (1999): Wood based Composites, Editura LuxLibris Braşov, Romania. ISBN 973-9240-80-1 (Romanian, 313 pag.).
3. **BARBU**, M.C.; Mitisor, A. (1999): Technology of Fiberboards. University Transilvania of Braşov (Romanian, 124 pag.).
4. **BARBU**, M.C. (2002): MDF – Technological aspects. Editura Universitatii “Transilvania” din Brasov. ISBN 973-635-027-4 (Romanian, 240 pag.)
5. Thömen, H. et.al. (2010): Wood based Panels – An Introduction for Specialists. Brunel University Press, London. ISBN 978-1-902316-82-6. Chapter 1: ”Wood-based Panel Technology” by Irle, M. and **BARBU**, M. (English, 94 pag.).
6. Teischinger, A.; **BARBU**, M.C. Dunky, M. et.al. (2010): Proceeding of the “1st International Conference on Processing Technologies for the Forest and Bio-based Products Industries”, Salzburg University of Applied Sciences, Kuchl, Austria, Co-Editor, 219 pag.
7. Rowell, R. (2013): Handbook for Wood Chemistry and Wood Composites – 2nd Edition. CRC Press Taylor & Francis Group LLC. Boca Raton, FL, USA. Chapter 10: “Wood Composites” by Irle, M.; **BARBU**, M.C.; Reh, R., pag. 321-413. ISBN 978-1-439853801
8. Aguilera, A.; Davim, P. (2014). Research Developments in Wood Engineering and Technology. IGI Global. Engineering Science Reference. Hershey, PA, USA. Chapter 1: “Wood-based Composites” by **BARBU**, M.C.; Irle, M.; Reh, R., pag.1-45; Chapter 3: “Modern Testing of Wood-based Panels, Process Control and Modeling” by **BARBU**, M.C.; Hasener, J.; Bernardy, G., pag.90-130; Chapter 8: “Lignocellulosic Composites” by **BARBU**, M.C.; Reh, R., Dönmez Cavdar, A., pag.281-319, ISBN 978-1-4666-4554-7
9. Paulitsch, M; **BARBU**, M.C. (2015): Holzwerkstoffe der Moderne, DRW-Verlag, Leinfelden-Echterdingen, 528 pag., ISBN 978-3871818912

PATENTS and PATENT APPLICATIONS (2+6):

1. **BARBU**, M.C.; Resch, H.; Weninger, W. (2003): Wood-fibre semi-finished product and method for producing the same. European Patent 1185587 B1 / 19.02.03
2. Lüdtkke, J.; Welling, J.; Thömen, H.; **BARBU**, M.C. (2007): Verfahren zum Herstellen einer Sandwichplatte bzw. Leichtbau-Holzwerkstoffplatte. German patent application DE 10 2007 012 597.8AZ / 13.03.07
3. Aigner, T.; **BARBU**, M.C.; Binder, H.; Joscak, T.; Schrenk, M. (2009). Bauelement sowie Verfahren zur Herstellung eines Bauelementes”. German patent application DE 10 2009 005 102.3AZ / 19.01.09
4. Lüdtkke, J.; Welling, J.; Thömen, H.; **BARBU**, M.C. (2011):



. Russian Federation patent nr. 015211

5. Lüdtkke, J.; Welling, J.; Thömen, H.; **BARBU**, M.C. (2013): Lightweight wood-based boardsand process for producing of it. New Zealand letters patent nr. 578195

6. Lüdtke, J.; Welling, J.; Thömen, H.; **BARBU, M.C.** (2013): Lightweight wood-based boardsand process for producing of it. Indonesian patent ID P0033156
7. Thömen, H.; Welling, J.; **BARBU, M.C.**; Lüdtke, J. (2013): Lightweight wood-based boardsand process for producing of it. Australian standard patent 2007332593. Patent acts 1990
8. Kain, G.; **BARBU M.C.**; Petutschnigg, A. (2014): Dämmplatten aus Baumrinde. Österreichischen Patentamt AT 51 2707 81 2014-07-15, Wien

PUBLISHED PAPERS IN INTERNATIONAL JOURNALS (70):

1. **BARBU, M.C.** (1993): Il Sistema Foresta - Legno in Romania. Revista Xilon, anno IV, no. 64, pag.: 18-21, Milano, Italia
2. Tröger, F.; **BARBU, M.C.**; Seemann, C. (1994): Verstärkung von Miscanthus- und Holzspanplatten mit Flachfasern. Holz als Roh- und Werkstoff No.53. pag.: 268.
- 3 **BARBU, M.C.**; Pruckner, M.; Resch, H. (2000): Aspekte der Benetzbarkeit von MDF-Platten, Holzforschung und Holzverwertung 52, ISSN 0018-3849, Vol.3, pag.: 63-65.
- 4 **BARBU, M.C.** (2001): Wald und Gesellschaft: die Rolle der Forschung. Österreichische Forstzeitung 112: Vol.2, pag.: 28-30.
- 5 **BARBU, M.C.**; D. Hoepner et al. (2001): Continuous Press With Cooling Section for MDF Production. Panelboard Highlights. Metso Panelboard Customer Magazine no.2, pag. 26-31.
- 6 **BARBU, M.C.** (2002): Optimale Qualitätssicherung in modernen Herstellungsprozessen. Holzforschung und Holzverwertung 54, ISSN 0018-3849, Vol.1, pag. 10-11.
- 7 **BARBU, M.C.** (2002): Markt für Holzwerkstoffe: Kunde gibt Qualität vor. Holzforschung und Holzverwertung 55, ISSN 0018-3849, Vol.4, pag.78-79.
8. **BARBU, M.C.** (2002): ERA Wood – neue Forschungsära in der Holzindustrie ? Holzforschung und Holzverwertung 55, ISSN 0018-3849, Vol.6, pag.104-105.
- 9 Resch, H.; **BARBU, M.C.**; Weninger, W. (2003): Compactplatten – Neues Verfahren für Trockenfaserplatten. Holz>Bildung>Forschung 55, ISSN 1812-6928, Vol.4, pag. 9.
- 10 Cismaru, M.; Cismaru, I.; **BARBU, M.C.** (2003): Rumäniens Holz – Industrie hat Tal durchschritten, Investoren da. Holzkurier, ISSN 0018-3784, Jahrgang 58, Heft 38, pag. 20
- 11 **BARBU, M.C.** (2003): Potential da – Plattenerzeugung optimierbar. Holzkurier, Jahrgang 58, ISSN 0018-3784, Heft 43, pag. 16
- 12 Resch, H.; **BARBU, M.C.** (2003): Fortschritte und Innovationen bei der Holzforschung: IUFRO's 8. Internationaler Konferenz über die Holz Trocknung. Holz-Zentralblatt 78, ISSN 0018-3792, pag. 1083.
- 13 **BARBU, M.C.**; Aigner, T. et al. (2004): Spanloses Schneiden vom Holz. Holz-Zentralblatt Part 1: no.4, ISSN 0018-3792, pag. 63-64.
- 14 **BARBU, M.C.**; Aigner, T. et al. (2004): Spanloses Schneiden vom Holz. Holz-Zentralblatt Part 2: no.9, ISSN 0018-3792, pag. 126-127.
- 15 **BARBU, M.C.**; Höfelmaier, F. et al. (2004): Spanloses Schneiden vom Holz. Holz-Zentralblatt, Part 3, no.62, ISSN 0018-3792, pag. 822.
- 16 **BARBU, M.C.**; Lerach, K. et al. (2005): Integration der Mattenvorwärmung und Rückkühlung bei der MDF-Produktion. Holz Technologie no.46/1, ISSN 0018-3881, pag.40-44.
- 17 **BARBU, M.C.** (2005): Netzwerk für Holzwerkstoffe. Holzkurier, Jahrgang 60, Heft 33, ISSN 0018-3784, pag. 18.
- 18 **BARBU, M.C.** (2005): Platten-Produktionen. Neue Dimensionen und Geschwindigkeiten. Holzkurier, Jahrgang 60, ISSN 0018-3784, Heft 41, pag. 19.
- 19 Schönborn, F.; Flach, M.; **BARBU, M.C.** et al. (2005): Leistungsfähige Holz-Beton-Verbundkonstruktionen. Holz-Zentralblatt, nr.92, ISSN 0018-3792, pag.1251/1254.
- 20 **BARBU, M.C.** (2006): Holzressourcen und Platteneigenschaften. Holz-Zentralblatt Nr.35, ISSN 0018-3792, pag.996.

- 21 Penker, A.; **BARBU, M.C.**; Gronalt, M. (2007): Bottleneck analysis in the MDF production by means of discrete event simulation. *International Journal of Simulation Modelling*, ISSN 1726-4529, Vol.6, No.1, pag. 49-57.
- 22 **BARBU, M.C.**; Gurău, L. (2008): Taiwan im Mittelpunkt von Forst und Holz. *Holz-Zentralblatt* Nr.2, ISSN 0018-3792, pag.54.
- 23 **BARBU, M.C.**; Schrenk, M.; Aigner, T.; Resch, F.; Joscak, T. (2008): Dünnschnittbandsäge – Technologie für Lamellen. *Holz-Zentralblatt* Nr.16, ISSN 0018-3792, pag.438-439.
- 24 **BARBU, M.C.**; Montoya Arango, J.A. (2008): Kolumbien ist mehr als Drogen und Geiselnahmen. Darstellung der Forst- und Holzwirtschaft – Potentiale der Zukunft. *Holz-Zentralblatt* Nr.38, ISSN 0018-3792, pag.13-14.
- 25 Malanit, P.; **BARBU, M.C.**; Liese, W.; Frühwald, A. (2008): Macroscopic aspects and physical properties of *Dendrocalamus asper* Backer for composite panels. *Journal of Bamboo and Ratan*, Brill Academic Publishers, ISSN 0973-4449, Vol.7, Nos.3&4, pag. 151-163
- 26 **BARBU, M.C.**; Schmidt, T. (2009): Pulverbeschichtung von MDF – Entwicklung einer umweltfreundlichen Technologie. *HolzTechnologie* no.50/1, DRW-Verlag, ISSN 0018-3881, pag.32-37.
- 27 **BARBU, M.C.**; Curtu, L. (2009): 60-Jahrfeier der Forstlichen Fakultät in Brasov. *Holz-Zentralblatt* Nr.9, ISSN 0018-3792, pag.236.
- 28 Malanit, P.; **BARBU, M.C.**; Frühwald, A. (2009): The gluability and bonding quality of an Asian bamboo (*Dendrocalamus asper* Backer) for the production of composite lumber. *Journal of Tropical Forest Sciences*, Forest Research Institute Malaysia, ISSN 0128-1283, No. 21 (4), pag. 359-366
- 29 Malanit, P.; **BARBU, M.C.**; Frühwald, A. (2009): Mechanical Properties of Sweet Bamboo (*Dendrocalamus asper* Backer). *Journal of Bamboo and Ratan*, Brill Academic Publishers, ISSN 0973-4449, Vol.8, Nos.3&4, pag. 151-160.
- 30 Malanit, P.; **BARBU, M.C.**; Frühwald, A. (2010): Physical and Mechanical Properties of Oriented Strand Lumber made from an Asian Bamboo (*Dendrocalamus asper* Backer). *European Journal of Wood Products*, Springer Verlag, ISSN 0018-3768, Originals – published online on 07.01. (10 pag.)
- 31 Aigner, T.; Joscak, T.; **BARBU, M.C.** et.al. (2009): Bessere Keilzinkensöße für Brettsperrholz – Prototypanlage zur industriellen Fertigung eines optisch ansprechenden Generalkeilzinkenstoßes ohne Festigkeitsverlust. *Holz Zentralblatt* Nr.48, ISSN 0018-3792, pag.1219-1220.
- 32 Niemz, P.; **BARBU, M.C.**; Câmpean, M. (2010): Ausbildung auf dem Gebiet Holztechnologie in Osteuropa. *AFZ-Der Wald*. Nr.10, pag.42-43.
33. **BARBU, M.C.** (2010): Bewirtschaftung in Einklang mit den Naturgesetzen. *Holz Zentralblatt* Nr.46, ISSN 0018-3792, pag.1165.
- 34 **BARBU, M.C.** (2010): Südkoreas Holzindustrie von Importholz abhängig. *Holz Zentralblatt* Nr.46, ISSN 0018-3792, pag.1166
35. **BARBU, M.C.** (2010): Südkoreas Holzindustrie von Importholz abhängig. *Holz Zentralblatt* Nr.46, ISSN 0018-3792, pag.1166
36. **BARBU, M.C.** (2011): Serbiens Zukunft mit Wäldern und Holzindustrie. *Holz Zentralblatt* Nr.12, ISSN 0018-3792, pag.311-312
37. **BARBU, M.C.** (2012): Holzindustrie von Importholz abhängig. *Holz Zentralblatt* Nr.1, ISSN 0018-3792, pag.18-19.
38. **BARBU, M.C.** (2012): Bautätigkeit beflügelt Betriebe und Hochschulen. *Holz Zentralblatt* Nr.10, ISSN 0018-3792, pag.263-265
39. Glowacki, R.; **BARBU, M.C.**, Wijck van, J. Chaowana, P. (2012): The use of coconut husk in high pressure laminate production. *Journal of Tropical Forest Sciences*, Forest Research Institute Malaysia, ISSN 0128-1283, No. 24 (1), pag. 27-36.

40. Kain, G.; Teischinger, A.; Musso, M.; **BARBU**, M.C.; Petutschnigg, A. (2012): Stoffliche Rindennutzung in Form von Dämmstoffen. HolzTechnologie no.53/4, DRW-Verlag, ISSN 0018-3881, pag.31-37.
41. Stassen, O.; Tirschmann, J.; **BARBU**, M.C., Hoepner, W.D.; Rüter, S. (2012): Einsparmöglichkeiten nicht ausgeschöpft. Holz Zentralblatt Nr.28, ISSN 0018-3792, pag.734-735.
42. Kain, G.; **BARBU**, M.C.; Teischinger, A.; Musso, M.; Petutschnigg, A. (2012): Substantial bark use as insulation material. Forest Products Journal 62 (6): 480-487
43. Heinzmann, B.; **BARBU**, M.C. (2013): Palettenklotz aus Fichtenrinde. Holztechnologie no.54/3, DRW-Verlag, ISSN 0018-3881, pag.62-63.
44. **BARBU**, M.C.; Tudor, E.; Hofmann, U. (2013): Kuchl bei Salzburg – eine Hochburg der Holzwissenschaft. Holztechnologie no.54/3, DRW-Verlag, ISSN 0018-3881, pag.58-59.
44. Kain, G. ; **BARBU**, M.C.; Hinterreiter, S.; Richter, K.; Petutschnigg, A. (2013): Using bark as heat insulation material. BioResources 8(3), pag. 3718-3731
45. Heinzmann, B.; **BARBU**, M.C. (2013): Untersuchungen zur Steigerung der Wertschöpfung von Rinde durch Verpressen zu Palettenklötzen. Holztechnologie no.54/4, DRW-Verlag, ISSN 0018-3881, pp. 5-17
46. Heinzmann, B.; **BARBU**, M.C. (2013): Untersuchungen zur Steigerung der Wertschöpfung von Rinde durch Verpressen zu Palettenklötzen. Holztechnologie no.54/5, pag.25-32
47. Zeller, F.; **BARBU**, M.C.; Iwakiri, S. (2013): Parica (*Schizolobium amazonicum*) and embauba (*Cecropia sp.*) as new raw materials for particleboards. European Journal for Wood Products 71: 823–825
48. Shalbafan, A.; Benthien, J.; Welling, J.; **BARBU**, M.C. (2013): Flat pressed wood plastic composites made of milled foam core particleboard residues. European Journal for Wood Products 71: 805–813
49. Akrami, A.; **BARBU**, M.C.; Frühwald, A. (2014): Characterization of properties of oriented strand boards from beech and poplar. European Journal of Wood and Wood Products, 72(3): 393-398
50. Akrami, A.; **BARBU**, M.C.; Frühwald, A. (2014): The effect of fine strands in core layer on physical and mechanical properties of oriented strand boards (OSB) made of beech (*Fagus sylvatica*) and poplar (*Populus tremula*). European Journal of Wood and Wood Products, 72(3): 521-525
51. Kain, G.; Güttler, V.; **BARBU**, M.C.; Petutschnigg, A.; Richter, K.; Tondi, G. (2014): Density related properties of bark insulation boards bonded with tannin hexamine resin. European Journal of Wood and Wood Products, 72(4):417-424
52. Akrami, A.; Frühwald, A.; **BARBU**, M.C. (2014): Supplementing pine with European beech and poplar in oriented strand boards. Wood Material Science and Engineering
51. **BARBU**, M.C. (2014): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 1: Bulgarien, Kroatien, Tschechien. Holztechnologie 55(1): 51-54
52. **BARBU**, M.C. (2014): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 2: Finnland, Frankreich, Griechenland. Holztechnologie 55(2): 52-55
53. **BARBU**, M.C. (2014): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 3: Österreich, Italien. Holztechnologie 55(3): 53-55
54. **BARBU**, M.C. (2014): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 4: Ungarn, Kosovo, Lettland, Litauen. Holztechnologie 55(4): 53-55
55. **BARBU**, M.C. (2014): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 5: Irland, Norwegen, Polen, Portugal, Rumänien. Holztechnologie 55(5): 50-55
56. **BARBU**, M.C. (2014): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 6: Russland, Serbien, Slowakei und Slowenien. Holztechnologie 55(6): 49-52
57. **BARBU**, M.C. (2015): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 7: Belgien, Schweden, Schweiz, Spanien. Holztechnologie 56(1): 51-53

58. **BARBU**, M.C. (2015): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 8: Albanien, Bosnien u. Herzegowina, Mazedonien, Ukraine. Holztechnologie 56(2): 51-53
59. **BARBU**, M.C. (2015): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 9: Türkei. Holztechnologie 56(3): 49-52
60. **BARBU**, M.C. (2015): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 10: Deutschland (1). Holztechnologie 56(4): 51-53
61. **BARBU**, M.C. (2015): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 11: Deutschland (2). Holztechnologie 56(5): 51-54
62. **BARBU**, M.C. (2015): Universitäre Ausbildung für Holzwissenschaft in Europa und weltweit; Teil 12: Estland. Holztechnologie 56(6): 50-52
63. Kain, G.; Charwat-Pessler, J.; **BARBU**, M.C.; Plank, B., Richter, K.; Petutschnigg, A. (2015): Analyzing wood bark insulation board structure using X-ray computed tomography and modeling its thermal conductivity by means of finite difference method. Journal of Composite Materials 1-12
64. Kain, G.; Güttler, V.; Lienbacher, B.; **BARBU**, M.C.; Petutschnigg, A. Richter, K.; Tondi, G. (2015): Effect of different flavonoid extracts in the optimization of tannin-glued bark insulation boards. Wood and Fiber Science 47(3): 1-12
65. Kain, G.; **BARBU**, M.C., Richter, K.; Plank, B.; Tondi, G.; Petutschnigg A. (2015): Use of tree bark as insulation material. Forest Products Journal 65 (3/4):16-25
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5. Computerized Wood Drying Program for Robinia. Institute for Wood Research. University for Natural Resources, Vienna, 1993.
6. Computerized Wood Drying Program for Picea. Institute for Wood Research. University for Natural Resources, Vienna, 1993.
7. Reinforcement of Wood Composite Structures with Miscanthus and Lineum for High Physical Performance. Institute for Wood Research. Ludwig-Maximilian University Muenich, 1994.
8. Braşov, 1997 INL-B.
9. Wood Austria. Competence Centre for Wood Composites and Chemistry. University for Agricultural Sciences Vienna, Austria 1999-2000.
10. Proposal for Craft Project ALCAWO “Innovative utilization of mountain wood for integrated rural development in Alpine-Carpathian regions”. University for Agricultural Sciences Vienna and other 6 European Universities, 2001.
11. Proposal for Integrated Project Advanced Wood FP6-500400-2 of 6th FP: “Engineering the Properties of Wood-Based Composites Through Innovative Pressing Technologies”, Cooperation between universities and industries of 21 European countries, 2002-2003.
12. Proposal for Integrated Project SustainMultiWood 515832 of 6th FP: “Engineering the Properties of Wood-Based Composites Through Innovative Pressing Technologies”, Cooperation between universities and industries of 10 European countries, 2003-2004.
13. Proposal within the WoodWisdom –Net Research Programme NMP2-ER-2009-235066 “Development of a lightweight wood-based panel with a phenolic foam core and a process for the production thereof”. Cooperation between universities and 3 European mega-groups 2009-2010

SUPERVISION AND SCIENTIFIC WORK FOR RESEARCH PROJECTS (31):

1. FFF 10.095: „Optimum - MDF Lightboards”.
Cooperation: Universität für Bodenkultur Wien, Fa. Leitgeb AG - Kühnsdorf, Austria.
Period / place: 1995-1997, Vienna and Kühnsdorf, Austria.
Budget: ████████ ATS (1€ = 13,76 ATS), 25 % FFF Wien, 25% Credit
Position: Senior researcher
Results: weight decrease and industrial implementation, 1st PhD thesis, papers, presentations
2. FFF 800.798: „Compact - HPL (high pressure laminated board) made from HDF (high density fiberboard) as core and laminated with phenolic resin”.
Cooperation: Universität für Bodenkultur Wien, Fa. Funder Industrie GmbH, St.Veit, Austria
Period / place: 1997-1999, Wien, St.Veit/Glan and Kühnsdorf
Budget: ████████ ATS (1€ = 13,76 ATS), 25 % FFF Wien, 25% Credit, 5% Carinthian county
Position: Senior researcher

- Results: development of the 2nd worldwide technology, up scaling on industrial level, European patent, presentations,
3. FFF 804.846 (1st part), 806.939 (2nd part): „Influences of the cooling section of a continuous hot-press for the MDF-production”.
Cooperation: FH Kuchl, Fa. MDF Hallein GmbH & Co KG, Austria, Fa. Metso Hanover
Period / place: 2001-2004, Hallein, Kuchl
Budget: ████████ € (1st part), respectiv ████████ € (2nd part), 25 % FFF Wien, 25% Credit, 5% Salzburg county
Position: Scientific manager
Results: worldwide reference for prototype implementation, use and optimisation of the industrial production, diploma thesis, papers, presentations
 4. FFF 803.706 (1st part), FFF 805.081 (2nd part): „BioWave – Errection and optimization of a biological waste air scrubber for the MDF-Production”.
Cooperation: Technische Universität Graz, TÜV Bayern, Fa. MDF Hallein GmbH & Co KG, Fa. Scheuch, Ried, Austria, Fa. Metso Hanover, Germany
Period / place: 2001-2002, Ried in Innkreis, Hallein, Graz
Budget: ████████ ATS (1st part, 1€=13,76 ATS), ████████ € (2nd part), 25 % FFF Wien, 25% Credit, 5% Salzburg county
Position: Scientific manager
Results: development of a worldwide unique prototype, implementation in process and testing the equipment, papers, presentations
 5. FFF 804.882 (1st part), FFF 806.483 (2nd part): „Chips free separation of timber in lamella for the massive wooden boards”.
Cooperation: Universität Bodenkultur Wien, Fachhochschule Kuchl, Franz Binder Ges.m.b.H., Massivholzplattenwerk St.Georgen, Holzfoschung Austria GmbH Wien, Fachhochschule Rosenheim, Fa. Linck Oberkirch, Germany
Period / place: 2001-2003, St.Georgen bei Salzburg, Oberkirch, Wien
Budget: ████████ € (1st part), ████████ € (2nd part) 25 % FFF Wien, 25% Credit, 5% Salzburg county
Position: Scientific manager
Results: worldwide 1st implementation, test and optimization in direct process, 3 diploma works, publications
 6. FFF 806.377 (1st part), FFF 809.778 (2nd part): „Optimized machine grading for the GluLam production”.
Cooperation: Technische Universität Graz, Technische Universität München, Leopold Franzens Universität Innsbruck, Fachhochschule Kuchl, Franz Binder Ges.m.b.H., Brettschichtholzwerk Jenbach, Holzfoschung Austria GmbH Wien, Fagus GreCon Alfeld
Period / place: 2002-2005, Jenbach, Graz, Wien, Austria, München, Alfeld
Budget: ████████ € (1st part), ████████ € (2nd part) 25 % FFF Wien, 25% Credit, 5% Tyrol county
Position: Scientific manager
Results: worldwide 1st implementation, test and optimization in direct process, publications, presentations
 7. ÖKK A1-10918: “BioMass based energy plant for heat and electrical power generation for sawmill and wood panels industry”.
Cooperation: Bloom & Voss IndustrieTechnik Hamburg, VA Tech Elin EBG, Germany, Franz Binder GmbH Sägewerk Fügen, Austria.
Period / place: 2002-2004, Fügen
Budget: ████████ €, 20 % Österreichische Kommunakredit AG (Wien)
Position: Project vice manager

- Results: local premiere, design, realization and optimization of a prototype of a biomass based heating (60 MW_t) and power (20 MW_e) plant, publications, presentations
8. ÖKK A2-10588: “Substitution of fossil fuel trough realization of a granulate injection in a BioMass energy plant”.
- Cooperation: Österreichische Kommunalkredit Austria AG Wien, Metso Panelboard Hanover and MDF Hallein GmbH & Co KG, Austria.
- Period / place: 2002-2003, Hallein, Austria, Hanover, Germany
- Budget: ████████ €, 30% Österreichische Kommunalkredit AG (Wien)
- Position: Project vice manager
- Results: local premiere, design, implementation and optimization, 20 MW_e more energy supply, publications, presentations
9. ÖKK A3-10282: „Bio-electricity production using an ORC-Module (Organic Ranking Cycle)”.
- Cooperation: Power Tec International GmbH, Klosterneuburg, Kommunalkredit Austria AG Wien, Salzburg AG and MDF Hallein GmbH & Co KG, Austria etc.
- Period / place: 2003-2005, Hallein, Salzburg, Austria
- Budget: ████████ €, 15% Österreichische Kommunalkredit AG (Wien)
- Position: Project vice manager
- Results: local premiere, design, implementation and optimization 1 MW_e power generation, publications
10. FFG 807.602 (1st part), FFG 810.323 (2nd part): “Tyrolean Wood-concrete ceiling”.
- Cooperation: Leopold Fanzens Universität Innsbruck, Franz Binder GmbH Brettschichtholzwerk Jenbach, Huter&Söhne Innsbruck, Holzbau Saurer GmbH&Co.KG, Schafferer Holzbau GmbH Matrei, Austria, Nulli Construzioni Iseo, Italy
- Period / place: 2003-2006, Innsbruck, Jenbach, Iseo
- Budget: ████████ € (1st part), ████████ € (2nd part), 5 % FFG Wien, 5% Tyrol county
- Position: Project vice director for the partners from the industry
- Results: national premiere, development, prototype realization and implementation in a 2 store building, Ph.D. thesis F.Schönborn, publications conferences
11. FFG 809.980: “Optimization of the process control for MDF production”.
- Cooperation: Fachhochschule Salzburg, IPAC Villach, MDF Hallein GmbH & Co KG
- Period / place: 2005-2006, Hallein, Kuchl, Villach, Austria
- Budget: ████████ €, 25% FFG Wien, 25% Credit, 5% Salzburg county
- Position: Scientific manager
- Results: data bank generation, data transfer net from equipment, algorithms application, model development, diploma work
12. FFG 812.591: “Material flow based production management for sawmills”.
- Cooperation: Universität für Bodenkultur Wien, Franz Binder Ges.m.b.H, Sägewerk Fügen
- Period / place: 2006-2007, Fügen, Wien, Kösching
- Budget: ████████ €, 50% FFG Wien
- Position: Project vice director for the partners from the industry
- Results: local premiere, model development with Arena software for material flow simulation, Ph.D. thesis T.Greigeritsch, publications
13. FFG 812.902: “Thin cutting trace beltsaw technique for the softwood lamellae production”.
- Cooperation: Fachhochschule Rosenheim, Universität für Bodenkultur Wien, Franz Binder GmbH, Massivholzplatten Werk St. Georgen, Fa. Fill, Gurten, Austria.
- Period / place: 2006-2007, St.Georgen, Wien, Rosenheim
- Budget: ████████ €, 25% FFG Wien, 25% Credit, 5% Salzburg county
- Position: Scientific manager

- Results: European premiere, development, implementation in process, optimization, diploma work, publications
14. Project: “The utilization of coconut husks for High Pressure Laminates production”.
 Cooperation: Universität Hamburg, Maier Zerkleinerungstechnik Bielefeld, Germany, AFSG Wageningen UR, Trespa International BV, Weert, Netherlands
 Period / place: 2006-2007, Hamburg, Bielefeld, Germany, Weert, Wageningen, Netherlands
 Budget: ████████ €, 100% Trespa International BV, Weert
 Position: Scientific manager from university side
 Results: development of a prototype and characterization, publications, presentations
15. Project: “Optimization on the defibration for the production of High Pressure Laminates”.
 Cooperation: Universität Hamburg, Germany, Trespa International BV, Weert, Netherlands, Andritz AG, Graz, Austria
 Period / place: 2007-2008, Hamburg, Germany, Weert, Graz
 Budget: ████████ €, 100% Trespa International BV, Weert
 Position: Scientific manager from university side
 Results: process optimization, fibre characterization, diploma work
16. FFG 814712: “Finger-joint for multi-layered timber based wall elements”.
 Cooperation: Fachhochschule Salzburg, Binder Holzsysteme GmbH, Unternberg, Fa. Hitt, Ettringen, Germany, Holzforschung Austria Wien
 Period / place: 2007-2009, Unternberg, Kuchl, Wien
 Budget: ████████ €, 25% FFG Wien, 25% Credit, 5% Salzburg county
 Position: Scientific consultant
 Results: national premiere, implementation and optimization of a prototype, publications
17. Project: “Hydrolysis stability of different resins for the wood based panels”.
 Cooperation: Universität Hamburg, Werzalit GmbH, Oberstenfeld, Dynea Austria, Krems,
 Period / place: 2007-2008, Hamburg, Oberstenfeld, Krems
 Budget: ████████ €, 100% Dynea Austria
 Position: Scientific manager from university side
 Results: worldwide 1st lab scale trial for the development of a measurement technique, two diploma works, presentations
18. Project “Optimization of the <Visual Inspection Unit> for the identification of shivees and their quantification”.
 Cooperation: Universität Hamburg, Germany, Trespa International BV, Weert, Netherlands
 Period / place: 2008, Hamburg, Weert
 Budget: ████████ €, 100% Trespa International BV
 Position: Scientific manager from university side
 Results: implementation and optimization of a NDT system
19. Project “Light board with foam sandwich continuously pressed”
 Cooperation: Universität Hamburg, Germany, Ikea, Älmhult, Sweden, Dynea Austria, Krems, Austria
 Period / place: 2008-2010, Hamburg, Älmhult, Krems, Erckner
 Budget ████████ €, 100% Ikea and Dynea
 Position: Development team member
 Results: development and lab scale prototype, preparation for up scaling, European patent application, TV interview, publications, presentations, Ph.D. thesis J.Lüdtke, diplomas
20. FFG 822221: “Light weight cross laminated timber”.
 Cooperation: University of Innsbruck, Technical University of Munich, Germany, Binderholz Bausysteme Unternberg, IBS Linz, Austria
 Period / place: 2009-2010, Innsbruck, Unternberg, Linz, München
 Budget: ████████ €, 25% FFG Wien, 25% Credit, 5% Salzburg county

Position: Scientific consultant

Results: development, testing and optimization of a prototype, European patent application, presentations

21. Project “Coconut wood processing to cross laminated timber”

Cooperation: University Hamburg, Applikatio Freiburg, Germany, Pika, Semarang, Indonesia

Period / place: 2010-2011, Hamburg, Semarang

Budget ████████ €, 100% Pika, Applikatio and University Hamburg

Position: Scientific manager from university side

Results: development and lab scale of prototype, preparation for up scaling, publications, presentations, bachelor and diplomas

22. Project “Bark”

23. Project “P&P residual water”

24. Project “Organoid”

25. Project “Mikroperforation”

26. Project “Lamellae gluing”

27. Project “MHP-Leicht”

28. Project “Stroh”

29. Project “Leder”

30. Project “Natwood poplar”

31. Project “Cacao”

ACADEMIC ACTIVITIES

LECTURE TOPICS (26, based on 13 x hours/week/term):

University “Transilvania” of Brasov, Faculty of Wood Engineering

(1998-now, on Romanian and English):

1. Technology of veneer, plywood and veneer based composites (LVL, LSL, etc.): 2h/w
2. Technology of wood particles based panels (PB, OSB, MDF etc.): 2h/w
3. Technology of wood - non wood composites (cement, gypsum, agro-waste, plastic): 2h/w

University for Natural Sciences Vienna (Boku), Institute for Wood Research

(2002-now, on German and English for Master):

4. Particle and fibre panels (particle and fibre generation, processing, panels pressing): 1h/w
5. Engineered wood composites (GLT, CLT, multi-layered board, LVL, I-Joist, etc.): 1h/w

Leopold Franzens University Innsbruck, Institute for Steel, Wood and Composite Construction

(2002-2007, on German):

6. Wood based materials for construction (GLT, I-Beam, CLT, MLB, OSB, LVL, etc.): 0,5h/w

University of Hamburg, Center for Wood Science

(2006-2011, on German and English for Bachelor and Master):

7. Wood based panels technology (raw materials prepar., mat forming, pressing, finishing): 3h/w
8. Mechanical wood technologies (wood processing technologies to half products): 2h/w
9. Finishing of wood based panels (lacquering, coating, powder coating, printing etc.): 4h/w
10. Environmental aspects and waste air/water cleaning technologies for the industry: 1h/w
11. Production of energy from wood and biomass (fuels, combustion, boilers, power): 4h/w
12. Building with wood (wooden based materials for construction): 1h/w
13. Managerial design (processes, factories design and economics): 1h/w
14. Materials science (metals, ceramics, plastics, hybrid compounds): 1h/w

Salzburg University of Applied Sciences, Wood Technology and Construction, Kuchl

(2008-2010, on German and English):

15. Wood based composites – basics (particle generation, processing, pressing, uses): 2h/w

Salzburg University of Applied Sciences, Wood Technology and Construction, Kuchl

(2011-now, on German and English):

16. Wood based composites – basics (particle generation, processing, pressing, uses): 2h/w
17. Wood based composites – advanced (details of panel production and quality check): 2h/w
18. Wood processing – advanced (half parts of wood and their production): 1h/w
19. Products of the wood economy (composites made from wood and other materials): 2h/w
20. Wood technical processing and processes (massive wood processing): 2h/w
21. Process development (innovative products, pilot plants and ind. implementation): 2h/w
22. Energy from biomass (equipment for ind. energy generation/air cleaning): 1h/w
23. Process analysis and control (non-destructive online control, simulation and forecast): 2h/w
24. International wood economy (worldwide raw materials and markets): 1h/w
25. Applied materials science for wood industry (metals, ceramics, plastics, hybrids): 1h/w

University of Applied Sciences Rottenburg am Neckar, Study program Forest Products

(2013, on German):

26. Wood based composites – introduction (metals, ceramics, plastics, hybrids): 2h/w

LAB TOPICS (7):

University “Transilvania” of Brasov, Faculty of Wood Engineering

(1998-now, on Romanian and English):

1. Lab (board manufacturing and properties testing) and Project work (plant design) for veneer based panel factory (1+1h/w)
2. Lab (board manufacturing and properties testing) and Project work (plant design) for particle based panel factory (1+1h/w)
3. Lab (board manufacturing and properties testing) and Project work (plant design) for wood – nonwood based composites factory (1+1h/w)

University of Hamburg, Center for Wood Science

(2006-2011, on German):

4. Lab (manufacturing and testing of wood based panels): 2h/w
5. Seminary for final work presentations (Diploma, Bachelor, Master): 1h/w
6. Seminary for industrial development presentations (invited guest from industry): 1h/w
7. Seminary for studying abroad (European exchanges, DAAD scholars, partner univ.): 1h/w

DIPLOMA (CO)SUPERVISION (36)

- 1) Klausner, F. (2002): New processes for the MDF production. University for Applied Science Kuchl/Salzburg.
- 2) Aigner, T. (2003): Spanloses Schneiden vom Schnittholz zur Lamellenherstellung. University for Applied Sciences Rosenheim, Dept. for Wood Technique
- 3) Höfelmaier, F. (2004): Quality influencing parameters for chipless processing of lamellas. University for Applied Science Kuchl/Salzburg
- 4) Preiml, M. (2004): The influence of climate conditions and press parameters on the properties of MDF boards. University for Applied Science Kuchl/Salzburg
- 5) Ciolan, B. (2005): LVL – a valuable raw material for construction. University “Transilvania” Brasov, Faculty for Wood Industry
- 6) Taga, D. (2005): MDF – modern continuous pressing technologies. University “Transilvania” Brasov, Faculty for Wood Industry
- 7) Penker, A. (2006): Simulation soft-ware for the warehouse and finishing area of MDF Hallein. University for Natural Sciences Vienna.
- 8) Korten, B. (2006): Analyse und Optimierung der Parameter bei der MDF-Herstellung. University of Applied Sciences Salzburg, Course of Study: Wood technique and economy
- 9) Liteanu-Voinescu, V. (2006): Wood plastic composites – a symbiosis between two materials. University “Transilvania” Brasov, Faculty for Wood Industry
- 10) Tatu, C.M. (2006): Comparative study of modern MDF coating materials and technologies. University “Transilvania” Brasov, Faculty for Wood Industry
- 11) Oana, N. (2006): Glue Laminated Timber (GLT). University “Transilvania” Brasov, Faculty for Wood Industry
- 12) Jelehovschi, V. (2006): Thin board production using calander presses. University “Transilvania” Brasov, Faculty for Wood Industry
- 13) Tigges, D. (2007): Untersuchungen zur Festigkeitsentwicklung während des Heißpressvorgangs von Holzwerkstoffen. University of Hamburg, Faculty for Natural Sciences.
- 14) Beyer, P. (2007): Einfluß der Stamdimensionen und Holzmerkmalen entlang des Produktionsablaufs von Messerfurnieren. University of Hamburg, Faculty for Natural Sciences.
- 15) Pieper, O. (2007): Untersuchungen an Dämmplatten aus Holzfasern. University of Hamburg, Faculty for Natural Sciences.
- 16) Lüdtke, J. (2007): Entwicklung eines kontinuierlichen Verfahrens zur Herstellung von Leichtbauplatten. University of Hamburg, Faculty for Natural Sciences.
- 17) Schröder, A (2007): Einfluss der Holzpartikel auf die Eigenschaften von Wood Plastic Composites hergestellt im Rotationssinterverfahren. University of Hamburg, Faculty for Natural Sciences
- 18) Gehrman, S. (2007): Einfluss ausgewählter Verfahrensparameter auf die Emissionscharakteristik von Faserplatten. University of Hamburg, Faculty for Natural Sciences.
- 19) Resch, F. (2007): Inbetriebnahme einer Trennbandsäge mit Dünnschnittbandsägetechnologie. University for Applied Sciences Rosenheim, Dept. for Wood Technique.

- 20) Boge, R. (2008): Hydrolysebeständigkeit von Holzwerkstoffen. University of Hamburg, Faculty for Natural Sciences.
- 21) Bosselmann, A. (2008→2010): Konzept zur Visualisierung eines Furnierschlüssels und dessen Verknüpfung mit dem produktbezogenen Fertigungsablauf. University of Hamburg, Faculty for Natural Sciences.
- 22) Rettenmeier, C. (2008): Eigenschaftsuntersuchungen an Furnierschichtholz. University of Hamburg, Faculty for Natural Sciences.
- 23) Bukvic, A. (2008): Markt für Energieholzpresslinge aus Osteuropa. University of Hamburg, Faculty for Natural Sciences.
- 24) Thomé, H. (2008): Optimierung der Faserqualität in der Herstellung von HPL. University of Hamburg, Faculty for Natural Sciences
- 25) Zeller, F. (2009): Untersuchung der Eigenschaften von Spanplatten hergestellt aus Paricá (*Schizolobium amazonicum*) and Embaúba (*Cecropia sp.*). Cooperation between the University of Hamburg, Faculty for Natural Sciences and Universidade Federal do Parana, Faculdade Floresta, Curitiba.
- 26) Jungklaus A. (2009): Untersuchungen zur Dauerhaftigkeit und Wasseraufnahme von kommerziellen Wood-Plastic Composites. University of Hamburg, Faculty for Natural Sciences
- 27) Weber (2009): Einschnittplanung in Nadelholzsägewerken. University of Hamburg, Faculty for Natural Sciences
- 28) Vintila, G. (2009): Modern living-room furniture from light weight panels. University "Transilvania" Brasov, Faculty for Wood Industry
- 29) Beck, M. (2009): Planung und Kalkulation von Sanierungs-, An- und Umbaufträgen. University of Hamburg, Faculty for Natural Sciences
- 30) Westerholt (2010): Export von forstlicher Biomasse aus Chile zur energetischen Nutzung. University of Hamburg, Faculty for Natural Sciences and University BioBio, Concepcion.
- 31) Poppensieker, T. (2010): Untersuchung der Wirtschaftlichkeit von leichten Holzwerkstoffen. University of Hamburg, Faculty for Natural Sciences
- 32) Schwartze, D. (2010): Investigation and Optimization of Dual Density Boards for IKEA furniture Products. University of Hamburg, Faculty for Natural Sciences
- 33) Hasemann, D. (2011): Untersuchungen für die Anwendung von Kokosnußholz für die Herstellung von 3schichtigen Massivholzplatten für Aussenanwendung. University of Hamburg, Faculty for Natural Sciences
- 34) Hinsch, S. (2011): Behandlung von Holzoberflächen zur gezielten optischen und haptischen Eigenschaften. University of Hamburg, Faculty for Natural Sciences
- 35) Belda, M. (2012): Impact of short length veneer on bending properties of LVL. University of Hamburg, Faculty for Natural Sciences and Oregon State University, Dept. of Wood Science & Engineering
- 36) Petersen, N.O. (2012): Changes to the characteristic strength and stiffness values of structural timber, critical properties in roof truss design, and the effect on roof truss costs in SA. University of Hamburg, Faculty for Natural Sciences and University of Stellenbosch, Faculty of AgriScience

BACHELOR (CO)SUPERVISION (33)

- 1 Wenker, J. (2008): Einsatz von Ultraschall zur Charakterisierung von Holzwerkstoffen. University of Hamburg, Faculty for Natural Sciences.
- 2 Stücker, A. (2008): Untersuchungen zum Einfluß von Temperaturänderungen auf die Festigkeitsentwicklung von Holzwerkstoffen. University of Hamburg, Faculty for Natural Sciences
- 3 Manns, D. (2009): Alternative Holzrohstoffe für die Herstellung von Spanplatten in Südbrasilien. University of Hamburg, Faculty for Natural Sciences.
- 4 Funk, S. (2010): Untersuchung eines Sensors zur Ermittlung von Preßparameter während der Herstellung von Holzwerkstoffplatten. University of Hamburg, Faculty for Natural Sciences.

- 5 Hirsch, M. (2010): Ermittlung von Materialkennwerten für die Vorhersage des Bruchverhaltens leichter Holzwerkstoff-Sandwichplatten. University of Hamburg, Faculty for Natural Sciences.
- 6 Richter, J-H (2010): Herstellung und Ermittlung der Schraubenauszieh Widerstände von leichten mehrlagigen Holzwerkstoffen. University of Hamburg, Faculty for Natural Sciences.
- 7 Gurr, J. (2011): Ermittlung der Klebrigkeit und Eigenschaften von Kokosnußholz. University of Hamburg, Faculty for Natural Sciences.
- 8 Glasenapp, S. (2011): Herstellung gebogener Vollholzerzeugnisse. University of Hamburg, Faculty for Natural Sciences.
- 9 Breitmar, C. (2012): Verwertung von Leichtschäumplatten als Rohstoff für die WPC-Herstellung. University of Hamburg, Faculty for Natural Sciences.
10. Solt, P. (2012): Valorization of Pulp and Paper Wastewater: Lignin polymers. Salzburg University of Applied Sciences, Forest products technology and timber construction
11. Nagl, K. (2012): Valorization of pulp & paper wastewater: Industrial applications. Salzburg University of Applied Sciences, Forest products technology and timber construction
12. Mazzitelli, M. (2012): Entwicklung von Dämmstoffen auf Basis von Lärchenrinde. Bachelorarbeit. Salzburg University of Applied Sciences, Forest products technology and timber construction
13. Hauser, B. (2012): Entwicklung von Dämmstoffen auf Basis von Fichten- und Tannenzrinde. Bachelorarbeit. Salzburg University of Applied Sciences, Forest products technology and timber construction
14. Brötzner, T. (2013): Spannungsprobleme während der Trocknung von Eichenholz. Methode zur Analyse der Spannungsverhältnisse im Trockengut. Salzburg University of Applied Sciences, Forest products technology and timber construction
15. Lohninger, Y. (2014): Formaldehyde emissions from bark panels bonded with tannin-based resin. Salzburg University of Applied Sciences, Forest products technology and timber construction
16. Güttler, V. (2014): Development of tannin based natural resin systems bonded bark insulation boards. Salzburg University of Applied Sciences, Forest products technology and timber construction
17. Hofmann, S. (2014): Formaldehyde emissions from bark panels bonded with UF resin Salzburg University of Applied Sciences, Forest products technology and timber construction
18. Platzer, M. (2014): Untersuchung der Durchwärmung und Beileimungsgüte von dreischichtigen Massivholzplatten mit MUF-Leim Salzburg University of Applied Sciences, Forest products technology and timber construction
19. Polhammer, M. (2014): Entwicklung von stärkeren Lärchenrindenplatten auf Basis zweier Leimsysteme. Salzburg University of Applied Sciences, Forest products technology and timber construction
20. Resch, A. (2014): Untersuchung der Durchwärmung und Beileimungsgüte von dreischichtigen Massivholzplatten mit EPI – Leim. Salzburg University of Applied Sciences, Forest products technology and timber construction
21. Krenn, S. (2014): Mikroperforation von mit Dekoren/Laminaten von beschichteten MDF mittels Lasertechnologie. Salzburg University of Applied Sciences, Forest products technology and timber construction
22. Hollerweger, S. (2014): Untersuchungen zum Einsatz technischer Lignine für die Modifizierung einheimischer Laubhölzer. Salzburg University of Applied Sciences, Forest products technology and timber construction
23. Gstötter, A. (2014) : Untersuchungen zum Einsatz technischer Lignine für die Modifikation einheimischer Hölzer. Salzburg University of Applied Sciences, Forest products technology and timber construction
24. Pröller, M. (2014): An investigation of selected physical and mechanical properties of green-glued, finger-jointed and laminated Eucalyptus grandis. Salzburg University of Applied Sciences, Forest products technology and timber construction. University of Stellenbosch, Dept. for Forestry and Wood Science
25. Ullrich, T. (2015): Herstellung von dreischichtigen Leichtbau Massivholzplatten. Salzburg University of Applied Sciences, Forest products technology and timber construction

26. Pfeffer, C. (2015): Development of an Improved Separation Method Organosolv Black Liquor. Salzburg University of Applied Sciences, Forest products technology and timber construction and University of Tennessee, Center for Renewable Carbon, Knoxville
27. Painer, J. (2015): Untersuchung und Bewertung von geölten Holzoberflächen nach simulierten Reinigungsvorgängen. Salzburg University of Applied Sciences, Forest products technology and timber construction
28. Lienbacher, B. (2015): Untersuchung der Auswirkungen der Partikelausrichtung auf die Eigenschaften von Rindenplatten. Salzburg University of Applied Sciences, Forest products technology and timber construction
29. Dürager, M. (2015): Herstellung und Untersuchung von dreischichtigen Massivholzplatten aus wiederverwerteter Eiche. Salzburg University of Applied Sciences, Forest products technology and timber construction
30. Bindreiter, G. (2015): Herstellung und Untersuchung der Verklebungsqualität einer dreilagigen Massivholzplatte aus frischem und altem Nadelholz. Salzburg University of Applied Sciences, Forest products technology and timber construction
31. Kastenhuber, T. (2015): Untersuchung der physikalischen und mechanischen Eigenschaften von dreilagigen Massivholzplatten aus modifizierter Pappel. Salzburg University of Applied Sciences, Forest products technology and timber construction
32. Güttler, V. (2015): Entwicklung von Rindendämmplatten und natürlichen Leimen basierend auf Tanninen. Salzburg University of Applied Sciences, Forest products technology and timber construction
33. Schnitzhoffer, C. (2015): Studie zur Überprüfung des Potentials von Reststoffen aus Produktionen am Beispiel der Kakaoschale. Salzburg University of Applied Sciences, Design and products management

MASTER (CO)SUPERVISION (24+4)

- 1 Holm, D. (2011): Optimierung des Pressenprogramms mit Hilfe von Gasdruck- und Temperaturmessungen in Verbindung mit der Simulationssoftware VHP. University of Hamburg, Faculty for Natural Sciences
- 2 Oran, B. (2011): Cross Laminated Timber from Coconut Palm. University of Hamburg, Faculty for Natural Sciences and Karadeniz Technical University Trabzon
- 3 Maikowski, S. (2011): Technologische Untersuchung der Einsatzmöglichkeiten von plattenförmigen WPC für die Pferdestelle. University of Hamburg, Faculty for Natural Sciences
- 4 Rütze, M. (2011): Technologische Untersuchungen von Sandwichplatten mit expandierten Polypropylen als Mittellage und Deckschichten aus Holz-Kunststoff-Verbundwerkstoff. University of Hamburg, Faculty for Natural Sciences
- 5 Hansen, G. (2011): Improvement of BoBoard – a new technology for lightweight particleboard. University of Hamburg, Faculty for Natural Sciences
6. Heinzmann, B. (2012): Untersuchungen zur Steigerung der Wertschöpfung von Rinde durch Verpressen zu Palettenklötzen. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
7. Kain, G. (2012): Stoffliche Rindennutzung in Form von Dämmstoffen. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
8. Bulmer, J. (2013): Ist die Rundholzversorgung mit Fichte für die Schwäbische Alb und Baden-Württemberg gesichert? Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
9. Nedorost, H. (2013): Chemische Charakterisierung von ultrafiltrierten Bleichereiabwässern der Zellstoffherzeugung. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
10. Coutu, T. (2013): Untersuchungen für die Verwertung der Nebenprodukte aus der Zellstoffindustrie bei der Herstellung von Holzwerkstoffen. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
11. Tudor, E. (2014): Rinde als Korkersatz für Bodenbeläge. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
12. Trubkin, A. (2014): Herausforderungen für einen österreichischen Waldpächter und ein Holz verarbeitendes Unternehmen bei der Waldpacht und Holzbereitstellung in Zentralrussland. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction

13. Mazzitelli, M. (2014): Optimierung eines dekorativen Beschichtungsstoffes basierend auf Lärchenrinden Partikel, für den weiteren Einsatz im Möbel und Innendekor-Bereich. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
14. Solt, P. (2014): Entwicklung von hoch-verdichteten Faserplatten auf Basis von chromatisch gegerbten Lederfalzresten (Wet Blue) und Holzfasern. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
15. Rindler, A. (2014): Entwicklung und Untersuchung eines hoch-verdichteten Plattenwerkstoffes auf Basis pflanzlich gegerbter Lederfalzreste (Wet White) und Holzfasern. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
16. Hauser, B. (2014): Optimale Partikelgröße von Lärchenrinde für die Herstellung von Dämmstoffplatten auf Basis von Tannin Bindemittel. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
17. Grasser, K. (2014): Das Potential des konstruktiven Holzbaues in ausgewählten Märkten am Beispiel der Egger Building Products. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
18. Lienbacher, M. (2014): Modifizierung von Pappel und Buche für Massivholzplatten. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
19. Rizzo, F. (2015): Development of an environmental product declaration (EPD) for wood products in north Italy sawmills. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
20. Bolla, J. (2015): Untersuchung der Eignung von Laubholz für die Herstellung von CLT. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
21. Delbeck, L. (2015): 3-Schicht Massivholzplatten in Leichtbauweise. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
22. Poschenrieder, D. (2015): Erfolgsfaktoren in der Sägewerksindustrie. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
23. Wolpers (2015): Eignung von Dünnschichtplatten aus Baumrinde zur Verwendung als Fußbodenbeläge. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
24. Berkenhoff (2015) Werkstoffliche Gestaltung von faserverstärkten Schichtstoffen. Salzburg University of Applied Sciences, Forest Products Technology and Timber Construction
25. Platzer, M. (2016):
26. Pollhammer, M. (2016):
27. Resch, A. (2016):
28. Seitz (2016):
29. Vitztum, K. (2016)

FIELD TRIPS (13):

- 1999: Transilvania University of Brasov: Austria (Vienna), 1 week with 10 students (factories)
- 2001-2006: Factories of Binder Group (MDF, GLT, CLT, Pellets, Sawmill, Energy) for 1 day with students of Boku Vienna, FH-Rosenheim, FH-Salzburg, TU Munich, University of Ljubljana etc.
- 2006: ESB Nantes: Vietnam, 2 weeks with 90 students (factories)
- 2006: University Hamburg: Austria (Vienna), 1 week with 25 students (factories)
- 2007: ESB Nantes: South Africa; 2 week with 90 students (organisation of 2 days in Durban)
- 2007: University Hamburg: Austria (Salzburg, Carinthia, Tyrol), 2 weeks with 28 students
- 2008: University Hamburg: Turkey (Western part), 2 weeks with 27 students (factories)
- 2010: Boku Viena: Romania (Transylvania): 3 days with 26 students (organization of 2 days)
- 2011: University Hamburg: Romania (Transylvania): 12 days with 41 students (factories)
- 2012: FH-Salzburg: Romania (Transylvania): 8 days with 43 students (factories)
- 2013: FH-Salzburg: Germany: 5 days with 34 students (factories and Ligna Fair)
- 2014: FH-Salzburg: Slovenia: 6 days with 40 students (factories)
- 2015: FH-Salzburg: Germany: 5 days with 46 students (factories and Ligna Fair)
- 2016: FH-Salzburg: Styria, Slovenia, Croatia, Hungary: 6 days with 46 students (factories)

DOCORATE 1ST/2ND SUPERVISION (6)

- 1 Malanit Pannipa (2006-2009): The suitability of sweet bamboo (*Dendrocalamus asper* Backer) for structural composite lumber. University of Hamburg, Faculty for Natural Sciences.
- 2 Hengniran Pongsak (2007-2010): Future potential of forest and agricultural residues for the energy production in Thailand – Strategies for a better utilization. University of Hamburg, Faculty for Natural Sciences.
- 3 Ali Akrami (2010-2014): Use of European wood species for light OSB. University of Hamburg, Faculty for Natural Sciences.
- 4 Günther Kain (2012-2015): Development on the utilization of softwood bark for composites. Technical University of Munich
- 5 Bernd Heinzmann (2013-2016). Non-destructive testing methods for the volume measurement of industrial logs. West Hungarian University, Sopron
- 6 Petr Klimek (2013-2016): Innovative particle boards by in-situ imprinted density pattern. Mendel University, Brno

DOCTORATE COMMITTEE (14+1)

1. 2006: Reviewer and Member of the Exam Committee for the PhD-Thesis „Aspects regarding the drying of the bamboo type *Guadua Angustifolia*“ under tropical conditions”, written by Jorge Augusto Montoya, University of Hamburg.
2. 2006: Member of the board of examiners for the PhD-Thesis „Methods for analysis of selected properties for 3layers massive boards made in softwood” written by Steffen Tobisch, University of Hamburg.
3. 2006: Member of the board of examiners for the PhD-Thesis „Methoden zur qualitativen und quantitativen Analyse der Mikrostruktur von Naturfaserwerkstoffen”, written by Thomas Walter, University of Hamburg.
4. 2006: Member of the board of examiners for the PhD-Thesis „Thermische Modifizierung von Spanmaterial und Holzwerkstoffplatten zur Verbesserung ausgewählter Eigenschaften”, written by Wulf Paul, University of Hamburg.
5. 2006: Reviewer and Member of the Exam Committee for the PhD-Thesis „ Einfluss von Druckänderungen während des Heißpressprozesses auf die mechanischen Eigenschaften von Holzwerkstoffen”, written by Niels Meyer, University of Hamburg.
6. 2006: Member of the board of examiners for the PhD-Thesis „Untersuchungen über die Emissionen flüchtiger organischer Verbindungen von OSB aus Kieferholz”, written by Mathias Makowski, University of Hamburg.
7. 2009: Reviewer and Member of the Exam Committee for the PhD-Thesis „The suitability of sweet bamboo (*Dendrocalamus asper* Backer) for structural composite lumber”, written by Pannipa Malanit, University of Hamburg/University of Walailak, Nakhon Si Thammarat
8. 2009: Reviewer and Member of the Exam Committee for the PhD-Thesis „In-situ Untersuchungen des Verdichtungsverhaltens von Holzwerkstoffmatten - insbesondere von MDF - im Hinblick auf die Ausbildung des Rohdichteprofils und die Feuchtebewegung in der Matte während des Heißpressvorgangs”, written by Matthias Gruchot, University of Hamburg
9. 2010: Reviewer and Member of the Exam Committee for the PhD-Thesis „Einfluss der Faserstoff-Aufschlussbedingungen und des Bindemittels auf die Eigenschaften von MDF für eine Verwendung im Feucht- und Außenbereich”, written by Detlef Krug, IHD Dresden, University of Hamburg
10. 2010: Reviewer and Member of the Exam Committee for the PhD-Thesis „Future potential of forest and agricultural residues for the energy production in Thailand – Strategies for a better utilization”, written by Pongsak Hengniran, University of Hamburg/Kasetsart University, Bangkok
11. 2011: Member of the board of examiners for the PhD-Thesis „Untersuchungen von Trocknungs- und Prüfbedingungen als Einflußfaktoren auf die Emissionen flüchtiger organischer Verbindungen aus getrocknetem Vollholz von Kiefer und Fichte ”, written by Vera Steckel, University of Hamburg

12. 2011: Member of the board of examiners for the PhD-Thesis „Compréhension des phénomènes de diffusion du formaldéhyde dans les panneaux à base du bois : utilisation dans la réduction des émissions industrielles et domestiques de composés organiques volatils”, written by Baha Guezguez, l'Ecole Centrale de Nantes
13. 2011: Member of the board of examiners for the PhD-Thesis „Entwicklung und Evaluierung eines Konzepts für die kontinuierliche Herstellung von Leichtbauplatten mit polymerbasiertem Kern und Holzwerkstoffdecklagen”, written by Jan Lüttke, University of Hamburg
14. 2014: Reviewer and Member of the Exam Committee for the PhD-Thesis „Development and Characterization of Oriented Strand Boards made from the European Hardwood Species: Beech (*Fagus sylvatica* L.) and Poplar (*Populus tremula*)”, written by Ali Akrami, University of Hamburg/Teheran University
15. 2016: Member of the the board of examiners for the PhD-Thesis „Design of tree bark insulation boards: analysis of material, structure and property relationships”, written by Günther Kain, Technical University of Munich
16. 2016: Member of the the board of examiners for the PhD-Thesis „Strategic raw material supply in the particleboard producing industry in Europe: Problems and challenges”, written by Johann Trischler, Linnaeus University, Kalmar

CHAIRMAN OF SCIENTIFIC SESSIONS (30):

- 1999: Chairman of the Session “Process technology” at The 3rd European Panel Products Symposium, Llandudno, Wales, UK.
- 2000: Chairman of the Session 5.05 “Composite and reconstituted products” at The 21st IUFRO World Congress, Kuala Lumpur, Malaysia.
- 2000: Chairman of the Session “Fundamental properties” at The 4th European Panel Products Symposium, Llandudno, Wales, UK.
- 2001: Chairman of the Session “Fundamental properties” at The 5th European Panel Products Symposium, Llandudno, Wales, UK.
- 2003: Chairman of the Business Session 5.05.00 “Composite and reconstituted products” at The IUFRO All Division 5 Conference, Rotorua, New Zealand.
- 2003: Chairman of the Session 5.05.01 “Lignocellulosic-based composites” at The IUFRO All Division 5 Conference, Rotorua, New Zealand.
- 2003: Chairman of the Session “Process control” at The 7th European Panel Products Symposium, Llandudno, Wales, UK.
- 2005: Chairman of the Business Session 5.05.00 “Composite and reconstituted products” at The 22nd IUFRO World Congress, Brisbane, Australia.
- 2005: Chairman of the Technical Session 90 “Using wood composites as a tool for sustainable forestry” at The 22nd IUFRO World Congress, Brisbane, Australia.
- 2004-2006: Chairman of the „Initiative Massivholzplatte“, the massive board producers platform of Austria, Germany and Italy, The Austrian Wood Federation, Vienna.
- 2006: Chairman of the Session 2: Innovation at the Cost E44/E49 Conference on “Wood resources and panel properties”, Valencia, Spain.
- 2006: Chairman of the “Pressing process” Workshop during the 4th Press Users Club Seminar, Shanghai, China.
- 2006: Chairman of WG1: “Process optimization and process innovation” of COST E49 “Processes and performance of wood-based panels” for the Management Committee and Working Group Meeting, Biel, Suisse.
- 2006: Chairman of Cost E49 Training School “Testing and evaluation of emissions from wood based materials”, Hamburg, Germany.
- 2007: Chairman of WG1: “Process optimization and process innovation” of COST E49 “Processes and performance of wood-based panels” for the Management Committee and Working Group Meeting, Nantes, France.
- 2007: Chairman of WG1: “Process optimization and process innovation” of COST E49 “Processes and performance of wood-based panels” for the Management Committee and Working Group Meeting, Ligna Fair, Hannover, Germany.

- 2007: Chairman of the Session 5.05.00 “Using Plantation and small-diameter timber in composites” at “IUFRO All Division 5 Conference”, Taipei, Taiwan.
- 2007: Chairman of the Business Meeting of WG 5.05.00 “Composite and reconstituted products” at “IUFRO All Division 5 Conference”, Taipei, Taiwan.
- 2007: Chairman of WG1: “Process optimization and process innovation” of COST E49 “Processes and performance of wood-based panels” for the Management Committee and Working Group Meeting, Braunschweig, Germany.
- 2008: Chairman of WG1: “Process optimization and process innovation” of COST E49 “Processes and performance of wood-based panels” for the Management Committee and Working Group Meeting, Bled, Slovenia.
- 2009: Chairman of the Section 4 “Wood composites. Innovative wood based materials” at 7th ICWSE, Brasov, Romania.
- 2010: Chairman of the Session E04 “Integrating Engineered Biocomposites from Wood and other Bio-based Materials to promote Sustainability” at the IUFRO 23rd World Congress, Seoul, Korea.
- 2010: Chairman of the Business Meeting of WG 5.05.00 “Composite and reconstituted products” at the IUFRO 23rd World Congress, Seoul, Korea.
- 2010: Chairman of the Plenary II of The 1st International Conference on Processing Technologies for the Forest and Bio-based Products Industries, Kuchl, Austria
- 2010: Key Note Speaker and Chairman of Session 2 “Wood Science and Technology” of 1st Serbian Forestry Congress “Future with Forests”, Belgrade, Serbia.
- 2011: Chairman of the Section 8 “Computer-aided Engineering and Economics in the Wood Industry” at 8th ICWSE, Brasov, Romania
- 2012: Chairmann of the Session “Wood processing – Adhesives & Surface” at “IUFRO All Division 5 Conference”, Estoril, Portugal
- 2012: Chairmann of the “Composite and Reconstituted Products” at “IUFRO All Division 5 Conference”, Estoril, Portugal
- 2012: Chairmann of the “Wood processing – Drying” at “IUFRO All Division 5 Conference”, Estoril, Portugal
- 2012: Chairmann of the “Wood processing – Sustainability” at “IUFRO All Division 5 Conference”, Estoril, Portugal
- 2012: Chairmann of the “Processing of plantation wood and innovative technologies” at “IUFRO All Division 5 Conference”, Estoril, Portugal
- 2012: Chairmann of Official Opening speech of the 11th Pacific RIM Symposium - BioComp, Shizuoka, Japan
- 2013: Key Note Speaker and Chairman of the Section 1&2 “Wood Constructions & Renewable Energy from Wooden Biomass” at 9th ICWSE, Brasov, Romania
- 2014: Chairmann of the “Wood Panels Composites” at Society of Wood Science and Technology International Convention, Zvolen, Slovakia
- 2014: Key Note Speaker at the opening ceremony “World Market Development of Wood based Products ” of the 3rd PTFBPI, Kuchl, Austria
- 2015: Key Note Speaker at the Ligna Fair “Gewinnung biogener Wertstoffe aus Abwässern der Zellstoffindustrie mittels Membrantechnologie” Hannover, Germany
- 2015: Chairmann of the “Biobased Fibers and Polymers” at Forest Products Society International Convention, Atlanta, USA
- 2015: Key Note Speaker at Construction Fair Salzburg “Neue Generation von Leichtbauplatte”, Austria
- 2015: Key Note Speaker at Ambienta Fair “Evolution of the Light Board”, Zagreb, Croatia
- 2015: Key Note Speaker at ICWSE ... Brasov, Romania

VISITED UNIVERSITIES, RESEARCH CENTERS and INVITED LECTURER (50):

- 1992: Universität für Bodenkultur, Institut für Holzforschung Wien (afterwards permanent)
- 1992: Institut für Holzforschung Austria, Wien (afterwards permanent)
- 1992: Nyugat Magyarországi Egyetem, Faipari Mérnöki Kar, Sopron (1996, 2005, 2013)
- 1993: VTT - Technical Research Centre of Finland, Espoo (1995)
- 1993: Universität Ludwig-Maximilian, Insitut für Holzforschung, München (afterwards permanent)
- 1995: USDA Forest Service, Forest Products Laboratory Madison
- 1995: Virginia Tech, Wood Education & Resource Center, Blacksburg

1995: Technická univerzita vo Zvolene, Drevárska fakulta (2014, 2015)
 1995: Agricultural University of Poznan
 1996: Washington State University, College of Engineering and Architecture, Pullman (2002)
 1996: University of British Columbia, Faculty of Forestry, Wood Science Department & Forintek, Vancouver
 1996: Materialprüfungsanstalt Universität Stuttgart (MPA), Otto-Graf-Institut (FMPA) (2005)
 1996: Ecole Polytechnique Federale de Lausanne (EPFL)
 1996: University of Kasetsart, Faculty for Forestry, Department for Forest Products, Bangkok (2007,2009,2011)
 1996: Kyoto University, Wood Research Institute (2015)
 1997: University of Wales, BioComposite Center, Bangor (1997-2003)
 2000: Forest Research Institute of Malaysia (FRIM), Kuala Lumpur
 2001: Fachhochschule Kuchl, Studiengang Holztechnologie (afterwards permanent)
 2001: Fachhochschule Rosenheim, Studiengang "Holztechnik" (afterwards permanent until 20014)
 2002: Leopold Franzens Universität, Institut für Stahl-, Holz- und Mischbau, Innsbruck (2002-2007, 2015)
 2003: Forest Research Institute, Rotorua
 2003: University of Canterbury, School of Forestry, Christchurch
 2004: University of Ljubljana, Faculty for Biotechnology (2012, 2013, 2014)
 2004: Universität Hamburg, Zentrum für Holzwirtschaft (2006-2010)
 2004: Technische Universität Graz, Institut für Holzbau und Holztechnologie
 2005: Ecole Supérieure du Bois Nantes (2004-2006)
 2005: Universidade Federal do Parana, Departamento de Engenharia e Tecnologia Florestal, Curitiba (2008)
 2005: Agency for Food and Fibre Sciences, Dept. Of Primary Industries, Queensland Government
 2005: Center for Timber Technology&Construction (BRE), Watford
 2006: Institut für Holzforschung Dresden, Technische Universität Dresden
 2006: University of Agriculture and Forestry, Faculty of Forestry, Dept. Of Wood Technology, Ho Chi Min
 2006: Istituto per la Valorizzazione del Legno e delle Specie Arboree, Trento
 2006: Associazione Ingegneri-Architetti della provincia di Bologna
 2006: Instituto Tecnológico del Mueble, Madera, Embalaje y Afines (Aidima), Valencia
 2006: Univ. of Science and Technology, Dept. of Indust. Economics and Technology Management, Trondheim
 2006: Georg-August-Universität Göttingen, Fakultät für Forstwissenschaften und Waldökologie (2008)
 2007: Walailak University, Institute of Engineering and Resources Management, Nakom Si Thammarat (2009,2011)
 2007: Fraunhofer Institut Braunschweig (2009)
 2008: Technische Universität München, Forstwirtschaftliche Fakultät, Weihenstephan (2012)
 2008: Fachhochschule Salzburg, Studiengang Holztechnologie und Bau (afterwards permanent)
 2008: Berner Fachhochschule, Studiengang Architektur, Holz und Bau, Biel (2006, 2009)
 2008: Universidad Tecnológica de Pereira, Centro Regional de Producción mas Limpia, Pereira
 2008: Kastamonu University, Faculty of Forestry, Department of Forest Industrial Engineering
 2008: Universidad de Concepción, Unidad de Desarrollo Tecnológico
 2008: Universidad del BioBio, Depto. Ingeniería en Maderas, Concepción,
 2009: University of Shizuoka, Faculty of Agriculture (2012, 2014, 2015)
 2009: Japanese Association for Wood based Panels, Tokyo (2012, 2014)
 2010: Korean Forest Research Institute, Seoul
 2010: United Nation, UNECE Timber Committee Timber Commission, Geneva
 2010: University of Belgrade, Faculty of Forestry
 2011: Oregon State University, College of Forestry, Wood Science and Engineering, Corvallis
 2011: Karadeniz Technical University, Faculty for Forestry, Dept. for Wood Science and Industry, Trabzon (2014)
 2011: Univ. of Stellenbosch, Faculty of Agriculture, Department of Forestry and Wood Science, Stellenbosch (2015)
 2012: Technical University of Lisboa
 2012: Academy of Forestry Beijing
 2013: University of Austin, Texas
 2013: Hochschule für Forstwirtschaft Rottenburg, Studiengang Holzverwendung - Holzverwertung
 2013: Mendel University, Faculty of Forestry and Wood Technology, Brno
 2013: University of Zagreb, Faculty of Forestry (2015)
 2014: University of Porto, Department for Biomaterials
 2014: Faculdade de Engenharia da Universidade do Porto and Escola Superior de Tecnologia e Gestão de Viseu
 2014: Laval University in Quebec and University of Toronto
 2014: University Nagoya, Department for Wood Chemistry, Wood Construction and Wood Products (2015)
 2015: University of Tennessee in Knoxville, Center for Renewable Carbon

AFFILIATIONS, PRIZES, COORDINATION (30):

- 1990-1994: Member of the Redaction Committee of the Journal “Revista Industria Lemnului”, Bucharest, Romania.
- 1995-2002: Member of Forest Products Society, Madison, USA.
- 1995-2000: Deputy Coordinator of S.5.05.02: "Recycling and Recycled Products", Division 5 "Forest Products" IUFRO.
- 1996: Appreciation Award for Distinguished Service for Meritorious Effort in Preparing and Presenting Scientific and Industrial Information at the 30th Washington State University International Symposium on Particleboard/Composite Materials, USA.
- 1999-2000: Member in the Society for Wood Science and Technology, Madison, USA.
- 1999: Consultant for The World of MDF, MDF-Industry Yearbook, ISSN 1361-777X
- 2000-2010: Coordinator of WG5.05.00: "Composites and Reconstituted Products" of Division 5 "Forest Products" of IUFRO (Responsible for the Scientific Sessions of 5.05.00 during the World Congresses and Division 5 Conferences: Kuala Lumpur 2000, Rotorua 2003, Brisbane 2005, Taipei 2007, Seoul 2010).
- 2001: Selection for The International Directory of Distinguished Leadership of American Biographical Institute – 11th Edition for Outstanding Contributions to Wood Science and Technology
- 2003: Diploma of General Association of Engineers Romania for the book “MDF-technological aspects”, Bucharest, Romania.
- 2005-2009: Coordinator of WG 1: “Process optimization and process innovation”, COST E49 “Processes and performance of wood-based panels”, Brussels, Belgium.
- 2005-now: Member in the Redaction Committee of “Holztechnologie”, Dresden, Carl Hanser Verlag München (now DRW-Verlag), ISSN 0018-3881, Germany
- 2005-now: Reviewer of the Journal “Building and Environment”, Elsevier Ltd. Oxford, ISSN 0360-1323, UK
- 2005-now: Reviewer of the Journal “Holz als Roh- und Werkstoff”, Springer Verlag München, ISSN 0018-3768.
- 2006: Member of the board of experts for the ERA Wood Wisdom 2006 for the 7th Framework Program, Helsinki, Finland.
- 2006-2009: Member of NA 042-04-03 AA of the DIN German Institute for Norms Committee for the Wood Products, Berlin, Germany.
- 2006-now: Reviewer of the “Journal of Materials Processing Technology“, Elsevier Ltd. Oxford, London, ISSN: 0924-0136.
- 2006-now: Expert for the Evaluation of 6th and 7th Framework Programme applications for the European Commission, EX2002B020652, Brussels, Belgium.
- 2008-2009: Coordinator Unibril – DAAD Exchange Program between University of Hamburg and Universidade Federal do Parana, Curitiba, Brazil.
- 2008-now: Reviewer of the Journal “Sensors”, MDPI, Basel, ISSN: 1424-8220
- 2009-now: Reviewer of the Journal “Holzforschung”, Walter de Gruyter, Berlin, Germany, ISSN: 0018-3830
- 2009: Member the Scientific committee of the Cost E49 Workshop „Adding value through physical functionality”, Istanbul, Turkey.
- 2009: Member of Organizing and Scientific Committee and Chairman of the Section 4 “Wood composites. Innovative wood based materials” at 7th ICWSE, Brasov, Romania
- 2009: Scientific Director of the 1st Asian Training on Wood based Composites organized by International Wood Academy, Nakon Si Thammarat, Thailand
- 2010-now: Reviewer of the Journal “ProLigno”, Editura Universitatii “Transilvania” din Brasov, ISSN 1841-4737
- 2010: Member of Conference Scientific Board of the “1st International Conference on Processing Technologies for the Forest and Bio-based Products Industries”, Salzburg University of Applied Sciences, Kuchl, Austria
- 2010: Member of Conference Scientific Board of the 1st Serbian Forestry Congress, Belgrade, Rep. Serbia
- 2010-now: Reviewer of the Forest Products Journal, Forest Products Society, Madison, USA, ISSN: 0015-7473
- 2011-now: Reviewer of Cellulose, Springer, ISSN 0969-0239
- 2011-now: Reviewer of Journal of Reinforced Plastics and Composites, Sage Publishers, ISSN: 0731-6844

- 2011-now: Reviewer of International Wood Products Journal, Maney Publishing, ISSN: 2042-6453
- 2011: Scientific Director of the 2nd Asian Training on Wood based Composites organized by International Wood Academy, Nakon Si Thammarat, Thailand
- 2011-now: Reviewer of Journal for Polymer Degradation and Stability, Elsevier, ISSN 0141-3910
- 2011-now: Coordinator of WG5.04.00: "Wood Processing" and Deputy Coordinator of WG5.05.00 "Composites and Reconstituted Products" of Division 5 "Forest Products" of IUFRO (Responsible for the Scientific Sessions of 5.04.00 and 5.05.00 during the World Division 5 Conferences: Lisbon 2012).
- 2011: Member of Organizing and Scientific Committee at 8th ICWSE, Brasov, Romania
- 2011-now: Member of the Annals of Forestry Research, Câmpulung Moldovenesc, Romania
- 2011-now: Reviewer of Journal of Forestry, Karadeniz Technical University, Trabzon, Turkey
- 2011-now: Reviewer of Journal Scientific Research and Essays, <http://www.academicjournals.org/SRE> ISSN 1992-2248
- 2011-now: Reviewer of Parlar Scientific Publications (PSP).
Fresenius Environmental Bulletin. www.psp-parlar.de
- 2012-now: Reviewer of Journal "Journal of Adhesion Science and Technology"
- 2012-now: Reviewer of Journal "Journal of Composites – Part B". Elsevier
- 2012-now: Reviewer of Journal "Journal of Materials Science and Engineering".
David Publishing Company
- 2012-now: Reviewer of Journal "Journal of Environmental Science and Engineering"
- 2012-now: Reviewer of Journal "Journal of Tropical Forest Science (JTFS)". FRIM
- 2012-now: Reviewer of Journal "Journal of Wood Chemistry and Technology"
- 2012: Reviewer for the 5th International Conference on Environmentally-Compatible Forest Products – EcoWood, Porto, Portugal
- 2013: Advisory Coordinator of the 9th ICWSE, Brasov, Romania
- 2013: Vicepresident and Founder of Forest Products Society Europe
- 2014: Extraordinary Professor at the Dept. for Forestry and Wood Science, University of Stellenbosch, South Africa, since January
- 2014: Trainer COST FP 1006 in Porto/Viseu**
- 2014: Scientific Director of the 1st Euro-Asian Short Course on Wood based Composites organized by Karadeniz Technical University, Trabzon, Turkey
- 2014: Adjunct Professor at Center for Renewable Carbon, Department for Forestry, Wildlife and Fisheries, Institute for Agriculture, University of Tennessee, Knoxville, USA, since July 2014
- 2014: Visiting professor at the Faculty for Agriculture, University Shizuoka, September
- 2014: Vicepresident of 3rd PTFBPI Conference in Kuchl**
- 2015: Visiting professor at the Faculty for Agriculture, University Shizuoka, September