

PERSONAL INFORMATION:

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EDUCATION:

- Diploma in experimental sciences, Sari, Iran, 2000
- B.Sc. in Natural Resources Engineering, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran, 2006
- M.Sc. in Natural Resource Engineering, Pulp and Paper Industries, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran, 2010
- Ph.D. in Pulp and Paper Industries, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran, 2015

RESEARCH INTEREST:

- Biotechnology in the pulp and paper industry

- New technologies in pulp and paper making

- Pulp bleaching and waste paper recycling

- Biorefineries in pulp and paper mills

- Biorefineries of lignocellulosic materials

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PUBLICATION:

Selected Papers in ISI Journals since 2008:

1. Soleimani, A., Resalati, H., & **Akbarpour, I.** (2012). The effect of using White Birch on Mechanical Properties and Fiber Length Distribution of Mixed Hardwood CMP pulp. *Bioresources*, 1(2), 89-91.

2. Akbarpour, I., Ghaffari, M., & Ghasemian, A. (2013). Deinking of different furnishes of recycled MOW, ONP and OCC waste papers in silicate-fee conditions using organic complex of PHAAS. *Bioresources*, 8(1), 31-44.

3. Akbarpour, I., Ghasemian, A., Resalati, H., & Saraeian, A. (2018). Biodeinking of mixed ONP and OMG waste papers with Cellulase. *Cellulose*, 25(2), 1265-1280.

4. Akbarpour, I. (2023). Surface characterization of pulp fiber from mixed waste newspaper and magazine deinked-pulp with combined cellulase and laccase-violuric acid system (LVS). *Bioresource Technology Reports*, 23, 101551, https://doi.org/10.1016/j.biteb.2023.101551.

5. Akbarpour, I. (2024). Synergistic deinking effect of neutral sodium sulfite with fungal hemicellulase enzyme for improved recycling of waste papers. *International Journal of Biological Macromolecules*, 282 (4), https://doi.org/10.1016/j.ijbiomac.2024.137010.

6. Akbarpour, I. (2025). An eco-friendly cost-effective neutral deinking methodology with sodium sulfite and sodium carbonate in recycled fiber processing. *Cellulose*, 1-16, https://doi.org/10.1007/s10570-025-06569-w.

7. Sepahvand, S., **Akbarpour, I.,** & Ashouri, A. (2025). Optimizing mixed waste paper properties through formamidine sulfinic acid bleaching and cationic additive treatments. *Journal of Polymers and the Environment*, 33(1), 29-50.

8. Akbarpour, I. (2026). The implementation of *Phanerochaete chrysosporium* Manganese Peroxidase (MnP) enzyme, a potentially sustainable method, for the bioprocessing of waste newspaper pulp. *Environmental Chemical Engineering*, 14(1), https://doi.org/10.1016/j.jece.2026.121032.

9. Akbarpour, I. (2026). Ultrasonic-assisted eco-friendly deinking of waste newspaper pulp fibers: Improvements in paper performance, cellulose structure and thermal stability. *Bioresource Technology Reports*, 34, 102625; https://doi.org/10.1016/j.biteb.2026.102625.

Selected Papers in Scientific-Research Journals since 2008 (In Persian):

1. Akbarpour, I., Resalati, H., & Saraeian, A.R**.** (2010). Enzymatic versus Chemical Deinking of Old Newspaper. *Iranian Journal of Wood and Paper Science Research*, 25(2), 223-233.

2. Kamrani, S., Saraeian, A.R., & **Akbarpour, I.** (2010). Study of CMP and APMP Wheat Straw Pulp Properties in Golestan Province. *Iranian Journal of Wood and Paper Science Research*, 25(132), 32-47.

3. Akbarpour, I., Resalati, H., & Saraeian, A.R. (2010). Investigation on the Deinkability of Old Newspaper. *Journal of Wood and Forest Science and Technology*, 17(2), 73-87.

4. Akbarpour, I., Resalati, H., & Saraeian, A.R. (2010). Investigation on the Appearance Properties of Waste Newspaper Deinked by Cellulase Compared to Chemical Method. *Journal of Forest and Wood Products*, 63(4), 331-341.

5. Akbarpour, I., Resalati, H., & Saraeian, A.R. (2010). The Effect of Different Conditions of Enzymatic Deinking on Optical Properties of ONP Deinked Pulp with Cellulase. *Journal of Wood and Forest Science and Technology*, 17(3), 71-84.

6. Ghasemian, A., Ghaffari, M., & **Akbarpour, I.** (2011). Effect of Organic Complex of Polyhydroxyl Acrylic Acid and Sodium Salt on Optical and Physical Properties of ONP Deinked Pulp. *Journal of Wood and Forest Science and Technology*, 18(2), 89-102.

7. Akbarpour, I., & Resalati, H. (2011). Utilization of Organic Complex of Glanapone Stab Rather than Sodium Silicate in Peroxide Bleaching of Mixed Hardwood CMP Pulp. *Iranian Journal of Wood and Paper Science Research*, 26(1), 80-90.

8. Aliabadi, M., **Akbarpour, I.**, & Saraeian, A.R. (2011). Application of Organic Complex " Sulvy-x " in Peroxide Bleaching of Hornbeam CMP Pulp. *Iranian Journal of Wood and Paper Science Research*, 26(1), 117-127.

9. Akbarpour, I., Resalati, H., & Saraeian, A.R. (2011). Investigation on the Physical and Mechanical Properties of Waste Newspaper Deinked Pulp by Cellulase Enzyme Compared to Conventional Method. *Iranian Journal of Wood and Paper Science Research*, 26(2), 243-255.

10. Akbarpour, I., Resalati, H., & Soleimani, A. (2011). Investigation of Substituting the Organic Complex of Sulvy-x rather than Sodium Silicate in CMP Pulp Bleaching of Mazandaran Wood and Paper Industries. *Iranian Journal of Wood and Paper Science Research*, 26(336), 411-428.

11. Aliabadi, M., **Akbarpour, I.**, Saraeian, A.R., & Roshenasan, J. (2011). Biometrical Properties of Hornbeam Fibers from Astara. *Iranian Journal of Wood and Paper Science Research*, 26(3), 535-544.

12. Soleimani, A., Resalati, H., & **Akbarpour, I.** (2011). Optical and Physical Properties of Mixed Hardwood CMP Pulp and the Birch Wood. *Iranian Journal of Wood and Paper Science Research*, 26(3), 523-534.

13. Akbarpour, I., & Resalati, H. (2012). The Effect of Different Concentrations of Cellulase Enzyme on Optical and Physical Properties of ONP Deinked Pulp. *Iranian Journal of Wood and Paper Industries*, 2(1), 1-15.

14. Akbarpour, I., Ghaffari, M., & Ghasemian, A. (2012). Effect of Sodium Silicate on Optical and Physical Properties of ONP Deinked Pulp. *Journal of Wood and Forest Science and Technology*, 19(4), 163-169.

15. Akbarpour, I., & Resalati, H. (2014). The Effect of Cellulase on the Physical Properties and Drainability of OCC Pulp. *Journal of Forest and Wood Products*, 67(1), 133-145.

16. Afra, E., & **Akbarpour, I.** (2013). Evaluation of the Effect of Endoglucanase Refining on Physical and Mechanical Properties of Paper Made from OCC Pulp. *Iranian Journal of Wood and Paper Industries*, 4(2), 111-122.

17. Imani, M., Ghasemian, A., Shakeri, A., & **Akbarpour, I.** (2015). Investigation of Physical and Mechanical Properties of Old Magazine Recycled Fiber and Glass Fiber- Polypropylene Hybrid Composite. *Journal of Forest and Wood Products*, 68(1), 209-220.

18. Afra, E., **Akbarpour, I.**, Hezbi, N., & Resalati, H. (2014). Investigation of the Effect of Endoglucanase Treatment on Beatability and Drainage Rate of OCC Pulps. *Iranian Journal of Wood and Paper Industries*, 5(1), 129-138.

19. Akbari, M., **Akbarpour, I.**, Resalati, H., & Imani, M. (2015). Performance of Pectinase on Improving the Properties of ONP Deinked Pulp by Washing Method. *Journal of Forest and Wood Products*, 68(3), 531-545.

20. Mehri Irani, H., Ghasemian, A., Resalati, H., Saraeian, A.R., & **Akbarpour, I.** (2014). Investigation on Bleaching of Mixed Old Newspaper and Magazine Deinked Pulp with Hydrogen Peroxide. *Journal of Forest and Wood Products*, 67(3), 503-516.

21. Mehri Irani, H., Ghasemian, A., Resalati, H., Saraeian, A.R., & **Akbarpour, I.** (2014). The Effect of Different Charges of Sodium Dithionite and Bleaching Times on the Optical and Mechanical Properties and COD of Bleached Recycled Mixed ONP and OMG Pulp. *Iranian Journal of Wood and Paper Science Research*, 29(3), 411-421.

22. Akbarpour, I., Ghasemian, A., Resalati, H., Saraeian, A.R., & Jahan Latibari, A. (2016). Upgrading the Qualitative Characteristics of Mixed Recycled ONP and OMG Pulps with Hemicellulase. *Journal of Forest and Wood Products*, 69(3), 585-602.

23. Akbarpour, I., & Resalati, H. (2022). The Effect of Enzymatic Pre-treatment with Amylase and Refining on the Physical and Dewatering Properties of OCC Pulp. *Iranian Journal of Wood and Paper Industries*, 12(4), 507-519.

24. Azizian Nasnar, A., Ghasemian, A., & **Akbarpour, I.** (2022). Investigation on the Sodium Hydroxide Replacement with Calcium Hydroxide on the Optical and Physical Properties of Recycled Pulp Bleached with Hydrogen Peroxide. *Journal of Forest and Wood Products*, 75(1), 73-84.

25. Azizian Nasnar, A., Ghasemian, A., & **Akbarpour, I.** (2022). Environmental and Strength Properties Evaluation of Bleached Recycled pulp with Calcium Hydroxide. *Iranian Journal of Wood and Paper Industries*, 13(1), 71-81.

26. Akbarpour, I., Ghasemian, A., Resalati, H., Saraeian, A.R., & Jahan Latibari, A. (2022). Investigation on the Bleachability of Hemicellulase-Deinked Pulp versus Chemical Deinking Process. *Iranian Journal of Wood and Paper Industries*, 13(13), 289-300.

27. Akbarpour, I. (2023). The Effect of Enzymatic Pre-treatment of Recycled Pulp with the Combined Sequence of Cellulase and Laccase in Hydrogen Peroxide Bleaching. *Journal of Wood and Forest Science and Technology*, 30(2), 87-107.

28. Akbarpour, I. (2023). The Importance of Biotechnology in Waste Papers Processing. *Modares Journal of Biotechnology*, 14(2), 1-12.

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List of Conference Proceedings:

1. Resalati, H., & **Akbarpour, I.** (2008). Silicate-Free Peroxide Bleaching Of Mixed Hardwood CMP Pulp. *European Workshop on lignocelluloses and pulp, Advances in Pulping, Bleaching and Related Analytics*.

2. Ghorbannezhad, P., Azizi, M., Layeghi, M., & **Akbarpour, I.** (2009). A Strategic Model for Cleaner Production Implementation in a Paper Making Mill. *Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction*.

3. Soleimani, A., Resalati, H., & **Akbarpour, I.** (2008). The Effect of Using Populus Deltoides in Combination with Hornbeam and Beech Species on CMP Pulp Properties. *Conference on Raw Material Supply and Development of Wood and Paper Industries*.

4. Akbarpour, I., & Resalati, H. (2008). Investigation of Replacing Glanapone Organic Complex Instead of Sodium Silicate in Bleaching of Mixed Hardwood CMP Pulp with Hydrogen Peroxide. *Conference on Raw Material Supply and Development of Wood and Paper Industries*.

5. Ghaffari, M., **Akbarpour, I.**, Asadollahzade, M.T., Mahmoodkia, M., Gholizade, A., & Monfared, S. (2010). The Effect of Wet Pressing on Bonding in Paper. *Caspian Ecosystems Research Institute*.

6. Akbarpour, I., Soleimani, A., Ghaffari, M. (2010). The Uses, Properties, Process and Parameters Influencing on Opacifying Power of Dioxide Titanium Pigments in Papermaking. *Caspian Ecosystems Research Institute*.

7. Ghasemian, A., Ghaffari, M., **Akbarpour, I.**, & Moradi Kia, M. (2010). Biorefining in Pulp and Paper Industry. *Caspian Ecosystems Research Institute*.

8. Ghaffari, M., **Akbarpour, I.**, Saraeian, A.R., Asadollahzade, M.T., & Soleimani, A. (2010). Investigation of the Effect of Different Thermal Treatment Conditions on Mechanical Properties of Noe, Trembling Poplar and Alder Wood Species. *Caspian Ecosystems Research Institute*.

9. Ghaffari, M., Asadollahzade, M.T., & **Akbarpour, I.** (2008). Nanotechnology in Papermaking. *Biology and the Modern World*.

10. Saraeian, A.R., **Akbarpour, I.**, Resalati, H., & Soleimani, A**.** (2010). The Effect of Flotation Time on Optical Properties of Chemically Deinked Newspaper Pulp. *Conference on New Technologies in Wood and Paper Industries*.

11. Resalati, H., **Akbarpour, I.**, & Soleimani, A. (2010). Comparative Study of the Efficiency of Two Organic Complexes, Sulvy-x and Glanapone Stab, in Bleaching CMP Pulp with Hydrogen Peroxide. *Conference on New Technologies in Wood and Paper Industries*.

12. Soleimani, A., **Akbarpour, I.**, & Resalati, H. (2010). Investigation of Using Hornbeam Species on Optical Properties of Mixed Hardwood CMP Pulp. *Conference on New Technologies in Wood and Paper Industries*.

13. Ghasemian, A., **Akbarpour, I.**, Ghaffari, M., & Soleimani, A. (2010). Optimization of Sodium Silicate Consumption in Waste Newspaper Recycling. *Conference on New Technologies in Wood and Paper Industries*.

14. Resalati, H., Soleimani, A., & **Akbarpour, I.** (2010). Comparison of Fiber Classification Properties of CMP Pulp from Pure Different Hardwood Species. *Conference on New Technologies in Wood and Paper Industries*.

15. Akbarpour, I., & Resalati, H. (2010). The Effect of Different Cellulase Enzyme Concentrations on ERIC Content of Deinked Newspaper. *Conference on New Technologies in Wood and Paper Industries*.

16. Akbarpour, I., Soleimani, A., & Resalati, H. (2010). Investigation of Using Poplar and Hornbeam Wood Species in Production of Mixed Hardwood CMP Pulp. *Conference on New Technologies in Wood and Paper Industries*.

17. Akbarpour, I., Resalati, H., & Saraeian, A.R. (2010). Investigation of the Effect of Populus Deltoides on Refinability of Mixed Hardwood CMP Pulp. *Conference on New Technologies in Wood and Paper Industries*.

18. Akbarpour, I., Resalati, H., & Saraian, A. R. (2010). Evaluation of the Efficiency of Washing and Flotation in Deinking of Waste Newspaper Using Cellulase. *Conference on Advanced Technologies in the Wood and Paper Industries*, Tehran.

19. Akbarpour, I., Ghasemian, A., & Ghaffari, M. (2010). Feasibility Study and Determination of Optimal Consumption of Sulvy-x Organic Complex in Chemical Deinking of Waste Newspaper. *Conference on New Technologies in Wood and Paper Industries*.

20. Saraeian, A.R., **Akbarpour, I.**, & Resalati, H. (2010). The Effect of Flotation Time on Appearance Properties of Deinked Newspaper Pulp. *Conference on New Technologies in Wood and Paper Industries*.

21. Resalati, H., **Akbarpour, I.**, & Soleimani, A. (2010). The Effect of Pre-treatment with DTPA on Brightness and Yellowness of Hydrogen Peroxide Bleached CMP Pulp. *Conference on New Technologies in Wood and Paper Industries*.

22. Pesarklou, M.R., & **Akbarpour, I.** (2010). The Effect of Different Percentages of Hazelnut Husk and Shell on Physical Properties of MDF. *Conference on New Technologies in Wood and Paper Industries*.

23. Akbarpour, I., Resalati, H., & Saraeian, A.R. (2010). Investigation of the Effect of Washing Process in Chemical Deinking of Recycled Newspaper Pulp. *Conference on New Technologies in Wood and Paper Industries*.

24. Pesarklou, M.R., & **Akbarpour, I.** (2010). Investigation of the Usability of Hazelnut Husk and Shell in MDF Production. *Conference on New Technologies in Wood and Paper Industries*.

25. Soleimani, A., **Akbarpour, I.**, & Resalati, H. (2010). Comparison of Refinability of CMP Pulp from Pure Different Hardwood Species. *Conference on New Technologies in Wood and Paper Industries*.

26. Akbarpour, I., Soleimani, A., Ghasemian, A., & Saraeian, A.R. (2010). Nanofiber Technology and its Application in Nanopaper Production. *Nanoscience and Nanotechnology Conference*.

27. Akbarpour, I., & Ghasemian, A. (2010). Introduction to Cellulose Nanocrystals in Pulp and Paper Industries. *Nanoscience and Nanotechnology Conference*.

28. Shoob Chari, H., Saraeian, A.R., & **Akbarpour, I.** (2010). Investigation of the Effect of Husk and Hydrogen Peroxide on Yield and Brightness of Cotton Stalk APMP Pulp. *1st Intra-University Conference on Paper Recycling and Lignocellulosic Products*.

29. Ghasemian, A., & **Akbarpour, I.** (2011). Paper Recycling Strategy and its Role in Supplying Lignocellulosic Raw Materials Needed by the Country's Pulp and Paper Industries. *Conference on Roadmap for Raw Material Supply and Development of Wood and Paper Industries by 1404*.

30. Akbarpour, I., Pesarklou, M.R., Ghasemian, A., & Shakeri, A. (2011). Application of Nanomaterials and Cellulose Nanocrystals in Reinforcing Polymer Nanocomposites. *Nanomaterials and Nanotechnology, Shahrood Islamic Azad University*.

31. Akbarpour, I., Mashkour, M., & Afra, E. (2011). Preparation of Nano or Micro Scale Cellulose Films and Their Properties in Different Cellulosic Resources. *Nanomaterials and Nanotechnology, Shahrood Islamic Azad University*.

32. Akbarpour, I., Pesarklou, M.R., Saraeian, A.R., & Sepahvand, S. (2011). Investigation of the Potential of Using Bagasse in Wood and Paper Industries. *1st International and 6th National Conference on Waste Management, Mashhad Islamic Azad University*.

33. Sepahvand, S., **Akbarpour, I.**, Zahedi, M., & Pesarklou, M.R. (2012). Use of Nano Silica in Modification and Improvement of Urea Formaldehyde Resin Properties Used in Wood Products Manufacturing. *Nanotechnology and its Applications in Agriculture and Natural Resources*.

34. Akbarpour, I. (2012). Environmental and Business Opportunities of Using Nanotechnology to Reduce Waste Emissions in Papermaking Industry. *Nanotechnology and its Applications in Agriculture and Natural Resources*.

35. Akbarpour, I., Soleimani, A., Resalati, H., Mashkour, M. (2012). Technical and Economic Feasibility of Using Nano Silica for Dewatering Papermaking Sludge. *Nanotechnology and its Applications in Agriculture and Natural Resources*.

36. Mashkour, M., **Akbarpour, I.**, Saraeian, A.R., & Mashkour, M. (2012). Production of Aerogels from Fibrillated Nanocellulose and Cellulose Nanocrystals. *Nanotechnology and its Applications in Agriculture and Natural Resources*.

37. Dehghanian, F., **Akbarpour, I.**, & Mohammadlou, A.R. (2014). The Effect of Nano-Titanium Dioxide and Thermal Treatment on the Mechanical Strength of Hornbeam Wood. *The 4th International Conference on Environmental Challenges and Dendrochronology*.

38. Ghaffari, M., Ghasemian, A., & **Akbarpour, I.** (2014). The Necessity of Using Biorefinery in the Pulp and Paper Industries. *The 4th International Conference on Environmental Challenges and Dendrochronology*.

39. Ghaffari, M., Resalati, H., & **Akbarpour, I.** (2014). An Introduction to Membrane Systems as the Best Available Technology (BAT) for Decreasing the Wastewater Contaminants in the Papermaking Closed-loop Water Circuits. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

40. Kool, F., Ghaffari, M., Imani, M., Soleimani, A., & Akbari, M. (2014). Nano-cellulose-Based Composites and Their Commercial Uses. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

41. Akbarpour, I., Ghasemian, A., Resalati, H., Saraeian, A.R., & Jahan Latibari, A. (2014). Enzymatic Modification of Recycled Fibers by Cellulosic and Oxidative Enzymes. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

42.Akbarpour, I., Ghasemian, A., Resalati, H., Saraeian, A.R., & Jahan Latibari, A. (2014). Enhancing the Quality Properties of Recycled Papers with Starch and Cationic Polyacrylamide Dry Strength Additives. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

43. Akbarpour, I., Imani, M., Narchin, P., Kool, F., Ghaffari, M., Karian, I., & Pesarklou, M.R. (2014). Investigation of Environmental Effects of Bleaching Effluent and Appropriate Strategies to Reduce Them in Pulp and Papermaking Units. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

44. Tatari, A., Dehghani Firouzabadi, M.R., Ghaffari, M., **Akbarpour, I.**, & Imani, M. (2014). Biorefining of Hemicelluloses and its Importance in Pulp and Paper Industries. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

45. Akbarpour, I., Saraeian, A.R., Imani, M., Soleimani, A., Ghaffari, M., & Kool, F. (2014). Importance of Using Non-Wood Plant Cotton in Pulp and Paper Industries. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

46. Imani, M., Shakeri, A., Ghasemian, A., & **Akbarpour, I.** (2014). Comparison of Physical and Mechanical Properties of Hybrid Composites from Recycled Newspaper and Magazine Fibers. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

47. Imani, M., Shakeri, A., **Akbarpour, I.**, & Miraki, F. (2014). Production of Cellulose Nanocrystals from Cotton Stalk. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

48. Mohammadlou, A.R., Ghalandari, E., & **Akbarpour, I.** (2014). Investigation of Pollution Status of Wastewater from Iranian Wood and Paper Factories. *The 4th International Conference on Environmental Challenges & Dendrochronology*.

49. Imani, M., Karian, I., Pesarklou, M.R., & **Akbarpour, I.**, Ghasemian, A. (2013). Introduction to Cellulose Nanofibrils and their Importance in Papermaking Industry. *1st National Conference on Natural Resources Management*.

50. Pesarklou, M.R., & **Akbarpour, I.**, Karian, I., Soleimani, A., Imani, M. (2013). Production of Strong Nanocomposites Using Cellulose Nanofibrils. *1st National Conference on Natural Resources Management*.

51. Pesarklou, M.R., & **Akbarpour, I.**, Karian, I., Imani, M., Ghasemian, A. (2013). Possibility of Using Bamboo Chips and its Waste for Manufacturing Wood Composites. *1st National Conference on Natural Resources Management*.

52. Akbarpour, I., Soleimani, A., Narchin, P., Ghasemian, A., Imani, M., & Mohammadlou, A. (2013). Evaluation of the Effect of Adding Commercial Enzymes on Quality Properties of Recycled Paper. *1st National Conference on Natural Resources Management*.

53. Soleimani, A., Resalati, H., Asadpour Atoei, G., Dehghani Firouzabadi, M.R., & **Akbarpour, I.** (2014). The Effect of Different Hornbeam Mixing Levels on Refinability of Domestic CMP Pulp. *2nd National Conference on New Technologies in Wood and Paper Industries*.

54. Soleimani, A., Resalati, H., Asadpour Atoei, G., Dehghani Firouzabadi, M.R., & **Akbarpour, I.** (2014). Investigation on the Possibility of Improving Fiber Classification Properties of Domestic CMP Pulp Using Different Levels of Poplar and Hornbeam Mixing. *2nd National Conference on New Technologies in Wood and Paper Industries*.

55. Ghasemian, A., & **Akbarpour, I.** (2015). Paper Recycling and its Challenges in Iran. *Conference on Paper Production Challenges and Environment*.

56. Ghaffari, M., & **Akbarpour, I.**, Ghasemian, A., Imani, M. (2019). Use of Silver Nanoantennas Printed on Polymer and Paper Substrates and their Application in Various Industries. *1st National Conference on Paulownia Planting and Industry*.

57. Akbarpour, I., Ghasemian, A., Soleimani, A., & Sadeghipanah, V. (2019). Investigation of Fuel Properties from Paulownia Biomass for Bioenergy Production. *1st National Conference on Paulownia Planting and Industry*.

58. Akbarpour, I. (2019). Evaluation of Anatomical and Physico-Mechanical Properties of Fibers of New Green Paulownia Hybrid. *1st National Conference on Paulownia Planting and Industry*.

59. Akbarpour, I., & Sadeghipanah, V. (2019). Evaluation of Using Paulownia Wood Species in Pencil Making Industry. *1st National Conference on Paulownia Planting and Industry*.

60. Akbarpour, I. (2019). Possibility of Producing Soda-Anthraquinone Pulp from Paulownia Tri-Hybrid. *1st National Conference on Paulownia Planting and Industry*.

61. Akbarpour, I., Ghasemian, A., & Azizian Nasnar, A. (2020). Investigation of Waste Paper Consumption and Recycling Rate on a Global Scale until 2028. *3rd National Conference on Knowledge and Innovation in Wood and Paper Industry*.

62. Akbarpour, I., Ghasemian, A., & Azizian Nasnar, A. (2020). Evaluation of Using Calcium Hydroxide in Bleaching Systems of Deinked Pulp. *3rd National Conference on Knowledge and Innovation in Wood and Paper Industry*.

63. Akbarpour, I., Ghasemian, A., & Mehri Irani, H. (2020). Active Agents on Surface and their Process Role in Deinking of Recycled Papers. *3rd National Conference on Knowledge and Innovation in Wood and Paper Industry*.

64. Akbarpour, I., Sepahvand, S., Pirayesh, H., & Sadeghipanah, V. (2020). Possibility of Producing Resistant and Bio-based Wood-Cement Composites Using Various Lignocellulosic Materials. *3rd National Conference on Knowledge and Innovation in Wood and Paper Industry*.

65. Akbarpour, I. (2021). Investigation of Morphological and Physical Properties of Green Paulownia Hybrid Wood Fibers. *1st National Conference on Environment, Challenges, and Practical Solutions*.

66. Akbarpour, I., & Azizian, A. (2021). Creating a Cleaner Environment by Producing Vermicompost from Papermaking Industry Waste. *1st National Conference on Environment, Challenges, and Practical Solutions*.

67. Akbarpour, I., & Dehghani Firouzabadi, M.R. (2022). Environmental and Economic Evaluation of Using Peracetic Acid (PAA) in Pulp and Paper Industry. *4th National Conference on Knowledge and Innovation in Wood and Paper Industry*.

68. Akbarpour, I. (2022). Use of Dry Strength Additives in Improving Quality of Recycled Pulp. *4th National Conference on Knowledge and Innovation in Wood and Paper Industry*.

69. Akbarpour, I. (2022). Application of Oxidative Enzymes in Lignin Removal and Bleaching Processes of Pulp. *4th National Conference on Knowledge and Innovation in Wood and Paper Industry*.

70. Pishbin-Raeisi, S., **Akbarpour, I.**, & Dehghani Firouzabadi, M. R. (2025). Management and conversion of office waste papers to bioethanol using biological technologies. *21st International Conference on Management*, Tehran.

71. Pishbin-Raeisi, S., **Akbarpour, I.**, & Dehghani Firouzabadi, M. R. (2026). Sustainable Development through Microbial Management of Waste Paper for Biofuel Production. *5th National Conference on Knowledge and Innovation in the Wood and Paper Industry*, Tehran.

72. Akbarpour, I., Amani, S., & Sepahvand, S. (2026). Investigation of Biological Approaches in Pulping and Pulp Bleaching Processes. *5th National Conference on Knowledge and Innovation in the Wood and Paper Industry*, Tehran.

73. Sepahvand, S., **Akbarpour, I.**, & Amani, S. (2026). Lignin-Derived Adhesives: Sustainable Alternatives to Wood-Based Materials. *5th National Conference on Knowledge and Innovation in the Wood and Paper Industry*, Tehran.

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LIST OF RESEARCH PROJECTS :

1. Enzymatic Deinking of Waste Newspaper with Cellulase, **Co-Researcher** (Principal Investigator: Dr. Hossein Resalati), Gorgan University of Agricultural Sciences and Natural Resources, Completed

2. Improving the Quality Properties of Recycled Newspaper and Magazine Pulp with Chemical, Enzymatic, and Ultrasonic Treatments, **Co-Researcher** (Principal Investigator: Dr. Ali Ghasemian), Gorgan University of Agricultural Sciences and Natural Resources, Completed

3. Combined Use of Cellulase-Laccase Enzymes to Strengthen Paper from Recycled Newspaper and Magazine Pulp, **Principal Investigator**, Gorgan University of Agricultural Sciences and Natural Resources, Completed

4. Evaluation of Deinking Efficiency with Neutral Sulfite and Combined Neutral Sulfite-Enzymatic (Hemicellulase) Deinking Sequence in Waste Paper Recycling, **Principal Investigator**, Gorgan University of Agricultural Sciences and Natural Resources, Completed

5. Effect of Combined Deinking with Ultrasonic Waves and Manganese Peroxidase (MnP) Enzyme in Waste Newspaper Recycling, **Principal Investigator**, Gorgan University of Agricultural Sciences and Natural Resources, Completed

6. Effect of Enzymatic Deinking with Lignin Peroxidase (LiP) and Bleaching with Sodium Percarbonate and Sodium Perborate on Improving Recycled Pulp Quality, **Principal Investigator**, Gorgan University of Agricultural Sciences and Natural Resources, Completed

7. Use of Polymeric Additives and Oxidative/Reductive Bleaching Systems to Improve the Quality of Cellulosic Fibers from Mixed Office Waste (MOW) Pulp, **Co-Researcher** (Principal Investigator: Dr. Sima Sepahvand), Shahid Beheshti University, Zirab Unit, Completed

8. Use of Maleic Anhydride and Commercial Agent Sulvy-x Instead of Sodium Silicate in Deinking and Bleaching Processes of Recycled Pulp, **Co-Principal Investigator** (Jointly with DR. Mozhdeh Mashkour), Gorgan University of Agricultural Sciences and Natural Resources, Completed.

9. Use of Xylanase Enzyme and Potassium Peroxymonosulfate (Oxone) in Bleaching Sequences of Recycled Pulp, **Principal Investigator**, Gorgan University of Agricultural Sciences and Natural Resources, Approved - In Progress

LIST OF AUTHORED AND TRANSLATED BOOKS :

1. Afra, E., Mehri Irani, H., & **Akbarpour, I.** (2017). *Environmentally Benign Approaches for Pulp Bleaching*. Gorgan University of Agricultural Sciences and Natural Resources Press.

2. Ghasemian, A., & **Akbarpour, I.** (2019). *Biorefinery in Pulp and Paper Industry*. Gorgan University of Agricultural Sciences and Natural Resources Press.

3. Jonoubi, M., **Akbarpour, I.,** & Sepahvand, S. (2021). *Handbook of Green Materials (Self and Direct Assembling of Bionanomaterials)*. University of Tehran Press.

4. Dehghani Firouzabadi, M., **Akbarpour, I.,** & Asadi Khansari, R. (In Press). *Biotechnology for Pulp and Paper Processing*. (Under Final Review).

5. Akbarpour, I., & Sepahvand, S. (2025). *Production of Carbon Fibers from Lignin*. Shahid Beheshti University Press, Tehran.

Gorgan University of Agricultural Sciences & Natural Resources

INVITED LECTURES & CONFERENCE PRESENTATIONS:

1. An Introduction and Application of NCC and MCC in Pulp and Paper Industry, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, December 2011

2. Best Thermal and Mechanical Treatment Technologies to Reduce Solid Waste in Pulp and Paper Industries, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, December 2012

3. Overview of the Effects of Paper Quality Characteristics on Printability, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, December 2013

4. Enhancing the Quality Properties of Recycled Pulp with Cellulase and Hemicellulase Enzymatic Treatments, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, May 2015

5. Enzymatic Modification of Recycled Fibers by Cellulosic and Oxidative Enzymes, The 4th International Conference on Environmental Challenges & Dendrochronology, 2015

6. Biorefining of Hemicelluloses and its Importance in Pulp and Paper Industries, The 4th International Conference on Environmental Challenges & Dendrochronology, 2015

7. Investigation of Waste Paper Consumption and Recycling Rate on a Global Scale until 2028, 3rd National Conference on Knowledge and Innovation in Wood and Paper Industry, Tehran, February 2021

8. Possibility of Producing Resistant and Bio-based Wood-Cement Composites Using Various Lignocellulosic Materials, 3rd National Conference on Knowledge and Innovation in Wood and Paper Industry, Tehran, February 2021

9. Importance of Recycling Paper and Cardboard Products in Iran, Nature House, Gorgan, March 2021

10. Investigation of Waste Paper Consumption and Recycling Rate on a Global Scale until 2028, National Conference on Knowledge and Innovation in Wood and Paper Industry, 2021

11. Creating a Cleaner Environment by Producing Vermicompost from Papermaking Industry Waste, National Conference on Environment, Challenges, and Practical Solutions, 2022

12. Foresight and Job Opportunities/Entrepreneurship in Wood and Lignocellulosic Products Industries, Gorgan Technical and Vocational College, Imam Khomeini Aliabad Katoul, 2022

13. An Introduction to Preparation, Applications, Safety Issues, and Toxicity of Nanocellulose, Gorgan University of Agricultural Sciences and Natural Resources, 2022

14. Specialized Session on the Importance, Opportunities, and Foresight in Wood Recycling and Lignocellulosic Products Industry, Gorgan University of Agricultural Sciences and Natural Resources, 2022

15. Importance of Biotechnology in Pulp Recycling and Bleaching, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, 2022

16. Use of Enzyme Mixtures to Strengthen Recycled Paper, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, 2023

17. Employment and Entrepreneurship Based on Creativity and Innovation, Gorgan University of Agricultural Sciences and Natural Resources, 2023

18. Combined Use of Neutral and Enzymatic (Hemicellulase) Deinking in Waste Paper Recycling, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, 2024

19. Online Businesses, (Co-Speaker: Mehdi Parvini), Gorgan University of Agricultural Sciences and Natural Resources, 2024

20. Use of Manganese Peroxidase (MnP) Enzyme in Waste Paper Recycling, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, 2025

21. Choosing the Right Job for Graduates, (Co-Speaker: Mehdi Parvini), Gorgan University of Agricultural Sciences and Natural Resources, 2025

22. Prerequisites for Launching and Developing a Business, (Co-Speaker: Meysam Modarresi), Gorgan University of Agricultural Sciences and Natural Resources, 2025

23. Use of Cellulase and Laccase Enzyme Sequences to Improve Recycled Pulp Quality, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, 2025

24. Use of Lignin Peroxidase (LiP) Enzyme in Processing Waste Newspaper, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, November, 2025

25. Advantages and Barriers to Business in the Commercialization of cellulosic Products, Gorgan University of Agricultural Sciences and Natural Resources, Faculty of Wood and Paper Engineering, December, 2025

ACADEMIC TEACHING EXPERIENCE:

B.Sc. Level

An introduction in paper properties

Wood Chemistry

Wood Chemistry Laboratory

Papermaking Laboratory

Converting Technologies in Papermaking

Regulations for Establishing Industrial Units

Mass and Energy Balance

M.Sc. Level

Biorefineries of lignocellulosic materials

Ph.D. Level

Biotechnology in cellulose industry

Gorgan University of Agricultural Sciences & Natural Resources

SERVICE AND PROFESSIONAL MEMBERSHIP:

AWARDS:

LANGUAGES:

Persian, English