

PERSONAL INFORMATION

Maria Cristina TIMAR

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POSITION
IOSUD UTBv

PhD Coordinator
Doctoral studies field: Forestry Engineering
Since 2011

EXPERTISE FIELD AND
RESEARCH INTEREST AREAS

Ageing and degradation of wood /materials: testing and investigation
Scientific conservation of wood /furniture
Wood preservation, gluing and finishing
Wood chemistry, wood modification
Wood based composite materials, wood products: development, investigation, testing

WORK EXPERIENCE

2016- prezent	Transilvania University of Braşv - Director of the Interdisciplinary Doctoral School
2003 - prezent	Transilvania University of Braşv (UTBv) , www.unitbv.ro / Faculty of Wood Engineering (https://il.unitbv.ro) – Professor - teaching and research activities UTBv/Faculty of Wood Engineering - associate professor – research and teaching UTBv/Faculty of Wood Engineering - lecturer – research and teaching
2000-2003	UTBv/Faculty of Wood Engineering - assistant – research and teaching
1995-2000	UTBv/Faculty of Wood Engineering - researcher, research activity based on projects
1990-1995	Codlea (industrial company – organic compounds and dyestuff manufacturer) – Department of QualityControl CTC
1886-1990	Laboratory CTC – II- Organic intermediar products / Laboratory coordinator – control of materials

EDUCATION AND TRAINING

1992-1998	Doctoral studies	EQF 8
1998	Doctor of Philosophy (PhD) - Brunel University, United Kingdom, – Certificate Brunel University conferred at the Congregation from 25.09.1998	
1999	Doctor in technical field –specialisation Mechanical technology of wood Certificate of recognition and equivalation in Romania of the PhD title obtained in the UK; Certificate series C/0001331/1999- Romanian Ministry of Education PhD thesis: <i>Chemically modified wood for thermally formed composites</i>	
1980 -1981	Post-graduate studies (MSc) – specialisation for research Babeş Bolyai—University Cluj / Faculty of Chemical Technology Certificate of specialisation in Organic chemistry –series A/ Nr.182/27.09.1982 Mendation for research and higher education	EQF 7
1976 -1980	Under-graduae studies (BSc) – Licence in chemistry Babeş Bolyai—University Cluj / Faculty of Chemical Technology, Section Chemistry Diplom of licence in Chemistry 27933/24.03.1981 – Specialisation Chemistry	EQF 6

PERSONAL SKILLS

Mother tongue(s) ROMANIAN

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Certificat Cambridge FCE, grade A, nr. 0019536, Ref 97C522140007 .					

French	B1	B1	A2	A2	A2
No certificate					

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

Communication skills ▪ good communication skills gained through my experience as researcher, teacher, events organiser, volunteering actions

Organisational / managerial skills Organisation and coordination of didactic and research laboratories, research teams
 Membre of the Council of the Faculty of Wood Engineering – 2000-2016
 Director of the Interdisciplinary Doctoral School – IOSUD UTBv – since May 2016
 Membre of the Senate of Transilvania University of Braşov – since November 2016

Job-related skills ▪ skills / competence in conservation-restoration of wood/furniture; initiation and development of this field within the the Faculty of Wood Engineering
 ▪ organisational skills: organisation of restoration exhibitions (yearly since 2006), restoration camps, volunteering actions for conservation of cultural heritage

Digital skills

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

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- good command of office suite (word processor, spread sheet, presentation software)
- good command of photo editing software Adobe Photoshop, basic user Corell Draw
- independent user of specific software for investigation equipment

Other skills ▪ Coordinator of the MSC programme: Furniture Eco-designb and Restoration
 ▪ PhD Coordinator since 2011

ADDITIONAL INFORMATION

Publications 5 books, 5 patents, over 140 scientific papers in journals and proceedings of internationally recognised conferences (20 papers in ISI journals, 12 articles as first author, 3 ISI proceedings-2 first author, 40 papers in journals indexed in international databases, over 60 papers in proceedings of international conferences)

Projects Director of research projects: 1 international project FP5 and 3 national projects obtained by competition; member of the research team in other 4 international projects and 12 national projects

Citations Over 130 in ISI journals

H Indexes ISI-WOS 7, Scopus 9, Google Scholar 10

References Contact persons for references: Dr. Mark Irle (Nancy), Prof. Holger Militz (Goettingen), Prof. Joris Van Acker (Gent), Dr. Andrew Pitman (UK), Dr Dennis Jones (UK), Dr. Kevin Maher (UK)

ANNEXES

LIST OF RELEVANT PUBLICATIONS /RESEARCH (selection)

A. Articles in ISI journals

1. Varodi A.M., Beldean E., **Timar M.C.** (2019). Furan resin as potential substitute of phenol-formaldehyde resin in plywood manufacturing, *BioRes*, 14(2), 2727-2739; <https://bioresources.cnr.ncsu.edu/issues/vol14-issue2/page/3>
2. Croitoru, C., Varodi A.M., **Timar, M.C.**, Stanciu E.M., Pascu A. (2018). Wood-plastic composites based on HDPE and ionic liquid additives, *J. Mater Sci.*, **53**(6), pp 4132–4143, ISSN 1573-4803 (Online), <https://link.springer.com/article/10.1007/s10853-017-1826-7>
1. Liu X.Y., **Timar M.C.**, Varodi A., Sawyer G. (2017). An investigation of accelerated temperature-induced ageing of four wood species: colour and FTIR, *Wood Sci Technol*, DOI 10.1007/s00226-016-0867-4, **51** (2): 357-378. <http://link.springer.com/article/10.1007%2Fs00226-016-0867-4>,
2. **Timar M. C.**, Varodi, A., Hacıbektasoglu, M., and Campean, M. (2016). Color and FTIR analysis of chemical changes in beech wood (*Fagus sylvatica* L.) after light streaming and heat treatment in two different environments, *BioRes*. 11(4), 8325-8343, https://www.ncsu.edu/bioresources/BioRes_11/BioRes_11_4_8325_Timar_VHC_Color_FTIR_Anal_Chem_Changes_Beech_Light_Heat_Treatm_9978.pdf
3. Liu, X. Y., **Timar M. C.**, Varodi, A. M., and Yi, S. L. (2016). Effects of ageing on the color and surface chemistry of Paulownia wood (*P. elongata*) from fast growing crops, *BioRes*. 11(4), 9400-9420, https://www.ncsu.edu/bioresources/BioRes_11/BioRes_11_4_9400_Liu_TVY_Ageing_Color_Surface_Chem_Wood_Pawlona_10124.pdf
4. **Timar M.C.**, Varodi A., Gurău L. (2016). Comparative study of photodegradation of six wood species after short-time UV exposure, (DOI) 10.1007/s00226-015-0771-3, *Wood Sci Technol* (2016) 50(1):135-163, ISSN 0043-7719, <http://link.springer.com/article/10.1007/s00226-015-0771-3>
5. Liu X.Y., Cionca M., Varodi A.M., **Timar M.C.** (2015) A comparative study of Qing and European Rococo chairs (18th Century). *Ciencia e tecnica*, Volume 30/Issue 2, ISSN 0254-0223,
6. **Timar M.C.**, Sandu I.C.A., Beldean E. Sandu I. (2014). FTIR investigation of Paraloid B72 as consolidant for old wood. Principle and case studies. *Revista de Materiale Plastice*, Vol. 51, no.4, pp. 382-387, ISSN:00255289 <http://www.revmaterialeplastice.ro/pdf/TIMAR%20M.pdf%204%2014.pdf>
7. Tuduce (Traistaru) A.A. Sandu I.C.A., **Timar M.C.**, Dumitrescu L., Sandu I. (2013). SEM-EDX, water absorption, and wetting capability studies on evaluation of the influence of nano-zinc oxide as additive to paraloid B72 solutions used for wooden artifacts consolidation, *Microscopy research and technique (MRT)*, **76** (2), 209-218, ISSN:1097-0029; <http://onlinelibrary.wiley.com/doi/10.1002/jemt.22155/citedby>
8. Gurau L., **Timar M.C.**, Porojan M., Ioras F. (2013). Image processing method as a supporting tool for wood species identification, *Wood and Fiber Science*, no3, July, 303-313; ISSN 0735-6161; <http://wfs.swst.org/index.php/wfs/article/view/1966>
9. **Timar M.C.**, Gurau L., Porojan M., Beldean E. (2013). Microscopic identification of wood species an important step in furniture conservation, *European Journal of Science and Theology*, vol9(4): 243-252, ISSN 1841-0464; http://www.ejst.tuiasi.ro/Files/40/19_Timatetal.pdf
10. Tuduce (Traistaru) A.A, **Timar M.C.**, Campean M., Croitoru C. (2012): Paraloid B72 versus Paraloid B72 with Nano ZnO Additive as Consolidants for Frail Wood, *Materiale Plastice*, **49** (4), 293-300, ISSN 0025-5289; <http://www.revmaterialeplastice.ro/pdf/TUDUCE%20A.pdf%204%2012.pdf>
11. **Timar MC**, Beldean E, Porojan M, Gurau G. (2009): Field testing and microscopy - important tools for a realistic long-term evaluation of wood improvement treatments, *Environmental Engineering and Management Journal EEMJ*, **8**(4): 669-678, ISSN 1582-9596; http://omicron.ch.tuiasi.ro/EEMJ/pdfs/vol8/no4/9_Timar.pdf
12. **Timar M.C.**, Maher K., Irle M., Mihai D. (2004). Thermal forming of chemically modified wood to make high performance plastic like composites, *Holzforschung*, **58** (5): 519-528, ISSN 0018-3830; <http://www.degruyter.com/view/j/hfsg.2004.58.issue-5/hf.2004.079/hf.2004.079.xml?rskey=BzA4Ri&result=3>
13. **Timar M.C.**, Mihai M.D., Maher K., Irle M., (2000). Preparation of wood with thermoplastic properties. Part 1- Classical synthesis, *Holzforschung*, **54** (1): 71-76, ISSN 0018-3830; <http://www.degruyter.com/view/j/hfsg.2000.54.issue-1/hf.2000.011/hf.2000.011.xml?rskey=BzA4Ri&result=2>
14. **Timar M.C.**, Maher K., Irle M., Mihai M.D., (2000). Preparation of wood with thermoplastic properties. Part 2- Simplified technologies, *Holzforschung*, **54** (1): 77-82, ISSN 0018-3830; <http://www.degruyter.com/view/j/hfsg.2000.54.issue-1/hf.2000.012/hf.2000.012.xml?rskey=BzA4Ri&result=1>
15. **Timar M.C.**, Pitman A. (1999). Biological resistance of chemically modified aspen composites, *International Biodeterioration and Biodegradation*, **43** (4): 181-187, ISSN 0964-8305; <http://www.sciencedirect.com/science/article/pii/S0964830599000529>

Articles in BDI (international databases) journals

1. **Timar M.C.**, Beldean E., Varodi A.M., Muscu I., (2017) Old wood recovered from constructions – from scientific challenge to design opportunities, *Pro Ligno*, vol. 13(4), pp. 437-446, ONLINE ISSN 2069-743, <http://www.proligno.ro/en/articles/2017/4/TIMAR.pdf>
2. Varodi A.M., **Timar M.C.**, Liu X.Y., Cojocariu C., (2017) Effect of natural ageing in indoors conditions on the colour of wood surfaces finished with natural traditional materials, *Pro Ligno*, vol. 13(4), pp. 331-340, ONLINE ISSN 2069-7430 . <http://www.proligno.ro/ro/articles/2017/4/VARODI.pdf>
3. Liu X.Y., Cionca M., **Timar M.C.**(2015), A Comparative Study Of 17th Century Ming And Western European Chairs, *European Journal of Science and Theology*, February 2015, Vol.11, No.1, 253-262. ISSN 842 – 8517, http://www.ejst.tuiasi.ro/Files/50/24_Liu%20et%20al.pdf
4. Deak A., Cionca M., **Timar M.C.**, Porojan M. (2015). Arguments for Reusing Old Oak Wood Recovered from Demolition, *Pro Ligno*, Vol11(3): 38-47. ON LINE ISSN 2069-7430. <http://www.proligno.ro/ro/articles/2015/3/deak.pdf>
5. Liu X.Y., **Timar M.C.**, Varodi A., Yi S.L. (2015). Tung oil and linseed oil as traditional finishing materials important for furniture conservation, *PRO LIGNO*, Vol. 11 N° 4 2015, pp. 571-579. ON LINE ISSN 2069-7430. http://www.proligno.ro/ro/articles/2015/4/Liu_final.pdf
6. **Timar M.C.**, Pop D.M., Varodi A., Lazureanu D., Tolomeiu I.(2015), Microscopy, Micro-Chemistry And Ftr As Analytical Tools For Identifying Transparent Finishes Case Studies From Astra Museum – Sibiu, *PRO LIGNO* Vol. 11 N° 4 2015, pp. 561-570, ON LINE ISSN 2069-7430. http://www.proligno.ro/ro/articles/2015/4/Timar_final.pdf
7. Babita L.L, **Timar M.C.**(2015) Conservation of polychrome wood – principles and case studies, *PRO LIGNO* Vol. 11 N° 4 2015, pp. 545-552. ON LINE ISSN 2069-7430. http://www.proligno.ro/en/articles/2015/4/Babita_final.pdf
8. Beldean E., **Timar M.C.**, Varodi A.(2015). Assessing protecting efficiency of some surface treatments on fir wood after 7 years outdoor exposure, *PRO LIGNO* Vol. 11 N° 4 2015, pp. 275-282. ON LINE ISSN 2069-7430. http://www.proligno.ro/ro/articles/2015/4/Beldean_final.pdf
9. Varodi A., Pop D.M., Babita L.L., **Timar M.C.**, Volunteering For Cultural Heritage Conservation - Two Case Studies, *PRO LIGNO* Vol. 11 N° 4 2015, pp. 537-544. ON LINE ISSN 2069-7430. http://www.proligno.ro/ro/articles/2015/4/Varodi_final.pdf
10. Liu, X.Y., **Timar M.C.**, Varodi A.M. (2014) A Preliminary Study of Three Finishing Materials for Traditional Chinese Furniture. *Advances in Materials Physics and Chemistry*, **4**, 85-92. <http://dx.doi.org/10.4236/ampc.2014.45011>
11. **Timar M.C.**, Beldean E. (2013): A comparative study of fir (*Abies alba* Mill) and beech (*Fagus sylvatica*) degradation in UC3, *Bulletin of Transilvania University of Brasov, series II, Forestry, wood industry, Agricultural food engineering*, vol 6 (55) No.1 pp. 39-46. ISSN 2065-2135; http://webbut.unitbv.ro/BU2013/Series%20II/BULETIN%20II%20PDF/06_Timar_Beldean_.pdf
12. **Timar M.C.**, Beldean E. Varodi A. (2013): A laboratory comparative study on the performance and reversibility of some traditional and modern adhesives for furniture conservation, *Pro Ligno*, **9** (4): 282-290; http://www.proligno.ro/ro/articles/2013/4/Timar_final.pdf
13. **Timar, M.C.**, Beldean, E., Zeleniuc, O., Varodi, A. (2012): An insight into beech wood (*Fagus sylvatica* L.) degradation, in outdoors, above ground, long-time exposure. Part. 1. *Pro Ligno*, **8** (2), 37-52, ISSN 2069-7430; http://www.proligno.ro/ro/articles/2012/2/timar_full.pdf. Part. 2. *PRO Ligno*, **8** (3), 53-67, ISSN 2069-7430; http://www.proligno.ro/ro/articles/2012/3/timar_full.pdf
14. **Timar, M.C.**, Tuduțe (Traistaru), A., Porojan, M., Gurau, L. (2010). An investigation of consolidants penetration in wood. Part 1: General methodology and microscopy. *PRO Ligno*, **6** (4): 13-27, <http://www.proligno.ro/ro/articles/2010/4/timar.pdf>
15. **Timar, M.C.**, Tuduțe (Traistaru), A., Patachia S, Croitoru, C: (2011). An investigation of consolidants penetration in wood. Part 2: FTIR spectroscopy, *PRO Ligno*, **7**(1), pg. 25-38; http://www.proligno.ro/ro/articles/2011/1/timar_full.pdf
16. **Timar M.C**, Gurau L., Cionca M., Porojan M. (2010): Wood species for Biedermeier furniture a microscopic characterisation for scientific conservation, *International Journal of Conservation Science*, **1** (1): 3-12, ISSN 20678223; http://www.ijcs.uaic.ro/volume_1.html#Issue1

C. Coordinated PhD thesis / PhD title confirmed

Liu Xin You (2017): Contributions to the study of ageing phenomena of wooden substrate and traditional materials for transparent finishes – a comparative approach for Europe and China with applicability in furniture conservation/ restoration,

20 April 2019