PERSONAL INFORMATION:

Full Name: Mozhdeh Mashkour

Nationality: Iranian

Academic Level: Assistant Professor

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EDUCATION:

- **Ph.D:** Production of esterified nanofibrillated cellulose and investigating its effect on the strength and barrier properties of paper, , Gorgan University of Agricultural Sciences and Natural Resources, Iran (2015)

- **M.Sc:** Investigation of the effects of age (3 and 6 years old) of Brutian Pine (Pinus Brutia) on chemical composition and kraft pulp production, Faculty of Forestry and Wood Technology, Gorgan University of Agricultural Sciences and Natural Resources, Iran (2005)

- **B.Sc:** Investigating the condition of fibers and yeild of sulfate pulp at different heights of Heaven tree wood (Ailantus altissima swingle), Faculty of Wood and Paper Engineering, Gorgan University of Agricultural Sciences and Natural Resources, Iran (2002)

RESEARCH INTEREST:

- Modification of Cellulosic and Nanocellulosic fibers
- Anatomical and morphological properties of lignocellulosic materials
- Paper recycling

PUBLICATION:

Mozhdeh, Mashkour and Davoud Rasouli. 2023. Comparison of Thermal Modification Method with Air and Oil on Physical and Mechanical Properties of Paulownia Wood. Journal of Wood and Forest Science and Technology. 30: 3. 115-131. (In Persian)

Mozhdeh, Mashkour and Ahmad reza Saraeian**. 2021.** The effect of glanapone organic complex on the Properties of ONP Deinked Pulp. Journal of Wood and Forest Science and Technology. 28: 3. 91-109 (In Persian)

Mahdi Mashkour, **Mozhdeh Mashkour**. 2020. A Simple and Scalable Approach for Fabricating High-Performance Superparamagnetic Natural Cellulose Fibers and Papers. Carbohydrate Polymers, https://doi.org/10.1016/j.carbpol.2020.117425

Mozhdeh Mashkour, E Afra, H Resalati. 2019. Direct esterification of reinforced papers by immersion method and evaluation of their properties. Wood Science and Technology. 53: 5 1035-1050

Mashkour, Mozhdeh., Afra, E., Resalati, H., & Mashkour, Mahdi. 2015. Moderate surface acetylation of nanofibrillated cellulose for the improvement of paper strength and barrier properties. RSC Advances. 60179-60187.

Mashkour, Mahdi., Kimura, T., Kimura, F., **Mashkour, Mozhdeh**., & Tajvidi, M. 2014. One-dimensional core–shell cellulose-akaganeite hybrid nanocrystals: synthesis, characterization, and magnetic field induced self-assembly. RSC Advances. 4:94. 52542-52549.

Mozhdeh, Mashkour, E., Afra, H., Resalati. 2016. Prediction of nanofibrillated cellulose reinforced acetylated papers properties using artificial neural networks. J. of Wood & Forest Science and Technology, 23: 4. 269-292. (In Persian)

Ahmad reza Saraeian, and **Mozhdeh, Mashkour. 2013.** The effect of poly acrylic acid, sodium salt grafted to poly ethylene oxide complex on the physical and optical properties of old newsprint paper deinked pulp. Iranian Journal of Wood and Paper Science Research. 28: 3. 405-416. (In Persian)

Mozhdeh, Mashkour and Ahmad reza Saraeian**. 2010.** Comparison of Fiber Morphology and Chemical Compositions of Rice Straw Parts. Journal of Wood and Forest Science and Technology. 18: 3. 185-190. (In Persian)

S.Z., Hosseini, and **Mozhdeh, Mashkour**. 2007. Effect of age of Kalaleh Brutian Pine (Pinus brutia Michx.) tree on its wood chemical composition and Kraft pulp properties. Journal of agricultural sciences and Natural Resources. 14: 1. 72-80. (In Persian)

Mozhdeh, Mashkour, and Elyas., Afra, 2015. A review of nanocellulose surface chemical modification methods. Nano World Scientific-Extension Quarterly. 38: 39-45. (In Persian)

Mozhdeh, Mashkour, Elyas., Afra and Hossein, Resalati., 2015. Nanofibrillated cellulose; Review of production, features and application. Nano World Scientific-Extension Quarterly. 36: 47-54. (In Persian)

Research Report

Mozhdeh, Mashkour and Ahmad reza Saraeian**. 2022. Investigation of** the effect of sodium silicate replacement with organic complexes in the deinking of ONP on the Properties of recycled papers. Vice Presidency for Research and Technology, 28p.	This research was sponsored financially by Gorgan University of Agricultural Sciences and Natural Resources.

CONFERENCE PRESENTATIONS

Mashkour, Mozhdeh. (2022). Nanocellulose and its applications in papermaking. Oral presentation delivered at 11th National Congress of the New Technologies in Sustainable Development of Iran. Tehran, Iran, March. 6p.

Mashkour, Mozhdeh. (2021). Paper recycling is a step towards protecting the environment. Oral presentation delivered at the 1stNational Conference on Environment Challenges and Real World Solution. Gorgan, Iran, August. 7p.

Mashkour, Mozhdeh. (2021). Some features and uses of Eucalyptus wood. The first national conference on the industrial potential of fast-growing wood species. Gorgan, Iran, August. 6p.

Mashkour, Mozhdeh. (2020). Detoxification of pulp and paper mill effluent by biological methods. 10th National Conference on Agriculture and Sustainable Natural Resources. Mashhad, Iran, July.

Mashkour, Mozhdeh. (2019). Biological treatment methods as a suitable solution for pulp and paper mill waste. The Fourth International Conference on New Horizons in Agricultural Sciences, Natural Resources and Environment. Full article. Tehran, Iran. April.

Mozhdeh, Mashkour and Ahmad reza Saraeian. (2019). Some properties and applications of Paulownia wood. The first national conference of planting and industry of Paulownia. Gorgan, Iran, April.

Mozhdeh, Mashkour. (2018). Chemical modification of nanocells with the aim of hydrophobicity of its surface. The Second National Conference on Knowledge and Innovation in Wood and Paper Industry. Taleghan, Alborze Province. Iran. February.

Mozhdeh, Mashkour, Iman akbarpour and Ahmad reza Saraeian. (2013). Making urogels from fibrillated nanocellulose and cellulose nanocrystals. The first national conference on nanotechnology and its application in agriculture and natural resources. Tehran, Iran, May.

Akbarpour, I.., Soleimani, A., Resalati, H., and., Mashkour, M., (2012). Technical and economic feasibility of using nano-silica to dehydrate the sludge of the paper unit.. The first national conference on nanotechnology and its application in agriculture and natural resources. Tehran, Iran, May.

Mozhdeh, Mashkour, Iman akbarpour and Elyas, Afra. (2011). Preparation of Nano or Micro Scale Cellulose Films and Their Properties in Different Cellulose. The first national conference on nanomaterials and nanotechnology. Shahroud, Iran,

Mashkour, Mozhdeh. (2010). Investigation of the effect of age of Brutian pine tree on fiber length and chemical composition of its wood. Oral presentation delivered at the the first national conference on new technologies in the wood and paper industries. Chalous, Mazandaran Province, Iran, May.

Mashkour, M., and Hosseinkhani, S. (2010). Investigation and comparison of chemical compounds of wheat straw and rice straw components. Oral presentation delivered at the the first national conference on new technologies in the wood and paper industries. Chalous, Mazandaran Province, Iran, May.

Mashkour, M., Hosseinkhani, S., and Saraeian, Ahmad Reza. (2010). Investigation and comparison of fiber morphology of wheat straw and rice straw components. Oral presentation delivered at the the first national conference on new technologies in the wood and paper industries. Chalous, Mazandaran Province, Iran, May

Book:

Mashkour, Mozhdeh. (2023). Nonwood Plant Fibers for Pulp and Paper. Publications of Gorgan University. Gorgan, Iran. (Translated to Persian).

ACADEMIC TEACHING EXPERIENCE:

Natural fibers (MSc)
Wood identification (BSc)
Lignocellulosic materials identification (BSc)
Wood Physic (BSc)
Wood chemistry (BSc)
Lignocellulosic materials anatomy (BSc)
Chemical conversion of wood (BSc)
Principles of wood drying (BSc)
Functional analysis of lignocellulosic raw materials (PhD)

LANGUAGES: Persian, English