



# Resume

**Saeed KAZEMI NAJAFI**

*Professor in:  
Wood-Based Composites*

## I- Personal Information

**Birth of Date:** 22 June 1969  
**Place of Birth:** Noshahr, IRAN  
**Language:** Persian, English  
**Address:** Wood & Paper Science & Technology Department,  
Natural Resources Faculty,  
Tarbiat Modares University,  
P. O. Box: 46414-356, Nour, Mazandaran, Iran

**Tel:** + 98 11 44553101-3  
**Fax:** + 98 11 44553499  
**E-Mail:** skazemi@modares.ac.ir; skazemi\_najafi@yahoo.com

## II- Education records:

**B. Sc.** Wood & Paper Science & Technology, Natural Resources Faculty,  
University of Tehran (1988 -1992).  
**M. Sc.** Wood & Paper Science & Technology, Natural Resources Faculty,  
University of Tehran (1993 - 1996)  
**Ph. D.** Wood & Paper Science & Technology, Natural Resources Faculty,  
University of Tehran (1997 - 2002).

## III- Seminar and Thesis Publications:

- 1) Kazemi Najfai, S., 1992 Replacing Poplar wood by Iranian forest species in Werzalit manufacturing, B.Sc. Project, Natural Resources Faculty, University of Tehran.
- 2) Kazemi Najfai, S., 1996 Use of gallotannin in formulation of Tannin- Formaldehyde(TF) adhesive or as the filler of phenol – formaldehyde(PF) resin in plywood manufacturing, 1996, M.Sc. thesis, Natural Resources Faculty, University of Tehran.
- 3) Kazemi Najfai, S., 2002 Mechanical (elastic constants) characterization of particleboard by ultrasonic technique, Ph. D. thesis, Natural Resources Faculty, University of Tehran.

#### **IV- Research Interests:**

- 1) Wood-Based Composites
- 2) Wood Plastic Composites
- 3) Nondestructive Testing and Evaluation (NDT&E) of Wood and Wood –Based Products.

#### **V- Research Papers:**

##### **A) In Persian**

- 1) **Kazemi Najafi, S.** and Doosthoseini, K., 2000, The use of gall flour as the filler of Phenol - formaldehyde resin in plywood manufacturing, Iranian Journal of Natural resources 53(20): 155-164.
- 2) **Kazemi Najafi S.,** Bucur, V. and Ebrahimi Gh. 2004, Anisotropy characterization of particleboard by static and acoustic methods, Iranian Journal of Natural Resources 56(4): 481-489
- 3) **Kazemi Najafi S.,** Bucur, V. and Ebrahimi Gh. 2005 Density profile in three types of Iranian particleboards, Iranian Journal of Natural Resources 57(4): 729-737
- 4) **Kazemi Najafi, S.,** Abbasi Marasht, A. and Ebrahimi Gh. 2005 Investigation on Ultrasonic Velocity and Mechanical Properties in Different Angles of Particleboard. Iranian Journal of Natural Resource 58(4): 899-908.
- 5) Rezayati-charani, P., Mohammadi-Rovshandeh J., Navae-Ardeh S., Poorjozi M., Resalati H., **Kazemi- Najafi S.,** 2005 Use of Central composite Design (CCF) in Cellulosic researches and analyzing with regression models, Iranian Journal of Polymer Science and Technology 8: 345-358
- 6) Sefidgaran, R., Resalati, H. and **Kazemi Najafi, S.** 2005 Studying the potentials of producing soda pulps from Colza straw for making fluting paper. Iranian Journal of Natural Resource 59(2): 433-445
- 7) Charmahali, M., **Kazemi Najafi, S.** Tajvidi, M., and Poudinehpoor, M. A. 2006. Mechanical Properties of Wood-Plastic Composite Made from Particleboard and MDF Wastes and Polyethylene(HDPE) Wastes, Iranian Journal of Wood and paper Science Research 20(2):271-284
- 8) Charmahali, M., **Kazemi Najafi, S.,** Tajvidi, M., and Haajhasani, R. 2006. Long Term Water Absorption and Thickness Swelling Behavior of Wood-Plastic Composite Made from Particleboard and MDF Wastes and Polyethylene Wastes. Iranian Journal of Wood and paper Science Research 20(2): 255-270

- 9) **Kazemi Najafi, S.**, Charmahali, M., and Shalbfan, A. 2006. A Study on Density Profile of Three Types of Medium Density Fiberboard (MDF) Used in Iran Market. Iranian Journal of Wood and Paper Science Research 20(2): 285 - 299.
- 10) Ghobadifar, P., **Kazemi Najafi, S.** and Mahdavi, S. 2007 Investigation on Mechanical Properties in Different Angles of Newsprint Paper. Iranian Journal of Natural Resource 61(1): 153-162.
- 11) Chaharmahali1,M., **Kazemi Najafi1, S.** and Tajvidi, M. (2007) Effect of Blending Method on the Mechanical Properties of Wood-Plastic Composites. Iranian Journal of Polymer Science and Technology 20(3):361-367
- 12) Kiadaliri H. and **Kazemi Najafi, S.** (2007) The effect of leaf feeder moth (*E.defoliaria* and *O. Brumata*) on radial growth of forest species Poplar research in north of Iran (case study on hornbeam, beech and maple), Forest and Popular Researches of Iran 15(3): 301-309.
- 13) **Kazemi Najafi, S.**, Mostafazadeh Marzenaki, M., Chaharmahali1,M. and Tajvidi, M. 2008 The Effects of Filler Content and Water Absorption on Creep Behavior of HDPE Waste/MDF Flour Composites. Iranian Journal of Polymer Science and Technology 21(1): 53-59.
- 14) Chaharmahali1,M., **Kazemi Najafi1, S.** and Tajvidi, M. 2006 The effect of producing method on the mechanical properties of wood plastic composites made from particleboard wastes, Iranian Journal of Wood and Paper Science Research 21(1): 33-42
- 15) **Kazemi Najafi, S.**, Najari, S., Pourtahmasi, K., Karimi, A. N. 2008 3D assessment of decay in oak using nondestructive ultrasonic technique, Iranian Journal of Natural Resource 61(3): 723-732
- 16) Chaharmahali1,M., **Kazemi Najafi1, S.** and Tajvidi, M. 2008 Chemical Resistance of Natural Fiber/ High Density Polyethylene(HDPE) composites, Iranian Journal of Natural Resource 61(1): 133-142
- 17) Ebrahimi Gh., Majoob, H., **Kazemi Najafi S.**, 2006 Relationship between moisture content and ultrasonic wave speed during kiln drying of basswood lumber. Iranian Journal of Wood and Paper Science Research 21(1): 1-8.
- 18) Najafi, A., Faezipour,M., Khademi-Islam, H., **Kazemi Najafi S.**, Hemmasi, A.H. 2008 Flexural properties of wood-plastic composites made from lignocellulosic fillers and recycled high density polyethylene manufactured using a dry blend/hot press method. Iranian Journal of Wood and Paper Science Research 22(2): 109-120
- 19) Mostafazadeh Marzenaki, M., **Kazemi Najafi, S.**, Chaharmahali M. and Hajihassani, R. 2009 Study behavior creep composites made mixes particle board and medium density Fiber Board-Recycled from HDPE waste and effect water fiber board absorption on composites. Iranian Journal of Wood and Paper Science Research 24(2): 194-205

- 20) Ghotbifar, A. , **Kazemi Najafi, S.** and Behrooz Eshkiki , R. 2009 A Study on water absorption and thickness swelling behavior of wood flour/glass fiber hybrid composites. Iranian Journal of Wood and Paper Science Research 24(2):315-324
- 21) Nikrai, J., **Kazemi Najafi, S.** and Ebrahimi, Gh. 2009 A Comparative Study on Creep Behavior of Wood Flour-Polypropylene Composite, Medium Density Fiberboard (MDF) and Particleboard. Iranian Journal of Polymer Science and Technology 22(5): 363-371
- 22) **Kazemi Najafi, S.**, Younesi, H., and Nasiri-Avanaki, R. 2009 Effect of sea water on compatibilizer performance in water absorption behavior of wood flour-polypropylene composites. Iranian Journal of Natural Resource 62(3): 301-311
- 23) Ghotbifar, A., **Kazemi Najafi, S.**, Behrooz Eshkiki, R. 2010 Influence of concentration of compatibilizer on long term water absorption and thickness swelling behavior polypropylene wood flour/glass fiber hybrid composites. Iranian Journal of Wood and Paper Industries 1(1): 67-78.
- 24) **Kazemi Najafi, S.**, Mostafazadeh Marzenaki, M., Chaharmahali M. 2010 effect of virgin and degraded polypropylene blends on properties of wood flour polypropylene composites. Journal of Forest and Wood Products 63(1): 47-59
- 25) Behrooz, R., Younesi Kordkheili, H., 2010 **Kazemi Najafi, S.** Effect of lignin Mixing method on physical and mechanical properties of wood flour-polypropylene composites. Iranian Journal of Wood and Paper Industries 1(2): 103-112
- 26) Behrooz, R., Younesi Kordkheili, H., **Kazemi Najafi, S.** Use of Kraft lignin as compatibilizer in wood flour-polypropylene composites. Iranian Journal of Wood and Paper Science Research 26(3): 454-465
- 27) Firouzeh, M., **Kazemi Najafi S.**, Ghasemi I. 2011 Production of Wood/Plastic Composites Based on PP/HDPE Blends: Determination of Optimum Conditions. Iranian Journal of Polymer Science and Technology 24( 1): 43-53
- 28) Masoudifar, S., **Kazemi Najafi, S.**, Ghofrani, M., Zaki Dizaji, H. 2011 Effect of Finger Joint and Scarf Joint on Ultrasonic Parameters. Journal of Forest and Wood Products (JFWP), Iranian Journal of Natural Resources 64( 1):77-89
- 29) Younesi, H., **Kazemi Najafi, S.** 2011. A Comparison between Steam and Water Absorption Behavior in Polypropylene-Wood Fiber Composite. J. of Wood & Forest Science and Technology, 18(2), 129-134
- 30) Younesi Kordkheili, H., Behrooz, R., **Kazemi Najafi, S.** 2011 Using of Kraft lignin by solvent mixing method on properties of wood plastic composites. Iranian Journal of Chemistry and Chemical Engineering 30 (3): 69-76

- 31) **Kazemi Najafi, S.**, Nasiri-Avanaki, A. and Behrooz, R. 2012 Effect of chemical reagents on physical and mechanical properties of wood flour-polypropylene composites. *Journal of Forest and Wood Products* 65(1):57-69
- 32) Kartoolinejad, D., Najafi, A., **Kazemi Najafi, S.**, 2012 , Decay evaluation of damaged beech trees (*Fagus orientalis* L.) adjacent to skid trails by nondestructive stress wave technique. *Iranian Journal of Forest and Poplar Research* 20(4): 622-633
- 33) **Kazemi Najafi, S.**, Sadati, S.E., Ebrahimi, Gh. 2012 Effect of spacing and intercropping on stress wave velocity of planted poplar trees. *Journal of Forest and Wood Products* 65(2):187-197
- 34) **Kazemi Najafi, S.** and Azimi Delarestaghi, A. 2012 Effect of Beech bark Content on Physical and Mechanical Properties of Bark Flour-Polypropylene Composites. *Iranian Journal of Wood and Paper Science Research* 26(4): 811-823.
- 35) Ebrahimi, M., **Kazemi Najafi, S.**, Behrooz, R. 2014 Effects of Relative Humidity and Temperature on Creep Parameters of Medium Density Fiberboard (MDF). *Journal of Forest and Wood Products* 67(2): 347-357
- 36) Younesi-Kordkheili, H., **Kazemi-Najafi, S.**, Eshkiki, R.B., Pizzi, A. 2015. Investigation Changes in Structure and Thermal Properties of Glyoxalated Soda and Kraft Lignins, *Journal of Forest and Wood Products* 68(1): 169-179
- 37) Ghahri, S., **Kazemi Najafi, S.**, Mohebbi, B., 2016 Effect of Ethylene Vinyl Acetate as an Impact Modifier on Creep Behavior of Wood Flour- Recycled Polypropylene Composites . *Journal of Forest and Wood Products* 68(4):785-798
- 38) Reisi Nafchi, H., Abdouss, M. **Kazemi Najafi, S.**, Mohebbi Gargari, R., 2016 Effect of Nanoclay and Oxidized Polypropylene in Solution phase as A Compatibilizer on the Physical and Mechanical Properties of Wood Fiber/Polypropylene Composite. *Journal of Forest and Wood Products* 68(4): 843-858
- 39) Hajihassani, R., Mohebbi, B., **Kazemi Najafi, S.**, Navi, P. 2017 Evaluation of physical and mechanical properties of hygro-thermally modified wood. *Iranian Journal of Wood and paper Science Research* 32(1):1-12.
- 40) Habibi, M., **Kazemi Najafi, S.**, Ghasemi, I. 2017 The effect of mixing method and nanoclay on physical mechanical and morphological properties of wood plastic composite made from recycled low and high density polyethylene blends. *Journal of Forest and Wood Products* 7(1):167-177
- 41) Maleki, S. **Kazemi Najafi, S.**, Ebrahimi, Gh., Ghofrani, M. 2017 Determination of withdrawal resistance of staple joints constructed with various members of upholstered furniture. *Iranian Journal of Wood and Paper Industries* 8(1): 95-108
- 45) Harati Moghadam, Z. Mansouri, H.R., **Kazemi Najafi, S.**, 2019 Production of Phenol-urea-formaldehyde Resin (PUF) and Investigation of its Resistive Properties in Particleboard.

42) Daneshvar, S., Behrooz, R., **Kazemi Najafi, S.**, G Mir Mohamad Sadeghi 2020 Liquefaction of Lignocellulosic Wastes by Using Ethylene Carbonate Solvent: The Effect of Process Variables on Properties. *Nashrieh Shimi va Mohandesi Shimi Iran* 39 (1): 255-266

43) Jazayeri, R., **Kazemi Najafi, S.**, Younesi, H. Kargarfard, A. 2020 Influence of modified graphite on formaldehyde emission from medium density fiberboard (MDF) *Iranian Journal of Wood and Paper Science Research* 35 (4), 348-361

44) Hajihassani, R. Mohebbi, B., **Kazemi Najafi, S.**, 2020 The effect of hygro-thermo-mechanical modification on the applied properties of glulam made from poplar *Iranian Journal of Wood and Paper Industries* 11 (2), 241-253

## B) In English

1) **Kazemi Najafi, S.**, Abbasi Marasht, A. and Ebrahimi Gh. 2004 Anisotropy characterization of particleboard by ultrasonic and static technique. *Russian Journal of Nondestructive Testing* 40(9): 605-610

2) **Kazemi Najafi S.**, Bucur, V. and Ebrahimi Gh. 2005 Elastic constants of particleboard with ultrasonic technique. *Material Letters* 59:2039-2042

3) Rezayati -charani P., Mohammadi- Rovshandeh, J., Hashemi, S. J. and **Kazemi- Najafi, S.** 2005 Influence of dimethyl formamide pulping of bagasse on pulp properties, *Bioresource Technology* 97(18): 2435-2442

4) **Kazemi Najafi, S.**, Hamidinia, E. and M. Tajvidi, M. 2006 Mechanical Properties of Composites from Sawdust and Recycled Plastics. *Journal of Applied Polymer Science*, 100: 3641-3645.

5) **Kazemi Najafi, S.** Tajvidi, M., and Charmahali, M. 2006 A Study on the Long Term Water Uptake Behavior of Lignocellulosic-High Density Polyethylene Composites. *Journal of Applied Polymer Science*, 102: 3907-3911

6) Tajvidi, M., **Kazemi Najafi, S.**, Shekarabi, M. M. and Moteei, N. 2006 Effect of chemical reagents on the mechanical properties of natural fiber polypropylene composites, *Polymer Composites* 27(5): 563-569

7) Tajvidi, M., **Kazemi Najafi, S.** and Moteei, N. 2006 Long term water uptake behavior of natural Fiber/Polypropylene composites" *Journal of Applied Polymer Science* Vol. 99, 2199–2203.

8) **Kazemi Najafi, S.**, Kiaefar, A. Tajvidi, M. and Hamidina, E. 2006 Water Absorption Behavior of Composites from Sawdust and Recycled Plastics. *Journal of Reinforced plastic and Composites*

26(3):341-348

9) **Kazemi Najafi, S.**, Tajvidi, M and Hamidinia, E. 2007 Effect of temperature, plastic type and virginity on the water uptake of sawdust/plastic composites. *Holz als Roh und Werkstoff*. 65(5): 377-382

10) **Kazemi Najafi, S.**, Abbasi Marasht, A. and Ebrahimi Gh . 2007. Prediction of ultrasonic wave velocity in particleboard and fiberboard. *Journal of Material Sciences* 42:789–793

11) Mohebbi B., Talaii I. and **Kazemi-Najafi S.** 2007 Influence of acetylation on fire resistance of beech plywood. *Materials Letters*; 359-362

12) Tajvidi, M, Haghdan, S. and **Kazemi Najafi, S.** 2007 Physical Properties of Novel Layered Composites of wood flour and PVC, *Journal of Reinforced plastic and Composites*, 27(16-17): 1759-1765

13) **Kazemi Najafi, S.**, Kiaefar, A. Tajvidi, M. and Hamidina, E. 2008 Hygroscopic Thickness Swelling rate of Composites from Sawdust and Recycled Plastics. *Wood Science and Technology*, 42:161–168

14) **Kazemi Najafi, S.**, Sharifnia, H. and Tajvidi, M. 2008 Effects of Water Absorption on Creep behavior of Wood–Plastic Composites. *Journal of Composite Materials*, 42(10): 992-1003

15) Mohebbi. B. Ilbeighi, F. **Kazemi Najafi, S.** 2008 Influence of hydrothermal modification of fibers on some physical and mechanical properties of medium density fiberboard (MDF). *Holz als Roh und Werkstoff* 66: 213–218

16) Charmahali, M. و Tajvidi, M .and **Kazemi Najafi, S.** 2008 Mechanical properties of wood plastic composite panels made from waste fiberboard and particleboard, *Polymer Composites* 29(6): 606-610.

17) **Kazemi Najafi, S.**, Kiaefar, A. Tajvidi, M. 2008 Effect of Bark Flour Content on Hygroscopic Characteristics of Wood-Polypropylene Composites. *Journal of Applied Polymer Science* 110(5): 3116–3120.

18) Taaj, M.A., **Kazemi Najafi, S.** and Ebrahimi Gh. 2009. Withdrawal and lateral resistance of wood screw in beech, hornbeam and poplar. *Holz als Roh und Werkstoff* 67(2): 135-140

19) Najafi, A., and **Kazemi Najafi S.** 2009 Effect of temperature on hygroscopic thickness swelling rate of composites from lignocellulosic filler and HDPE, *Polymer Composites*, 30(11):1570-1575

20) Najafi, A., and **Kazemi Najafi S.** 2008 Effect of Load Levels and Plastic Types on Creep Behavior of Wood Sawdust /HDPE Composites. *Journal of Reinforced Plastics and Composites*. 28(21): 2645 – 2653.

- 21) **Kazemi Najafi, S.**, Shalbafan, A., Ebrahimi, Gh. 2009 Internal Decay Assessment in Standing Beech Trees Using Ultrasonic Velocity Measurement. *European Journal of Forest Research* 128(2): 345-350
- 22) **Kazemi Najafi, S.**, Mostafazadeh-Marznaki, M., Charmahali, M., and Tajvidi, M. 2009 Effect of Thermo-Mechanical Degradation of Polypropylene on Mechanical Properties of Wood-Polypropylene Composites, *Journal of Composite Materials*, 43(22): 2543-2554
- 23) Mohebby, B., Younesi, H., Ghotbifar A., and **Kazemi-Najafi, S.** 2010 Water and moisture absorption and thickness swelling behavior in polypropylene/wood flour/glass fiber hybrid composites. *Journal of Reinforced Plastics and Composites*, 29: 830-839.
- 24) Charmahali, M., Mibagheri, J. Tajvidi, M. and **Kazemi Najafi, S.** Mirbagheri, Y. 2010 Mechanical and Physical Properties of Wood-Plastic Composite Panels, *Journal of Reinforced Plastics and Composites* 29(2): 310-319
- 25) Mohebby, B., Fatemeh Tavassoli, F., **Kazemi-Najafi, S.** 2010 Mechanical properties of medium density fiberboard reinforced with metal and woven synthetic nets. *European Journal of Wood Products*. **69(2): 199-206**
- 26) **Kazemi Najafi, S.**, Bahra, A., and Abdous, M. 2011 Effect of Oxidized Polypropylene as a New Compatibilizer on Water Absorption and Mechanical Properties of Wood Flour-Polypropylene Composites. *Journal of Applied Polymer Science* 119: 438–442
- 27) **Kazemi Najafi, S.**, Mostafazadeh-Marznaki, M., Charmahali, M., 2010 Effect of Thermo-mechanical Degradation of Polypropylene on Hygroscopic Characteristics of Wood Flour-Polypropylene Composites *Journal of Polymers and the Environment* 18:720-726
- 28) **Kazemi Najafi, S.**, Younesi Kordkheili, H. 2011 Effect of sea water on water absorption and flexural properties of wood-polypropylene composites *European Journal of Wood Products* 69:553–556.
- 29) **Kazemi Najafi, S.**, Nikray, S.J., Ebrahimi, Gh. 2011 A comparison study on creep behavior of wood–plastic composite, solid wood, and polypropylene. *Journal of Composite Materials* 46(7): 801-808
- 30) Ghahri, S., **Kazemi Najafi, S.**, Mohebby, B., Tajvidi, M. 2012 Impact Strength Improvement of Wood Flour-Recycled Polypropylene Composites. *Journal of Applied Polymer Science* 124(2):1074-1080
- 31) Behrooz, R., Younesi Kordkheili, H., **Kazemi Najafi, S.** 2012 Physical properties of lignin added wood flour polypropylene composites: A comparison of direct and solvent mixing techniques. *Asian Journal of Chemistry* 24(1): 157-160.



- 32) **Kazemi Najafi, S.**, Englund, K. R., 2013 Effect of Highly Degraded High Density Polyethylene (HDPE) on Processing and Mechanical Properties of Wood Flour-HDPE Composites, *Journal of Applied Polymer Science* 129(6):3404-3410.
- 33) **Kazemi Najafi, S.**, 2013 Use of recycled plastics in wood plastic composites - a review, *Waste Management*, 33: 1898–1905.
- 35) [Mohebbi, B.](#), Kevily, H., [Kazemi-Najafi, S.](#) 2014.Oleothermal modification of fir wood with a combination of soybean oil and maleic anhydride and its effects on physico-mechanical properties of treated wood. *Wood Science and Technology*, 48(4):797–809
- 36) Younesi-Kordkheili, H., **Kazemi-Najafi, S.**, Eshkiki, R.B., Pizzi, A. 2014. Improving urea formaldehyde resin properties by glyoxalated soda bagasse lignin. [European Journal of Wood and Wood Products](#) 73(1): 77-85
- 37) Reisi Nafchi, H., Abdouss, M. **Kazemi Najafi, S.**, Mohebbi Gargari, R., Mazhar, M. 2015. Effects of nano-clay particles and oxidized polypropylene polymers on improvement of the practical properties of wood-polypropylene composite. *Advanced Composite Materials* 24(3): 239-248
- 38) Reisi Nafchi, H., Abdouss, M. **Kazemi Najafi, S.**, Mohebbi Gargari, R., Mazhar, M. 2015, Effect of nanoclay particles and oxidized polypropylene on improvement of thermal properties of wood plastic composites. *Maderas. Ciencia y tecnología* 17(1): 45 – 54
- 39) Habibi, M., **Kazemi Najafi, S.**, Ghasemi, I. 2017 Rheological and mechanical properties of composites made from wood flour and recycled LDPE/HDPE blend, *Iranian Polymer Journal* 26(12):949–956
- 40) Younesi-Kordkheili, H., **Kazemi-Najafi, S.**, Behrooz, R. 2017.Influence of nanoclay on urea–glyoxalated lignin–formaldehyde resins for wood adhesive. *The Journal of Adhesion* 93(6): 431–443
- 41)Ebrahimi, M., **Kazemi-Najafi, S.**, Behrooz, R. 2017.Effect of relative humidity and temperature on formaldehyde emission from MDF subjected to load. *INTERNATIONAL WOOD PRODUCTS JOURNAL* 8(3) 155–160
- 42) Neyciyani, B., **Kazemi Najafi, S.**, Ghasemi, I. 2017 Influence of foaming and carbon nanotubes on sound transmission loss of wood fiber-low density polyethylene composites. *Journal of Applied Polymer Science* 45096 :1- 6

- 43) Maleki, S. **Kazemi Najafi, S.**, Ebrahimi, Gh., Ghofrani, M. 2017 Withdrawal resistance of screws in structural composite lumber made of poplar (*Populus deltoides*). *Construction and Building Materials* 142: 499–505
- 44) Sharifnia, H., **Kazemi Najafi, S.**, Ahmadi-Najafabadi, m.Landis, E. 2017 Acoustic emission characterization of failure mechanisms in oriented strand board using waveletbased and unsupervised clustering methods. *Wood Science and Technology* 51: 1433–1446
- 45) Molkara, F., **Kazemi Najafi, S.**, Ghasemi, I. 2018 Foam morphology and sound transmission loss of foamed wood flour/low-density polyethylene (LDPE)/nanoclay composites *Journal of Thermoplastic Composite Materials* 31(11):1470-1482
- 46) Hajihassani, R., Mohebby, B., **Kazemi Najafi, S.**, Navi, P. 2018 Influence of combined hygro-thermomechanical treatment on technical characteristics of poplar wood. *Maderas: Ciencia y Tecnologia* 20(1): 117-128
- 47) Ansari Chaharsoughi, M., **Kazemi Najafi, S.**, Behooz, R. 2019 Formaldehyde Emission From PVC–Wood Composites Containing MDF Sanding Dust. *Journal of Vinyl & Additive Technology* 25(2): 159-164.
- 48) Mosavi-Mirkolaei, S.T. **Kazemi Najafi, S.**, Tajvidi, M. 2019 Physical and mechanical properties of wood-plastic composites made with microfibrillar blends of LDPE, HDPE and PET *Fibers and Polymers* 20 (10): 2156-2165
- 49) Daneshvar, S., Behrooz, R. **Kazemi Najafi, S.**, Sadeghi, G.M.M. 2019 Characterization of polyurethane wood adhesive prepared from liquefied sawdust by ethylene carbonate. *BioResources* 14 (1), 796-815
- 50) Mousavi, S.M. **Kazemi Najafi, S.**, Elyasi, M. 2019 Experimental Analysis Of Connections Made With Wood-Based Panels And Brackets Under Cyclic Loading *Sigma Journal of Engineering and Natural Sciences* 10 (1): 1-9
- 51) Khakzad, J., Shalbafan, A., **Kazemi Najafi, S.** 2020 Lightweight tubular fiberboard: Effect of hole diameters and number on panel properties. *Maderas. Ciencia y Tecnología* 22 (3): 311-324
- 52) Zahedi, Z. **Kazemi Najafi, S.**, Füssl, J., Elyasi, M. 2020 Characterization of Engineering Elastic Parameters of Oriented Strand Board (OSB) Manufactured from Poplar (*Populus deltoides*) Strands Using Ultrasonic Contact Pulse Transmission. *Drvna industrija* 71 (3): 227-234
- 53) Barzegar, M., Behrooz, R., Mansouri, H.R., **Kazemi Najafi, S.**, Lorenz, L.F., Frihart, C.R. 2020 Comparison of canola and soy flour with added isocyanate as wood adhesives. *Journal of the American Oil Chemists' Society* 97 (12): 1371-1383

- 54) Daneshvar, S., Behrooz, R. **Kazemi Najafi, S.**, Sadeghi, G.M.M. 2021 Preparation of Polyurethane Adhesive from Wood Sawdust polyol: Application of Response Surface Methodology for Optimization of Catalyst and Glycerol. *Biointerface Res. Appl. Chem* 12: 1870-1883
- 55) Eghtedarnejad, N., **Kazemi Najafi, S.**, Shalbafan, A. 2021 The effect of chipping method on the geometry of particles produced from Date Palm frond. *BioResources* 16(1): 1131-1143
- 56) Jamalpour, S., Shalbafan, A., **Kazemi Najafi, S.** 2022 Evaluation of lightweight fiberboard using recycled polystyrene as a part of binder. *Journal of Wood and Forest Science and Technology* 29 (1): 1-24
- 57) Zahedi, Z. **Kazemi Najafi, S.**, Füssl, J., Elyasi, M. 2022 Determining elastic constants of poplar wood (*Populus deltoides*) by ultrasonic waves and its application in the finite element analysis. *Wood Material Science & Engineering* 17 (6): 668-678
- 58) Nikkiah Shahmirzadi, A., **Kazemi Najafi, S.**, Younesi, H. 2022 Potential assessment of hybrid biochar from the date palm and pistachio residues. *Journal of Wood Chemistry and Technology* 42 (6): 435-444
- 59) Zamani, R., **Kazemi Najafi, S.**, Younesi, H. 2022 Utilization of activated carbon as an additive for urea-formaldehyde resin in medium density fiberboard (MDF) manufacturing. *Journal of Adhesion Science and Technology* 36 (21): 2285-2296

## **VI -List of Papers Presented in Congresses and Seminars:**

- 1) **Kazemi Najafi S.** and Bucur, V., Nondestructive Characterization of Particleboard with Acoustic Methods, 6th Conference of Acoustic, April 2002, Lille, France
- 2) Bucur V. and **Kazemi Najafi S.**, Negative Poisson Ratio in Wood and Particleboard, 11th International Symposium on Nondestructive Characterization of Materials, June 2002, Berlin, Germany.
- 3) **Kazemi Najafi, S.**, Ebrahimi Gh. And Abbasi Marasht A., Anisotropy Characterization of Particleboard by Ultrasonic and Static Methods, 3th International Conference of the European Society for Wood Mechanics, September 2004, Villa real, Portugal
- 4) **Kazemi Najafi, S.** and Ebrahimi, Gh. 2005 Three methods for the prediction of longitudinal ultrasonic wave velocity in particleboard and fiberboard. 14th International Symposium on Nondestructive testing of wood, 2-4 May, Hannover, Germany
- 5) Talaii, A., Mohebby, B., and **Kazemi najafi, S.** 2006, Thermal analysis of acetylated beech layers, The 1st Iranian Combustion Conference, 15-17 Feb. Tehran Iran.
- 6) Mohebby, B., Talaii, A., and **Kazemi najafi, S.** 2006, Fire resistance of acetylated beech

plywood, The 1st Iranian Combustion Conference, 15-17 Feb. Tehran, Iran

7) Najafi, A., and **Kazemi Najafi S.** 2007 Influence of water absorption on mechanical properties of

lignocellulosic/HDPE composites, Second International Conference on Recent Advances in Composites Materials, 20-23 Feb. New Delhi, India

8) **Kazemi Najafi, S.**, Ebrahimi, Gh. and Shalbafan, A. 2007 Nondestructive Evaluation of Beech Trees Using Ultrasonic Technique. 15th International Symposium on Nondestructive testing of wood, 10-12 September, Duluth, USA

9) Najafi, A., and **Kazemi Najafi S.** 2007 Physical and mechanical properties of wood plastic composites made from rice hull and recycled plastics. SoLAP3, 20 November, Tehran, Iran

10) **Kazemi Najafi, S.**, 2008 Ultrasonic Techniques for Wood and Wood Based Materials: A review. The 2nd International Conference on Technical Inspection and NDT (TINDT2008), 21-22 October, Tehran, Iran

11) **Kazemi Najafi, S.**, Ebrahimi, Gh. and Behjati, S. 2008 Nondestructive evaluation of wood plastic composites using ultrasonic technique, 8th International Conference and NDT Exposition 4-6 November, Brno, Czech Republic

12) **Kazemi Najafi, S.**, 2008 Using recycled plastics in manufacturing of wood plastic composites. The 1st International Conference on Composites: Characterization, Fabrication and Application (CCFA-1), 15-18 December, Kish Island, Iran

13) Behjati S., **Kazemi Najafi S.** and Ghotbifar A. 2008. Comparison of Elastic Modulus of Wood Flour/Glass Fiber Hybrid Determined by Static and Nondestructive methods. The 1st International Conference on Composites: Characterization, Fabrication and Application (CCFA-1), 15-18 December, Kish Island, Iran

14) Ghotbifar A., **Kazemi Najafi S.** and Behrooz Eshkiki R. 2008 Physical and Mechanical Properties of Polypropylene Wood Flour/Glass Fiber Hybrid Composites. The 1st International Conference on Composites: Characterization, Fabrication and Application (CCFA-1), 15-18 December, Kish Island, Iran

15) Kiaefar, A., **Kazemi Najafi, S.** and Kord, B. 2008 Effect of Bark Flour Content on Mechanical Properties of Wood-Polypropylene Composites. The 1st International Conference on Composites: Characterization, Fabrication and Application (CCFA-1), 15-18 December, Kish Island, Iran

16) Najafi, A., and **Kazemi Najafi S.** 2008 Effect of Filler Type and Load Levels on Creep Behavior of lignocellulosic filler/HDPE Composites. The 1st International Conference on Composites: Characterization, Fabrication and Application (CCFA-1), 15-18 December, Kish Island, Iran

17) Nikrai, J, **Kazemi Najafi, S.**, Ebrahimi, Gh. 2008 A Comparison Study on Creep Behavior of

Wood-Plastic Composite, Particleboard and MDF The 1st International Conference on Composites: Characterization, Fabrication and Application (CCFA-1), 15-18 December, Kish Island, Iran

18) Sharifnia, H., Mohebbi, B., **Kazemi Najafi, S.**, 2008 Assessing static and dynamic modulus of elasticity of modified poplar wood, In CD Proceeding of The 1th Iranian Conference on supplying raw Materials and Development of wood and Paper Industries, 3-4 November. Gorgan, Iran.

19) Tavassoli, F., Mohebbi, B., **Kazemi Najafi, S.**, 2008 Reinforced Medium Density Fiberboard with Metal and Woven Synthetic Nets and its Mechanical Properties, In CD Proceeding of The 1th Iranian Conference on supplying raw Materials and Development of wood and Paper Industries, 3-4 November. Gorgan, Iran.

20) Najafi, A., and **Kazemi Najafi S.** 2008 Study on Short Term Flexural Creep Behavior of Sanding of MDF/HDPE Composites, In CD Proceeding of The 1th Iranian Conference on supplying raw Materials and Development of wood and Paper Industries, 3-4 November. Gorgan, Iran.

21) **Kazemi Najafi, S.** 2009 Detection of internal decay in standing trees using nondestructive methods. National Conference of Forest, 12-14 May, Karaj, Iran

22) **Kazemi Najafi, S.**, Bolandbakht, F. and Najafi A. 2009 Detection of Internal Decay in Standing Beech Trees Using Ultrasonic Technique. 16th International Symposium on Nondestructive testing of wood, 12-14 October, Beijing, China

23) Mohebbi B., Sharifnia-Dizboni H., **Kazemi-Najafi S.**, 2009: Combined Hydro-Thermo-Mechanical Modification (CHTM) as an Innovation in Mechanical Wood Modification, European Conference on Wood Modification, 27-29 April 2009, Stockholm, Sweden: 353-362.

24) Mohebbi B., Fallah-Moghadam., **Kazemi-Najafi S.**, 2010: Mechanical and interfacial adhesion properties of acetylated wood fibre reinforced polypropylene composites. The 5<sup>th</sup> European Conference on Wood Modification. 20-21 September, Riga, Latvia

25) Fallah-Moghadam., Mohebbi B., **Kazemi-Najafi S.**, 2010: Absorption and diffusion of water in acetylated wood fibre/polypropylene composites The 5<sup>th</sup> European Conference on Wood Modification. 20-21 September, Riga, Latvia

26) **Kazemi Najafi, S.**, Ghahri, S., Mohebbi, B., 2011 Effect of impact modifier and coupling agent on impact strength wood flour/recycled polypropylene composites. Joint International Symposium on Wood Composites & Veneer Processing and Products. April 5-7, Seattle, USA

27) Masoudifar, S., **Kazemi Najafi, S.**, Ghofrani, M., Zaki Dizaji, H. 2011 Ultrasonic assessment of Finger Joint in beech wood. Forest Products Society's 65th International Convention. June 19-21, Portland, USA

- 28) Sharifi, F., **Kazemi Najafi, S.**, Mohebbi, B. 2012 Effect of nanoclay on impact strength of wood flour-recycled polypropylene composites. First NANOTEchnology and Its Application in Agriculture and Natural Resources Conference, 15-16 May, Karaj, Iran
- 29) Sharifi, F., **Kazemi Najafi, S.**, Mohebbi, B. 2013 Improvement of some physical and mechanical properties of sawdust/recycled polypropylene composites using nanoclay 2<sup>nd</sup> International Conference on Environment, Agriculture, and Food Sciences (ICEAFS). Kuala Lumpur, Malaysia
- 30) Hatami, S. **Kazemi Najafi, S.**, Mohebbi, B. 2015 Photostabilization of wood flour filled/polyvinyl chloride composites by addition of pigments during natural weathering The 6th International Color & Coating Congress, Tehran. Iran
- 31) **Kazemi Najafi, S.**, Maleki, S., Ebrahimi, Gh. And Ghofrani, M. 2016 Withdrawal resistance of staple joints constructed with OSL and poplar wood. 2016. Eco-efficient Resource Wood with special focus on hardwoods, Sopron, Hungary
- 32) **Kazemi Najafi, S.**, Zamani, R., Younesi, H. 2017 Activated Carbon Production from Wood Based Panels Waste and its Application as an Additive of Urea Formaldehyde Resin. 25th European Biomass Conference and Exhibition (EUBCE), 12-15 June, Stockholm, Sweden.
- 33) **Kazemi Najafi, S.**, Mousavi, S.M, Elyasi, M., 2018 Evaluation of Connections Made By Different Wooden Materials and Bracket under Cyclic Loads. International Forest Products Congress 2018, 26-29 September, Trabzon, Turkey.

## VII- Research Reports

- 1) **Kazemi Najafi, S.**, Ebarhimi, Gh. and Tabari, M. 2004 determination of engineering properties of Boxwood. Research Report.Natural Resources and Marine Sciences Faculty. Tarbiat Modares University
- 2) Kiadeliri, H., **Kazemi Najafi, S.** and Ahangaran, Y. 2005, Influence of insect attack on annual growth of trees in northern forests of Iran. Research report, Islamic Azad University on Noshahr & Chaloos, Iran
- 3- **Kazemi Najafi, S.**, 2010 Nondestructive Assessment of Poplar Trees by Stress Wave (2010)
- 4- **Kazemi Najafi, S.**, 2014 Effect of foaming and nanoparticles on acoustic properties of wood flour/low density polyethylene composites
- 5- **Kazemi Najafi, S.**, 2017 Activated Carbon production from MDF Sanding Dust and its Utilization in Urea-Formaldehyde Resin for Formaldehyde Emission Reduction

## VIII- Books:

1-Bucur, V., and **Kazemi Najafi, S.** 2010 Chapter 16: Delamination Detection in Wood – Based Composites Panel Products Using Ultrasonic Techniques. In: V. Bucur(Ed.) Delamination in Wood, Wood Products and Wood-Based Composites. Springer (Due: 14 Sep. 2010)

2- Saeed Kazemi Najafi, 2016 Nondestructive Assessment of Standing trees, Published by Tarbiat Modares University ( In Persian)

## **IX - Courses Taught:**

- 1) Instruments and methods of measurement in wood industries (M. S. Course)
- 2) Processes of Wood Industries (M. Sc. course)
- 3) Adhesive technology in wood industries (M. Sc. course)
- 4) Nondestructive tests (M. Sc. course)
- 5) Recycling of wood based materials (Ph. D course)
- 6) Wood Plastic Composites (M.Sc. course)

## **X- Others**

- Head of Department 2001-2007 and 2012-2016
- 9 months visiting scientist in LERMAB of Nancy University (France, 2001)
- Participating in training course of NDT on wood in West Hungary University(Sopron, Hungary, 2005)
- Organizing a wood NDT workshop in Tarbiat Modares University(May 2010, Iran)
- Editorial board member of 2 Iranian scientific and research Journals
- Board committee of Iranian Scientific Association of Wood & Paper Industries(ISAWPI)
- 8 months sabbatical leave in Washington State University