

RESUME

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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 fiber polymer composites, nano materials and composites, interface and adhesion science, wood protection, wood-moisture relation.

CURRENT AND PREVIOUS POSITIONS

- 2010/7-present Adjunct Professor, LSU Chemistry
- 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 WORK EXPERIENCE

Membership in Professional Organizations

- International Research Group in Wood Preservation, Stockholm, Sweden
- American Chemical Society
- American Wood Preservation Association (AWPA)
- American Society of Mechanical Engineering (ASME)
- 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

- Louisiana Biomass Council, Baton Rouge, LA
 - Gamma Sigma Delta Society of Agriculture, Louisiana State University Chapter
- Journals Edited, Manuscripts Refereed, Books and Proposals Reviewed***
- Grant Proposal Reviewer, USDA NRI Competitive Grant Program. (1998), USDA CSREES SBIR Program. (2002), National Research Council – Collaboration in Basic Science and Engineering (COBASE) Program (2000), Austria National Science Foundation (2010), Swiss National Science Foundation (2003), Chinese National Natural Science Foundation (2003-present), Canada Strategic Research Program (2003).
 - Journal Reviewer, Bioresource Technology (2009-present), Express Polymer letters. (2009-present), Wood and Fiber Science. (1996-present), Forest Products Journal (1996-present), Journal of Applied Polymer Science (2006-present), Journal of Material Science (2000), Maderas-Cienc Tecnol Journal (2010), Journal of Tropical Forest Products (2000-present), Composites Part B: Engineering (2010), Composites Part A: Applied Science and Manufacturing (2009-2010), Industrial Crop and Products (2004-present), Journal of Agricultural Science and Technology (2010), International Journal of Hydrogen Energy (2005). BioMacromolecules, Carbohydrate Polymer.

Advisory Boards, Commissions, or Agencies

- Panelist – 2014 NSF Sustainable Infra-structure Materials (December 3, 2014)
- Panelist – 2014 USDA 1890 Teaching/Extension, (June 17-19, 2014)
- Panelist – 2014 USDA 1890 Capacity Research AdHoc (May 14-16, 2014)
- Panelist – 2014 USDA Higher Education Hispanic-Serving Institutions (HSI) Education Grants Program Peer Review Panel (April 30-May 1st, 2014)
- Panelist – 2013 USDA Higher Education Hispanic-Serving Institutions (HSI) Education Grants Program Peer Review Panel (April 24-25, 2013)
- Panelist – 2010. NSF SBIR. NSF 10-607 (Phase I)
- Panelist - 2009. China National NSF Program
- Panelist - 2002. USDA CSREES SBIR- Forest and Related Resources.
- Chair – FPS Wood Award Committee, 2010
- Industrial Consultant – on-going
- Member: AWWA T8 Composites – on-going
- Vice-Chair/Chair, FPS MidSouth, 2004/2005
- 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 SWST. 2003-2004.
- Member. Current Policy and Current Issue Committee for SWST. 2002-2003.
- Division coordinator, FPS Processing Division. 6/2003 to 6/2006.
- Vice-Chair, Book-review Committee for SWST. - 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.

External Examiner for Tenure and Promotion

- Dr. Greg Smith, Professor, UBC, 2014
- Dr. Siqun Wang, Full Professor, UT, 2010
- Dr. O.B. Sulaiman, Professor, UPM, Malaysia 2009
- Dr. K. C. Li, Professor, Oregon SU, 2009.
- Dr. Salim Hizioglu, Professor, Oklahoma SU, 2008.
- Dr. K. C. Li, Professor, OSU, 2007.
- Dr. J.L. Zhang, Professor, MSU, 2007.
- Dr. Greg Smith, Associate Professor/Tenure, UBC, 2006.
- Dr. Siqun Wang, Associate Professor/Tenure, UT, 2005

PUBLICATIONS

Articles in Refereed Journals

2015

1. Zhang, Z., Q. Wu, K. Song, T. Lei. 2015. Poly (vinylidene fluoride)/cellulose nanocrystals composites: reinforcement, hydrophilicity and thermal properties. *Cellulose*, In-review. (Impact factor = 3.06)
2. Li M, Wu Q, Song K, Qing Y, and Wu Y. 2015. Cellulose nanoparticles: structure-morphology- rheology relationship, *ACS Sustainable Chemistry and Engineering*, In-Review.
3. Li M, Wu Q, Song K, Qing Y, and Wu Y. 2015. Cellulose nanoparticles as modifiers for rheology and fluid loss in bentonite water-based fluids *ACS J. Applied Materials and Interface*, 7,5006-5016 (Impact Factor=5.90)
4. Zhang, Z; Wu, Q; Song, K; Ren, S; Lei, T. 2015. Using Cellulose Nanocrystals as a Sustainable Additive to Enhance Hydrophilicity, Mechanical and Thermal Properties of Poly (vinylidene fluoride)/Poly (methyl methacrylate) Blend. *ACS Sustainable Chemistry & Engineering*, 3, 574–582.
5. Song, K; Wu, Q; Zhang, Z; Ren, S; Lei, T; Dooley, K; Liu, D; Janes, M. 2015. Fabricating electrospun nanofibers with antimicrobial capability: A facile route to recycle biomass tar. *Fuel*. 150:123-130. (Impact factor = 3.44)
6. Sun, X, Q. Wu, S Ren, and T Lei. 2015. Comparison of highly transparent all-cellulose nanopaper prepared using sulfuric acid and TEMPO-mediated oxidation methods *Cellulose*, (2015) 22:1123–1133 (Impact factor = 3.06)
7. Zhang, Z., Q. Wu, C. Zhang, Y. Wang, Y. Li, and Q. Zhang. 2015. Effect of inlet velocity on heat transfer process in a novel photo-fermentation biohydrogen production bioreactor using computation fluid dynamic simulation. *BioResources* 10(1):469-481. (Impact factor = 1.55)
8. Huang, S., Q. Wu, D. Zhou, and R. Huang. 2015. Thermal decomposition properties of materials from different parts of corn stalk. *BioResources* 10(1):2020-2031. (Impact factor = 1.55)
9. Kim, BJ, R. Huang, X. Xu, SY, Lee, J. Kunio, and Q. Wu. 2015. Sound transmission properties of mineral-filled high density polyethylene (HDPE) and wood-HDPE composites. *BioResources* 10(1):510-526. (Impact factor = 1.55)
10. Song, K. H. Zhang, Q. Wu, Z. Zhang, C. Zhou, Q. Zhang, and T. Lei. 2015. Structure and thermal properties of tar from gasification of agricultural crop residue. *Journal of Thermal Analysis and Calorimetry*: 119:27–35. (Impact factor = 2.20)

2014

1. Choi, K-H; Cho, S-J; Chun, S-J; Yoo, J T; Lee, C K; Kim, W; Wu, Q; Park, S-B; Choi, D-H; Lee, S-Y; Lee, S-Y. 2014. Heterolayered, one-dimensional nanobuilding block mat batteries. *ACS Nano Letters*: 14, 5677–5686 (Impact factor = 12.96)
2. Ren, S., X. Sun, T. Lei, and Q. Wu. 2014. The Effect of Chemical and High-Pressure Homogenization Treatment Conditions on the Morphology of Cellulose Nanoparticles. *Journal of Nanomaterials*: Article ID 582913, 11 <http://dx.doi.org/10.1155/2014/582913>. (Impact factor = 1.61)
3. Kim, B.J., R. Huang, J. Han, S. Lee, and Q. Wu. 2014. Mechanical and morphological properties of coextruded wood plastic composites with glass fiber filled shell. *Polymer Composites*: DOI: 10.1002/pc.23240 (Impact factor = 1.45)
4. Li, H., K. Song, D. Zhou, and Q. Wu. 2014. Effect of durability treatment on moisture sorption properties of wood plastic composite. *BioResources* 9(4):6397-6407. (Impact factor = 1.55)
5. Huang, Z, S. Liu, B. Zhang, and Q. Wu. 2014. Preparation and swelling behavior of a novel self-assembled β -cyclodextrin/acrylic acid/sodium alginate hydrogel. *Carbohydrate Polymers* 113: 430–437. (Impact factor = 3.91)
6. Scognamillo, S., J. Pojman, and Q. Wu. 2014. Frontal Cationic Curing of Epoxy Resins in the Presence of Defoaming or Expanding Compounds. *Journal of Applied Polymer Science*. DOI: 10.1002/app.40339. (Impact factor = 1.30)
7. Li, H., Z. Zhang, K. Song, S. Lee, S.J. Chun, D. Zhou, and Q. Wu. 2014. Effect of durability treatment on ultraviolet resistance, strength, and surface wettability of wood plastic composite. *BioResources* 9(2):3591-3602. (Impact factor = 1.55)
8. Zhang, Z., K. Song, Y. Li, and Q. Wu. 2014. Non-isothermal crystallization of poly (vinylidene fluoride)/poly (methyl methacrylate) cellulose nanocrystal nanocomposites. *International Journal of Polymer Analysis and Characterization*. 19: 1-10. (Impact factor = 1.23)
9. Wu, Q., K. Chi Y. Wu, and S Lee. 2014. Mechanical, thermal expansion, and flammability properties of co-extruded wood polymer composites with basalt fiber reinforced shells. *Materials and Design*, 60:334-342. (Impact factor = 2.91)
10. Zhou, C, Q. Wu, T. Lei, and I. Negulescu. 2014. Adsorption kinetic and equilibrium studies for methylene blue dye by partially hydrolyzed polyacrylamide/cellulose nanocrystal nanocomposite hydrogels. *Chemical Engineering Journal*. 251:17-24. (Impact factor = 3.5)
11. Liu, T., Q. Wang, Y. Xie, and Q. Wu. 2014. Effects of use of coupling agents on the properties of microfibrillar composite based on high-density polyethylene and polyamide-6. *Polymer Bulletin*. 71(3):685-703 (Impact factor = 1.20)
12. Du, L., Y. Li, and Q. Wu. 2014 Water absorption properties of heat-treated bamboo fiber and high density polyethylene composite. *BioResources*. 9(1):1189-1120. (Impact factor = 1.48).
13. Wu, Y.; C. Yao; Y. Hu; X. Zhu; Y. Qing; and Q. Wu. 2014. Comparative performance of three magnesium compounds on thermal degradation behavior of red gum wood. *Materials*, 7,637-652. (Impact factor = 2.2)
14. Wu, Y, C. Yao, Y. Hu, X. Zhu, Y. Qing and Q. Wu. 2014. Flame retardancy and thermal degradation behavior of red gum wood treated with hydrate magnesium chloride. *J. Industrial and Engineering Chemistry*, 20:3536-3542. (Impact factor = 2.2).
15. Han, G.; Huan, S.; Han, J.; Zhang, Z.; Wu, Q. 2014. Effect of Acid Hydrolysis Conditions

on the Properties of Cellulose Nanoparticle-Reinforced Polymethylmethacrylate Composites. *Materials* 7, 16-29. (Impact factor = 2.2).

16. Zhu, X., B.J. Kim, Q. Wang, and Q. Wu. 2014. Recent advances in the sound insulation properties of bio-based materials. *BioRes.* 9(1), 1764-1786. (Impact factor = 1.48).
17. Han, J., T. Lei, and Q. Wu. 2014. Cellulose nanoparticle reinforced polyvinyl alcohol-borax hydrogels: rheological properties and formation mechanism. *Carbohydrate Polymers.* 102:306-316. (Impact factor = 3.46)

2013

- 1 Edwards, J. V., N. Prevost, A. French, M. Concha, A. DeLucca, and Q. Wu. 2013. Nanocellulose-Based Biosensors: Design, Preparation, and Activity of Peptide-Linked Cotton Cellulose Nanocrystals Having Fluorimetric and Colorimetric Elastase Detection Sensitivity. *Engineering* 5, 20-28.
- 2 Zhou, C., S. Lee, K. Dooley, and Q. Wu. 2013. A facile approach to fabricate porous nanocomposite gels based on partially hydrolyzed polyacrylamide and cellulose nanocrystals for absorbing methylene blue at low concentration. *Journal of Hazardous Materials:* 263: 334– 341. (Impact factor = 4.17)
- 3 Han, J., T. Lei, and Q. Wu. 2013. Facile preparation of mouldable polyvinyl alcohol-borax hydrogels reinforced by well-dispersed cellulose nanoparticles: physical, viscoelastic and mechanical properties, *Cellulose* 20:2947–2958. (Impact factor = 3.60)
- 4 Huang, R., X. Xu, S. Lee, Y. Zhang, B.J. Kim, and Q. Wu. 2013. High Density Polyethylene Composite Reinforced with Hybrid Inorganic Fillers: Morphology, Mechanical and Thermal Expansion Performance. *Materials* 6:4122-4138. (Impact factor = 2.2)
- 5 Xu, X., D. Zhou, and Q. Wu. Influences of layered structure on physical and mechanical properties of kenaf core particleboard. *BioResources* 8(4):5219-5234. (Impact factor = 1.48)
- 6 Xiong, W., Q. Wu, and C.S. Cai. 2013. Mechanical and Thermal Performance of Coextruded Wood Plastic Composites for Structural Applications. *Advances in Structural Engineering*, 16(5): 909-930. (Impact factor = 0.48)
- 7 Liu, T., Y. Lei, Q. Wang, S. Lee, and Q. Wu. 2013. Effect of fiber type and coupling treatment on properties of high-density polyethylene/natural fiber composites. *BioResources.* 8(3):4619-4632. (Impact factor = 1.48)
- 8 Huang, Z., Wu, Q., Liu, S., and Zhang, B. 2013. A novel biodegradable β -cyclodextrin-based hydrogel for the removal of heavy metal ions. *Carbohydrate Polymers* 97(2):496-501 (Impact factor = 3.469)
- 9 Kim, J.H., E.S. Choi, J.H. Kim, S.J. Chun, Q. Wu, S.Y. Lee, and S.Y. Lee. 2013. Colloidal Silica Nanoparticle-assisted Structural Control of Cellulose Nanofiber paper separators for Lithium-Ion Batteries. *J. Power Sources.* 242:533–540. (Impact Factor=4.95)
- 10 Han, J., C. Zhou, Y. Wu, F. Liu, and Q. Wu. 2013. Self-assembling behavior of cellulose nanoparticles during freeze drying: effect of suspension concentration, particle size, crystal structure, and surface charge. *Biomacromolecules*, 14:1529-1540 (Impact Factor=5.48).
- 11 Zhou, C., Q. Shi, L. Terrell, D. Hayes, W. Guo, and Q. Wu. 2013. A novel electrospun bio-nanocomposite scaffold for tissue engineering by cellulose nanocrystals reinforcing maleic anhydride grafted PLA. *ACS J. Applied Materials and Interface.* 2013, 5 (9): 3847–3854 (Impact Factor=5.90)

- 12 Li, P., B. J. Kim, Q., Wang, and **Q. Wu**. 2012. Experimental and numerical analysis of sound insulation property of filled wood plastic composites (WPCs) filled with Precipitated CaCO₃. *Holzforschung* 67(3): 301–306 (Impact Factor=2.41)
- 13 Huang, R., B.J. Kim, S.Y. Lee, Y. Zhang, and **Q. Wu**. 2013. Co-extruded Wood Plastic Composites with talc Filled Shells: Morphology, Mechanical, and Thermal Expansion Performance. *BioResources* 8(2):2283-2299. (Impact factor = 1.48)
- 14 Han, J., C. Zhou, A. D. French, G. Han, and **Q. Wu**. 2013. Characterization of cellulose II nanoparticles regenerated from ionic liquid, 1-butyl-3-methylimidazolium chloride. *Carbohydrate Polymers* 94 : 773– 781 (Impact factor = 3.469)
- 15 Xu, X., S. Lee, Y. Wu, and **Q. Wu**. 2013. Decay and mold performance of borate modified OSB from southern wood species. *Bioresources* 8(1):104-114. (Impact factor = 1.48)
- 16 **Wu, Q.**, F. Yao, C. Mei, and D. Zhou. 2013. Thermal degradation of rice straw fibers: global kinetic modeling with isothermal thermogravimetric analysis. *Journal of Industrial and Engineering Chemistry*. 19 (2):670-676. (Impact Factor=2.24)
- 17 Li, Y., Du, L., Kai, C., Huang, R., and **Wu, Q.** 2013. Bamboo and high density polyethylene composite with heat-treated bamboo fiber: Thermal decomposition properties. *BioResources* 8(1):900-912 (IF=1.48)
- 18 Li, P., **Q., Wu**, and Y., Tao. 2013. Fractal dimension analysis of void size in wood-strand composites based on X-ray computer tomography images. *Holzforschung* 67(2):177-182. (Impact Factor=2.41)
- 19 Kim, B. J., F. Yao, G. Han, Q. Wang, and **Q. Wu**. 2013. Mechanical and Physical Properties of Core-Shell Structured Wood Plastic Composites: Effect of Shells with Hybrid Mineral and Wood Fillers. *J. Composite Part B*. 45:1040-1048. (Impact factor = 2.24)

2012

1. **Wu, Q.**, 2012. Tigerbullets and Geoux (HPHT): Fiber reinforced plastic composites for lost circulation control. *Louisiana Agriculture*. 55(4):18-19.
2. Huang, R., W. Xiong, X. Xu, and **Q. Wu**. 2012. Thermal Expansion Behavior of Co-extruded Wood Plastic Composites with Glass-fiber Reinforced Shells. *Bioresources* 7(4):5514-5526. (Impact factor = 1.48)
3. Guan, X., R. Cueto, P. Russo, Y. Qi, and **Q. Wu**. 2012. Asymmetric Flow field-flow fractionation with multiangle light scattering detection for characterization of cellulose nanocrystals. *Biomacromolecules* 13:2671-2679 (Impact Factor=5.48)
4. Shang, L. G. Han, F. Zhu J. Ding, T. Shupe, Q. Wang, and **Q. Wu**. 2012. High-Density Polyethylene-based Composites with Pressure-treated Wood Fibers. *Bioresources* 7(4):5181-5189. (Impact factor = 1.48)
5. Song, X., C. Zhou, F. Fu, Z. Chen, and **Q. Wu**. 2012. Effect of High-pressure Homogenization on Particle Size and Film Properties of Soy Protein Isolate. *J. of Industrial Crops and Products* 43:538-544. (Impact Factor=2.47)
6. Huang, R., Y. Zhang, X. Xu, D. Zhou, and **Q. Wu**. 2012. Effect of Hybrid Mineral and Bamboo Fillers on Thermal Expansion Behavior of Bamboo Fiber and Recycled polypropylene–polyethylene Composites. *BioResources* 7(4), 4563-4574. (Impact factor = 1.48)
7. Shi, Q., C. Zhou, Y. Yue, W. Guo, Y. Wu, and **Q. Wu**. 2012. Mechanical properties and *in vitro* degradation of electrospun bio-nanocomposite mats from PLA and cellulose nanocrystals. *Carbohydrate Polymers* 87:1779– 1786. (Impact factor = 3.469)

8. **Wu, Q.**, Y. Lei, K. Lian, and Y. Qi. 2012. Copper/carbon core shell nanoparticles (CCCSNs) as additive for natural fiber/wood plastic blends. *Bioresources* 7(3), 3213-3222. (Impact Factor=1.50)
9. Yue, Y., C. Zhou, Alfred D. French, X., Guan, G. Han, Q. Wang, and **Q. Wu**. 2012. Comparative properties of cellulose nano-crystals from native and mercerized cotton fibers. *Cellulose* 19:1173-1187. (Impact Factor=3.60)
10. Edwards, J. V., N. T. Prevost, B. Condon, A. French and Q. Wu. 2012. Immobilization of lysozyme-cellulose amide-linked conjugates on cellulose I and II cotton nanocrystalline preparation. *Cellulose* 19:495–506. (Impact Factor=3.60)
11. Li, Y., **Q. Wu**, J. Li, Y. Liu, X., Wang, and Z. Liu. 2012. Improvement of dimensional stability of wood via combination treatment: swelling with maleic anhydride and grafting with glycidyl methacrylate and methyl methacrylate. *Holzforschung* 66: 59–66. (Impact Factor=2.41)
12. Kim, B.J., F. Yao, G. Han, and **Q. Wu**. 2012. Performance of bamboo plastic composite with hybrid bamboo and precipitated calcium carbonate fillers. *Polymer Composites* 33: 68-78. (Impact Factor=0.998).
13. Zhou, C., X. Qiu, Q. Zhuang, Z. Han, and **Q. Wu**. 2012. *In situ* polymerization and photophysical properties of poly(*p*-phenylene benzobisoxazole)/multiwalled carbon nanotubes composites. *J. Applied Poly. Sci.* 124:4740-4746. (Impact Factor=1.24)

2011

1. Wu, Q., 2011. Tigerbullets: A newly created wood-plastic product to control lost circulation in oil drilling. *Louisiana Agriculture*. Winter 55(1):9-10.
2. Song, X. Z., Q. Wu., F. Fu, K., Guo. 2011. Research progress of nanocrystalline cellulose prepared from crops and agricultural residues. *J. Agricultural Engineering* 42(11):106-112.
3. Lei, Y., and **Q. Wu**. 2011. High density polyethylene and poly(ethylene terephthalate) in situ sub-micro-fibril blends as matrix for wood plastic composites. *Composite Part A*. 43:73-78. (Impact Factor=3.45)
4. Zhou, C., Q. Wang, and **Q. Wu**. 2011. UV-initiated crosslinking of electrospun poly(ethylene oxide) nanofibers with pentaerythritol triacrylate: effect of irradiation time and incorporated cellulose nanocrystals. *Carbohydrate Polymers* 87:1779-1786. (Impact factor = 3.469)
5. Zhou, C., R. Chou, R. Wu, and Q. Wu. 2011. Electrospun polyethylene oxide/cellulose nanocrystal composite nanofibrous mats with homogeneous and heterogeneous microstructures. *Biomacromolecules*: 12:2617-2625. (Impact Factor=5.5)
6. Lei, Y., and **Q. Wu**. 2011. Recycling Engine Oil Containers to Prepare Wood Plastic Composites. *J. Applied Poly. Sci.* 122(2):964-972. (Impact Factor=1.33)
7. Liu, D., X. Chen, Y. Yue, M. Chena, and **Q. Wu**. 2011. Structure and rheology of nanocrystalline cellulose. *Carbohydrate Polymers* 84:316-323. (Impact factor = 3.469)
8. Liu, D., **Q. Wu**, P. R. Chang, and G. Gao. 2011. Self-assembled liquid crystal film from mechanically defibrillated chitosan nanofibers. *Carbohydrate Polymers* 84(1): 686-689. (Impact factor = 3.469)
9. Liu, D., P. R. Chang, M. Chen, and **Q. Wu**, 2011. Chitosan colloidal suspension composed of mechanically disassembled nanofibers *Journal of Colloid and Interface Science*. 354(2):637-643. (Impact Factor=3.02)

10. Xu, Y., S. Y. Lee, and **Q. Wu**. 2011. Creep analysis of bamboo-high density polyethylene composites: effect of interfacial treatment and fiber loading level. *Polymer composites* 32(5):692-699. (Impact Factor=1.19)
11. Zhou, C, and **Q. Wu**. 2011. A novel polyacrylamide nanocomposite hydrogel reinforced with natural chitosan nanofibers. *J. Colloids and Surfaces B: Biointerfaces* 84:155-162. (Impact Factor=3.4)
12. Yao, F., **Q. Wu**, H., Liu, Y. Lei, and D. Zhou. 2011. Rice straw fiber reinforced high density polyethylene composite: Effect of coupled compatibilizing and toughening treatment. *J. Applied Poly. Sci.* 119:2214-2222. (Impact Factor=1.33)
13. Yao, F., **Q. Wu**, H., Liu, Y. Lei, and D. Zhou. 2011. Rice straw fiber reinforced high density polyethylene composite: Effect of coupled compatibilizing and toughening treatment. *J. Applied Poly. Sci.* 119: 2214–2222. (Impact Factor=1.33)

2010

1. Zhou, C, **Q. Wu**, and Q. Zhang. 2010. Dynamic rheology studies of in-situ polymerization process of polyacrylamide-cellulose nanocrystals composite hydrogels. *Colloid and Polymer Science* 353(1):116-123. (Impact factor = 2.2)
2. Zhou, C, **Q. Wu**, Y. Yue, and Q. Zhang. 2010. Application of rod-shape cellulose nanocrystals in Polyacrylamide hydrogels. *J. Colloid and Interface Science.* 353:116-123 (Impact Factor=3.32)
3. Zhou, C, W. Yang, Z. Lu, W. Zhou, Y. Xia, Z. Han, and **Q. Wu**. 2010. Synthesis and solution properties of novel comb-shaped acrylamide copolymers. *Polymer Bulletin.* (Impact Factor = 1.33)
4. Liu, D, H. Chen, P. R., Chang, **Q. Wu**, K. Li, and L. Guan. 2010. Biomimetic soy protein nanocomposites with calcium carbonate crystalline arrays for use as wood adhesive. *Bioresource Technology* 101: 6235-6241. (Impact Factor=4.75)
5. Li, Y. F., Y. X. Liu, X.M., Wang, **Q. Wu**, H. P. Yu, and J. Li. 2010. Wood-polymer composites Prepared by the in situ polymerization of monomers within wood. *J. Applied Poly. Sci.* 119(6):3207-3216 (Impact Factor=1.33)
6. Liu, D, H. Chen, P. R., Chang, **Q. Wu**, K. Li, and L. Guan. 2010. Biomimetic soy protein nanocomposites with calcium carbonate crystalline arrays for use as wood adhesive. *Bioresource Technology* 101: 6235-6241 (Impact Factor=4.75)
7. Yao, F., and **Q. Wu**. 2010. Coextruded polyethylene wood flour composite: effect of shell thickness, wood loading and core quality. *J. Applied Poly. Sci.* 118:3594-3601. (Impact Factor=1.33)
8. Liu, H., D. Liu, F. Yao, and **Q. Wu**. 2010. Fabrication and properties of transparent polymethylmethacrylate/cellulose nanocrystal composites. *Bioresource Technology*, 101:5685-5692 (Impact Factor=4.75)
9. Lei, Y., and **Q. Wu**. 2010. Wood plastic composites based on recycled high density polyethylene and poly(ethylene terephthalate) microfibrillar blends. *Bioresource Technology*, 101:3665-3671. (Impact Factor=4.75)
10. Liu, D. , T., Zhong, P. R. Chang, K. Li, and **Q. Wu**. 2010. Starch composites reinforced by bamboo cellulose crystals. *Bioresource Technology*, 101:2529-2536.(Impact Factor=4.75)
11. Xu, Y., **Q. Wu**, Y. Lei, and F. Yao. 2010. Creep behavior of bagasse fiber reinforced polymer composites. *Bioresource Technology*, 101(9):3280-3286.(Impact Factor=4.75)
12. Liu, H., F. Yao, Y. Xu, and **Q. Wu**. 2010. A novel wood flour-filled composite based on microfibrillar high density polyethylene (HDPE)/nylon-6 blends. *Bioresource Technology*,

101(9):3295-3297 (Impact Factor=4.75)

13. Cao, Q., F. Yao, and **Q. Wu**. 2010. Effects of sample size on characterization of wood-particle length distribution. *Wood and Fiber Science*: 42(1):46-50. (Impact Factor=0.4)
14. Han, G., J. Deng, S. Zhang, P. Bicho, and **Q., Wu**. 2010. Effect of Steam Explosion Treatment on Characteristics of Wheat Straw. *J. Industrial Crops and Products* 31:28-33. (Impact Factor=2.82)

2009

1. Vlosky, P. R., T. Shupe, and **Q. Wu**. 2009. Perceptions and use of termite resistant treated wood products. Part I: the perspective of homeowners in Formosan subterranean termite infected states. *Drvna Industrija* 60(3):135-144. (IF=0.2)
2. Vlosky, P. R., T. Shupe, and **Q. Wu**. 2009. Perceptions and use of termite resistant treated wood products. Part II: the perspective of homeowners and Architects in Formosan subterranean termite infected states. *Drvna Industrija* 60(4):219-228. (IF=0.2)
3. Liu, D., Q. Wu, H. Chen, and P. R. Chang 2009. Transitional Properties of Micro- to Nano-sized Starch Particles Manufactured via a Green Process. *Journal of Colloid and Interface Science* 339(1):117-124. (Impact Factor=3.39)
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- **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.

TEACHING EXPERIENCE

Course Taught

- **RNR 3039: Wood Products Spring Camp**
- **RNR 2043: Introduction to Wood Science and Forest Products.**
- **RNR 7029A: Wood and Wood Composites Mechanics.**
- **RNR 7029B: Wood Composite Manufacturing.**

Graduate Student/Postdoctoral Researcher Advising

- *On-Going Students*
- Jinlong Zhang, Ph.D. (committee Chair)
- Yiyang Yue, Ph.D. (committee Chair)
- Zhen Zhang, Ph.D. (committee Chair)
- Zhen Zhang, Ph.D. (committee Chair)
- Kunlin Song Ph.D. (Committee Chair)
- Xiuxuan Sun Ph.D. (Committee Chair)
- *Completed Students - Committee Chair/Major Advisor*
- Jingquan Han, Ph.D. (2013) The 2013 First Place Wood Award Winner for the best graduate student paper given by the Forest Products Society.
- BJ Kim, Ph.D. in Forestry/Forest Products (2012)
- Yiyang Yue, MS in Forestry/Forest Products (2010)
- Yanjun Xu, Ph.D. in Forestry/Forest Products (2009)
- Fei Yao, Ph.D. in Forestry/Forest Products (2008)
- 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*
Runzhou Huang (Visiting Scientist), August 2010 to present
Xiaozhou Song (Postdoc Researcher). August 2010 to present
Fei Yao (Postdoctoral Researcher), July 2008 to present
Chengjun Zhou (Postdoctoral Researcher), August 2009 to present
Dagang Liu (Postdoctoral Researcher), November 2008 to August 2009
Peng Tian (Postdoctoral Researcher), November 2006 to 2008.
Yong Lei (Postdoctoral Researcher), October 2004 to 2008
Weihong Guo (Postdoctoral Researcher), October 2005 to March 2006
Ziqiang Lu (Postdoctoral Researcher), July 2003 to June 2005
Han Guanping (Postdoctoral Visiting Scientist), February 2003 to August 2005
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

PARTICIPATION IN OTHER PROFESSIONAL MEETINGS, SYMPOSIA, WORKSHOPS AND CONFERENCES

- The ISO/TC61 on Plastic Meeting. September 21-25, 2014. Honolulu, Hawaii, USA.
- The International Symposium on the Fundamentals and Applications of Nanocellulose. Seoul, Korea. October 7-8, 2014.
- The 4th International Conference on Biomass Energy Technologies—8th World Bioenergy Symposium (ICBT-WBS 2014). Changsha, China. October 17-19, 2014.
- The 11th Pacific Rim Bio-composite Conference. Shizuoka, JP. November 27-30, 2012.
- The 20th Annual International Conference on Composites or Nano Engineering Beijing, China, July 22-28, 2012. Session Chair: 10D. Presentation: *Natural fiber/wood plastic blends modified by copper/carbon core shell nanoparticles.*
- Malaysia Polymer International Conference (MPIC 2011), Equatorial Bangi-Putrajaya, Malaysia- Presentation: *Nanocomposites based on cellulose nanocrystals.*
- The 18th International Composite Conference, Jeju, Korea. 2011. – Presentation: *Bamboo-plastic composites filled with precipitated calcium carbonate of sugar origin.*
- Symposium on Further Developing “Wood Science and Technology” Major in Nanjing Forestry University. Presentation: *Sustainable Bio-based nano composites.*
- The 1st Annual World Congress of Nano-S&T, Dalian, China. 2011. Presentation- *Nanocomposites from cellulose nanocrystals and nanofibers.*
- 65th Annual FPS meeting, Portland, OR. 6/2011
- Inter. Symposium on Utilization of Wood Based Resources, 11/2011
- 18th International conference on composite in Jeju, Korea, 8/21-26/2011
- IRG 41, Biarritz, France, 2010
- IUFRO Meeting, Seoul, Korea. 2010

- The Fourth International Forum of Wood Plastics Composites. Nanjing, China. 11/2010
- AWWA Annual Meeting, San Antonio. April 2009.
- IRG 40, Beijing, China, 2009
- The Third International Forum of Wood Plastics Composites. Shenzhen, China. 11/2009
- The Second International Forum of Wood Plastics Composites. Shengyang, China. 10/2008
- International Symposium on Wood Science and Technology. September 27-29, 2008.
- The 2nd Integration and Commercialization of Micro and Nanosystems International Conference & Exhibition. Clear Water Bay, Kowloon, Hong Kong. June 3-5, 2008.
- IUFRO All Division 5 Conference. Taipei, Taiwan. October 29-November 3, 2007.
- The Japanese 16th Wood-based Panel Symposium. Tokyo, Japan. October 12, 2007.
- AWWA Annual Meeting, St. Louis, MO. May 2007.
- Inter. Conference and Exhibition on Integration and Commercialization of Micro and Nanosystems. Sanya, Hainan, China. January 10-13, 2007.
- The 8th Pacific Rim Bio-based composites symposium. Kuala Lumpur, Malaysia. November 23-28, 2006.
- The SWST and FPS Annual Meeting. Newport Beach. June 25-28, 2006.
- The FPS MidSouth Meeting. Needouls, TX. March 27-28, 2006.
- OSB World Symposium. SBA. Miami Beech, FL. May 16-18, 2006.
- Wood Protection 2006. New Orleans, LA. March 21-23, 2006.
- The FPS Annual Meeting. Quebec City, Canada. June 20, 2005.
- The 3rd East Asian Polymer Conference, Chengdu, China. June 6-10, 2004.
- South Central Region Sun Grant Initiative Conf. 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. Nov. 6-8, 2003.
- Workshop: Spectroscopic Solution. 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.
- Inter. Conf. on Advances in Building Technology. Hong Kong, China. Dec. 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 35nd 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.

GRANTS AND CONTRACTS

- Co-extruded wood plastic composites: equipment design. Nanjing Forestry University/Zhejiang Forestry University. Q Wu. \$28,000. 1/1/2015-12/31/2017
- The use of cellulose nanoparticles for reinforcing oil well cements: industrial applications. Louisiana BOR OPT-IN. Q Wu. **\$70,000**. 7/2014 to 6/2015.
- Quartz Crystal Microbalance with Dissipation (QCM-D) Monitoring for Advanced Material Research and Development. Louisiana Education Quality Support Fund – Enhancement. Q. Wu. \$100,000. 2013-2015.
- Study of co-extruded wood plastic composites. Korea Forest Research Institute. Q Wu. \$99,000. 1/1/2012-12/31/2015
- Developing cellulose nanofiber-based membrane for energy device application. LSU Economic Development Assistantship. Q. Wu. \$100,000. 2013-2016.
- Biodegradable Nano-fibrous Materials Modified by Biopolymer Nanoparticles through Coaxial Electrospinning. Louisiana Education Quality Support Fund – pFund. Q. Wu. **\$10,000**. 07/2013-06/2014.
- Developing Lost Circulation Control Material for High Temperature Drilling Applications. LSU Economic Development Assistantship. Q. Wu. **\$100,000**. 2012-2015.
- Formulation development for continuous fiber reinforced wood plastic composites.

- Louisiana BOR OPT-IN. \$70,000. 7/2011 to 6/2013.
- Fiber reinforced wood plastic composites. NEFU, China. **\$110,000**. 1/2011 to 12/2013.
 - Reinforced Polymer Composite Systems as Lost Circulation Control Material in Oil Drilling Industry. LA BOR-ITRS. **\$250,000**. Q. Wu. 6/2010-6/2015.
 - Thermoplastics Composites Reinforced with Natural Fibers and/or Inorganic Nano-Particles. **\$791,568**. Wu, Q., Craig M Clemons, Kun Lian, and Yong Lei. DOE/USDA biomass research program. 2006-2012.
 - Enhancing R&D capability for creating and characterizing microcellular structured materials in sustainable engineering composites. Louisiana Education Quality Support Fund. Q.L. Wu. 6/01/2009 - 6/30/2011. **\$144,840**.
 - Biopolymer nanofibers disassembled through mechanical process and their self-organized liquid crystal materials. NSF/LABOR Pfund. Q.L. Wu. 1/01/2010 - 2/30/2011. **\$10,000**.
 - High performance biocomposites. LA BOR Governor Bio-Initiative. Chen, Y., Q. Wu, and G. Henderson. 2005-2012. **\$110,920/year**.
 - Nanotechnology Application in Forest Health Management -Using Copper-Carbon Core-Shell Nanoparticles (CCCSNs) to Improve Tree/Forest Health and Pest Resistance. USDA 1890 School Capacity Building. Qi, Y. K. Lian, and Q. Wu. 9/08 – 8/13. **\$448,877**.
 - Durable Wood-Based Products and Composites from Recycled Wood and Plastic Materials. USDA WUR. 09/08-1/10. **\$67,000**.
 - Temperature and pH-Sensitive Nano Polymeric Composites for Controlled Drug DeliveryLSU AgCenter BAIT. **\$25,000**. Wu, Q. 1/07-12/07.
 - Wood Durability Testing (With Dr. Todd Shupe). Industry Support. 2007. **\$55,374**.
 - Advanced Profile Extrusion Facility for Fiber-Reinforced Thermo-plastic Composite Research and Development. Louisiana Education Quality Support Fund. Q.L. Wu. 6/01/2007 - 6/30/2008. **\$170,000**
 - Nano Copper Carbon Core-Shell (NCCCS) Compound as New Generation Wood Preservatives: Industrial Application Development. LA BOR-ITRS. \$110,000 with \$60,000 Industry match. Wu, Q. and K. Lian. 6/2006-6/2008.
 - Nano Copper Carbon Core-Shell (NCCCS) Compound for Bio-Deterioration Protection Of Wood-Based Building Materials. LSU AgCenter BAIT. **\$40,000**. Wu, Q. 1/06-12/06.
 - Lignin as binder for structural OSB. **\$9,200**. Wu, Q. GreenValue Inc. 2006
 - Research on Natural Fiber Plastic Composites at the USDA Forest Products Laboratory. LABOR/NSF LINK. **\$4,000**. Wu, Q., and Y. Lei, 1/2006-3/2006.
 - Decay resistance of treated wood. Wood Smart Solution. **\$6,500**. Wu, Q. and T.F. Shupe. 1/2005-4/2006.
 - Durability analysis of engineered composite lumber: laminated strand lumber (LSL). Truss-Joist Inc. **\$11,875**. Wu, Q. and T.F. Shupe. 1/2006-12/2006.
 - Extruded natural fiber polymer composites as advanced engineering materials. LA BOR-ITRS. **\$150,000 with \$60,000 Industry match**. Q. Wu. 6/2005-6/2008
 - Durability analysis of engineered composite lumber: laminated strand lumber (LSL). Truss-Joist Inc. **\$9,500**. Wu, Q. and T.F. Shupe. 6/2005-12/2005.
 - Testing wood-plastic composites. Washington State University. \$4500. Wu, Q. and T.F. Shupe 7/2005-6/2006.
 - Termite-related Research. AgCenter FST Fund. **\$29,000**. Wu, Q., and T. F. Shupe.

7/1/2005 – 6/30/2006.

- Testing of Wood Based Treatments for MeadWestVaco. MeadWestvaco Corp. (Specialty Chemical Division). **\$17,000**. Wu, Q., and T. F. Shupe. 7/1/2005 – 6/30/2006.
- Testing of Wood Based Treatments for Modified Wood Corp. Modified Wood Corp. **\$20,000**. Wu, Q., and T. F. Shupe. 7/2005 – 6//2006.
- Testing treated wood composites. LanXress Inc. **\$8,500**. Wu, Q., and T. F. Shupe. 1/2005 – 12/2005.
- Testing treated wood for termite resistance. *Kop-Coat*. **\$2,500**. Wu, Q., and T. F. Shupe. 1/2005 – 12/2005.
- Durability analysis of structural wood composite panel: Oriented strandboard (OSB). Louisiana Pacific Corp. **\$9,500**. Wu, Q., and T. F. Shupe 1/2005 – 12/2005.
- Testing of borate-treated wood and wood composites, Quality Borate Company, **\$6,500**. Wu, Q., and T. F. Shupe 1/2005 – 12/2005.
- Bagasse fiber processing. DeMaxZ, LLC. \$5,500. Q.Wu. 1/2005
- 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**.
- Termite-related Research. AgCenter FST Fund. Smith, R. W., Wu, Q., and T. F. Shupe. 7/1/2004 – 6/30/2005. **\$29,000**.
- 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 - 6/30/2007. **\$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.**
- Wood Processing. Industry/Individuals. Wu, Q. February 2000. **\$3,300.**
- Durability Analysis of Borate-modified Oriented Strandboard. National Science Foundation-PATH. Wu, Q. 7/15/2000-6/30/2004. **\$150,000.**
- Tree Ring Properties and Environmental Interaction Evaluation Laboratory (TREE). Louisiana Education Quality Support Fund. Chambers, J., Q. Wu, and Joy Young. 6/01/2000 - 5/31/2001. **\$48,000**

AWARDS AND HONORS

- ◆ Journal of Colloid and Interface Science - Top Cited Article (2010-2011) award with a paper -Application of rod-shaped cellulose nanocrystals in polyacrylamide hydrogels.
- ◆ **Visiting Professorship**
Central South University of Forestry and Technology, Changsha, China . 2012
- ◆ **Specially Appointed Professorship**
Nanjing Forestry University, Nanjing, China. 2012
- ◆ **LSU Rogers Research Award**
LSU Agcenter Rogers Research award, 2009
- ◆ **Research Award**
Sigma Delta Gamma Honor Society, LSU Chapter. April 2008.
- ◆ **JSPS Fellow**
Shizuoka University, Shizuoka, Japan. October 2007.
- ◆ **Concurrent Professorship**
Nanjing Forestry University, Nanjing, China. 2006
- ◆ **Concurrent Teaching and Research Professorship**
Henan Agricultural University. Zhengzhou. China. 2006
- ◆ **Visiting Professorship**
East China University of Science and technology, Shanghai, China. 2006
- ◆ **Markwardt Wood Engineering Award**
Forest Products Society, Madison, WI. 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.

◆ **Visiting Professorship**

College of Mechanical and Electrical Engineering, Henan Agricultural University.
Zhengzhou. China. 2004 to 2006

◆ **Honorary Board Member**

Chinese Forestry Society. 2004-Present.