

Biography

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Dr. Eva Haviarova is presently Assistant Professor of Wood Products Engineering and Furniture Strength Design in Department of Forestry and Natural Resources, Purdue University. She is responsible for teaching “Furniture and Cabinet Design and Manufacturing” and “World Forests and Society” courses, conducting research in areas of Furniture Strength Design and Product Engineering; Direction for Emerging Furniture Design Challenges; Design and Development of Low Cost Furniture for Underprivileged; and Frame Design for Upholstered Furniture. Through her outreach activities she is working on forest products industry promotion projects. She is also a director of The Wood Research Laboratory.

Dr. Haviarova received her M.S. in Wood Processing & Furniture Design in 1992 from the Technical University in Zvolen, Slovakia, where she researched alternative natural materials and taught a course of aesthetic principles and use of natural materials in furniture production. After completing her Master's degree, she worked as an Industrial Engineer in a French-Slovak joint venture furniture company where she was in charge of scheduling production and quality control. As a research assistant at Louisiana State University, Haviarova researched alternative natural materials for furniture production, worker safety issues related to forest product industry, and biomass utilization.

She also received a Ph.D. in Furniture Design & Manufacturing from Purdue University. She designed, built, tested, and structurally analyzed school furniture for production and use in developing countries. She researched practical and environmentally friendly solutions for use of wood materials and their residues for furniture construction.

She authored or coauthored more than 50 publications and over 85 professional presentations on the subject of forest products, design, and manufacturing.

Dr. Haviarova is currently conducting projects:

- Promoting Sustainable Forest Industry Development in the State of Indiana: Forest Products Industry WEB Community Creation
- Analysis of the Forest Products Cluster in Indiana: A Framework for Improving Productivity and Competitiveness

- Indiana Forest Products Supply Chain Management
- Light Timber Frame Construction Based on Round Mortise and Tenon Joints — A Profitable Outlet for Small-Diameter Timber and Building Construction
- School Furniture in Developing Countries
- Emerging Furniture Design Challenges

Refereed Journal Articles

1. Haviarova, E., C.A. Eckelman, and Y. Erdil. 2001. Design and Testing of Wooden School Desks Frames for Production by Low Technology Methods from Waste Wood Residues. *Forest Products Journal*. 51(5):79-88.
2. Haviarova, E., C.A. Eckelman, and Y. Erdil. 2001. Design and Testing of Environmentally Friendly Wooden School Chairs for Developing Countries. *Forest Products Journal*. 51(3):58-64.
3. Eckelman, C.A., E. Haviarova, H. Zhu, and H. Gibson. 2001. Considerations in the Design and Development of School Furniture for Developing Regions Based on Local Resources. *Forest Products Journal*. 51(6):56-63.
4. Eckelman, C.A., Y.Z. Erdil, and E. Haviarova. 2002. Effect of Cross Holes on the Strength of Chair and Table Legs. *Forest Products Journal*. 52(5):67-70.
5. Eckelman, C.A., H. Akcay, R. Leavitt, and E. Haviarova. 2002. Demonstration Building Constructed with Round Mortise and Tenon Joints and Salvage Material from Small-Diameter Tree Stems. *Forest Products Journal*. 52(11/12):82-86.
6. Eckelman, C.A., Y.Z. Erdil, and E. Haviarova. 2003. School Chairs for Developing Countries: Designing for Strength and Durability, Simplicity, and Ease of Construction. *Forest Products Journal*. 53(2):63-70.
7. Erdil, Y., Haviarova, E., and C. Eckelman. 2004. Product Engineering and Performance Testing in Relation to Strength Design of Furniture. *Wood and Fiber Science*. Vo.36, No.3, pp. 411-416.
8. Eckelman, C., E. Haviarova, A. Tankut, N. Denizli, H. Akcay, and Y. Erdil. 2004. Withdrawal Capacity of Pinned and Unpinned Round Mortise and Tenon Furniture Joints. *Forest Products Journal*. 54(12):185-191.
9. Eckelman, C., E. Haviarova, Y. Erdil, A. Tankut, H. Akcay, N. Denizli. 2004. Bending Moment Capacity of Round Mortise and Tenon Furniture Joints. *Forest Products Journal*. 54(12):192-197.
10. Akcay, H., C. Eckelman, E. Haviarova. 2005. Withdrawal, Shear, and Bending Moment Capacities of Round Mortise and Tenon Timber Framing Joints. *Forest Products Journal*. 55(6):60-67.
11. Eckelman, C., Y. Erdil, E. Haviarova. 2006. Effect of Shoulders on the Bending Moment Capacity of Round Mortise and Tenon Joints. *Forest Products Journal* 56(1):82-86.
12. Eckelman, C. and E. Haviarova. 2006 Performance Tests of School Chairs Constructed with Round Mortise and Tenon Joints. *Forest Products Journal*. 56(3):51-57.
13. Eckelman, C., H. Ackay, and E. Haviarova. 2006. Performance Tests of Small Barn Frame Constructed with Round Mortise and Tenon Joints. *Forest Products Journal*. 56(4):41-47.

14. Tora, S., D.L. Cassens, and E. Haviarova. 2006. Properties of Hot-Melt Adhesives Used in Furniture Joints. *Forest Products Journal*. 56(11/12):43-50.
15. Tora, S., D.L. Cassens, and E. Haviarova. 2006. Performance of Stock Kitchen Cabinets Designed and Produced Based on Tested Joints. *Forest Products Journal*. 56(11/12):51-54.
16. Eckelman, C., E. Haviarova, and H. Akcay. 2006. Exploratory Study of the Withdrawal Resistance of Round Mortise and Tenon Joints with Steel Pipe Cross Pins. *Forest Products Journal*. 56(11/12): 55-61.
17. Eckelman, C., E. Haviarova, and H. Akcay. 2007. Parallel-to-Grain End-Load Capacity of Round Mortises in Round and Rectangular Timbers. *Forest Products Journal*. 57(4);66-71.
18. Eckelman, C., E. Haviarova, and C., H. Akcay. 2007. Exploratory study of small timber trusses constructed with through-bolt and cross-pipe heel connectors. *Forest Products Journal*. (in print).
19. Eckelman, C., and E. Haviarova. 2007. Load capacity and deflection characteristics of large wood dowels loaded in double shear. *Forest Products Journal*. (in print).