

Resume

MEHDI TAJVIDI, PHD

Assistant Professor of Renewable Nanomaterials

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EMPLOYMENT:

- September 2013-present: **Assistant Professor of Renewable Nanomaterials**, School of Forest Resources, University of Maine, Orono, ME, USA
- August 2012-July 2013: **Research Associate**, Department of Chemical Engineering, Faculty of Engineering, University of Waterloo, Waterloo, ON, Canada.
- August 2011-July 2012: **Visiting Professor**, Department of Chemical Engineering, Faculty of Engineering, University of Waterloo, Waterloo, ON, Canada.
- November 2010-September 2011: **Associate Professor**, Department of Wood and Paper Science and Technology, Faculty of Natural Resources, University of Tehran, Karaj, Iran.
- September 2008-November 2010: **Assistant Professor**, Department of Wood and Paper Science and Technology, Faculty of Natural Resources, University of Tehran, Karaj, Iran.
- September 2007-September 2009: **Visiting Assistant Professor**, Laboratory of Polymeric Materials, Department of Biomaterials Science, Graduate School of Agricultural and Life Sciences, the University of Tokyo, Tokyo, Japan.
- September 2003- September 2007: **Assistant Professor**, Department of Wood and Paper Science and Technology, Faculty of Natural Resources, University of Tehran, Karaj, Iran.
- October 2001-July 2002: **Visiting Scientist**, Forest Products Laboratory, Madison, Wisconsin, USA.

EDUCATION:

- **PhD in Natural Resources Engineering, Equivalent to “Earned Doctorate Degree”, assessed by International Credential Assessment Service of Canada (ICAS)**, Faculty of Natural Resources, University of Tehran, Iran, July 2003.
- **M.Sc. in Natural Resources Engineering, Equivalent to “Master’s Degree”, assessed by International Credential Assessment Service of Canada (ICAS)**, Faculty of Natural Resources, University of Tehran, Iran, May 1998.
- **B.Sc. in Natural Resources Engineering, Equivalent to “Bachelor’s Degree (Four Years)”, assessed by International Credential Assessment Service of Canada (ICAS)**, Faculty of Natural Resources, University of Tehran, Iran, July 1996.

OTHER PROFESSIONAL EXPERIENCE:

- Executive Director, Iranian Journal of Wood and Paper Industries, 2010-present.
- Head of the library, Faculty of Natural Resources, University of Tehran, Karaj, Iran, 2004-2007 and March-September 2011.
- ESL (English as a Second Language) Teacher, 1998-2011, various language institutes, Iran.
- Language Editor, Journal of Agricultural Science and Technology (JAST), 2010-2012.
- Editor Assistant, Iranian Journal of Natural Resources, 1999-2001.

RESEARCH INTERESTS:

- Specialty bio-based nano-composites, superparamagnetic all cellulose composites
- Cellulose nanocrystals (CNC), Cellulose nanofibrils (CNF) and their composites
- Nano-mechanics
- Natural fiber-thermoplastic/thermosetting composites used for automotive applications
- Mechanical properties of polymer matrix composites including creep, stress relaxation, fatigue and dynamic mechanical properties
- Design and fabrication of novel structural components made of natural fiber polymer composites
- Biomass utilization and conversion, forest waste utilization
- Bio-composites processing and formulation
- Environmental effects on mechanical properties of composites including humidity, high temperatures and fire
- Joints, mechanical fasteners, adhesives performance under climatic variations
- Image analysis in engineering applications

CERTIFICATES, ACHIEVEMENTS AND AWARDS:

- Best Professor Award, 2011, Forests, Rangelands and Watershed Management Organization, Iran.
- Research Excellence Award, 2010, College of Agriculture and Natural Resources, University of Tehran, Iran.
- Teaching Excellence Award, academic year 2005-2006, College of Agriculture and Natural Resources, University of Tehran, Iran.
- Japan Society for the Promotion of Science (JSPS) Postdoctoral Fellowship Award, 2007-2009.
- Teaching Excellence Award, academic year 2006-2007, College of Agriculture and Natural Resources, University of Tehran, Iran.
- University of Tehran PhD Fellowship, 1999-2002.
- First rank, University of Tehran PhD Entrance Examination, 1998.
- First rank graduated PhD student, University of Tehran, 2003.
- First rank graduated Master's student, University of Tehran, 1998.
- First rank, National Master's Entrance Examination, 1996.
- IELTS (Academic) English Test Score (Band score 8.5 out of 9), 2012.

LANGUAGES SPOKEN:

- English (near native)
- Farsi (mother tongue)
- Japanese (elementary)

PUBLICATIONS:

PEER REVIEWED PAPERS:

2014:

1. Mashkour, M., **M. Tajvidi**, F. Kimura, H. Yousefi, and T. Kimura, 2014. Strong highly anisotropic magneto-cellulose nanocomposite films made by chemical peeling and in-situ welding at interface using ionic liquid. *ACS Applied Materials & Interfaces*, 6(11):8165-8172.
2. Mashkour, M., T. Kimura, F. Kimura, M. Mashkour and **M. Tajvidi**, 2014. Tunable self-assembly of cellulose nanowhiskers and polyvinyl alcohol chains induced by surface tension torque (STT). *Biomacromolecules*, 15 (1): 60–65.
3. Derikvand, M., GH. Ebrahimi and **M. Tajvidi**, 2014. A feasibility study of using two-component polyurethane adhesive in constructing wooden structures. *Journal of Forestry Research*, 25(2): 477-482.
4. Elyasi, A., K. Dusthoseini, M. Tajvidi and A.H. Behraves, 2014. Effect of filler material and foaming agent on practical properties of wood plastic composites. *Iranian Journal of Wood and Paper Science Research*, 28(4): 597-612.
5. **Tajvidi, M.** and L. C. Simon, 2014. High temperature creep behavior of wheat straw-isotactic/impact modified polypropylene composites. Accepted for publication in: *Journal of Thermoplastic Composite Materials*.

2013:

6. Motiee, N., Gh. Ebrahimi, **M. Tajvidi** and M. Layeghi, 2013. Minimizing hot-press time in the manufacturing process of wood plastic composites. *Iranian Journal of Wood and Paper Industries*, 4(2): 85-93.
7. Dalvand, M., Gh. Ebrahimi, **M. Tajvidi** and M. Layeghi, 2013. Establishing mathematical model for withdrawal resistance of wooden dowel in plywood. *Iranian Journal of Wood and Paper Industries*, 4(1): 37-47.
8. Fathollahzadeh, A., A.A. Enayati, Y. Z. Erdil and **M. Tajvidi**, 2013. Stiffness changes in MDF kitchen cabinet after accelerated aging test. *Iranian Journal of Wood and Paper Industries*, 4(1): 131-141.
9. Darabi, P., A. N. Karimi, M. Azadfallah and **M. Tajvidi**, 2013. Properties Evaluation of High Density Polyethylene Composite Filled with Bagasse after Accelerated Weathering, *Iranian Journal of Wood and Paper Industries*, 3(2):119-130.
10. **Tajvidi, M.**, A. Mohan Sharma, and L. C. Simon, 2013. Thermal transitions and temperature dependent mechanical behavior of wheat straw/talc isotactic/impact modified polypropylene composites. *Journal of Reinforced Plastics and Composites*. 32(19): 1430-1443.
11. Rasouli, D., M. Faezipour, M.R. Masteri Farahani and **M. Tajvidi**, 2013. The effect of zinc borate and additives on weathering performance of wood-high density polyethylene composites. *J. of Wood & Forest Science and Technology*, 20 (2): 41-58.

2012:

12. Rostampour Haftkhani, A., GH. Ebrahimi, M. Arabi, **M. Tajvidi** and M. Layeghi, 2012. Investigation on lateral load of joints made with various screws on commercial wood-plastic composite. *Iranian Journal of Wood and Paper Science Research*, 27(1): 100-113.
13. Mirzaei, B. and **M. Tajvidi**, 2012. Investigation on the stress relaxation behavior of milled newsprint filled polyethylene composite. *Iranian Journal of Wood and Paper Science Research*, 27(2): 226-234.
14. Matini Behzad, H., A. Ashori, A. Tarmian and **M. Tajvidi**, 2012. Impacts of wood preservative treatments on some physico-mechanical properties of wood flour/high density polyethylene composites. *Construction and Building Materials*, 35: 246–250.

15. Eslah, F., A. A. Enayati, **M. Tajvidi** and M. M. Faezipour, 2012. Regression Models for the Prediction of Poplar Particleboard Properties based on Urea Formaldehyde Resin Content and Board Density, *Journal of Agricultural Science and Technology (JAST)*, 14:1321-1329.
16. Shahverdi, M., A. Tarmian, H. Dashti, G. Ebrahimi, and **M. Tajvidi**, 2012. Mechanical Properties of Poplar Wood (*Populus alba*) Dried by Three Kiln Drying Schedules, *BioResources*, 7(1): 1092-1099.
17. Maleki, S., A. Rostampour Haftkhani, M. Dalvand, M. Faezipour and **M. Tajvidi**, 2012. Bending moment resistance of corner joints constructed with spline under diagonal tension and compression. *Journal of Forestry Research*, 23(3): 481-490.
18. Ghahri, S., S. Kazemi Najafi, B. Mohebbi and **M. Tajvidi**, 2012. Impact Strength Improvement of Wood Flour-Recycled Polypropylene Composites. *Journal of Applied Polymer Science*, 124(2): 1074-1080.

2011:

19. Rostampour Haftkhani, A., GH. Ebrahimi, **M. Tajvidi**, and M. Layeghi, 2011. Investigation on withdrawal strength of various screws used in furniture industry in commercial wood plastic composites (WPC) and comparison with those in commercial medium density fiberboard (MDF) and particleboard. *Iranian Journal of Natural Resources*, 64(4):369-382.
20. Eslah, F., A. A. Enayati, M. M. Faezipour and **M. Tajvidi**, 2011. Effect of increasing board density and amount of UF resin on particleboard properties, *Iranian Journal of Wood and Paper Industries*, 2(1):103-113.
21. Mashkour, M., **M. Tajvidi**, T. Kimura, F. Kimura, and G. Ebrahimi, 2011. Fabricating unidirectional magnetic papers using permanent magnets to align magnetic nanoparticle covered natural cellulose fibers. *BioRes.* 6(4): 4731-4738.
22. Rostampour Haftkhani, A., GH. Ebrahimi, **M. Tajvidi**, M. Layeghi and M. Arabi, 2011. Lateral resistance of joints made with various screws in commercial wood-plastic composites. *Materials and Design*, 32: 4062-4068.
23. Rostampour Haftkhani, A., GH. Ebrahimi, **M. Tajvidi** and M. Layeghi, 2011. Investigation on withdrawal resistance of various screws in face and edge of wood- plastic composite panel. *Materials and Design*, 32: 4100-4106.
24. **Tajvidi, M.** and A. Takemura, 2011. Effects of reprocessing on the hygroscopic behavior of natural fiber high-density polyethylene composites. *Journal of Applied Polymer Science*, 122(2): 1258-1267.
25. Mirzaei, B., **M. Tajvidi**, R.H. Falk and C. Felton, 2011. Stress relaxation behavior of lignocellulosic-high density polyethylene composites. *Journal of Reinforced Plastics and Composites*, 30(10): 875-881.

2010:

26. Khosravani, A., A. Jahan Latibari, **M. Tajvidi**, S. A. Mirshokraee and M. Mohammad Nazhad, 2010. Studying the Influence of Cationic Starch Dosage on Performance of Anionic Nanosilica-Cationic Starch System in Fine Paper. *Iranian Journal of Natural Resources*, 63(1): 1-8.
27. **Tajvidi, M.** and A. Takemura, 2010. Recycled natural fiber polypropylene composites: water absorption/desorption kinetics and dimensional stability. *Journal of Polymers and the Environment*, 18(4): 500-509.
28. **Tajvidi, M.**, M. Bahrami and M. H. Ekhtera, 2010. Physical and Mechanical Properties of a Highly Filled Old Corrugated Container (OCC) Fiber/Polyethylene Composite. *Journal of Reinforced Plastics and Composites*, 29(8): 1166-1172.
29. Chaharmahali, M., J. Mirbagheri, **M. Tajvidi**, S. Kazemi Najafi and Y. Mirbagheri, 2010. Mechanical and Physical Properties Wood-Plastic Composite Panels. *Journal of Reinforced Plastics and Composites*, 29(2): 310-319.

30. **Tajvidi, M.** and A. Takemura, 2010. Thermal degradation of natural fiber reinforced polypropylene composites. *Journal of Thermoplastic Composite Materials*, 23(3): 281-298.
31. Nadali, E., A. Karimi, **M. Tajvidi**, and R. Naghdi, 2010. Natural durability of a bagasse fiber/polypropylene composite exposed to rainbow fungus (*Coriolus versicolor*). *Journal of Reinforced Plastics and Composites*, 29(7): 1028-1037.
32. **Tajvidi, M.**, N. Motie, Gh. Rassam, R. H. Falk and C. Felton, 2010. Mechanical performance of hemp fiber polypropylene composites at different operating temperatures. *Journal of Reinforced Plastics and Composites*, 29(5): 664-674.
33. Dastoorian, F., **M. Tajvidi** and GH. Ebrahimi, 2010. Evaluation of time dependent behavior of a wood flour-high density polyethylene composite. *Journal of Reinforced Plastics and Composites*, 29(1): 132-143.

2009:

34. Azad, F. M. Faezipour and **M. Tajvidi**, 2009. Effect of compatibilizer, MAPP, on physical and mechanical properties of reed stem flour-polypropylene composites. *Iranian Journal of Wood and Paper Science Research*, 24(2): 232-243.
35. Ramtin, A. A., A. Karimi and **M. Tajvidi**, 2009. Study on mechanical properties of composites made from sander dust of particleboard-polypropylene. *Iranian Journal of Wood and Paper Science Research*, 24(1): 58-68.
36. **Tajvidi, M.** and B. Mirzaei, 2009. Effects of temperature on the mechanical properties of beech (*Fagus orientalis* Lipsky) and lime (*Tilia begonifolia*) wood. *Wood Material Science and Engineering*, 4(3-4): 147-153.
37. Enayati, A. A., O. Hosseinaei, S. Wang, S.A. Mirshokraie and **M. Tajvidi**, 2009. Thermal properties of wood-plastic composites prepared from hemicellulose-extracted wood flour. *Polymer Science and Technology*, 22(3): 171-181.
38. **Tajvidi, M.** and SH. Haghdan, 2009. Effects of Accelerated Freeze-Thaw Cycling on Physical and Mechanical Properties of Wood Flour/ PVC Composites. *Journal of Reinforced Plastics and Composites*, 28(15): 1841-1856.
39. Kazemi Najafi, S., M. Mostafazadeh-Marznaki, **M. Tajvidi** and M. Chaharmahali, 2009. Effect of Thermo-Mechanical Degradation of Polypropylene on Mechanical Properties of Wood-Polypropylene Composites. *Journal of Composite Materials*, 43(22): 2543-2554.
40. Shamsian, M., GH. Ebrahimi, **M. Tajvidi**, and A. Ghalandar Zadeh, 2009. Measurement of mechanical and physical properties of Aspen (*Populus alba*) for establishing its allowable design values. *Iranian Journal of Natural Resources*, 61(4): 953-961.
41. **Tajvidi, M.**, M. Feizmand, R. H. Falk and C. Felton, 2009. Effect of cellulose fiber reinforcement on the temperature dependent mechanical performance of nylon 6. *Journal of Reinforced Plastics and Composites*, 28(22): 2781-2790.
42. **Tajvidi, M.** and A. Takemura, 2009. Effect of fiber content and type, compatibilizer and heating rate on thermo-gravimetric properties of natural fiber high-density polyethylene composites. *Polymer Composites*, 30(9): 1226 – 1233.
43. **Tajvidi, M.** and F. Azad, 2009. Effect of particle size, fiber content and compatibilizer on the physical properties of reed flour/polypropylene composites. *Journal of Reinforced Plastics and Composites*, 28(19): 2341-2351.

2008:

44. Sadatnejad, H., **M. Tajvidi** and H. Yosefi, 2008. Effect of longitudinal compression to bulk cell wall on mechanical properties of steamed treated of beach wood. *Iranian Journal of Wood and Paper Science Research*, 23(2): 191-199.
45. Kazemi Najafi, S., A. Kiaefar and **M. Tajvidi**, 2008. Effect of Bark Flour Content on Hygroscopic Characteristics of Wood-Polypropylene Composites. *Journal of Applied Polymer Science*, 110(5): 3116-3120.
46. Kazemi Najafi, S., A. Kiaefar, **M. Tajvidi**, and E. Hamidinia, 2008. Hygroscopic Thickness Swelling rate of Composites from Sawdust and Recycled Plastics. *Wood Science and Technology*, 42: 161-168.
47. Kazemi Najafi, S., H. Sharifnia, **M. Tajvidi**, 2008. Effects of Water Absorption on Creep Behavior of Wood Plastic Composites. *Journal of Composite Materials*, 42(10): 993-1002.

48. Kazemi Najafi, S., M. Mostafazadeh, M. Chaharmahali and **M. Tajvidi**, 2008. The effects of filler content and water absorption on the creep behavior of HDPE waste/MDF flour composites. *Iranian Journal of Polymer Science and Technology*, 21(1): 53-59.
49. Chaharmahali, M., **M. Tajvidi** and S. Kazemi Najafi, 2008. Mechanical Properties of Wood Plastic Composite Panels Made From Waste Fiberboard and Particleboard. *Polymer Composites*, 29(6): 606-610.
50. Dastoorian, F, and **M. Tajvidi**, 2008. Influence of strain rate on the flexural properties of wood flour-HDPE composites. *Journal of Reinforced Plastics and Composites*, 27(16-17): 1701-1708.
51. **Tajvidi, M.** Sh. Haghdan and S. Kazemi Najafi, 2008. Physical Properties of Novel Layered Composites of Wood Flour and PVC. *Journal of Reinforced Plastics and Composites*, 27(16-17): 1759-1765.
52. Chaharmahali, M., S. Kazemi Najafi and **M. Tajvidi**. 2008. Chemical resistance of natural fiber high-density polyethylene composites. *Iranian Journal of Natural Resources*, 61(1): 133-141.

2007:

53. Chaharmahali, M., S. Kazemi Najafi, and **M. Tajvidi**, 2007. Effect of Blending Method on the Mechanical Properties of Wood-Plastic Composites. *Iranian Journal of Polymer Science and Technology*, 20(4): 361-367.
54. Mirbagheri, J., **M. Tajvidi**, I. Ghasemi, and J. C. Hermanson, 2007. Prediction of the Elastic Modulus of Wood Flour/ Kenaf Fiber/ Polypropylene Hybrid Composites. *Iranian Polymer Journal*, 16(4): 271-278.
55. Kazemi Najafi, S., **M. Tajvidi** and E. Hamidinia, 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.
56. Mirbagheri, J., **M. Tajvidi**, J. C. Hermanson and I. Ghasemi, 2007. Tensile properties of wood flour/kenaf fiber polypropylene hybrid composites. *Journal of Applied Polymer Science*, 105(5): 3054-3059.
57. Kazemi Najafi, S., A. Kiaefar, E. Hamidinia & **M. Tajvidi**, 2007. Water Absorption Behavior of Composites from Sawdust and Recycled Plastics, *Journal of Reinforced Plastics and Composites*, 26(3): 341-348.
58. Karimi, A., **M. Tajvidi** and S. Pourabbasi, 2007. Effect of compatibilizer on the natural durability of wood flour/high density polyethylene composites against rainbow fungus (*Coriolus versicolor*), *Polymer Composites*, 28: 273-277.

2006:

59. Poudineh Pour M. A., GH. Ebrahimi, **M. Tajvidi**, M. Chaharmahali and A. A. Ramtin, 2006. Effect of two types of agricultural wastes (wheat and barley straws) on the NRC% of aspen particleboards. *Iranian Journal of Wood and Paper Science Research*, 21(2): 61-69.
60. Chaharmahali M., S. Kazemi Najafi and **M. Tajvidi**, 2006. Effect of processing method on the mechanical properties of wood plastic panels made from particleboard waste. *Iranian Journal of Wood and Paper Science Research*, 21(1): 33-42.
61. Karimi, A., S., Nazari, I., Ghasemi, **M. Tajvidi** and GH. Ebrahimi, 2006. The effect of delignification of wood fibers on the mechanical properties of wood fiber- polypropylene composites, *Journal of Applied Polymer Science*, 102: 4759-4763.
62. Kazemi Najafi, S., **M. Tajvidi** and M. Chaharmahali, 2006. Long-Term Water Uptake Behavior of Lignocellulosic-High Density Polyethylene Composites, *Journal of Applied Polymer Science*, 102: 3907-3911.
63. **Tajvidi M.**, S. Kazemi Najafi, M. M. Shekaraby & N. Motiee, 2006. Effect of Chemical Reagents on the Mechanical Properties of Natural Fiber Polypropylene Composites, *Polymer Composites*, 27(5): 563 - 569.
64. **Tajvidi, M.**, R. H. Falk & J. C. Hermanson, 2006. Effect of Natural Fibers on Thermal and Mechanical Properties of Natural Fiber Polypropylene Composites Studied by Dynamic Mechanical Analysis, *Journal of Applied Polymer Science*, 101:4341-4349.

65. Kazemi Najafi, S., E. Hamidinia & **M. Tajvidi**, 2006. Mechanical Properties of Composites from Sawdust and Recycled Plastics, *Journal of Applied Polymer Science*, 100: 3641–3645.
66. **Tajvidi M.**, S. Kazemi Najafi & N. Moteei, 2006. Long-term water uptake behavior of natural fiber-polypropylene composites, *Journal of Applied Polymer Science*, 99 (5): 2199-2203.

2005:

67. Chaharmahali M., S. Kazemi Najafi and **M. Tajvidi**, 2005. Mechanical properties of wood plastic composites made from particleboard and MDF wastes and polyethylene (HDPE) waste, *Iranian Journal of Wood and Paper Science Research*, 20(2): 271-284.
68. Chaharmahali M., S. Kazemi Najafi and **M. Tajvidi**, 2005. A study on the long term water absorption and thickness swelling behavior of wood plastic composite panels, *Iranian Journal of Wood and Paper Science Research*, 20(2): 255-269.
69. **Tajvidi, M.**, 2005. Static and dynamic mechanical properties of a kenaf fiber-wood flour/polypropylene hybrid composite, *Journal of Applied Polymer Science*, 98: 665-672.
70. **Tajvidi, M.**, R. H. Falk & J. C. Hermanson, 2005. Time-Temperature Superposition Principle Applied to a Kenaf-Fiber High-density Polyethylene Composite. *Journal of Applied Polymer Science*, 97: 1995-2004.

2004 and older:

71. Behzad, M., **M. Tajvidi**, GH. Ebrahimi & R. H. Falk, 2004. Dynamic Mechanical Analysis (DMA) of Compatibilizer Effect on the Mechanical Properties of Wood Flour – High-density Polyethylene Composites, *International Journal of Engineering*, 17(1): 95-104.
72. **Tajvidi, M.** & GH. Ebrahimi, 2003. Water uptake and mechanical properties of natural filler-polypropylene composites, *Journal of Applied Polymer Science*, 88: 941–946.
73. **Tajvidi, M.** GH. Ebrahimi & A. A. Enayati, 2003. Dynamic Mechanical Analysis of Compatibilizer Effect on Mechanical Properties of Wood Flour –Polypropylene Composites. *Iranian Journal of Natural Resources*, 56(1- 2): 47-59.
74. **Tajvidi, M.** & GH. Ebrahimi, 1998. Study of the Feasibility of the Use of Cellulose, Paper and Wood Fibers in the Manufacture of Fiber-Polypropylene Composites. *Iranian Journal of Natural Resources*, 51(2): 35-45.

CONFERENCES PRESENTATIONS:

1. Mashkour, M. **M. Tajvidi**, T. Kimura and F. Kimura, 2012. From Magnetic Natural Cellulose Fibers to a Magneto-Cellulose Hybrid Nanocomposite using Green Process. The Seventh International Workshop on Green Composites, IWGC-7, August 28-30 2012, Hamamatsu, Shizuoka, Japan.
2. **Tajvidi, M.**, A. Mohan Sharma, and L. C. Simon, 2012. Viscoelastic Properties of wheat straw fiber/talc/polypropylene composites for automotive applications. 12th Annual Automotive Composites Conference and Exhibition, Troy, MI, USA, September 11-13 2012.
3. **Tajvidi, M.**, A. Mohan Sharma, and L. C. Simon, 2012. Temperature dependent mechanical behavior and thermal transitions of thermoplastic composites containing talc, wheat straw fiber and polypropylene for automotive applications. 12th International Conference on Biocomposites, Niagara Falls, ON, Canada, May 6-8 2012.
4. **Tajvidi, M.** and A. Takemura, 2010. Preparation and properties of composites of rice hulls and micro-spherical blends of polyethylene terephthalate (PET) and high density polyethylene (HDPE). The 18th Annual BEPS Meeting, Polymers & the Environment: Emerging Green Technologies & Science, Toronto, ON, Canada, October 13-15 2010.
5. **Tajvidi, M.** and A. Takemura, 2010. Static and dynamic mechanical properties of recycled natural fiber polypropylene composites. The 10th Pacific-rim Bio-based Composites Symposium (BIOCOMP 2010), Banff, AB, Canada, October 5-8 2010.

6. **Tajvidi, M.** A review on the recycling of wood plastic composites, The First National Conference on Novel Technologies in Wood and Paper Industries, 18-19 May 2010, Chaloos, Iran.
7. Karimi, A., A. Khonsari, **M. Tajvidi** and J. Harun, 2009. Investigation of Natural Durability of Spruce Wood-Polyethylene Composite against White Rot Fungus (*Coriolum versicolor*). 15th International Symposium on Wood, Fiber and Pulping Chemistry, Oslo, Norway, June 15 – 18 2009.
8. **Tajvidi, M.** and A. Takemura, 2009. Recyclability Index: A measure to determine how recyclable natural fiber plastic composites are. The 10th International Conference on Wood & Biofiber Plastic Composites, May 11-13, Madison, WI, USA.
9. Khosravani, A., A. J. Latibari, **M. Tajvidi**, S. A. Mirshokraei, M. Rahmaninia, and Mousa M. Nazhad, 2008. The Performance of NanoParticles in Relation with Zeta Potential of the Wet-End System. The 5th International Congress of Nano-Bio Clean Tech 2008, October 27-30, 2008, San Francisco, USA.
10. **Tajvidi, M.** 2008. Recycling natural fiber thermoplastic composites. 29th Symposium on Wood Adhesion, November 5-6, Nara, Japan.
11. **Tajvidi, M.** and A. Takemura, 2008. Effect of formulation and testing variables on thermogravimetric properties of natural fiber high density polyethylene composites. The International Symposium on Wood Science and Technology 2008 (IAWPS2008), September 27-30, Harbin, China.
12. Haghdan, SH and **M. Tajvidi**, 2008. Performance of Layered Wood Flour/ PVC Composites in Extreme Freeze-Thaw Conditions, The International Symposium on Wood Science and Technology 2008 (IAWPS2008), September 27-30, Harbin, China.
13. Karimi, A., **M. Tajvidi** and Pourabbasi, S., 2007. Effect of fiber type and content on the natural durability of natural fiber/high density polyethylene composites against the rainbow fungus (*Coriolum versicolor*). IUFRO ALL-Division-5 Conference "Forest Products and Environment – A Productive Symbiosis", October 29 – November 2, 2007, Taipei, Taiwan.
14. Pourabbasi, S., A. Karimi, D. Parsapajouh, **M. Tajvidi** and M. Soleymani, 2007. The natural durability of wood floor/high density polyethylene composites against the rainbow fungus (*Coriolum versicolor*). IUFRO ALL-Division-5 Conference "Forest Products and Environment – A Productive Symbiosis", October 29 – November 2, 2007, Taipei, Taiwan
15. **Tajvidi, M.** Sh. Haghdan and J.C. Hermanson, 2007. Physical and mechanical properties of novel layered composites of wood flour and PVC. The 9th International Conference on Wood & Biofiber Plastic Composites, Madison, WI, USA, 21-23 May 2007.
16. **Tajvidi, M.** and GH. Ebrahimi, 2006. Effect of temperature on the creep behavior of natural fiber-polypropylene composites, Wood-Plastic Conference, Amirkabir University of Technology, 13 June 2006, Tehran, Iran.
17. Karimi A., S. Nazari, I. Ghasemi, GH. Ebrahimi and **M. Tajvidi**, 2005. The Effect of Delignification on the Mechanical Properties of Hornbeam fiber – polypropylene composites. The 4th International Conference of Polymer Science and Technology, Tehran, Iran, September 2005.
18. Pourabbasi, S., A. Karimi, D. Parsapajouh and **M. Tajvidi**, 2005. Investigation of durability of four types of natural fiber-polyethylene composites against the fungus *Coriolum versicolor*, The 4th International Conference of Polymer Science and Technology, Tehran, Iran, 27-29 September 2005.
19. **Tajvidi, M.**, 2005. Current trends in WPC research, First Workshop on Natural fiber plastic composites, Faculty of Natural Resources, University of Tehran, Karaj, Iran.
20. **Tajvidi, M.**, 2005. Natural fiber plastic composites; Introduction and Background, First Workshop on Natural fiber plastic composites, Faculty of Natural resources, University of Tehran, Karaj, Iran.
21. **Tajvidi, M.**, R. H. Falk & J. C. Hermanson, 2004. A Study on the applicability of Time-Temperature Superposition Principle to a Kenaf-Fiber High-density Polyethylene Composite. Third International Conference of the European Society for Wood Mechanics. Vila Real, Portugal, September 5-8 2004.

22. Ebrahimi, GH., R. H. Falk & **M. Tajvidi**, 2003. Short-term Creep Behavior of Natural Fiber/Polypropylene Composites, 2nd International Conference on Wood Mechanics, STFI, Stockholm, Sweden.
23. **Tajvidi, M.**, R. H. Falk & GH. Ebrahimi, 2003. Study of the Effect of Compatibilizer on the Mechanical Properties of Wood Flour - Polypropylene Composites using Dynamic Mechanical Analysis (DMA), 2nd International Conference on Wood Mechanics, STFI, Stockholm, Sweden.
24. **Tajvidi, M.**, R. H. Falk, J. C. Hermanson & C. Felton, 2003. Influence of Natural Fibers on the Phase Transitions in High-Density Polyethylene Composites Using Dynamic Mechanical Analysis, 7th International Conference on Wood Fiber Plastic Composites, Madison, WI, USA, 2003.

BOOKS:

- Darvishsefat A. A., 2007. Atlas of the Protected Areas of Iran, University of Tehran Press, Translation to English by: **M. Tajvidi**.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:

- Forest Products Society (FPS)
- Society of Wood Science and Technology (SWST)
- Iranian Society of Wood and Paper Science and industries
- Principal Investigator, Management of Fast Growing Wood Species Center of Excellence, University of Tehran

REVIEWING FOR ACADEMIC JOURNALS:

- *Composites Part A (Elsevier)*
- *Composites Science and Technology (Elsevier)*
- *Journal of Applied Polymer Science (Wiley)*
- *Polymer Composites (Wiley)*
- *Journal of Material Letters (Elsevier)*
- *Journal of Polymers and the Environment (Springer)*
- *Journal of Thermoplastic Composite Materials (Sage)*
- *Journal of Composite Materials (Sage)*
- *Bioresources*
- *Journal of Materials Science*
- *International Journal of Engineering*
- *Iranian Polymer Journal*
- *Iranian Journal of Natural Resources*
- *Iranian Journal of Wood and Paper Science Research*
- *Research and Construction in Natural Resources*
- *Journal of Agriculture and Natural Resources Sciences of the University of Gorgan*
- *Journal of the Iranian Society of Wood and Paper Industries*

THESES/DISSERTATIONS SUPERVISED/ADVISED:

1. Feasibility of using waste plastics and sawdust to produce wood plastic composites, Master's Thesis, Advised.
2. Comparison of the acoustic properties of insulation boards made from barley and wheat straws with similar boards made from wood waste, Master's Thesis, Advised.
3. Natural durability of four types of natural fiber high density polyethylene composites against rainbow fungus, Master's Thesis, Advised.
4. Prediction and modeling of elastic modulus of wood flour/kenaf fiber hybrid composites, Master's Thesis, Supervised.

5. Feasibility of producing composites from waste polyethylene and particleboard and MDF wastes, Master's Thesis, Advised.
6. Natural durability of bagasse fiber/polypropylene composites against rainbow fungus, Master's Thesis, Advised.
7. Time dependent behavior of wood flour high density polyethylene composites, Master's Thesis, Supervised.
8. Continuous online measurement of wood moisture content during kiln drying, Master's Thesis, Advised.
9. Effects of processing parameters on physical and mechanical properties of reed flour/PP composites, Master's Thesis, Advised.
10. Process optimization of PVC/sawdust composites made in hot press, Master's Thesis, Supervised.
11. Determination of density effects on physical and mechanical properties of wood/polypropylene composites, Master's Thesis, Supervised.
12. Effect of longitudinal compression on the non-elastic bending radius of beech wood, Master's Thesis, Advised.
13. Effects of methylation and antioxidants on weathered wood plastic composite fading, Master's Thesis, Advised.
14. Feasibility of using vine tree pruning wastes to produce wood plastic composites, Master's Thesis, Advised.
15. Empirical models for the prediction of wood dowel connected joints tensile strength and bending moment in medium density fiberboard, Master's Thesis, Advised.
16. Effect of bark flour content on physical and mechanical properties of wood plastic composites, Master's Thesis, Advised.
17. Effect of beech wood particle geometry on physical and mechanical properties of wood plastic composites, Master's Thesis, Advised.
18. Effects of the height and depth of tenons made of beech and hornbeam on bending strength of mortise and tenon joints, Master's Thesis, Advised.
19. Seismic behavior of poplar wood frame structures, PhD dissertation, Advised.
20. Physical and mechanical properties of recycled polypropylene/wood flour/glass fiber hybrid composites, Master's Thesis, Advised.
21. Effects of layering on the improvement of the physical and mechanical properties of wood/PVC composites, Master's Thesis, Supervised.
22. Physical and mechanical properties of composites made from particleboard sanding dust and polypropylene, Master's Thesis, Advised.
23. Investigation on utilizing cationic starch-anionic nanosilica system for the application of more filler in fine paper, PhD dissertation, Co-supervised.
24. Reduction of hot press time using highly conductive fillers, Master's Thesis, Supervised.
25. Interfacial properties of natural fiber polymer matrix composites, PhD dissertation, Advised.
26. Effects of polymer, wood and compatibilizer type on the properties of wood plastic composites, Master's Thesis, Advised.
27. Screw withdrawal resistance and shear strength of commercial wood plastic composites, Master's Thesis, Advised.
28. Recycling of off-service creosote treated railroad ties into wood/HDPE composites, Master's Thesis, Supervised.
29. Reinforcement of wood/HDPE composites using recycled PET fibers obtained from textile and carpet industries, Master's Thesis, Supervised.
30. Effects of wood species and veneer thickness on physical and mechanical properties of layered wood/PVC composites, Master's Thesis, Supervised.
31. Preparation and properties of oriented superparamagnetic nanocomposites using partial dissolution of cellulose, PhD dissertation, Supervised.