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EDUCATION

- Ph. D.** 1993. Forest Products with a minor in Mechanical Engineering (Solid Mechanics), Oregon State University, Corvallis, Oregon.
M. Eng. Sci. 1989. Mechanical Engineering, University of Tasmania, Tasmania, Australia.
B. S. 1983. Agricultural Engineering, Henan Agricultural University, Zhengzhou, P. R. China.

RESEARCH INTERESTS

Wood and natural fiber polymer composites, engineered wood products, composite durability and engineering performance, wood moisture relations.

RESEARCH IN PROGRESS

Chemical coupling in wood fiber and polymer composites.
Natural fiber reinforced composites from alloyed polymers.
Dimensional stability and durability of oriented strandboard (OSB).
Development of chemically modified oriented strandboard.
Characterization of internal void structure and its effect on engineering constants in OSB.
Establishing wood composites manufacturing facilities for the LFPDC.
Utilization of agricultural fibers for composite products.

PROFESSIONAL EXPERIENCE

- 2004/7-present Professor (with Roy O. Martin Jr. Professorship in Composites and Engineered Wood Products), Louisiana Forest Products Development Center, School of Renewable Natural Resources, LSU Agricultural Center
2000-2004/7 Associate Professor, Louisiana Forest Products Development Center, School of Renewable Natural Resources, LSU Agricultural Center
1996-2000 Assistant Professor, Louisiana Forest Products Development Center, School of Renewable Natural Resources, LSU Agricultural Center
1994-1995 Research Associate, Department of Forestry, Michigan State University, East Lansing, MI
1993-1994 Research Associate, Department of Forest Products, Oregon State University, Corvallis, OR
1989-1993 Research Assistant, Department of Forest Products, Oregon State University, Corvallis, OR

- 1987-1989 Research Assistant, Department of Civil and Mechanical Engineering, University of Tasmania, Tasmania, Australia
- 1986-1987 Visiting Scientist, Department of Mechanical Engineering, University of Queensland, Queensland, Australia
- 1983-1986 Lecturer, Department of Agricultural Engineering, Henan Agricultural University, Zhengzhou, China

PROFESSIONAL SERVICE

Membership in Professional Organizations

- International Research Group in Wood Preservation, Stockholm, Sweden
- American Chemical Society (ACS)
- American Wood Preservation Association (AWPA)
- American Society for Testing and Materials (ASTM), Philadelphia, PA
- Forest Products Society, Madison, WI
- Society of Wood and Science Technology, Madison, WI
- Louisiana Forestry Association, Alexandria, LA
- Structural Panel Association, Willowdale, Ontario, Canada
- Louisiana Biomass Council, Baton Rouge, LA
- Gamma Sigma Delta Society of Agriculture, Louisiana State University Chapter

Journals Edited, Manuscripts Refereed, Books and Proposals Reviewed

- Reviewer, Wood and Fiber Science. 1996-present.
- Reviewer, Forest Products Journal. 1996-present.
- Reviewer, USDA NRI Competitive Grant Program. 1998-present.
- Reviewer, National Research Council – Collaboration in Basic Science and Engineering (COBASE) Program. 1996-present.
- Reviewer, Journal of Material Science. 2000-present.
- Reviewer, Journal of Tropical Forest Products. 2000-present.
- Reviewer, USDA CSREES SBIR Program. 2002-present.
- Reviewer, Composites Part: Applied Science and Manufacturing. 2000-present.
- Reviewer, Industrial Crop and Products. 2004.

Advisory Boards, Commissions, or Agencies

- Panelist. 2002 USDA CSREES Small Business Innovation Research- Forest and Related Resources.
- Member. NSF-HUD Housing Research Agenda Development Group. 2003-2004.
- Chair. Session on Advances in Panel Systems, International Conference on Advances in Building Technology. Hong Kong, China. December 4-6, 2002
- Vice Chair. Current Policy and Current Issue Committee for Society of Wood and Science Technology. 2003-2004.
- Member. Current Policy and Current Issue Committee for Society of Wood and Science Technology. 2002-2003.
- Division coordinator, FPS Processing Division. 6/2003 to 6/2006.
- Member, Louisiana Formosan termite task force – Engineered wood products sub-

- committee. 2000.
- Vice-Chair, Book-review Committee for Society of Wood and Science Technology. - 6/1998 to 6/2000.
- Chair, FPS Fundamental Disciplines Division, Physics Group. 6/2000 -6/2003.
- Vice-Chair, FPS Fundamental Disciplines Division, Physics Group. 6/1999 to 6/2000.
- Secretary, FPS Fundamental Disciplines Division, Physics Group. 6/1996 to 5/1999.
- Chair, Joint drying and physics session at the 54th FPS meeting.
- Coordinator, Joint drying and physics session at the 55th FPS meeting.

HONORS

- **Markwardt Wood Engineering Award**
Forest Products Society. 2005
- **Roy O Martin Sr. Professor, Composites/Engineered Wood Products**
Endowed professorship for research in composite and engineered wood products.
Louisiana State University. 2004 to present.
- **Adjunct Professor**
College of Mechanical and Electrical Engineering, Henan Agricultural University.
Zhengzhou. China. 2004 to present.
- **Honorary Board Member**
Chinese Forestry Society. 2004-Present.
- **Wood Award**
Forest products Research Society (2nd Place, two awards annually for outstanding graduate student research). 1994.

TEACHING EXPERIENCE

Course Taught

- **RNR 7029A: Wood and Wood Composites Mechanics.** -Offered in Spring 1999 and Fall 2002. Student Evaluation Score: Spring 1999- 4.82/5 and Fall 2002 – 4.46/5.
- **RNR 7029B: Wood Composite Manufacturing.** - Offered in Spring 2001 and Spring 2003. Student Evaluation Score: Spring 2001 – 4.68/5 and Spring 2003 – 4.84/5.

Graduate Student/Postdoctoral Researcher Advising

- *On-Going Students*
Fei Yao, Ph.D. (Committee Chair)
Janjun Xu, Ph.D. (Committee Chair)
Fu Yu, Ph.D. (Committee Chair)
Xiaoqun Zhang. Ph.D. (Committee Member)
- *Completed Students - Committee Chair/Major Advisor*
Gi Young Goeng, MS in Forestry/Forest Products (2005)
Yiqiang Zhou, MS. in Forestry/Forest Products (2004)
Ronnie Vun, Ph.D. in Forestry/Forest Products (2003) - The 2003 Second Place Wood Award Winner for the best graduate student paper given by the Forest Products Society.
Ziqiang Lu, Ph.D. in Forestry/Forest Products (2003)
Xinwu Xu (Co-Chair, Joint Ph.D. student with NFU, Nanjing, China, 2003)
Sunyoung Lee, Ph.D. In Forestry/Forest Products (2002)

- Yukun Ren, MS in Forestry/Forest Products (2000)
 Cheng Piao, MS in Forestry/Forest Products (1998)
- *Completed Students- Committee Member*
 Matthew D. Voitier, MS (2005)
 Chiliang Chen, Ph.D. in Plant Pathology (2000)
 Kofi, P.K.U, MS in Forestry (1999)
 Jose Nos M-Gorier, Ph.D. in Civil Engineering (1999)
 - *Supervision of Postdoctoral Researchers and Visiting Scientists*
 Yong Lei (Postdoctoral Researcher), October 2004 to present
 Ziqiang Lu (Postdoctoral Researcher), July 2003 to June 2005
 Han Guanping (Postdoctoral Visiting Scientist), February 2003 to present
 Zhehui Liu (Postdoctoral Visiting Scientist), November 2003 to April 2005
 Duan Xinfeng (Postdoctoral Visiting Scientist), January 2003 to August 2003
 Jong Nam Lee (Postdoctoral Researcher), February 2000 to October 2002

EXTENSION SERVICES

Workshops Coordinated/Co-ordinated

- One-day workshop on ‘Drying Lumber for Quality and Profit’ at the Roy O. Martco Lumber Company’s Sawmill, LeMyoen, LA. With Dr. Ramsay Smith and Dr. Todd Shupe. November 21, 2003 (18 participants).
- Lumber Drying Workshop. With Dr. Todd Shupe, LFPL. Tegucigalpa, Honduras. October 25, 2001 (20 participants).
- The third annual three-day workshop on “Drying Lumber for Quality and Profits” - February 24-26, 1999 (12 participants). With Dr. Ramsay Smith, LFPL and Dr. Todd Shupe, Louisiana Cooperative Extension Service.
- The second annual three-day workshop on “Drying Lumber for Quality and Profits” - February 11-13, 1998 (17 participants). With Dr. Ramsay Smith, LFPL and Dr. Todd Shupe, Louisiana Cooperative Extension Service.
- The first annual three-day workshop on “Drying Lumber for Quality and Profits” - February 26-28, 1997 (12 participants). With Dr. Ramsay Smith, LFPL and Dr. Todd Shupe, Louisiana Cooperative Extension Service.
- One day workshop on “Basics of Lumber Drying” - October 24, 1996 (40 participants). With Dr. Ramsay Smith, LFPL and Dr. Bob Mills, Louisiana Cooperative Extension Service.

PUBLICATIONS

Book Chapters

- Han, G., and Q., Wu. 2004. Oriented strandboard as advanced structural material: – Property enhancement through alternative raw material and modeling. Northeast Forestry University Press, Harbin, China (*ISBN: 7-81076-6104*). 128 p.
- **Wu, Q.**, S. Lee, J. N. Lee, and K. Lian. 2003. Borate-modified oriented strandboard as a durable structural panel for home construction. Page 331-338 *In Better Utilization of Wood for Human, Earth, and Future* edited by H.H. Lee and S.S. Jang (*ISBN:89-87603-01-6-94540*). The Korean Society of Wood Science and Technology, Seoul, Korea.
- **Wu, Q.** 2003. Finite element modeling of the influence of voids on the engineering

constants of oriented strandboard. Page 762-769 *In Better Utilization of Wood for Human, Earth, and Future* edited by H.H. Lee and S.S. Jang (*ISBN:89-87603-01-6-94540*). The Korean Society of Wood Science and Technology, Seoul, Korea.

- **Wu, Q.**, S. Lee, and J. N. Lee. 2002. Mechanical, physical, and biological properties of borate-modified oriented strandboard. Pages 137-144. *In Advances in Building Technology* edited by M. Anson, J.M. Ko, and E.S.S. Lam (*ISBN: 0-08-044100-9*). Elsevier Science Ltd., Oxford, UK.
- **Wu, Q.**, and J. N. Lee. 2002. Long-term creep response of borate-modified oriented strandboard. Pages 129-136 *In Advances in Building Technology* edited by M. Anson, J.M. Ko, and E.S.S. Lam (*ISBN: 0-08-044100-9*). Elsevier Science Ltd. Oxford, UK.
- **Wu, Q.** 2001. Comparative properties of bagasse particleboard. Pages 277-284 *In Utilization of Agricultural and Forest Residue* edited by Dinguo Zhou, Yukun Hua, Chunping Dai, Rob Wellwod, and Shuichi Kawai (*ISBN: 7-5023-1593-4*). Science and Technology Literature Press. Beijing, China.

Articles in Refereed Journals

- Wu, Q., Z. Cai, G. Han, and J. N. Lee. 2005. Tensile and Thickness Swelling Properties of Strands from Southern Hardwoods and Southern Pine: Effect of Hot Pressing And Resin Application. *Forest Products Journal* (In-Review).
- Han, G., **Q. Wu**, and J.Z. Lu. 2005. Selected Properties of Wood Strand And Oriented Strandboard From Small-Diameter Southern Pine Trees. *Wood Fiber Sci.* (In-review).
- Han, G., **Q. Wu**, and J.Z. Lu. 2005. The Influence of Fines Content and Panel Density On Properties Of Mixed Hardwood Oriented Strandboard. *Wood Fiber Sci.* (In-review).
- Lei, Y., **Q. Wu**, and K. Lian. 2005. Cure Kinetics of Aqueous Phenol-Formaldehyde Resins Used for Oriented Strandboard Manufacturing: Analytical Technique. *Journal of Applied Polymer Science* (In-Review).
- Lei, Y., **Q. Wu**, and K. Lian. 2005. Cure Kinetics of Aqueous Phenol-Formaldehyde Resins Used for Oriented Strandboard Manufacturing: Effect of Wood. *Journal of Applied Polymer Science* (In-Review).
- Lei, Y., **Q. Wu**, J. Z. Lu, and K. Lian. 2005. Cure Kinetics of Aqueous Phenol-Formaldehyde Resins Used for Oriented Strandboard Manufacturing: Effect of Zinc Borate. *Journal of Applied Polymer Science* (In-Review).
- Lu, J.Z., C.J. Monlezum, **Q. Wu**, Q. Cao, and G. Woodson. 2005. Fitting weibull and lognormal distributions to wood fiber length. *Wood Fiber Sci.* (In-review).
- Duan, X., J.Z. Lu, Q. Wu, and K. Lian. 2005. Thermal, mechanical, and fungal decay resistance properties of wood-polymer composites modified with chitosan copper complex. *Journal of Applied Polymer Science* (In-Review).
- **Wu, Q.**, and X. Xu. 2005. The influence of wax-sizing on physical and mechanical properties of Bagasse particleboard. *Wood Fiber Sci.* (In-review).
- **Wu, Q.**, Z. Cai, and J.N. Lee. 2005. Creep behavior of borate treated strandboard: effect of zinc borate retention, wood species, and load level. *Wood Fiber Science* (In-Review).
- Lu, J.Z., and **Q. Wu**. 2005. Surface and interfacial characterization of wood-PVC composites: Dynamic contact angles and kinetics of wetting. *WFS* (In-Review).
- Han, G., **Q. Wu**, and X. Duan. 2005. Physical and mechanical properties of mixed comrind and hardwood oriented strandboard bonded with phenol formaldehyde resin.

Forest Products Journal – Paper 97xx (In-press).

- Han, G. P., **Q. Wu**, and X., Wang. 2005. Stress-wave properties of wood-based panels: effect of moisture, product type, and material direction. Forest Products J. - Paper 9730 (In-press).
- Via, B.K., **Q. Wu**, I.D. Hartley, T.F. Shupe, S.Y. Lee, and B.G. Lee. 2005. Theoretical sensitivity of warp to varying layer thickness in 5-layer plywood. Korean J. Wood Science and Technology 33(2): 24-28.
- Lu, J.Z., **Q. Wu**, and I.I. Negulescu. 2005. Maleated wood fiber-high density polyethylene composites: coupling mechanisms and interfacial characterization. Composite Interfaces 12 (1-2):125-140.
- Xu, X., **Q. Wu**, and D. Zhou. 2005. Kenaf core composites: a laboratory trial. Journal of Nanjing Forestry University 29(1):10-16.
- **Smith, W.R. and Q. Wu**. 2005. Durability improvement for structural wood composites- Current state of the art. Forest Products Journal 52(2):8-17.
- **Wu, Q.**, Cai, Z., and J.N. Lee. 2005. Tensile and dimensional properties of wood strands made from plantation southern pine lumber. Forest Products Journal 52(2):1-6.
- Lu, J.Z., **Q. Wu**, and I.I. Negulescu. 2005. Maleated wood fiber-high density polyethylene composites: coupling agent performance. Journal of Applied Polymer Science 96:93-102.
- Lu, J.Z., and **Q. Wu**. 2005. Surface and interfacial characterization of wood-PVC composites: imaging morphology and wetting behavior. Wood Fiber Sci. 37(1):95-111.
- Lu, J.Z., and **Q. Wu**. 2004. Surface and interfacial characterization of wood-PVC composites: thermal and dynamic mechanical properties. Wood Fiber Sci. 36(4):500-510.
- Lu, J.Z., **Q. Wu**, and I.I. Negulescu. 2004. Maleated wood fiber-high density polyethylene composites: compounding process. Journal of Applied Polymer Science 93:2570-2578.
- Han, G., and **Q. Wu**. 2004. Comparative properties of comrind and wood strands for structural composite manufacturing. Forest Products Journal 54(12):283-294.
- Vun, R.Y., **Q. Wu**, C.J. Monlezum. 2004. Through-thickness ultrasonic characterization of wood and agricultural-fiber composites. Forest Products Journal 54(12):233-239.
- Cai, Z., **Q. Wu**, J.N. Lee, and S. Hiziroglu. 2004. The influence of board density, mat construction, and chip type on performance of particleboard made from eastern redcedar. Forest Products Journal 54(12):226-232.
- Xu, X., D. Zhou, **Q. Wu**, and R.P. Vlosky. 2004. Agri-based Composites in China: Opportunities & Challenges. Forest Prod. J. 54(5):8-15.
- Lee, S., **Q. Wu**, and W. R. Smith. 2004. Formosan subterranean termite resistance of borate-modified strandboard manufactured from southern wood species: a laboratory trial. Wood Fiber Sci. 36(1):107-118.
- **Wu, Q.**, J.N. Lee, and G. Han. 2004. The influence of voids on the engineering constants of oriented strandboard: a finite element model. Wood Fiber Sci. 36(1):71-83.
- **Xu, X.**, Q. Wu, and D. Zhou. 2004. Experimental particleboard from Kenaf stalk (I): Influences of structure on board performances. China Forest Prod. Industry 31(3): 28-32.
- **Xu, X.**, Q. Wu, and D. Zhou. 2004. Experimental particleboard from Kenaf stalk (II): Influences of glue system and raw materials on board performances. China Forest Products Industry 31(5): 29-31.

- Vun, R.Y., **Q. Wu**, and C. J. Monlezum. 2003. Ultrasonic characterization of horizontal density variations in oriented strandboard. *Wood and Fiber Science* 35(4): 450-465.
- Vun, R.Y., **Q. Wu**, M. Bhardwaj, and G. Stead. 2003. Ultrasonic characterization of structural properties of oriented strandboard: Direct-contact vs. Non-contact methods. *Wood and Fiber Science* 35(3): 381-396.
- **Wu, Q.**, and J.N. Lee. 2003. Continuum modeling of engineering constants of oriented strandboard. *Wood and Fiber Science* 35(1):24-40.
- Hiziroglu, S., R.B. Holcomb, and **Q. Wu**. 2002. Manufacturing particleboard from eastern red cedar. *Forest Products Journal* 52(7/8):72-76.
- Shupe, T. F., **Q. Wu**, and I. D. Hartley. 2002. Calibration of moisture meters for southern hardwoods. *Forest Products Journal* 52(7/8): 59-62.
- Lu, J. Z., and **Q. Wu**. 2002. The influence of maleation on wood surface wettability and interfacial bonding strength in wood-PVC laminates. *Wood Fiber Science* 34(3):434-459.
- **Wu, Q.**, and J. N. Lee. 2002. Thickness swelling of oriented strandboard under long-term cyclic humidity exposure conditions. *Wood and Fiber Science* 34(1):125-139.
- Lee, J. N., and **Q. Wu**. 2002. In-plane dimensional stability of three-layer oriented strandboard. *Wood and Fiber Science* 34(1):77-95.
- Vlosky, R. P., and **Q. Wu**. 2001. A brief look at raw material usage in the furniture and cabinet industries in the southern United States. *Forest Products Journal* 51(9):25-29.
- Lee, S., **Q. Wu**, and B. Strickland. 2001. Influence of flake chemical properties and zinc borate on gel time of phenolic resin for OSB manufacturing. *Wood and Fiber Science* 33(3):425-436.
- Poku, K., **Q. Wu**, and R. P. Vlosky. 2001. Wood properties of lesser-used species of tropical hardwoods from Ghana. *Wood and Fiber Science* 33(2):284-291.
- **Wu, Q.**, and R. P. Vlosky. 2000. Panel products: a perspective from furniture and cabinets manufacturers in the southern United States. *Forest Products J.* 50(9):45-50.
- **Wu, Q.**, and Y. Ren. 2000. Characterization of sorption behavior of oriented strandboard under long-term cyclic humidity exposure conditions. *Wood and Fiber Science* 32(4):404-418.
- Lu, J. Z., **Q. Wu**, and H.S. McNabb, Jr. 2000. Chemical coupling in wood fiber and polymer composites: A review of coupling agents and treatments. *Wood and Fiber Science* 32(1):88-104.
- **Wu, Q.**, and C. Piao. 1999. Thickness swelling and its relationship to internal bond strength loss of commercial oriented strandboard. *Forest Products Journal* 49(7/8):50-55.
- **Wu, Q.** 1999. Screw-holding capacity of two furniture-grade plywoods. *Forest Products Journal* 49(4):56-59.
- **Wu, Q.** 1999. Application of Nelson's sorption isotherm to wood composites and overlays. *Wood and Fiber Science* 31(2):187-191.
- **Wu, Q.** 1999. In-plane dimensional stability of oriented strand panel: Effect of processing variables. *Wood and Fiber Science* 31(1):28-40.
- **Wu, Q.** 1998. Effect of moisture on bending and breaking resistance of commercial oriented strandboard. *Wood and Fiber Science* 30(2):205-209.
- **Wu, Q.**, and W. R. Smith. 1998. Effects of elevated and high-temperature schedules on warp in southern yellow pine. *Forest Products Journal* 48(2):52-56.

- **Wu, Q.** 1997. Calibration of moisture meters for baldcypress (*Taxodium Distichum*). *Forest Products Journal* 47(10):77-78.
- **Wu, Q.**, and O. Suchsland. 1997. Effect of moisture on the flexural properties of commercial oriented strandboard. *Wood and Fiber Science* 29(1):47-57.
- Milota, M. R., and **Q. Wu**. 1997. Post sorting of Hem-fir: a mill study. *Forest Products Journal* 47(2):49-56.
- **Wu, Q.**, and O. Suchsland. 1996. Linear expansion and its relationship to moisture content change for commercial oriented strand boards. *Forest Products Journal* 46(11/12):79-83.
- **Wu, Q.**, and O. Suchsland. 1996. Prediction of moisture content and moisture gradient of an overlaid particleboard. *Wood and Fiber Science* 28(2):227-239.
- **Wu, Q.**, and M. R. Milota. 1996. Mechano-sorptive deformation of Douglas-fir specimens under tension during moisture adsorption. *Wood Fiber Science* 28(1):128-132.
- **Wu, Q.**, A. R. Oliver, and P. E. Doe. 1995. A study of the boundary layer flow through a lumber drying stack. *Drying Technology* 13(8&9):2011-2026.
- **Wu, Q.** 1995. Rheological behavior of Douglas-fir as related to the process of drying. *Drying Technology* 13(8&9):2239-2240.
- **Wu, Q.**, and M. R. Milota. 1995. Rheological behavior of Douglas-fir perpendicular to the grain at elevated temperatures. *Wood and Fiber Science* 27(3):285-295.
- **Wu, Q.**, and M. R. Milota. 1995. Shrinkage and set in drying 4x4 Douglas-fir lumber. *Forest Products Journal* 45(5): 59-63.
- **Wu, Q.**, and M. R. Milota. 1994. Effect of creep and mechano-sorptive effect on the stress development during drying. *Drying Technology* 12(8): 2057-2085.

Conference Proceedings

- Zhang, B., **Q. Wu**, L. Wang, and G Han. 2005. Characterization of Internal Void Structure of Strand-Based Wood Composites Using X-Ray Tomography and Digital Tools. In Proc. the McMat2005 – The 2005 joint ASME/ASCE/SES Conference on Mechanics and Materials. June 1-3, 2005. Baton Rouge, LA. Paper 255.
- Zhang, B., **Q. Wu**, L. Wang, And G Han. 2005. The Influence of In-Plane Density Variation On Engineering Properties of Oriented Strandboard: A Finite Element Simulation. In Proc. the McMat2005 – The 2005 joint ASME/ASCE/SES Conference on Mechanics and Materials. June 1-3, 2005. Baton Rouge, LA. Paper 257.
- **Wu, Q.**, and R. Vlosky. 2004. New Initiative on Bio-based Industry Development in the United States. *In*. Proc. the 2004 Council Meeting and Technical Forum of Wood Industry Section, Chinese Forestry Society. Dan Yang, China. October 27-29. pp 97-110.
- Han, G., **Q. Wu**, and R. Vlosky. 2004. Mixed Sugarcane Rind and Hardwood Oriented Strandboard Bonded with Phenol Formaldehyde Resin. In Proc. the 7th Pacific Rim Bio-based Composite Symposium. Nanjing, China. October 31-Nov. 2. pp 115-125.
- Duan, X, J.Z. Lu, **Q. Wu**, and K. Lian. 2004. Mechanical properties and decay resistance of wood-polymer composites modified with Chitosan copper complex. In Proc. the 7th Pacific Rim Bio-Based Composites Symposium. Nanjing, China. October 31-November 2, 2004. pp 205-215.
- Xu, X., **Q. Wu**, and D. Zhou. 2004. A laboratory trail of manufacturing kenaf core particleboard (KPB). In Proc. 7th Pacific Rim Bio-Based Composites Symposium.

Nanjing, China. October 31-November 2, 2004. pp 270-277.

- **Wu, Q.**, X. Duan, and J.Z. Lu. 2004. Chitosan copper complex as a potential preservative for enhancing biological performance of wood polymer composite. In Proc. the Sun Grant Initiative South Central Region Meeting. Okalahoma City, OK. June 14-15, 2004. B-4.
- **Wu, Q.**, J.Z. Lu, I.I. Negulescu, and K. Lian. 2004. Coupling efficiency of maleated polyethylene copolymers in wood fiber-polymer composite. In Proc. the 3rd East Asian Polymer Conference, Chengdu, China. June 6-10, 2004. pp 244-245.
- **Wu, Q.**, X. Duan, J.Z. Lu, and K. Lian. 2004. Wood-polymer composites modified by chitosan copper complex with improved biological performance. In Proc. the 3rd East Asian Polymer Conference, Chengdu, China. June 6-10, 2004. pp 420-421.
- Lu, J. Z., **Q. Wu**, and I. I. Negulescu. 2004. Coupling Efficiency of Maleated Polyethylene Copolymers in Wood Fiber-High Density Polyethylene Composites. In. Proc. Annual Technical Conference, Society of Plastics Engineers, Chicago, IL. May 16-20, 2004.
- Lu, J. Z., **Q. Wu**, and I. I. Negulescu. 2004. A fundamental study on compounding process for wood fiber-High Density Polyethylene Composites. In Proc. 11th International Conference on Composite Engineering. Hilton-Head Island, South Carolina. August 8-14, 2004.
- **Wu, Q.** 2004. Preservative treated structural wood composites for durable home constructions. Position Paper in Proc. NSF and HUD Housing Research Workshop, Orlando, FL. February 11-14, 2004. 10 pp.
- **Wu, Q.**, S. Lee, and J. P. Jones. 2003. Decay and mold resistance of borate modified oriented strandboard. CD-ROM: IRG/WP03-40260. In Proc. 34th Annual Conference for the International Research Group on Wood Preservation, Brisbane, Australia. May 12-17, 2003.
- **Wu, Q.**, and J. N. Lee. 2002. Predicting engineering constants of oriented strandboard: a continuum model. Page 372-380 *In* Proc. The 6th Pacific Rim Bio-composite Conference. Portland, OR. November 10-13, 2002.
- Lu, J. Z., I. I. Negulescu, and **Q. Wu**. 2002. Thermal and dynamomechanical properties of wood-PVC composites. Page 535-544 *In* Proc. The 6th Pacific Rim Bio-composite Conference. Portland, OR. November 10-13, 2002.
- Vun, R.Y., and **Q. Wu**. 2002. Ultrasonic mapping of in-plane density variation of oriented strandboard. Pages 20-28 *In*: Proc. 13th International Symposium on Nondestructive Testing of Wood, Berkeley, CA. August 19-21, 2002.
- **Wu, Q.**, and S. Lee. 2002. Leachability of borate-modified oriented strandboard: a comparison of zinc and calcium borate. CD-ROM: IRG/WP02-40232. In Proc. 33rd Annual Conference for the International Research Group on Wood Preservation, Cardiff, England. May 12-17, 2002. 10 p.
- Lee, S., **Q. Wu**, and B. Strickland. 2001. Effects of flake chemical properties and zinc borate on gel time of phenolic resin for OSB manufacturing. Pages 440-447 *In*: Proc. Wood Adhesive 2000. Lake Tahoe, NV. June 18-20, 2000.
- **Wu, Q.**, and M. Xiong. 2001. A simulation of moisture diffusion process in furniture-grade medium density fiberboard. Pages: 222-227 in A. Ishikawa ed. *In*: Proc. 7th International IUFRO Wood Drying Conference, Tsukuba, Japan. July 9-13, 2001.

- Vun, R.Y., **Q Wu**, M. Bhardwaj, and G. Stead. 2000. Through-thickness ultrasonic transmission properties of oriented strandboard. Pages: 77-86 in F. Divos, ed. *In: Proc. 12th International Symposium on Nondestructive Testing of Wood*, Sopron, Hungary. September 13-15, 2000.
- Lee, S., **Q. Wu**, and B. Strickland. 2000. Effects of flake chemical properties and zinc borate on gel time of phenolic resin for OSB manufacturing. Pages 35-36 In: *Proc. Wood Adhesive 2000*. Lake Tahoe, NV. June 18-20, 2000.
- **Wu, Q.** 1999. Influence of moisture on stress-wave velocity and modulus of wood based panels. Pages: 19-26 in D. G. Pollock, ed. *In: Proc. 11th International Symposium on Nondestructive Testing of Wood*, Madison, WI. September 9-11, 1998.
- **Wu, Q.** 1998. Stiffness and strength retention properties of structural oriented strandboard. Pages 838-839 in Natterer, J., and J. L. Sandoz, eds. *In Proc. Fifth World Conference on Timber Engineering*, Montreux, Switzerland. August 17-20, 1998.
- **Wu, Q.** 1998. In-plane stability of oriented strandboard: layer properties in relation to processing variables. Pages 15-24 *in Engineered System Using Structural Panels*. Forest Products Society Proceedings No. 7272, Madison, WI.
- Milota, M. R., and **Q. Wu**. 1995. Post sorting of Hem-fir: a mill study. Pages 98-117 in M. R. Milota, ed. *In Proc. 46th Western Dry Kiln Assoc. Meeting*, Reno, NV. May 10-12, 1995.
- Milota, M. R., and **Q. Wu**. 1994. Resolution of the stress and strain components during drying of a softwood. Pages 735-742 *In Proc. 9th International Drying Symposium*, Gold Coast, Queensland, Australia. August 1-2, 1994.
- **Wu, Q.**, A. R. Oliver, and P. E. Doe. 1989. Air flow through a timber stack. Pages 56-64 in *Proc. the Fourth Australasian Conference on Heat and Mass Transfer*, Christchurch, New Zealand. May 9-12, 1989.
- **Wu, Q.**, A. R. Oliver, and P. E. Doe. 1989. A heat and mass transfer model for drying of Tasmanian Eucalypt timbers. Pages 587-593 *in Proc. the Fourth Australasian Conference on Heat and Mass Transfer*, Christchurch, New Zealand. May 9-12, 1989.

Louisiana Agriculture Publications

- **Wu, Q.** 2003. Particleboard from Sugarcane Bagasse for Value-added Applications. *Louisiana Agriculture* 46(3): 11.
- Dehoop, N., M. Dunn, T. F. Shupe, W. R. Smith, R. Vlosky, and **Q. Wu**. 2002. Value-Added Forest Products in Louisiana: Current Status and Opportunities for Growth. *Louisiana Agriculture* 45(4):24-25.
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- Han, G., and **Q. Wu**. 2003. Comparative properties of comrind and wood flakes. In Proc. 57th Forest Products Society Annual Meeting, Bellevue/Seattle, WA. June 22-25, 2003.
- **Wu, Q.** 2003. Creep properties of borate-modified oriented strandboard. In Proc. 57th Forest Products Society Annual Meeting, Bellevue/Seattle, WA. June 22-25, 2003.
- **Wu, Q.** 2003. Borate-treated oriented strandboard as a structural panel for home construction. In Proc. 57th Forest Products Society Annual Meeting, Bellevue/Seattle, WA. June 22-25, 2003.
- Lu, J. Z., and **Q. Wu**. 2002. Measurement of dynamic and static contact angles on chemically modified wood surfaces with an imaging system. In Proc. 56th Forest Products Society Annual Meeting, Madison, WI. June 23-26, 2002.
- Lee, S, J. N. Lee, and **Q. Wu**. 2002. Leachability of borate-modified OSB: a comparison of zinc and calcium borate. In Proc. 56th Forest Products Society Annual Meeting, Madison, WI. June 23-26, 2002.
- Vun, R., and **Q. Wu**. 2002. Ultrasonic mapping of in-plane density variation of oriented strandboard. In Proc. 56th Forest Products Society Annual Meeting, Madison, WI. June 23-26, 2002
- Smith, W.R., D. Ring, T. Shupe, G. Henderson, **Q. Wu**, and M. Voitier. 2002. Louisiana and the Formosan Subterranean Termite: An Update. Abstract in Biographies & Abstracts, Forest Products Society 56th Annual Meeting, Madison, WI. June 23-26, 2002.
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- Lee, S., and **Q. Wu**. 2001. Leachability of borate-modified OSB from southern wood species. In Proc. 55th Forest Products Society Annual Meeting, Baltimore, MD. June 24-27, 2001.
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- Lee, S., **Q. Wu**, and T.F. Shupe. 2000. Selected engineering properties of southern hardwoods. In Proc. 54th Forest Products Society Annual Meeting, Lake Tahoe, NV. June 18-21, 2000.
- **Wu, Q.**, and R. Vlosky. 2000. Panel products: a perspective from furniture and cabinet manufacturers in the southern United States. In Proc. 54th Forest Products Society Annual Meeting, Lake Tahoe, NV. June 18-21, 2000.
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time of phenolic resin for oriented strandboard manufacturing. In Proc. Wood Adhesive 2000, Lake Tahoe, NV. June 21-23, 2000.

- **Wu, Q.** 1999. Durability of oriented strandboard: effect of short-term water soaking. In Proc. 1st International Conference on Advanced Engineered Wood Composites, Bar Harbor, Maine. July 7, 1999.
- Ren, Y., and **Wu, Q.** 1999. Characterization of sorption behavior of oriented strandboard under long-term cyclic humidity exposure conditions. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 27-30, 1999.
- Lu, J. Z., and **Wu, Q.** 1999. A review of chemical coupling and adhesion mechanisms in wood fiber and polymer composites. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 27-30, 1999.
- **Wu, Q.** 1999. Influence of moisture, fastening direction, and wood species on screw withdrawal load of furniture-grade plywood. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 27-30, 1999.
- Kofi, P., and **Wu, Q.** 1999. Wood properties of three potential lesser used topical hardwoods from Ghana. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 27-30, 1999.
- **Wu, Q.**, and C. Piao. 1998. Characterizing strength loss behavior of OSB. In Proc. 52nd Forest Products Society Annual Meeting, Merida, Mexico. June 21-24, 1998.
- **Wu, Q.** 1997. Effects of the processing variables on dimensional stability of orientedstrand board. In Proc. IUFRO Division 5 Conference “Forest Products for Sustainable Forestry”, Pullman, WA. July 7-12, 1997.
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- **Wu, Q.**, and O. Suchsland. 1996. Effect of moisture on the flexural properties of commercial oriented strand boards. In Proc. 50th Forest Products Society Annual Meeting, Minneapolis, MN. June 23-26, 1996.
- **Wu, Q.**, and O. Suchsland. 1996. Prediction of moisture and moisture gradient of an overlaid particleboard. In Proc. 50th Forest Products Society Annual Meeting, Minneapolis, MN. June 23-26, 1996.
- **Wu, Q.** 1994. Effect of creep and mechano-sorptive effect on the stress development during wood drying. In Proc. 48th Forest Products Society Annual Meeting, Portland, Maine. June 26-29, 1996.
- **Wu, Q.**, and M. R. Milota. 1993. Mechano-sorptive effect perpendicular to the grain at elevated temperatures. In Proc. 47th Forest Products Society Annual Meeting, Clearwater Beach, FL. June 20-23, 1993.

Technical Forum (Poster) Presentations

- **Wu, Q.**, X. Duan, and J.Z. Lu. 2004. Chitosan Copper Complex as a Potential Preservative For Enhancing Biological Performance Of Wood-Polymer Composites. South Central Region Sun Grant Initiative Conference & Workshop in Oklahoma City. June 14, 2004.
- **Wu, Q.** and J.Z. Lu. 2004. Coupling efficiency of maleated polyethylene copolymers in wood fiber-polymer composite. Presented at the 3rd East Asian Polymer Conference,

Chengdu, China. June 9, 2004.

- **Wu, Q.**, X. Duan, and J.Z Lu. 2004. Wood-polymer composites modified by chitosan copper complex with improved biological performance. Presented at the 3rd East Asian Polymer Conference, Chengdu, China. June 9, 2004.
- **Wu, Q.** 2004. Borate treated structural wood composites for durable home constructions. In Proc. NSF and HUD Housing Research Workshop, Orlando, FL. February 11-14, 2004.
- Han, G., and **Q. Wu.** 2003. Comparative properties of comrind and wood flakes. In Proc. 57th Forest Products Society Annual Meeting, Bellevue/Seattle, WA. June 21, 2003.
- Smith, W.R., C.F. deHoop, T. Shupe, R. Vlosky, and Q. Wu. 2003. Wood Durability Research at the Louisiana Forest Products Development Center. American Wood-Preservers' Association, Spring Meeting, Boston, Mass. April 2003.
- Smith, W.R., D. Ring, T. Shupe, G. Henderson, and **Q. Wu.** 2002. Louisiana and the Formosan Subterranean Termite: An Update. AWWPA Annual Meeting, Memphis, TN.
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- Lee, S, J. N. Lee, and **Q. Wu.** 2002. Leachability of borate-modified OSB: a comparison of zinc and calcium borate. In Proc. 56th Forest Products Society Annual Meeting, Madison, WI. June 23-26, 2002.
- Vun, R., and **Q. Wu.** 2002. Ultrasonic mapping of in-plane density variation of oriented strandboard. In Proc. 56th Forest Products Society Annual Meeting, Madison, WI. June 23-26, 2002
- Lu, J. Z., and **Q. Wu.** 2002. The Behavior of wood-PVC composites. In Proc. American Association for textile chemists and colorists. Auburn University, Auburn. April 12-13, 2002.
- Lu, J. Z., and **Q. Wu.** 2001. The influence of maleation on wood surface wettability and interfacial bonding strength in wood-PVC laminates. In Proc. 55th Forest Products Society Annual Meeting, Baltimore, MD. June 24-27, 2001.
- Lee, S, and **Q. Wu.** 2001. Leachability of borate-modified OSB from southern wood species. In Proc. 55th Forest Products Society Annual Meeting, Baltimore, MD. June 24-27, 2001.
- Vun, R., and **Q. Wu.** 2001. Ultrasonic response of wood and agricultural fiber based composite materials. In Proc. 55th Forest Products Society Annual Meeting, Baltimore, MD. June 24-27, 2001.
- Lu, Z., and **Wu, Q.** 2000. Compounding processes used for wood fiber and polymer composites: a review. In Proc. 54th Forest Products Society Annual Meeting, Lake Tahoe, NV. June 18-21, 2000.
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hardwoods. In Proc. 54th Forest Products Society Annual Meeting, Lake Tahoe, NV. June 18-21, 2000.

- **Wu, Q.**, and R. Vlosky. 2000. Panel products: a perspective from furniture and cabinet manufacturers in the southern United States. In Proc. 54th Forest Products Society Annual Meeting, Lake Tahoe, NV. June 18-21, 2000.
- Lee, S., and **Wu, Q.** 2000. Effects of flake chemical properties and zinc borate on gel time of phenolic resin for oriented strandboard manufacturing. In Proc. Wood Adhesive 2000, Lake Tahoe, NV. June 21-23, 2000.
- Ren, Y., and **Wu, Q.** 1999. Characterization of sorption behavior of oriented strandboard under long-term cyclic humidity exposure conditions. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 26, 1999.
- Lu, J. Z., and **Wu, Q.** 1999. A review of chemical coupling and adhesion mechanisms in wood fiber and polymer composites. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 26, 1999.
- **Wu, Q.** 1999. Influence of moisture, fastening direction, and wood species on screw withdrawal load of furniture-grade plywood. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 30, 1999.
- Kofi, P., and **Wu, Q.** 1999. Wood properties of three potential lesser used topical hardwoods from Ghana. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 30, 1999.
- **Wu, Q.** 1998. Stiffness and strength retention properties of structural oriented strandboard. Presented at the 5th World Conference on Timber Engineering. Montreux, Switzerland. August 17-20, 1998.
- **Wu, Q.**, and O. Suchsland. 1996. Effect of moisture on the flexural properties of commercial oriented strand boards. Presented at the 50th Forest Products Society Annual Meeting, Minneapolis, MN. June 23-26, 1996.
- **Wu, Q.** 1994. Effect of creep and mechano-sorptive effect on the stress development during wood drying. Presented at the 48th Forest Products Society Annual Meeting, Portland, Maine. June 26-29, 1994.
- **Wu, Q.**, and M. R. Milota. 1993. Mechano-sorptive effect perpendicular to the grain at elevated temperatures. Presented at the 47th Forest Products Society Annual Meeting, Clearwater Beach, FL. June 20-23, 1993.

Papers Presented at Professional Meetings and Seminars -Invited Presentations

- **Wu, Q.** 2004. Selected properties of wood-polymer composites modified with chitosan copper complex. Presented at 7th Pacific Rim Bio-Based Composites Symposium. Nanjing, China. October 31 2004.
- **Wu, Q.** 2004. Mixed sugarcane rind and hardwood oriented strandboard bonded with phenol formaldehyde resin. Presented at 7th Pacific Rim Bio-Based Composites Symposium. Nanjing, China. November 1, 2004.
- **Wu, Q.** 2004. Borate-treated strandboard from southern wood species. Presented at the 58th FPS meeting in Grand Rapids, MI. June 30, 2004.
- **Wu, Q.** 2004. Chitosan Copper Complex as a Potential Preservative For Enhancing Biological Performance of Wood-Polymer Composites. Presented at the South Central

- Region Sun Grant Initiative Conference & Workshop in Oklahoma City. June 14, 2004.
- **Wu, Q.** 2004. Coupling efficiency of maleated polyethylene copolymers in wood fiber-polymer composite. Presented at the 3rd East Asian Polymer Conference, Chengdu, China. June 6- Jun 10, 2004.
- **Wu, Q.** 2004. Preservative treated structural wood composites for durable home constructions. Presented at the NSF and HUD Housing Research Workshop, Orlando, FL. February 13, 2004.
- **Wu, Q.** 2004. Economic Feasibility of Using Comrind as a Supplemental Raw Material for Structural Composite Manufacturing. Presented at the American Sugar Cane League Research Proposal Meeting, Thibodaux, LA. February 19, 2004.
- **Wu, Q.** 2003. Creep properties of borate-modified oriented strandboard. In Proc. 57th Forest Products Society Annual Meeting, Bellevue/Seattle, WA. June 22, 2003.
- **Wu, Q.** 2003. Borate-treated oriented strandboard as a structural panel for home construction. In Proc. 57th Forest Products Society Annual Meeting, Bellevue/Seattle, WA. June 23, 2003.
- **Wu, Q.** 2003. Decay and mold resistance of borate modified oriented strandboard. In Proc. 34th Annual Conference for the International Research Group on Wood Preservation, Brisbane, Australia. May 15, 2003.
- **Wu, Q.** 2003. Natural and Wood-fiber polymer composites: research effort at LSU. Chinese Forestry Academy, Beijing, China. September 21, 2003.
- **Wu, Q.** 2003. Natural and Wood-fiber polymer composites: an advanced engineered material. Henan Agricultural University, Zhengzhou. September 22, 2001.
- **Wu, Q.** 2002. Predicting engineering constants of oriented strandboard: a continuum model. In Proc. The 6th Pacific Rim Bio-composite Conference. Portland, OR. November 12, 2002.
- **Wu, Q.** 2002. Thermal and Dynamomechanical Properties of Wood-PVC Composites. In Proc. The 6th Pacific Rim Bio-composite Conference. Portland, OR. November 13, 2002.
- **Wu, Q.** 2002. Mechanical, physical, and biological properties of borate-modified oriented strandboard. In Proc. International Conference on Advances in Building Technology. Hong Kong, China. December 6, 2002.
- **Wu, Q.** 2002. Long-term creep response of borate-modified oriented strandboard. In Proc. International Conference on Advances in Building Technology. Hong Kong, China. December 6, 2002.
- **Wu, Q.** 2002. Leachability of borate-modified oriented strandboard: a comparison of zinc and calcium borate. In Proc. 33rd Annual Conference for the International Research Group on Wood Preservation, Cardiff, England. May 14, 2002.
- **Wu, Q.** and Z. Lu. 2002 The Behavior of wood-PVC composites. In Proc. American Association for Textile and Color Chemists. Auburn University, Auburn. April 13, 2002.
- **Wu, Q.** 2001. Comparative properties of bagasse particleboard. International Symposium on Utilization of Agricultural and Forest Residue. Nanjing, China. Nov. 1, 2001.
- **Wu, Q.** 2001. Structural wood composite research – what are we up to? Community of Scholars Seminar Series, School of Renewable Natural Resources. September 26, 2001.
- **Wu, Q.** 2001. Wood composite research program at LSU. Naijing Forestry University, Naijing, China. July 24, 2001.
- **Wu, Q.** 2001. Agriculturally derived fiber as an industrial material in North America.

- Naijing Forestry University, Naijing, China. July 24, 2001.
- **Wu, Q.** 2001. Commercial OSB manufacturing in North America. Naijing Forestry University, Naijing, China. July 21, 2001.
 - **Wu, Q.** 2001. Borate-modified OSB for durable residential construction. Naijing Forestry University, Naijing, China. July 24, 2001.
 - **Wu, Q.** 2001. A simulation of moisture diffusion process in furniture grade medium density fiberboard. The 7th IUFRO Wood Drying Conference, Tsukuba, Japan. July 12, 2001.
 - **Wu, Q.** 2001. Borate modified OSB from southern wood species. Structural Board Association Spring Annual Meeting in New Orleans. April 25, 2001.
 - **Wu, Q.** 2001. Wood Composite Research at LSU. Structural Board Association Spring Annual Meeting in New Orleans. April 24, 2001.
 - **Wu, Q.** 2001. Development of structural wood composites for durable residential construction. Washington State University Wood Engineering Material Laboratory, Pullman, WA. April 5, 2001.
 - **Wu, Q.** 2001. Behavior of particleboard mat during a press cycle. University of Idaho Department of Forest Products, Moscow, ID. April 4, 2001.
 - **Wu, Q.** 2000. Through-thickness ultrasonic transmission properties of oriented strandboard. In: Proc. 12th International Symposium on Nondestructive Testing of Wood, Sopron, Hungary. September 14, 2000.
 - **Wu, Q.,** and R. Vlosky. 2000. Panel products: a perspective from furniture and cabinet manufacturers in the southern United States. In Proc. 54th Forest Products Society Annual Meeting, Lake Tahoe, NV. June 20, 2000.
 - **Wu, Q.** 1999. Durability of oriented strandboard: effect of short-term water soaking. In Proc. 1st International Conference on Advanced Engineered Wood Composites, Bar Harbor, Maine. July 7, 1999.
 - **Wu, Q.** 1999. Characterization of sorption behavior of oriented strandboard under long-term cyclic humidity exposure conditions. In Proc. 53rd Forest Products Society Annual Meeting, Boise, Idaho. June 27, 1999.
 - Kofi, P., and **Wu, Q.** 1999. Wood properties of three potential lesser used topical hardwoods from Ghana. In Proc. 53rd Forest Products Society Meeting, Boise, Idaho. June 30, 1999.
 - **Wu, Q.** 1998. Influence of moisture on stress-wave velocity and modulus of wood-based panels. Presented at the 11th International symposium on Nondestructive Testing of Wood, Madison, WI. September 9, 1998.
 - **Wu, Q.** 1998. Stiffness and strength retention properties of structural oriented strandboard. Presented at the Fifth World Conference on Timber Engineering, Montreux, Switzerland. August 19, 1998.
 - **Wu, Q.** 1998. Characterizing strength loss behavior of OSB. Presented at the 52nd Forest Products Society Annual Meeting, Merida, Mexico. June 23, 1998.
 - **Wu, Q.** 1997. Effects of the processing variables on dimensional stability of oriented strand board. Presented at the IUFRO Division 5 Conference“ Forest Products for Sustainable Forestry”, Pullman, Washington. July 8, 1997.
 - **Wu, Q.** 1997. In-plane stability of oriented strand board in relation to structural

applications. Presented at the 51st Forest Products Society Annual Meeting, Vancouver, British Columbia, Canada. June 26, 1997.

- **Wu, Q.** 1997. Effects of elevated and high-temperature schedules on warp in southern yellow pine. Presented at the 48th Western Dry Kiln Association Meeting, Reno, NV. May 7, 1997.
- **Wu, Q.** 1996. An Overview of VOC emissions and research activities related to wood drying. Presented at Woodward-Clyde Environmental Seminar for the Louisiana Wood Products Industry, Alexandria, LA. September 19, 1996.
- **Wu, Q.** 1996. Prediction of moisture and moisture gradient of an overlaid particleboard. Presented at the 50th Forest Products Society Meeting, Minneapolis, MN. June 23, 1996.
- **Wu, Q.** 1995. Fundamental aspects of moisture-shrinkage-stress interaction in wood during drying. Presented in the Department of Wood and Paper Science, North Carolina State University, Raleigh, NC. November 21, 1995.
- **Wu, Q.** 1995. Post sorting of Hem-fir: a mill study. Presented at the Louisiana Forest Products Laboratory, School of Renewable Natural Resources, Louisiana State University, Baton Rouge, LA. November 6, 1995.
- **Wu, Q.** 1995. Rheological behavior of Douglas-fir as related to the process of drying. Presented in the Department of Forestry, University of Kentucky, Lexington, Kentucky. March 21, 1995.
- **Wu, Q.** 1994. Rheological behavior of Douglas-fir as related to the process of drying. Presented in the Department of Forestry, Michigan State University, East Lansing, MI. May 20, 1994.

PARTICIPATION IN OTHER PROFESSIONAL MEETINGS, SYMPOSIA, WORKSHOPS AND CONFERENCES

- The FPS Annual Meeting, Quebec City, Quebec, Canada. June 19-23, 2005.
- The 3rd East Asian Polymer Conference, Chengdu, China. June 6-10, 2004.
- South Central Region Sun Grant Initiative Conference & Workshop in Oklahoma City. June 14-16, 2004.
- The FPS Annual Meeting Grand Rapids, MI. June 26-30, 2004.
- ASCL Research Proposal Meeting. Thibodaux, LA. February 19, 2004.
- NSF-HUD Housing Research Workshop. Orlando, FL. February 11-14, 2004.
- Renewable Energy Meeting sponsored by the Louisiana Biomass Council. Baton Rouge, LA. February 4, 2004.
- Louisiana Forestry Association (LFA) meeting. Alexandria, LA. February 4, 2004.
- Forest Products Society Mid-south section meeting, Hot Spring, AK. November 6-8, 2003.
- Workshop: Spectroscopic Solution by Thermal Electron Inc. New Orleans, LA. October 30, 2003
- Forest Products Society Annual Meeting, Seattle, WA. June 22-25, 2003.
- American Chemical Society Annual Meeting. New Orleans, LA. March 23-27, 2003.
- Society of Plastic Engineer Meeting. LSU Faculty Club. April 21, 2003
- WorkShop on Thermal Analysis by TA Inc. Houston, TX. May 7-8, 2003.
- Business BootCamp, Baton Rouge Technology Council, BTR, LA., May 16, 2003.

- International Conference on Advances in Building Technology. Hong Kong, China.
- December 4-6, 2002.
- The 6th Pacific-rim Bio-composite Conference, November 14-17, 2002. Portland, OR.
- The Sun Grant Initiative meeting, Dallas, TX. June 26-27, 2002.
- The Forest Products Society Annual Meeting, Madison, WI. June 23-26, 2002.
- Society of Wood Science and Technology Annual Meeting, Madison, WI. June 22, 2002.
- The 33rd Annual Conference for the International Research Group on Wood Preservation, May 12-17, Cardiff, England.
- LSU CAMD Annual User Meeting. Baton Rouge, LA. April 19, 2002.
- Funding Opportunities for Emerging Technologies: Focus on Bio- & Information Technologies. Sponsored by the Louisiana Board of Regents' National Science Foundation EPSCoR Program. Radisson Hotel, Baton Rouge, LA. April 10-11, 2002.
- Louisiana Plant Protection Association and Louisiana Association of Agronomists meeting. LSU Ag Center, Baton Rouge. April 1-2, 2002.
- Build With Tree Workshop, Baton Rouge, LA. February 21, 2002
- Louisiana Forestry Association Board meeting, Alexandria, LA. February 5, 2002
- International Symposium on Utilization of Agricultural and Forest Residue, Nanjing, China. October 31-November 4, 2001.
- Louisiana Forestry Association Annual Meeting, Lafayette, LA. August 28-29, 2001.
- The 2nd Louisiana Conference on Microfabrication and Materials Science, Baton Rouge, LA. August 20-22, 2001.
- The 7th International IUFRO Wood Drying Conference, Tsukuba, Japan. July 9-13, 2001.
- The Forest Products Society Annual Meeting, Baltimore, MD. June 24-27, 2001.
- SWST Annual Meeting, Baltimore, MD. June 24-27, 2001.
- Structural Board Association Spring Annual Meeting, New Orleans, LA. April 24-25, 2001
- The 35th International Particleboard Composite Materials Symposium. Washington State University, Pullman, WA. April 4-7, 2001.
- The 12th Internal Symposium on Nondestructive Testing of Wood. Sopron, Hungary. September 13-15, 2000.
- Wood Adhesive 2000 Conference in Lake Tahoe, NV. June 21-23, 2000.
- Forest Products Society Annual Meeting in Lake Tahoe, NV. June 18-21, 2000.
- SWST Annual Meeting in Lake Tahoe, NV. June 18, 2000.
- LSU Termite Conference, Baton Rouge, LA. May 31-June 1, 2000.
- The First International Conference on Advanced Engineered Wood Composites, Bar Harbor, MA. July 5-8, 1999.
- Forest Products Society Annual meeting in Boise, Idaho. June 26-30, 1999.
- LFPL steering committee meeting, Ruston, LA. June 15-16, 1999.
- Forest Products Society Mid-south section meeting in Alexandria. March 18-19, 1999.
- Louisiana Forestry Association Board Meeting. Alexandria, LA. November 3, 1998.
- Engineered Wood Research Foundation Information Forum. Shreveport, LA. September 17-18, 1998.
- The 11th Internal Symposium on Nondestructive Testing of Wood. Madison, WI. September 9-11, 1998.

- Louisiana Forestry Association Annual Meeting, Baton Rouge, LA. August 26, 1998.
- 5th World Conference on Timber Engineering, Lausanne, Switzerland. August 17-20, 1998.
- Southeast Chapter Meeting of the Louisiana Society of American Foresters. Bear Creek, LA. August 6, 1998.
- Forest Products Society 52nd Annual Meeting. Merida, Mexico. June 21-24, 1998.
- The 32nd International Particleboard Composite Materials Symposium. Washington State University, Pullman, WA. March 31 to April 2, 1998.
- Louisiana Furniture Industry Association Meeting-Ponchatoula, LA. January 20, 1998.
- NSF EPSCoR 13th annual Conference, New Orleans, LA, Dec. 1-4, 1997.
- Louisiana Forestry Association Annual meeting, Alexandria, LA. August 26-28, 1997.
- IUFRO meeting, Pullman, WA. July 7-12, 1997.
- Forest Products Society Annual Meeting, Vancouver, BC, Canada. June 22-27, 1997.
- Western Dry Kiln Association Meeting, Reno, NV. May 7-10, 1997.
- Louisiana Furniture Industry Association meeting. - Ponchatoula, LA. Jan. 9, 1997.
- Louisiana Forestry Association (LFA) meeting. Alexandria, LA. November 5, 1996.
- The 4th International Wood Engineering Conference, New Orleans, LA. October 30, 1996.
- Woodward-Clyde Environmental Seminar for the Wood Products Industry. Alexandria, LA. September 19, 1996.
- Governor's Conference on Wood Products Industry. Alexandria, LA. Sep. 18, 1996
- American Forest and American Paper Association (AF&AP) poster session - Chicago, IL. Sep. 12, 1996.
- Meeting on cooperative research projects at Michigan State University. East Lansing, MI. Aug. 15-16, 1996.
- Forest Products Society Annual Meeting. Minneapolis, Minnesota. June 23-26, 1996.
- Society of Wood Science and Technology, Minneapolis, Minnesota. June 22, 1996.
- Forest Products Society mid-south section meeting, Nashville, TN. May 16-17, 1996.
- Hardwood grading workshop at Louisiana Tech. University. Ruston, LA. March 12-15, 1996.
- Louisiana Forestry Association (LFA) meeting. Alexandria, LA. March 5, 1996.

SELECTED PROJECTS

- Extruded natural fiber and polymer composites as advanced engineered materials. Louisiana Education Quality Support Fund – Industrial Tie. Wu, Q. 6/01/2005 - 5/31/2008. **\$150,000**. Industrial match: **\$60,000**.
- Bagasse fiber processing. DeMaxZ, LLC. Q.Wu. 1/2005. **\$5,500**.
- Chemical analysis of Southern Pine wood for OSB manufacturing. Roy Martin Lumber Company. Q. Wu. 8/2004 – 10/2004. **\$4,000**.
- MDF fiber analysis. Weyerhaeuser Company. Q. Wu. 4/2004 – 6/2004. **\$1,500**.
- Micro-thermal analyzer (μ -TA) for advanced interfacial characterization in bio-fiber and polymer composites. Louisiana Education Quality Support Fund. Wu, Q. 6/01/2004 - 5/31/2005. **\$151,457**.
- Enhancement of wood-based Durability Facilities at the LFPDC. Louisiana Education

- Quality Support Fund. Smith, W.R., T.F. Shupe, Q.L. Wu, R.P Vlosky. 6/01/2004 - 5/31/2005. **\$105,540.**
- Economic Feasibility Study of Using Comrind as a Supplemental Raw Material for Structural Composite Manufacturing. American Sugar Cane League I. Wu, Q, M. E. Salassi, R.P. Vlosky, and B.L. Legendre. 9/1/2004 – 6/30/2005. **\$15,000.**
 - Economic Feasibility Study of Using Comrind as a Supplemental Raw Material for Structural Composite Manufacturing II. Louisiana Department of Economic Development. Wu, Q, M. E. Salassi, R.P. Vlosky, and B.L. Legendre. 9/1/2004 – 6/30/2005. **\$15,000.**
 - Evaluating Product Performance of the Wagner Chemical for Treating Wood and Wood Composites. The Wagner Technology Company. Wu, Q., and R. Vlosky. 8/2003 – 12/2003. **\$5,000.**
 - Lumber Drying Research for ROM Lumber Company. Roy Martin Lumber Company. Smith, W. R., T. F. Shupe, and Q. Wu. 8/2003 – 12/2003. **\$5,000.**
 - Characterization of engineering properties of strand-based composites using x-ray tomography and finite element techniques. USDA NRICGP (Wood Fiber). Wu, Q. and L.B. Wang. 10/1/2003 – 9/31/2005. **\$110,000.**
 - Linear expansion study of commercial OSB. Roy Martin Lumber Company. Wu, Q. 1/2003 – 6/2003. **\$5,000.**
 - Termite-related Research. AgCenter FST Fund. Smith, R. W., Wu, Q., and T. F. Shupe. 7/1/2003 – 6/30/2004. **\$29,000.**
 - Comrind and Wood OSB. Roy Martin Lumber Company. Wu, Q. 2/2003 – 6/2003. **\$10,000.**
 - Termite-related Research. Ag Center FST Funds. Smith, R. W., Wu, Q., and T. F. Shupe. 7/1/2002 – 6/30/2003. **\$29,000.**
 - High performance biocomposites. LA BOR Governor Bio-Initiative. Chen, Y. Q. Wu, and G. Henderson. 1/01/2003 - 12/31/2005. **\$554,600.**
 - Enhancing analytical capability for wood and polymer chemistry research at the Louisiana Forest Products Laboratory. Louisiana Education Quality Support Fund. Wu, Q. 6/01/2002 - 5/31/2003. **\$40,000.**
 - Termite-related Research. AgCenter FST Fund. Smith, R. W., Wu, Q., and T. F. Shupe. 7/1/2001 – 6/30/2002. **\$59,828.**
 - Research studies on physical properties and resistance of OSB treated with colemanite borate to Formosan subterranean termites. Cole Research Company. W. R. Smith, and Q. Wu. 6/1/2001 – 12/30/2003. **\$5,700.**
 - Effect of Zinc Borate on Gel time of PF OSB resin. Neste Resin Inc. Wu, Q. 7/15/2000- 7/14/2002. **\$9,000.**
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 - Wood Fiber Science Page Charge Grant. Society of Wood Science and Technology. Wu,

- Q. October 1999. **\$1,600**
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