

# 💄 About Me

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I am an associate professor of wood science and technology at University of Mohaghegh Ardabili, faculty of agriculture and natural resources, Ardabil, Iran. I received my BSc, MSc, and Ph.D in wood science and technology from University of Tehran. My expertise is in timber engineering, engineered wood products, wood mechanics, and engineering design of furniture. I have performed extensive research on producing engineered wood products from fast-growing tree species. I am the author or co-author of over 38 scholarly publications in the fields of structural performances of wood, wood-based composite, and engineered wood products.

# Education

University of Tehran

• Bachelor of wood science and technology

University of TehranMaster of wood science and technology

**MSc. Thesis:** Investigation on withdrawal and lateral strength of various screws used in furniture industry in commercial wood plastic composites

# **University of Tehran**

Sep. 2012 – Feb. 2017

Sep. 2007 – Dec. 2009

o PhD of wood science and technology

**PhD thesis:** Structural performance of cross laminated timber (CLT) made out of poplar and preparing model for its mechanical behavior by finite element method

# Research interest

- o Timber Engineering
- Mass Timber Structures
- Timber Connections and Fasteners
- Finite Element Analysis
- Mechanical and Physical Properties of Wood, Wood-Based Composites and Engineered Wood Products
- Computer-Aided Design of Timber Structures and Furniture

# Publications

### - Papers in International Journals

- 1. M. Arabi, M. Hazrati. **A. Rostampour-Haftkhani**, Performance of Laminated Veneer Lumber Panels from Fast-Growing Species with Different Layering Arrangements, **BioResources** (2024), 19(2), 2546-2561.
- 2. **A. Rostampour-Haftkhani**, F. Abdoli, M. Arabi, V. Nasir, M. Rashidi, Effect of Wood Densification and GFRP Reinforcement on the Embedment Strength of Poplar CLT, **Applied Sciences (2023)**, 13(22): 12249.
- 3. M. Arabi, A. Rostampour-Haftkhani, R. Pourbaba, Investigating the Effect of Particle Slenderness Ratio on Optimizing the Mechanical Properties of Particleboard Using the Response Surface Method, BioResources (2023), 18(2): 2800-2814.
- 4. F. Abdoli, M. Rashidi, A. Rostampour-Haftkhani, M. Layeghi, G. Ebrahimi, Effects of fastener type, end distance, layer arrangement, and panel strength direction on lateral resistance of single shear lap joints in cross-laminated timber (CLT), Case Studies in Construction Materials (2023), 18 e01727.
- 5. **A. Rostampour-Haftkhani**, F. Abdoli, I. Rashidijouybari, R.A. Garcia, Prediction of water absorption and swelling of thermally modified fir wood by artificial neural network models, **European Journal of Wood and Wood Products** (2022), 80(5): 1135-1150.
- 6. **A. Rostampour-Haftkhani**, H. Hematabadi, Effect of layer arrangement on bending strength of cross-laminated timber (CLT) manufactured from poplar (populus deltoides L.), **Buildings (2022)**, 12(5): 608.
- F. Abdoli, M. Rashidi, A. Rostampour-Haftkhani, M. Layeghi, G. Ebrahimi, Withdrawal Performance of Nails and Screws in Cross-Laminated Timber (CLT) Made of Popular (Populus alba) and Fir (Abies alba), Polymers (2022), 14(15)
- 8. **A. Rostampour-Haftkhani**, M. Rashidi, F. Abdoli, M. Gerami, The Effect of GFRP Wrapping on Lateral Performance of Double Shear Lap Joints in Cross-Laminated Timber as a Part of Timber Bridges, **Buildings** (2022), 12(10): 1678.
- 9. **A. Rostampour-Haftkhani**, F. Abdoli, A. Sepehr, B. Mohebby, Regression and ANN models for predicting MOR and MOE of heat-treated fir wood, **Journal of Building Engineering (2021)**, 42 102788.
- M. Dalvand, G. Ebrahimi, A. Rostampour-Haftkhani, S. Maleki, Analysis of factors affecting diagonal tension and compression capacity of corner joints in furniture frames fabricated with dovetail key, Journal of Forestry Research (2013), 24 155-168.
- 11. M. Mohamadzadeh, A. Rostampour-Haftkhani, G. Ebrahimi, H. Yoshihara, Numerical and experimental failure analysis of screwed single shear joints in wood plastic composite, Materials & Design (2012), 35 404-413.
- 12. S. Maleki, A. Rostampour-Haftkhani, M. Dalvand, M. Faezipour, M. Tajvidi, Bending moment resistance of corner joints constructed with spline under diagonal tension and compression, **Journal of Forestry Research (2012)**, 23 481-490.
- 13. M. Arabi, M. Faezipour, **A. Rostampour-Haftkhani**, S. Maleki, The effect of particle size on the prediction accuracy of screw withdrawal resistance (SWR) models, **Journal of the Indian Academy of Wood Science** (2012), 9 53-56.
- 14. **A. Rostampour-Haftkhani**, M. Arabi, Improve regression-based models for prediction of internal-bond strength of particleboard using Buckingham's pi-theorem, **Journal of forestry research (2013)**, 24 735-740.
- A. Rostampour-Haftkhani, G. Ebrahimi, M. Tajvidi, M. Layeghi, M. Arabi, Lateral resistance of joints made with various screws in commercial wood plastic composites, Materials & Design (2011), 32(7): 4062-4068.
- A. Rostampour-Haftkhani, G. Ebrahimi, M. Tajvidi, M. Layeghi, Investigation on withdrawal resistance of various screws in face and edge of wood–plastic composite panel, Materials & Design (2011), 32(7): 4100-4106.

#### - Papers in National Journals

- 1. Shokrvand Shakiba, **A., Rostampour Haftkhani, A.,** Kalagar, M., Sefidi, K., Saffari, M., Predicting the volume of Populus deltoids using the artificial neural network method (Case study: Shafarud forest company). **Forest and Wood Products (2023),** 76(3), 217-228.
- 2. Arabi, M., **Rostampour Haftkhan, A**. Improved withdrawal capacity of nail and screw in cross-laminated timber (CLT) made of popular (Populus alba) using glass fiber-reinforced polymer (GFRP). **Forest and Wood Products (2023).**, 76(1), 23-32.

- 3. M. Sharari, A. Rostampour-Haftkhani, M. Ahmadi, B. Moezzipour, F. Hajializadeh, Strengthening of the cross-laminated timber using glass fiber-reinforced polymer on the lateral performance of the single shear lap joints, Iranian Journal of Wood and Paper Industries (2022), 13(1): 1-14.
- 4. **A. Rostampour-Haftkhani**, M. Sharari, M. Arabi, F. Hajializadeh, Improvement of the bending moment capacity of mitered MDF frame under diagonal tension by using of the densified poplar dowel, **Iranian Journal of Wood and Paper Industries (2022)**, 12(4): 561-573.
- 5. **A. Rostampour-Haftkhani**, A. Chavooshi, M. Arabi, Simulation and prediction of bending performance of wood plastic composite profiles using finite element method by ANSYS Workbench software, **Iranian Journal of Wood and Paper Industries (2022)**, 13(3): 325-344.
- 6. **A. Rostampour-Haftkhani**, F. Abdoli, M. Abdeh, Performance evaluation of regression models for predicting dimensional stability of heat-treated silver fir wood based on mass loss, contact angle, and color changes, **Forest and Wood Products (2022)**, 74(4): 501-513.
- 7. **A. Rostampour-Haftkhani**, F. Hajializadeh, M. Arabi, The effect of spline material, adhesive type, and screw on bending moment capacity of the mitered frame corner joints made of medium-density fiberboard (MDF) under diagonal tension, **Forest and Wood Products (2022)**, 75(2): 169-184.
- 8. M. Arabi, **A. Rostampour-Haftkhani**, R. Poorbaba, An artificial neural network model for predicting modulus of elasticity and modulus of rupture of particleboard comparison with a multiple linear regression model, **Iranian Journal of Wood and Paper Industries (2021)**, 12(2): 283-297.
- 9. M. Arabi, **H.A. Rostampour**, R. Pourbaba, Prediction Of The Flexural Strength Of Particleboard Using Artificial Neural Network Modeling In Comparison With Regression Models, **Iranian Journal of Wood and Paper Industries (2021)**, 12(2): 283-297.
- 10. **A. Rostampour-Haftkhani**, M. Sharari, M. Ahmadi, B. Moezzipour, A. Shakiba, Flexural performance of cross-laminated timber made out of poplar reinforced with nail and screw, **Iranian Journal of Wood and Paper Industries (2020)**, 11(1): 1-18.
- 11. **A. Rostampour-Haftkhani**, Effect of reinforcement of the galvanized steel, Aluminum sheet and Glass fiber reinforcement polymer wrapped on flexural behavior of screwed glued laminated timber (glulam) made with poplar, **Forest and Wood Products (2020)**, 72(4): 327-338.
- 12. **A. Rostampour-Haftkhani**, A. Shakiba, Reinforcement of flexural performance of screwed cross laminated timber (CLT) panels constructed of poplar by aluminum sheet and glass fiber reinforced polymer wrap, **Forest and Wood Products (2020)**, 73(3): 317-331.
- 13. M. Ahmadi, B. Moezzipour, A. Moezzipour, **A. Rostampour-Haftkhani**, M. Sharari, Utilization of recycled fibers from MDF wastes and waste paper for manufacturing fiberboard and the effect of poly vinyl acetate on its practical properties, **Iranian Journal of Wood and Paper Industries (2020)**, 11(2): 173-183.
- 14. **A. Rostampour-Haftkhani**, Experimental study on flexural performance of poplar glued-laminated timber constructed by mechanical fastener and comparing them with those made with cold press, **Iranian Journal of Wood and Paper Industries (2019)**, 10(3): 347-360.
- 15. **A. Rostampour-Haftkhani**, M. Layeghi, G. Ebrahimi, K. Pourtahmasi, Evaluation of bendiing performance of cross laminated timber (clt) made out of populus alba), **Iranian Journal of Wood and Paper Industries (2017)**, 8(1): 67-78.
- 16. M. Saadatnia, S. Eshaghi, **A. Rostampour-Haftkhani**, Nondestructive evaluation of acoustical and mechanical properties of bagasse fiber composites by flexural vibration method (Lohe Sabz & Karoon factories), **Iranian journal of wood and paper industries (2015)**, 6(2): 217-226.
- 17. M. Dalvand, S. Maleki, G. Ebrahimi, A. Rostampour-Haftkhani, Investigating the Stress Carrying Capacity of Corner Joints In The Furniture Frame Fabricated With Dowel, Iranian Journal of Wood and Paper Industries (2014), 5(1): 21-32.
- 18. S. Maleki, M. Dalvabd, **A. Rostampour-Haftkhani**, M. Faezipour, The effect of adhesive types and dovetail fitting height on stress carrying capacity of Miter Frame corner joints constructed of particleboard and Medium Density Fiberboard (MDF), **Forest and Wood Products** (2013), 66(2): 203-214.
- 19. **A. Rostampour-Haftkhani**, G. Ebrahimi, M. Arabi, M. Tajvidi, M. Layeghi, Investigation on lateral load of joints made with various screws on commercial wood-plastic composite, **Iranian Journal of Wood and Paper Science Research (2012)**, 27(1): 100-113.
- 20. **A. Rostampour-Haftkhani**, G. Ebrahimi, M. Tajvidi, M. Layeghi, Investigation on withdrawal strength of various screws used in furniture industry in commercial wood plastic composite (wpc) and compare with that in commercial medium density fiberboard (mdf) and particleboard, **Iranian Journal of Natural Resources** (2012), 64(4): 369-382.

- 21. M. Dalvand, S. Maleki, G. Ebrahimi, A. Rostampour-Haftkhani, Determination of stress carrying capacity of doweled corner joints in framed furniture structure constructed of Fir, Iranian Journal of Wood and Paper Industries (2011).
- 22. M. Arabi, M. Faezipour, **A. Rostampour-Haftkhani**, A. Sepehr, Investigation on the effects of density, adhesive content and particle size on withdrawal strength of screw in particleboard made from populus (populus alba) particles, **Journal of Wood and Forest Science and Technology (2010)**, 17(4): 53-69.

#### **Published Books**

- [1] Hamzeh. Yahya, **Rostampour Haftkhani. Akbar,** principles of papermaking chemistry, 2008, University of Tehran Press, ISBN 978-964-03-5853-5 (compose)
- [2] Ebrahimi. Ghanbar, **Rostampour Haftkhani. Akabr**, Wood-Plastic Composites, written by: Anatole, A.Klyosov, Published by John Wiley & Sons, Inc., Hoboken, New Jersey. University Of Tehran Press, 2010 (translation), ISBN:978-964-03-6013-6.
- [3] Ebrahimi. Ghanbar., **Rostampour Haftkhani. Akabr.**, Fatemeh, Taheri., Ali Naghi Karimi., wood: structure and properties. written by: Pentti O. Kettunen, Published by Trans Tech Publications, Ltd. University of Tehran Press, 2014 (translation)



#### Language Skills

- English: Upper-Intermediate (B2)
- Persian: Native

#### Computer Software Skills

- Microsoft Office (Word, Excel, Power point)
- Statistics (SPSS, Minitab, Design-Expert)
- Graphics: Photoshop
- ANSYS, ABAQUS, SolidWorks, AutoCAD, 3D MAX, Sketch Up



### **Technical Skills**

## **Laboratory Skills**

- Mechanical Strength Testing
- o Physical Properties Testing
- Sample Fabrication and

Preparation

## **Professional Carpentry**

- o Constructing Wooden Structures and Furniture
- o Installing Timber Structures for Indoor and Outdoor Applications
- o Skilled in Working with wood Machinery (Sawing, planning, Drilling etc.)



### Work Experience



# **Teaching experience (2018-2023)**

- Vector Mechanics for Engineers: Statics (BSc)
- Mechanics of Materials (BSc)
- Statics and Mechanics of Materials (BSc)
- Mechanics of Wood and Wood-based Composites (BSc)
- Engineering Design of Wood Structures (BSc)
- Furniture Design and Manufacturing (BSc)
- Wood-based composite (BSc)
- Wood-Plastic Composites (BSc)
- Wood identification (BSc)
- o Industrial safety (BSc)
- Transport Phenomena in wood (BSc)
- Wood Destroying Organisms (BSc)
- Research methodology (MSc)

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# **Work experience (2009-2017)**

- Chief Executive Officer (CEO) of Dehkadeye Choobiye 7Almas company for two years (Private limited company)
- o Chief Executive Officer (CEO) of Pardis Saze Kadus company for 5 years (Private limited company)

# Honors and Awards

- Ranked 1000 among more than 500000 competitors in the BSc. entrance examination
- Ranked 10 among more than 200 competitors in the MSc. entrance examination
- Ranked 1 among more than 200 competitors in the PhD entrance examination