CURRICULUM VITAE

Jingxin Wang
Professor and Associate Director for Research
Director, Renewable Materials and Bioenergy Research Center
Division of Forestry and Natural Resources
West Virginia University
PO Box 6125
Morgantown, WV 26506
(304) 293 7601
(304) 293 2441 (Fax)
jxwang@wvu.edu
forestry.wvu.edu
jingxin_wang.forestry.wvu.edu
bioenergy.wvu.edu/
www.newbio.psu.edu

EDUCATION:

Ph.D., 1997, Forest Resources Management, The University of Georgia, Athens, Georgia, USA.

M.S., 2005, Computer Science, West Virginia University, Morgantown, West Virginia, USA.

Ph.D., 1990, Forest/Mechanical Engineering, Northeast Forestry University, Harbin, China.

M.S., 1986, Forest/Mechanical Engineering, Northeast Forestry University, Harbin, China.

B.S., 1983, Forest/Mechanical Engineering, Jilin Forestry College, Jilin, China.

PROFESSIONAL INTERESTS AND COMPUTER SKILLS:

Forest ecosystem management. Biomass utilization and bioenergy. Biomass harvest and logistics. Forestry best management practices. Biomaterials and wood processing optimization. Carbon optimization and global change. Computer simulation and system modeling.

- System: Windows, and UNIX;
- Programming Language: VB, VBCE, VB.NET, .NET Compact Framework
  Unix C/C++ and VC++
  Ada 95, FORTRAN, SQL Windows
- Database: MS Access, DB2, Oracle;
- Web-based: ASP, ASP.NET, HTML, VB Script, Java Script;
- Mainframe: TSO/ISPF/JCL/SAS;
- GIS/Statistical Analysis: ArcGIS, SAS

PROFESSIONAL EMPLOYMENT:

2013 – Present. Associate Director for Research. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia, USA.

2011 – Present. Professor of Forestry and Wood Science, Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia, USA.

2008 – Present. Adjunct Professor of Forest Management and Wood Science. **Chinese Academy of Forestry**, Beijing, China; **Northeast Forestry University**, Harbin, China; and **Beijing Forestry University**, Beijing, China; **International Center for Bamboo and Rattan**, Beijing, China.

2006 – Present. Director of Renewable Materials and Bioenergy Research Center. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia, USA.

2006 – 2013. Program Coordinator of Wood Science and Technology Program. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia, USA.

2006 – 2011. Associate Professor of Wood Science and Technology, Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia, USA.

2000 – 2006. Assistant Professor of Wood Science and Technology, Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia, USA.

1998 – 2000. Systems Programmer/Analyst. Computer Sciences Corporation, Financial Services Group, Atlanta, Georgia, USA.

1994 – 1998. Research Assistant/Coordinator. Warnell School of Forest Resources, The University of Georgia, Athens, Georgia, USA.

1993 – 1994. Visiting Associate Professor. Department of Forest Resource Management, University of Helsinki, Helsinki, Finland.

1992 – 1993. Associate Professor. Department of Forest Engineering, Northeast Forestry University, Harbin, China.

1986 – 1992. Assistant Professor. Department of Forest Engineering, Northeast Forestry University, Harbin, China.

CURRICULUM DEVELOMENT AND TEACHING:

West Virginia University

Undergraduate Courses

- WDSC 422 Harvesting Forest Products, 3 CR
- FOR 240 Introduction to Computing in Natural Resources, 3 CR
- WDSC 491 Professional Field Experience, 1-6 CR
- WDSC 495 Independent Study, 1-6 CR

Graduate Courses

- WDSC 555 Computer Applications in Forest Resource Management, 3 CR
- WDSC 696 Graduate Seminars, 2 CR

Textbooks

Wang, J. 2016. Forest and Biomass Harvesting and Analysis. XanEdu. 4750 Venture Drive, Suite 400. Ann Arbor, MI 48108. 201 pp.

Wang, J. 2016. Computing Applications in Forestry and Natural Resources. XanEdu. 4750 Venture Drive, Suite 400. Ann Arbor, MI 48108. 310 pp.

Supervised Theses and Dissertations (as Major Professor)

- Yu, Z. 2016. Responses and adaptation strategies of terrestrial ecosystems to climate change. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 173 pp.
- Falcon, A. 2016. Pretreating underutilized woody biomass for value-added biofuels and bioproducts. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 116 pp.
- Liu, W. 2015. Economic and environmental analyses of biomass utilization for bioenergy products in the northeastern United States. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 193 pp.
- Hartley, D. 2014. Modeling and optimization of woody biomass harvest and logistics in the northeastern United States. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 219 pp.
- Summerfield, D. 2011. Assessments of management and marketing practices of Appalachian hardwood sawmills. M.S. Thesis. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 61 pp.
- Saud, P. 2011. Life cycle analysis of forest carbon in central Appalachian region. M.S. Thesis. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 93 pp.
- Lin, W. 2011. Development of a 3D log processing optimization system for small-scale sawmills to maximize profits and yield from central Appalachian hardwoods. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 182 pp.
- Jacobson, M. 2011. Properties of polyvinyl alcohol nanocomposites reinforced with cellulose nanocrystals of red oak residues. M.S. Thesis. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 57 pp.

- Sharma, B. 2010. Modeling of forest harvest scheduling and terrestrial carbon sequestration. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 160 pp.
- Adebayo, A. 2010. Pretreatments and energy potentials of Appalachian hardwood residues for biofuel production. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 94 pp.
- Wu, J. 2010. Development of economic analysis model for woody biomass to biofuels in central Appalachia. Ph.D. Dissertation. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 199 pp.
- Dhungana, S. 2009. Development of a web-based woody biomass energy expert system. M.S. Thesis. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 64 pp.
- Hamons, G. 2007. Modeling sediment movement in forested watersheds using hill-slope attributes. M.S. Thesis. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 88 pp.
- Sharp, W. 2007. Changes to in-stream turbidity following construction of a forest road in forested watersheds in West Virginia. M.S. Thesis. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 91 pp.
- Liu, J. 2006. Optimal bucking hardwood species in central Appalachia. M.S. Thesis. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia. 59 pp.
- Goff, T. 2005. Assessment of application, effectiveness, and compliance of forestry best managements practices in West Virginia. M.S. Thesis. Division of Forestry, West Virginia University, Morgantown, West Virginia. 113 pp.
- Li, Y. 2005. Modeling operational forestry problems in central Appalachian hardwood forests. Ph.D. Dissertation. Division of Forestry, West Virginia University, Morgantown, West Virginia. 144 pp.
- Long, C. 2003. Production and cost analysis of two harvesting systems in central Appalachia. M.S. Thesis. Division of Forestry, West Virginia University, Morgantown, West Virginia. 80 pp.
- Jones, M. 2003. Soil compaction caused by timber harvesting in central Appalachian hardwood forests. M.S. Thesis. Division of Forestry, West Virginia University, Morgantown, West Virginia. 52 pp.
- Vanderberg, M. 2002. Harvested log damage and value loss associated with two ground-based harvesting systems in central Appalachia. M.S. Thesis. Division of Forestry, West Virginia University, Morgantown, West Virginia. 98 pp.

Northeast Forestry University, China

Undergraduate Courses

- Technology and Equipment for Log Processing and Storage
- Computer Applications in Forest Operations and Engineering
- Professional Field Study in Forest Operations

Graduate Courses

- Operations Research in Forest Operations
- Operations Research Techniques for Optimal Tree-stem Bucking

Supervised Thesis

- Yang, Y. 1993. Optimal bucking system for the northeastern species of China. M.S. Thesis. Northeast Forestry University, Harbin, China. 90 pp.

RESEARCH GRANTS AND PROJECTS:

West Virginia University - Research grants include ($15 million total, $4 million for WVU over the last five years):

Investigators	Year	Project	Agency	Amount
Volk, T. Eisenbies, M. Wang, J. (WVU PI), Others	2016	Improved Advanced Biomass Logistics Utilizing Woody and other Feedstocks in the Northeast and Pacific Northwest	US DOE	$3,000,000 ($271,006 WVU, $89,916 for Y1)
Wang, J. Skousen, J. Grushecky, S. DiFazio, S. DeVallance, D.	2016	The Northeast Woody/Warm-season Biomass Consortium (Y5).	USDA NIFA	$149,790
Wang, J. Skousen, J. Grushecky, S. DiFazio, S. DeVallance, D.	2015	The Northeast Woody/Warm-season Biomass Consortium (Y4).	USDA NIFA	$157,098
Wang, J. Zondlo, J. Sabolsky, E. DeVallance, D. Xie, X.	2015	Enhancing the nanostructure of the lignocellulosic cell wall as a natural template for highly-ordered mesoporus carbons	USDA NIFA	$496,168
Wang, J. DeVallance, D.	2015	The Northeast Woody/Warm-season Biomass Consortium. (supplement)	USDA NIFA	$9,946
Wang, J. Skousen, J. Grushecky, S. DiFazio, S. DeVallance, D.	2014	The Northeast Woody/Warm-season Biomass Consortium (Y3).	USDA NIFA	$140,273
Wang, J.	2014	The Northeast Woody/Warm-season Biomass Consortium (supplement).	USDA NIFA	$3,159

Wang, J. Grushecky, S. Basden, T. DeVallance, D.	2014	Strengthening a wood energy team to facilitate bio-business development	USDA Forest Service	$249,680
Thomas, R. Peter-John, B. Wang, J.	2014	Using dendroisotopes in North America and Asia to examine how temperate forests respond to changes in acid deposition	NSF	$650,000
Grushecky, S. Wang, J. Spong, S.	2014	Wood byproducts and biomass and natural gas to liquid fuels	WV DOE	$50,000
Wang, J. Grusheky, S.	2014	The Northeast Woody/Warm-season Biomass Consortium. (supplement)	USDA NIFA	$6,143
Wang, J. DeVallance, D.	2014	The Northeast Woody/Warm-season Biomass Consortium. (supplement)	USDA NIFA	$20,811
DeVallance, D. Wang, J.	2013	Demand and product innovations for green products sourced from Appalachian hardwoods.	USDA WERC	$20,405
Oporto, G. DeVallance, D. Jaczynski, J Wang, J.	2013	Development of novel hybrid cellulose nanocomposite film with potent biocide properties utilizing low quality Appalachian hardwoods	USDA NIFA	$289,140
Wang, J. Skousen, J. Grushecky, S. DiFazio, S.	2013	The Northeast Woody/Warm-season Biomass Consortium (Y2).	USDA NIFA	$167,466
Grushecky, S. Wang, J. Spong, B.	2013	Biomass Resources in WV: Update of current sources and an expansion to the shale gas industry.	WVDOE	$50,000
Wang, J. Jackson, R.	2012	Economic and environmental impacts of woody biomass utilization in the central Appalachian region.	USDA NIFA	$349,954
Richard, T. Volk, T. Smart, L. Wang, J. (WVU PI) others	2012	The Northeast Woody/Warm-season Biomass Consortium.	USDA NIFA	$9,980,000 (WVU, $700,945, $147,311 for Y1)
Wang, J. Bhattacharyya, D.	2012	Feasibilities of a coal-biomass to liquids plant in southern West Virginia.	USDOE NETL	$299,433
Wang, J. Zondlo, J. Others	2011	Advancing an Interdisciplinary and Competitive Bioenergy Research Team at West Virginia University.	WVU AEI	$179,250

Wang, J. McNeel, J. DeVallance, D.	2011	Promoting Hardwood Processing Efficiency and Economic Competitiveness for Small Sawmills in the Appalachian Region.	USDA Forest Service	$50,000
Wang, J. DeVallance, D.	2011	Using 3D Laser Scanning and Log Defect Prediction Model to Determine Internal Defect Distributions in Appalachian Hardwood Logs.	USDA Forest Service	$15,000
DeVallance, D. Wang, J. Gray, J.	2011	Demand and Product Innovations for Green Products Sourced from Appalachian Hardwoods.	USDA Forest Service	$62,448
Singh, K. Wang, J.	2010	CO-LIQUEFACTION OF COAL AND PRETREATED BIOMASS	WVU AEI	$47,018
McNeel, J. Wang, J.	2010	Promoting Appalachian Hardwood utilization for value-added wood products and biofuels (Phase 2).	USDA NIFA	$458,367
Wafle, T. Dadyburijor, D. Seehra, M Zondlo, J. Kaushlendra, S. Wang, J.	2010	Coal and Biomass to Liquid Fuels.	USDOE	$250,600
Vandivort, T. Ziemkiewicz, P. Wang, J. Others	2010	State Water Resources Research Institute Program.	USGS	$92,335
Wang, J.	2010	US-China Wood Products Trade Conference.	WVURC	$9,500
McNeel, J. Wang, J.	2009	Promoting Appalachian Hardwood utilization for value-added wood products and biofuels (Phase 1).	USDA CSREES	$466,123
Wang, J.	2009	Genetic modification of woody biomass for more efficient biofuels production.	DOE/NETL	$85,082
Vandivort, T Ziemkiewicz, P Wang, J. Others	2009	State Water Resources Research Institute Program.	USGS	$92,335
Wang, J.	2009	Educational Resource Kit to Improve Lumber Processing.	WVU Public Service	$7,606
Wang, J.	2009	Alternative woody biomass pretreatments for biofuel production	WVU AEI	$20,320
Wang, J.	2008	Assessment of soil compaction and residual stand growth in a central Appalachian hardwood forest	USDA Forest Service	$20,000

Wang, J.	2008	An economic assessment of woody biomass availability and utilization for bioenergy in central Appalachia	US ARC	$43,200
Wang, J. McNeel, J. Armstrong, J.	2008	An Interactive Web-Based Training Toolkit for Primary Processors to Improve Lumber Utilization and Grading Efficiency and Maximize Profits from Appalachian Hardwoods. (supplement)	USDA WERC	$15,800
McNeel, J. Wang, J.	2008	Promoting Appalachian Hardwood utilization for value-added wood products and biofuels (Phase 1).	USDA CSREES	$459,266
Wang, J. Grushecky, S. McNeel, J.	2008	Assessment of coal/woody biomass to liquid fuels (CBTL) and carbon sequestration	WV DOE	$75,000
Wang, J. McNeel, J.	2007	Depolymerization and fermentation of wood wastes to ethanol and butanol fuels.	WVURC	$20,000
Grushecky, S. Spong, B. Wang, J.	2007	Wood residue survey 2008	WV DOE	$10,000
Wang, J. McGill, D. McNeel, J.	2007	Development of an outreach program to promote wood residue utilization for bioenergy in West Virginia.	Northeast SARE/ARC	$24,962
McNeel, J Wang, J.	2007	Efficient Utilization of Upland Hardwoods for Biomaterials and Bioenergy.	USDA CSREES (WUR/Hatch)	$365,442
Smaldone, D. Cooper, L. Wang, J.	2007	Increasing walking at the C&O canal national historical park: an intervention focused on local employees.	National Park Service	$32,741
Wang, J. Armstrong, J. Grushecky, S.	2006	Promoting the Economic Competitiveness of Central Appalachian Hardwood industries.	USDA WERC	$69,900
Wang, J. Edwards, P.	2006	In-stream Turbidity and Suspended Sediment Changes Following Improvements to a Forest Road and Harvesting.	USGS	$29,496
Wang, J. Dawson-Andoh	2006	Development of a Dynamic Business Analysis Model to Promote the Production and Utilization of Wood Residues for Bioenergy and Bioproducts.	WVEPSCOR	$48,205
McNeel, J. Wang, J.	2006	Improving Quality and Utilization of Upland Hardwoods in the Appalachian Region (Phase 3).	USDA CSREES	$474,586
Grushecky, S	2006	Development of an Expert System to	USDA	$65,261

Means, K. Wang, J.		Access the opportunities to Use Wood residue as a Commercial and Industrial Fuel Source.	WERC	
Wang, J.	2006	Determining Factors Contributing and Controlling Sediment Delivery to Stream Channels.	USDA Monongahela National Forest	$33,355
Wang, J.	2006	Modeling In-Stream Suspended Sediment and Turbidity Changes.	WVU Senate Grants	$12,632
Wang, J. Spong, B.	2006	Development of a Logging Business Management System for Loggers to Enhance the Logging Extension Services.	WVU Public Service Award	$9,376
Wang, J. Grushecky, S. McNeel, J.	2005	Development of a West Virginia Biobased Materials Center	WVDO	$75,000
Wang, J. McNeel, J.	2005	Using Hillside Attributes to Model and Predict To-Stream Sediment Delivery in Central Appalachian Forested Watersheds. (supplement)	USDA Forest Service	$3,000
Wang, J. McNeel, J. Armstrong, J.	2005	An Interactive Web-Based Training Toolkit for Primary Processors to Improve Lumber Utilization and Grading Efficiency and Maximize Profits from Appalachian Hardwoods.	USDA WERC	$73,230
Grushecky, S. Hassler, C. Wang, J.	2005	Supporting the Regional Logs to Lumber Yield Application: A West Virginia University Wood Utilization Research Project.	USDA WERC	$15,000
Brooks, J Wang, J.	2005	Analysis of FIA Data to Develop Economically Viable Thinning Guidelines in Oak-Hickory Stands in the Central Appalachian Hardwood Forest Region.	USDA Forest Service	$15,000
McNeel, J. Wang, J.	2005	Hardwood Log Product Merchandizing during Timber Harvesting Operations in West Virginia (Phase 2).	USDA CSREES	$462,993
Wang, J. McNeel, J.	2005	A Spreadsheet Program for Estimating Harvesting System Rates in the Northeastern and North Central Regions.	CORRIM Seattle, WA	$10,000
Wang, J. Milauskas, S. McNeel, J.	2004	An Assessment of Compliance with Forestry Best Management Practices in West Virginia.	WVDOF	$30,000
Wang, J. Edwards, P.	2004	Changes to In-stream Suspended Sediment and Turbidity Following Improvements to a Forest Road in West Virginia.	USGS	$25,060

McGill, D. Grushecky, S. Wang, J.	2004	Interactive CD Highlighting Forest Stewardship in West Virginia.	WVDOF	$15,000
Wang, J.	2004	Determining the Opportunity Costs of Implementing Streamside Management Zone Guidelines.	USDA Forest Service	$10,000
McNeel, J. Wang, J.	2004	Hardwood Log Product Merchandizing during Timber Harvesting Operations in West Virginia (Phase 1).	USDA CSREES	$417,884
Wang, J.	2003	Modeling and Validating a 3D Stand Generator for Central Appalachian Hardwood Forests.	USDA Forest Service	$15,000
Wang, J.	2003	Development of General Cost/Production Equations for Feller-bunchers in Central Appalachian Hardwoods.	USDA Forest Service	$12,000
McNeel, J. Grushecky, S. Wang, J.	2003	Developing a Web-based Data Entry and Retrieval Data System for the Forest Health Protection Program.	USDA Forest Service	$7,810
Wang, J. McNeel, J.	2003	Using Hillside Attributes to Model and Predict To-Stream Sediment Delivery in Central Appalachian Forested Watersheds. (supplement)	USDA Forest Service	$27,500
Brooks, J. Wang, J.	2003	Thinning Strategies to Increase the Regional Availability and Quality of Oak Timber.	USDA Forest Service	$16,000
Wang, J. McNeel, J.	2002	Using Hillside Attributes to Model and Predict To-Stream Sediment Delivery in Central Appalachian Forested Watersheds.	USDA Forest Service	$12,500
Wang, J.	2002	Effects of Soil Compaction on Residual Stand Growth in Central Appalachian Hardwood Forest.	USDA Forest Service	$12,000
McGill, D. Wang, J.	2002	Linking Forest Heritage Communities through Coordinated Web-page Development.	Kellogg Foundation	$9,600
Wang, J.	2001	Development of General Cut-to-length Cost/Production Equations for Eastern Hardwoods (supplemental funding).	USDA Forest Service	$4,000
McNeel, J. Wang, J.	2001	Enhancing WV's Forest Stewardship Program through Web-based Information.	USDA Forest Service	$35,000
McNeel, J. Wang, J.	2001	Operational Study of Silvicultural Treatments in Young Hardwood Stands to Promote Forest Ecosystem Health.	USDA Forest Service	$25,000
Wang, J.	2000	Development of General Cut-to-length Cost/Production Equations for Eastern	USDA Forest Service	$15,000

		Hardwoods.		
McNeel, J. Wang, J.	2000	System Analysis to Evaluate Alternative Harvesting Strategies.	USDA Forest Service	$18,000
McNeel, J. Wang, J. Hassler, C.	2000	Wood Industry Assistance Program.	WV Develop. Office	$35,000
McNeel, J. Wang, J.	2000	Comparing Ground-based and Cable-based Skidding Systems: A Case Study Emphasizing Productivity and Environmental Impacts on an Appalachian Forest Site.	USDA Forest Service	$33,000

University of Georgia - Projects included:

- Simulation Enhancement of the Operational Forestry Problems
- Modeling Stands, Equipment, and Harvests Interactions Caused by Harvesting Prescriptions
- Timber Sale Tract Size and Logging Economics
- C++, CGI, and Oracle Programming for the Project "An Inventory System for Office Equipment"

University of Helsinki, Finland - Projects included:

- Computer Simulations of Single-grip Harvesters in Forest Operations
- Mobility and Feasibility of Excavator with Attachments in Forestry Operations

Northeast Forestry University, China – Projects included:

- Optimum and Expert System of Tree-stem Bucking
- Forest Resource Management System of YanBian Forestry Administrative Bureau
- Software Development for Optimal Bucking the Northeastern Species of China
- Technical Conditions of Loading and Unloading Machines in Forestry (National Standard of China)
- Basic Parameters and Types of Loading and Unloading Machines in Forestry (National Standard of China)

PUBLICATIONS:

Patents

- Wang, Z., G. Xia, and J. Wang. 1989. Design and Applications of Model DZ1 Log Grapple for Loading and Unloading Operations - Chinese Patent (No. 89206335.1).
- Cheng, Q. J. Wang, and J. McNeel. 2011. Isolation of microfibrillated cellulose fibrils using a combined process of high intensity ultrasonication and high pressure homogenizer. U.S. Patent (pending).

Refereed Journal Papers

1. Yu, Z., J. Wang, S. Liu, J. Rentch, P. Sun, C. Lu. 2016. Global gross primary productivity and water use efficiency changes under drought stress. Environmental Research Letters. (Accepted)
2. Hu, Z., S. Liu, X. Liu, L. Fu, J. Wang, K. Liu, X. Huang., Y. Zhang, and F. He. 2016. Soil respiration and its environmental response varies by day/night and by growing/dormant season in a subalpine forest. Scientific Reports | 6:37864 | DOI: 10.1038/srep37864.
3. Huang, X., S. Liu, Y. You, Y. Wen, H. Wang, and J. Wang. 2016. Microbial community and associated enzymes activity influence soil carbon chemical composition in Eucalyptus urophylla plantation with mixing N2-fixing species in subtropical China. Plant Soil. DOI 10.1007/s11104-016-3117-5.
4. Liu, Y., S. Liu, S. Wan, J. Wang, H. Wang, and K. Liu. 2016. Effects of experimental throughfall reduction and soil warming on fine root biomass and its decomposition in a warm temperate oak forest. Sci. Total Environ. 2016 Sep 29. pii: S0048-9697(16)31811-3. doi: 10.1016/j.scitotenv.2016.08.116.
5. Liu, Y., S. Liu, S. Wan, J. Wang, and J. Luan and H. Wang. 2016. Differential responses of soil respiration to soil warming and experimental throughfall reduction in a transitional oak forest in central China. Agricultural and Forest Meteorology. 226-227 (2016): 186-198. http://dx.doi.org/10.1016/j.agrformet.2016.06.003.
6. Wu, J., J. Wang, W. Lin. 2016. Comparative Analysis of Primary Forest Products Export in the U.S. and China Using a Constant Market Share Model. Forest Products Journal. 66(7/8): 495-503. doi:10.13073/FPJ-D-14-00077
7. Xu, J., X. Xie, J. Wang, and J. Jiang. 2016. Directional liquefaction coupling fractionation of lignocellulosic biomass for platform chemicals. Green Chemistry. DOI: 10.1039/C5GC03070F
8. Yu, Z., J. Wang, S. Liu, S. Piao, P. Ciais, S. Running, B. Poulter, J. Rentch, and P. Sun. 2016. Decrease in winter respiration explains 25% of annual northern forest carbon sink enhancement over the last 30 years. Global Ecology and Biogeography. DOI: 10.1111/geb.12441 http://wileyonlinelibrary.com/journal/geb.
9. Wang, H., J. Liu, J. Wang, Z. Shi, J. Xu, P. Hong, A. Ming, H. Yu, L. Chen, L. Lu, D. Cai. 2016. Differential effects of conifer and broadleaf litter inputs on soil organic carbon chemical composition through altered soil microbial community composition. Scientific Reports | 6:27097 | DOI: 10.1038/srep27097.
10. Wang, K., J. Jiang, J. Xu, J. Feng, and J. Wang. 2016. Effective saccharification of holocellulose over multifunctional sulfonated char with fused ring structures under microwave irradiation. RSC Advances. 2016 (6), 14164 – 14170.
11. Wang, K., X. Xie, J. Jiang, and J. Wang. 2016. Sulfolane pretreatment of shrub willow to improve enzymatic saccharification. Cellulose. DOI: 10.1007/s10570-016-0875-4.
12. Ma, J., S. Liu, Z. Shi, and J. Wang. 2016. Assessing stand structure in successional stages of dark coniferous forests in western Sichuan, China. Journal of Forestry Research. DOI 10.1007/s11676-015-0197-7.
13. Zhang, X., S. Liu, X. Li, J. Wang, Q. Ding, H. Wang, C. Tian, M. Yao, J. An, and Y. Huang. 2016. Changes of soil prokaryotic communities after clear cutting in a karst forest: evidences for cutting-based disturbance promoting deterministic processes. FEMS

Microbiology Ecology. 2016: 92(3). pii: fiw026. doi: 10.1093/femsec/fiw026. Epub 2016 Feb 15.
14. Wang, J., X. Xie, D. DeVallance, J. Jiang, L. Huang, and L. Denes. 2015. Biomass-Based Materials and Technology for Energy (Editorial). Advances in Materials Science and Engineering. Volume 2015 (2015). http://dx.doi.org/10.1155/2015/393619.
15. Saud, P., J. Wang, B. Sharma, and W. Liu. 2015. Carbon impacts of lumber processing in the Northeastern United States. Canadian J. of Forest Research. 45: 1699–1710 (2015) dx.doi.org/10.1139/cjfr-2015-0082.
16. Nan, N., D. DeVallance, X. Xie, and J. Wang. 2015. The effect of bio-carbon addition on the electrical, mechanical, and thermal properties of polyvinyl alcohol/biochar composites. Journal of Composite Materials. DOI: 10.1177/0021998315589770.
17. Wang, H., S. Liu, S. Chang, J. Wang, Z. Shi, X. Huang. Y. Wen, L. Lu, and D. Cai. 2015. Soil microbial community composition rather than litter quality is linked with soil organic carbon chemical composition in plantations in subtropical China. J. Soils Sediments. DOI 10.1007/s11368-015-1118-2.
18. Wen, Y., J. Schuler, S. Liu, P. Mou, H. Wang, H. Yu, and J. Wang. 2015. Soil carbon dynamics in a *Pinus massoniana* plantation following clear-cutting and slash removal. Journal of Plant Ecology. doi:10.1093/jpe/rtv030.
19. Wang, K., X. Xie, Z. Si, J. Jiang, J. Wang. 2015. Microwave assisted hydrolysis of holocellulose using sulfonated char derived from lignin-rich residue, Advances in Materials Science and Engineering. http://dx.doi.org/10.1155/2015/106137.
20. Luan, J., S. Liu, S. Chang, and J. Wang. 2014. Differential impacts of warming and cooling on soil organic matter decomposition in warm-temperate oak forests, a reciprocal translocation experiment. Biogeochemistry. DOI 10.1007/s10533-014-0022-y.
21. Carrasco, J., G. Oporto., J. Zondlo, and J. Wang. 2014. Observed kinetic parameters during the torrefaction of red oak (*Quercus rubra*) in a pilot rotary kiln reactor. BioResources. 9(3): 5417-5437.
22. Wu, P., X. Liu, S. Liu, J. Wang, and Y. Wang. 2014. Composition and spatio-temporal variation of soil microarthropods in the biodiversity hotspot of northern Hengduan Mountains, China. European Journal of Soil Biology. 62(2014): 30-38, DOI: http://dx.doi.org/10.1016/j.ejsobi.2014.02.013.
23. Cheng, Q., B. Via, J. Wang, and J. Zondlo. 2014. Primary study of woody biomass and coal for energy production investigated by TGA-FTIR analysis. BioResources. 9(2): 2899-2906.
24. Liu, Y., S. Liu, J. Wang, X. Zhu, Y. Zhang, and X. Liu. 2013. Variation of soil respiration under tree canopy at different soil water conditions in a temperate mixed forest, central China. Ecological Research. DOI 10.1007/s11284-013-1110-5.
25. Wang, H., S. Liu, S. Chang, J. Wang, Z. Shi, X. Huang. Y. Wen, L. Lu, and D. Cai. 2013. Stable soil organic carbon is positively linked to microbial-derived compounds in four plantations of subtropical China. Biogeosciences Discussions, 10, 18093–18119, 2013. www.biogeosciences-discuss.net/10/18093/2013/doi:10.5194/bgd-10-18093-2013.
26. Carrasco, J., G. Oporto., J. Zondlo, and J. Wang. 2013. Torrefaction kinetics of red oak (*Quercus rubra*) in a fluidized reactor. BioResources. 8(4): 5067-5082.
27. Yu, Z., P. Sun, S. Liu, J. Wang, and A. Everman. 2013. Sensitivity of large-scale Vegetation green-up and dormancy dates to climate change in the North-South Transect of Eastern

China. International Journal of Remote Sensing. 34:20, 7312-7328, doi=10.1080/01431161.2013.817711.
28. Luan, J., S. Liu, J. Wang, and X. Zhu. 2013. Factors affecting spatial variation of annual apparent Q10 of soil respiration in two warm temperate forests. PLOS ONE. 8(5): e64167. doi:10.1371/journal.pone.0064167.
29. Brar, J., K. Singh, J. Zondlo, and J. Wang. 2013. Co-gasification of coal and hardwood pellets: a case study. American Journal of Biomass and Bioenergy. 2013(1): 11-26. Doi:10.7726/ajbb.2013.1005.
30. Wang, J., P. Edwards, F. Wood, and W. Goff. 2013. In-Stream Turbidity Changes Following Construction of a Forest Road in West Virginia. Int. J. of Forest Engineering. 24(1): 76–90. http://dx.doi.org/10.1080/19132220.2013.793056.
31. Saud, P., J. Wang, W. Lin, B. Sharma, and D. Hartley. 2013. A life cycle analysis of forest carbon balance and carbon emissions of timber harvesting in West Virginia, USA. Wood and Fiber Science. 45(3):250-267.
32. Yu, Z., S. Liu, J. Wang, P. Sun, W. Liu and D. Hartley. 2013. Effects of seasonal snow on the growing season of temperate vegetation in China. Global Change Biology. Doi:10.1111/gcb.12206.
33. Arano Gazal, K. and J. Wang. 2012. Global Competitiveness of West Virginia's Forest Products: An Examination of Export Activities. Forest Products Journal. 62(7/8): 607-612.
34. Grushecky, S. W. Lin, and J. Wang. 2012. Assessment of Woody Biomass Availability from Surface Mining Operations in West Virginia. Forest Products Journal. 62(5):359-364.
35. Wang, J., S. Liu, T. Gallagher, D. DeVallance, and L. Denes. 2012. Forest Biomass Utilization for Biofuels and Bioproducts (Editorial). International Journal of Forestry Research. Volume 2012 (2012), Article ID 656834, doi:10.1155/2012/656834.
36. Singh, K., J. Zondlo, J. Wang, L. Sivanandan, and J. Brar. 2012. Influence of environmental decomposition of logging residues on fuel properties. Biological Engineering Transactions. 5(4): 163-176.
37. Wang, H., S. Liu, J. Wang. 2012. Effects of tree species mixture on soil organic carbon stocks and greenhouse gas fluxes in subtropical plantations in China. Forest Ecol. Manage. (2012), http://dx.doi.org/10.1016/j.foreco.2012.04.005.
38. Adebayo, A.B. and J. Wang. 2012. Pretreated central Appalachian hardwood residues and their potential for bioenergy production. Wood and Fiber Sci. 44(4): 384-393.
39. Sun, P., Z. Yu, S. Liu, X. Wei, J. Wang, and N. Zegre. 2012. Climate change, growing season water deficit and vegetation activity along the north-south transect of Eastern China from 1982 through 2006. Hydrol. Earth Syst. Sci. Discuss. 2012(9): 6649-6688. DOI: 10.5194/hessd-9-6649-2012.
40. Brar, J., K. Singh, J. Wang, and S. Kumar. 2012. Cogasification of coal and biomass: A Review. Int. J. of For. Res. 2012(363058, doi:10.1155/2012/363058. 10 pp.
41. Lin, W., J. Wang, S. Grushecky, D. Summerfield, and B. Gopalakrishnan. 2012. Energy consumption and efficiency of Appalachian hardwood sawmills. Forest Products Journal. 62(1): 32-38.
42. Wu, J. J. Wang, Y. Li, and B. Spong. 2012. A web-based decision support system for analyzing timber harvesting costs and productivity. North. J. of App. For. 29(3): 141-149.

43. Lin, W. and J. Wang. 2012. An integrated 3D log processing optimization system for hardwood sawmills in central Appalachia, USA. Computers and Electronics in Agriculture. 82(2012): 61-74.
44. Wu, J. J. Wang, and M. Strager. 2012. A Two-Stage GIS-Based Suitability Model for Siting Biomass-to-Biofuel Plants and Its Application in West Virginia. International Journal of Forest Engineering. 22(2): 28-38.
45. Lin, W., J. Wang, D. DeVallance, and D. Summerfield. 2011. Assessment of the 2008-2010 Economic Downturn Period on Appalachian Hardwood Sawmill Operations. Forest Products Journal. 61(8): 649-655.
46. Xu, Q., S. Liu, X. Wang, C. Jiang, X. Song, and J. Wang. 2012. Effects of rainfall on soil moisture and water movement in a subalpine dark coniferous forest in southwestern China. Hydrological Processes. (wileyonlinelibrary.com) DOI: 10.1002/hyp.8400.
47. Lin, W., J. Wang, and E. Thomas. 2011. Development of a 3D log sawing optimization system for small sawmills in central Appalachia. Wood and Fiber Science. 43(4): 379-393.
48. Lin, W., J. Wang, and B. Sharma. 2011. Development of an optimal 3D visualization system for rough lumber edging and trimming in central Appalachia. Forest Products Journal. 61(5): 401-410.
49. Luan, J., S. Liu, X. Zhu, J. Wang, and K. Liu. 2011. Roles of biotic and abiotic variables in determining spatial variation of soil respiration in secondary oak and planted forests. Soil Biology and Biochemistry. 44(2012): 143-150.
50. Adebola, A., J. Wang, and Q. Cheng. 2011. Bioenergy properties of juvenile hybrid poplars and their parent species. Wood and Fiber Science. 43(4): 412-420.
51. Lin, W., J. Wang, J. Wu, and D. DeVallance. 2011. Log Sawing Practices and Lumber Recovery of Small Hardwood Sawmills in West Virginia. Forest Prod. J. 61(3): 216-224.
52. Luan, J., S. Liu, X. Zhu, and J. Wang. 2011. Soil carbon stock and flux in a warm-temperate oak chronosequence in China. Plant and Soil. (343) DOI: 10.1007/s11104-011-0842-7.
53. Wu, J., J. Wang, Q. Cheng, and D. DeVallance. 2011. Assessment of coal and biomass to liquid fuels in central Appalachia, USA. International Journal of Energy Research. (2011) DOI: 10.1002/er.1838.
54. Wu, J., J. Wang, and J. McNeel. 2011. Economic modeling of woody biomass utilization for bioenergy and its application in central Appalachia. Canadian J. of Forest Research. 41(2011):165-179.
55. Luan, J., S. Liu, J. Wang, X. Zhu, and Z. Shi. 2011. Rhizospheric and heterotrophic respiration of a warm-temperate oak chronosequence in China. Soil Biology and Biochemistry. 43(2011):503-512.
56. Sharma, B. J. Wang, S. Liu. 2011. Modeling of sustainable biomass utilization and carbon emission reduction. Sensor Letters. 9(2011):1175-1179.
57. Cheng, Q., J. Wang, J. McNeel, and P. Jacobson. 2010. Water retention value measurements of cellulosic materials using a centrifuge technique. BioResources. 5(3): 1945-1954.
58. Wu, J., M. Sperow, and J. Wang. 2010. Economic Feasibility of a Woody Biomass-Based Ethanol Plant in Central Appalachia, USA. Journal of Agricultural and Resource Economics. 35(3):522-544.
59. Wang, H., S. Liu, J. Mo, J. Wang, F. Makeschin, and M. Wolff. 2010. Soil organic carbon stock and chemical composition in four plantations of indigenous tree species in subtropical China. Ecological Research. 25(2010):1071-1079.

60. Cheng, Q., L. Muszynski, S. Shaler, and J. Wang. 2010. Microstructural changes in wood plastic composites due to wetting and re-drying evaluated by X-ray microtomography. Journal of Nondestructive Evaluation. 29(4): 207-213.
61. Wang, J., J. Wu, D. DeVallance, and J. Armstrong. 2010. Appalachian Hardwood Product Exports – An Analysis of the Current Chinese Market. Forest Products Journal. 60(1):94-99.
62. Cheng, Q., T. Neimsuwan, S. Wang, and J. Wang. 2010. Tensile and Impact Properties of Steam Exploded Wood Polypropylene Composites. Wood and Fiber Science. 42(2): 158-164.
63. Wang, J., J. Wu, and J. Armstrong. 2010. An analysis of Appalachian hardwood products in the Chinese market. Wood and Fiber Science. 42(1):71-80.
64. Sharma, B., J. Wang, and S. Liu. 2010. Development of Spatio-temporal forest harvest planning system for optimizing carbon sequestration. Intelligent Automation and Soft Computing. 16(6):1135-1145.
65. Wang, J., Sharma, B.D., Li, Y., Miller, G. 2009. Modeling and validating spatial patterns of a 3D stand generator for central Appalachian hardwood forests. Computers and Electronics in Agriculture. 68(2009): 141-149.
66. Wang, J., J. Liu, and C. LeDoux. 2009. A 3D Bucking System for Optimal Bucking of Central Appalachian Hardwoods. International J. of Forest Engineering. 20(2): 26-35.
67. Wang, J., T. Goff, and M. Strager. 2009. Using spatial features to review application, effectiveness, and compliance of forestry best management practices in West Virginia. International J. of Forest Engineering. 20(2): 36-46.
68. Wang, J., W. Goff, L. Osborn, and G. Cook. 2009. Assessments of hardwood lumber edging, trimming, and grading practices of small sawmills in West Virginia. Forest Products Journal. 59(5): 1-7.
69. Cheng, Q. and J. Wang. 2009. Long-term drying behavior, dimension and weight changes due to moisture cycling in wood polypropylene composite. Forest Products Journal. 59(9): 51-54.
70. Wang, J, W. Goff, J. McNeel, X. Zhao. 2009. A field assessment of central Appalachian hardwood log bucking and merchandising practices. Forest Products Journal. 59(1/2): 43-49.
71. Adebayo, A., J. Wang, B. Dawson-Andoh, J. McNeel, and J. Armstrong. 2009. Assessments of Appalachian hardwood residue properties and potentials for bioenergy utilization. Wood and Fiber Science. 41(1): 74-83.
72. Cheng, Q., J. Wang, and S. Shaler. 2009. Mechanical performances of wood polypropylene composite due to extended moisture immersion. J. of Thermoplastic Composite Materials. 22(5): 321-333.
73. Wang, J. and W. Goff. 2008. Application and Effectiveness of Forestry Best Management Practices in West Virginia. Northern Journal of Applied Forestry. 25(1): 32-37.
74. Wang, J. 2007. Hardwood log bucking and loading efficiency in West Virginia. Forest Products Journal. 57(5): 84-90.
75. Wang, J., W. Goff, and B. Spong. 2007. Compliance analysis of forestry best management practices in West Virginia. International Journal of Forest Engineering. 18(1): 9-16.
76. Wang, J., C. LeDoux, and P. Edwards. 2007. Changes in soil bulk density resulting from construction and conventional cable skidding using preplanned skid trails. Northern Journal of Applied Forestry. 24(1): 5-8.
77. Wang, J., S. Grushecky, Y. Li, and J. McNeel. 2007. Hardwood log merchandising and

bucking practices in West Virginia. Forest Products Journal. 57(3): 71-75.
78. Wang, J., J. McNeel, W. Goff, and S. Milauskas. 2007. Assessment of compliance of forestry best management practices in West Virginia. Southern Journal of Applied Forestry. 31(2): 60-65.
79. Grushecky, S., J. Wang, and D. McGill. 2007. Influence of site characteristics and costs of trucking and extraction on log residue utilization in southern West Virginia. Forest Products Journal. 57(7/8): 63-67.
80. Li, Y., C. LeDoux, and J. Wang. 2006. An economic assessment of implementing streamside management zones in central Appalachian hardwood forests. Forest Products Journal. 56(10): 73-79.
81. Li, Y., J. Wang, G. Miller, and J. McNeel. 2006. Production economics of harvesting small-diameter hardwood stands in central Appalachia. Forest Products Journal. 56(3): 81-86.
82. Milauskas, S. and J. Wang. 2006. West Virginia loggers' characteristics. Forest Products Journal. 56(2): 19-24.
83. Wang, J., S. Grushecky, and J. McNeel. 2005. Production analysis of helicopter logging in West Virginia: A preliminary case study. Forest Products Journal. 55(12): 71-76.
84. Wang, J., C. LeDoux, P. Edwards, and M. Jones. 2005. Soil bulk density changes caused by mechanized harvesting: A case study in central Appalachia. Forest Products Journal. 55(11): 37-40.
85. Wang, J., C. LeDoux, and Y. Li. 2005. Simulating cut-to-length harvesting operations in Appalachian hardwoods. International Journal of Forest Engineering. 16(2): 11-27.
86. Wang, J., C. LeDoux, and L. Wang. 2005. Modeling and validating the grabbing forces of hydraulic log grapples used in forest operations. International Journal of Forest Engineering. 16(1): 77-85.
87. Jiang, L., J. Brooks, and J. Wang. 2005. Compatible taper and volume equations for yellow-poplar in West Virginia. Forest Ecology and Management. 213(2005): 399-409.
88. Hao, Q., F. Meng, Y. Zhou, and J. Wang. 2005. Determining the optimal selective harvest strategy for mix-species stands with a transition matrix growth model. New Forests. (2005) 29: 207-219.
89. Hao, Q., F. Meng, Y. Zhou, and J. Wang. 2005. A transition matrix growth model for uneven-aged mixed-species forests in the Changbai Mountains, northeastern China. New Forests. (2005) 29: 221-231.
90. Wang, J., S. Grushecky, and J. Brooks. 2004. An integrated computer-based cruising system for central Appalachian hardwoods. Computers and Electronics in Agriculture. 45(2004): 133-138.
91. Wang, J., C. Long, and J. McNeel. 2004. Production and cost analysis of a feller-buncher and grapple skidder in central Appalachian hardwood forests. Forest Products Journal. 54(12): 159-167.
92. Wang, J., C. Long, J. McNeel, and J. Baumgras. 2004. Productivity and cost of manual felling and cable skidding in central Appalachian hardwood forests. Forest Products Journal. 54(12): 45-51.
93. Wang, J., C. LeDoux, M. Vanderberg, and J. McNeel. 2004. Log damage and value loss associated with two ground-based harvesting systems in central Appalachia. International Journal of Forest Engineering. 15(1): 61-69.
94. Wang, J., J. McNeel, and S. Milauskas. 2004. Logging sediment control act and best forestry management practices in West Virginia: A Review. Northern Journal of Applied

Forestry. 21(2): 93-99.
95. Wang, J., C. LeDoux, and J. McNeel. 2004. Optimal tree-stem bucking of northeastern species of China. Forest Products Journal. 54(2): 45-52.
96. Wang, J., J. Bell, and S. Grushecky. 2003. Logging injuries for a 10-year period in Jilin Province of People's Republic of China. Journal of Safety Research. 34(2003): 273-279.
97. Wang, J., J. McNeel, and J. Baumgras. 2003. A computer-based time study system for timber harvesting operations. Forest Products Journal. 53(3): 47-53.
98. Wang, J. and C. LeDoux. 2003. Estimating and validating ground-based timber harvesting production through computer simulation. Forest Science. 49(1): 64-76.
99. Wang, J. 2003. Effects of tong shapes on hydraulic log grapple's performance in loading and unloading operations. International Journal of Forest Engineering. 14(1): 59-66.
100. Wang, J. and R. Haarlaa. 2002. Production analysis of an excavator-based harvester: a case study in Finnish forest operations. Forest Products Journal. 52(3): 85-90.
101. Wang, J. and W. Greene. 1999. An interactive simulation system for modeling stands, harvests, and machines. Journal of Forest Engineering. 10(1): 81-99.
102. Wang, J., W. Greene, and B. Stokes. 1998. Stand, harvest, and equipment interactions in simulated harvesting prescriptions. Forest Products Journal. 48(9): 81-86.
103. Greene, W., T. Harris, Jr., C. DeForest, and J. Wang. 1997. Harvesting cost implications of changes in the size of timber sales in Georgia. Southern Journal of Applied Forestry. 21(4): 193-198.
104. Wang, J. and R. Haarlaa. 1994. On logging accidents in China. Proceedings of the Seminar on Clothing and Safety Equipment in Forestry, Kuopio, Finland, International Labor Organization (ISBN 951-802-068-X). p. 251-264.
105. Wang, J. and G. Li. 1993. A review on log grapples used in China. Journal of Forest Engineering. 4(2): 33-36.
106. Wang, J. and D. Pan. 1993. Design and applications of DZ1 log grapple. Journal of Northeast Forestry University (English Edition). No. 1: 36-40.
107. Sun, G., J. Wang, and H. Chen. 1993. Measurement and analysis of the gravity center variation of tree-stems. Scientia Silvae Sinicae (Chinese Forest Science). 29(3): 242-247.
108. Shi, J. and J. Wang. 1993. Study on optimal combinations of the working speeds of gantry crane for unloading tree-lengths. Journal of Northeast Forestry University. 21(1): 54-63.
109. Wang, J. and J. Shi. 1992. Mechanics and mechanical properties of loading mechanism in forest operations. Scientia Silvae Sinicae (Chinese Forest Science). 28(6): 538-543.
110. Wang, J. and S. Xu. 1992. Computer program design for optimal tree stem bucking. Forest Logging Science. No. 1, p. 35-37.
111. Wang, J. and Y. Qi. 1992. Grabbing forces of log grapples in loading and unloading operations. Machinery Engineer. No. 2, p. 32-34.
112. Wang, J., Z. Fan, and J. Shi. 1992. Study on the grabbing speeds of log grapples in loading operations. Journal of Northeast Forestry University. 20(5): 61-65.
113. Wang, J. and Z. Fan. 1992. Methods of calculating grabbing resistance of log grapples. Forestry Machinery. No. 5, p. 10-12.
114. Wang, J. 1991. System dynamic analysis in forest harvesting operations. Journal of Northeast Forestry University. 19(3): 51-57.
115. Wang, J. and S. Xu. 1991. Dynamic programming & network analysis models and their

applications in optimal tree-stem bucking. Forest Logging Science. No.3, p.24-31.

116. Wang, J., S. Xu, and G. Li. 1991. Application of network analysis in optimal tree-stem bucking. Journal of Northeast Forestry University. 19(2): 81-89.
117. Wang, J. 1991. Study on main parameters of grabbing unit of loading machine in forestry. Forest Logging Science. No. 4, p. 40-46.
118. Wang, J. and Y. Qi. 1991. Resemblance principles in model test of grabbing mechanism in forest operations. Forestry Machinery. No. 3, p. 14-18.
119. Wang, J. 1991. Analysis and evaluation of log grapples in forest operations. Forest Logging Science. No. 2, p. 51-57.
120. Pan, D. and J. Wang. 1991. Study on the production lines in centralized log yard. Journal of Northeast Forestry University (English Edition). No. 1, p. 77-82.
121. Xu, S. and J. Wang. 1991. Expert system in forest engineering: an introduction. Forest Logging Science. No. 3, p. 48-51.
122. Wang, Z., G. Xia, and J. Wang. 1990. Economic analysis of Model DZ1 log grapple in forest operations. Forest Logging Science. No. 3, p. 50-55.
123. Wang, J. 1989. Application of Value Engineering in selection of machines in log yard. Forest Logging Science. No. 2, p. 50-58.
124. Wang, J. 1989. A review on self-released chokers in forest operations. Journal of Jilin Forest Science and Technology. No. 4, p. 35-37.
125. Wang, J. and G. Xia. 1989. Past, present, and future development of log grapples used both in China and abroad. Forest Logging Science. No.4, p. 39-48.
126. Qi, Y. and J. Wang. 1989. A report on market investigations of wooden floor plate in the Northeast of China. Forestry Machinery. No. 2, p. 43-50.
127. Shi, J. and J. Wang. 1989. Testing report on mechanical and mechanic properties of log grapples in loading and unloading operations. Journal of Northeast Forestry University. 17(5): 45-52.
128. Wang, J. 1988. Finite element application in strength calculation of grabbing mechanism on loader. Journal of Northeast Forestry University. 16(1): 52-59.
129. Wang, J. and Y. Qi. 1988. System dynamic model for predicting the chainsaw demand in the northeast of China. Journal of Northeast Forestry University. 16(6): 119-124.
130. Wang, J. 1988. An introduction to system dynamics in forest operations. Forest Logging Science. No. 1, p. 62-64.
131. Shi, J. and J. Wang. 1987. Analysis and testing verification of forces acted on log grapples. Scientia Silvae Sinicae (Chinese Forest Science). 23(3): 320-331.

<u>Refereed Proceedings Papers</u>

1. Liu, W. and J. Wang. 2015. Life cycle assessment and techno-economic analysis of energy crops utilization for biofuels in the northeastern United States. IN: Proceedings of the 2015 FORMEC Forest Engineering: Making a positive contribution. Linz, Austria. October 4-8, 2015.
2. Schuler, J., S. Grushecky, and J. Wang. 2014. Establishing perennial seed-based energy crops on a reclaimed surface mine in the central Appalachians. IN: Proceedings of the 19th Central Hardwood Forest Conference, Morgantown, WV. March 26-28, 2014.
3. Yu, Z., J. Wang, S. Liu, P. Sun, W. Liu. 2013. Inconsistent NDVI trends from AVHRR, MODIS, and SPOT sensors in the Tibetan Plateau. The Second International Conference

on Agro-Geoinformatics, Fairfax, VA, August 12-16, 2013. http://ieeexplore.ieee.org/xpl/articleDetails.jsp?reload=true&arnumber=6621887

4. Lin. W. and J. Wang. 2012. A Life Cycle Assessment of Forest Carbon Balance and Carbon Emissions of Timber Harvesting in West Virginia, USA. IN: Proceedings of SWST/ICBR International Convention. August 27-31, 2012. Beijing, China. ISBN: 978-0-9817876-3-3.
5. Lin, W. and J. Wang. 2012. An integrated 3D log processing optimization system for small sawmills in central Appalachia. IN: Proceedings of the 18th Central Hardwood Forest Conference, Morgantown, WV. March 26-28, 2012.
6. Carraso, J., G. Oporto, and J. Wang. 2012. Co-firing torrefied woody biomass with coal: A new challenge for power generation. IN: Proceedings of the 18th Central Hardwood Forest Conference, Morgantown, WV. March 26-28, 2012.
7. Lin W., J. Wang, and D. Summerfield. 2011. Assessments of the Impacts of Economic Downturn on the Appalachian Hardwood Sawmills. IN: Proceedings of the International Scientific Conference on Hardwood Processing. October 16-18, 2011. Blacksburg, VA, USA. ISBN 978-0-9837700-1-5.
8. Lin W., J. Wang, and D. Summerfield. 2011. Energy Consumption and Efficiency of Hardwood Sawmills in the Appalachian Region. IN: Proceedings of the International Scientific Conference on Hardwood Processing. October 16-18, 2011. Blacksburg, VA, USA. ISBN 978-0-9837700-1-5.
9. Wang, J., P. Edwards, and W. Goff. 2010. Assessing changes to in-stream turbidity following construction of a forest road in West Virginia. IN: Proceedings of TMDL 2010: Watershed Management to Improve Water Quality. Baltimore, Maryland, USA. November 14-17, 2010.
10. Sharma, B. and J. Wang. 2010. Status and potential of Terrestrial Carbon Sequestration in West Virginia. IN: Proceedings of the 17th Central Hardwood Forest Conference, Lexington, KY. April 5-7, 2010.
11. Lin, W., J. Wang, and E. Thomas. 2010. A 3D optimal sawing system for small sawmills in central Appalachia. IN: Proceedings of the 17th Central Hardwood Forest Conference, Lexington, KY. April 5-7, 2010.
12. Spong, B., J. Wang, and D. Summerfield. 2010. Characteristics of West Virginia Loggers during Economically Difficult Times. IN: Proceedings of the 17th Central Hardwood Forest Conference. April 5-7, 2010. Lexington, Kentucky.
13. Brooks, J., J. Wang, and C. LeDoux. 2010. Thinning Strategies to Increase the Regional Availability of Oak Timber in the Mid-Appalachian Region. IN: Proceedings of the 17th Central Hardwood Forest Conference. April 5-7, 2010. Lexington, Kentucky.
14. Edwards, P.J., J. Wang, and J.T. Stedman. 2009. Recommendations for constructing forest stream crossings to control soil losses. IN: Proceedings, AWRA 2009 Summer Specialty Conference. June 29-July 1, 2009. Snowbird, UT. 6 p.
15. Spong, B. and J. Wang. 2008. Synthetic rope applications in Appalachian logging. IN: Proceedings of the 16th Central Hardwood Forest Conference, Lafayette, IN. April 8-9, 2008.
16. Sharma, B.D., J. Wang, and G. Miller. 2008. A GIS-based approach to stand visualization and spatial pattern analysis in a mixed hardwood forest in West Virginia. IN: Proceedings of the 16th Central Hardwood Forest Conference, Lafayette, IN. April 8-9, 2008.

17. Wang, J., S. Grushecky, Y. Li, and J. McNeel. 2006. Hardwood log merchandising and bucking practices in West Virginia. IN: Proceedings of the 15th Central Hardwood Forest Conference, Knoxville, TN. February 27 – March 1, 2006.

Books/Book Chapters

1. DeVallance, D., T. Wang, X. Xie, J. Wang. 2015. Advancements in Wood Pretreatment for Bioenergy and Biofuel Applications. In: Practices and Perspectives in Sustainable Bioenergy: A Systems Thinking Approach. (M. Mitra, ed.), Springer. Accepted.
2. Wang, J. (Lead Editor), L. Denes, J. Jiang, L. Huang, D. DeVallance, and X. Xie. 2015. Biomass-Based Materials and Technologies for Energy. A Special Issue of Advances in Materials Science and Technology. http://www.hindawi.com/journals/amse/si/912752/cfp/
3. Wang, J., D. Hartley, and W. Liu. 2013. Biomass harvesting systems and analysis. In: Wood-Based Energy in the Northern Forests. (M. Jacobson and D. Ciolkosz, ed). Springer. 22pp. DOI 10.1007/978-1-4614-9478-2_5, © Springer Science+Business Media New York.
4. Wang, J. (Lead Editor), S. Liu, T. Gallagher, D. DeVallance, and L. Denes. 2012. Forest Biomass Utilization for Biofuels and Bioproducts. A Special Issue of International Journal of Forestry Research. Volume 2012 (2012), doi:10.1155/2012/656834.
5. Wang J, Cheng Q, Adebayo A., Difazio S. 2012. Poly(vinyl alcohol) nanocomposites reinforced with cellulosic nanofibers isolated from juvenile poplar, In: Fiber-Reinforced Composites (Q Cheng, ed.), ISBN 978-1-61470-303-7, Nova Science Publishers Inc., New York. p. 91-103.
6. Wang, J. 2011. System modeling in forest harvest scheduling and carbon management. Forests in a Changing World. (ed. Shougong Zhang). China Forestry Publishing House. ISBN 978-7-5038-6214-4. 115-125 pp.
7. Cheng, Q., D. DeVallance, J. Wang and S. Wang. 2011. Advanced Cellulosic Nanocomposites Materials. In: Advances in Composite Materials for Medicine and Nanotechnology (ed. Brahim Attaf), ISBN 978-953-307-35-7, INTECH. 547-564 pp.
8. Liu, S., Y. Lin, Y. Zhang, Z. Guo, C. Li, and J. Wang. 2011. Landscape Ecology and Forest Management: Challenges and Solutions in a Changing Globe (eds. Li, C., Lafortezza, R., and Chen, J.). HEP-Springer Publisher. 22-45 pp.
9. Mulari, J., R. Haarlaa, X. Sun, and J. Wang. 1996. Mobility and Feasibility of Tracked Excavators in Forestry Operations. Publication No. 11, Department of Forest Resources Management, University of Helsinki, Finland, ISBN 951-45-7324-2. 109 pp.
10. Wang, J. 1994. Goal Programming, Operations Research in Forest Operations and Management. ed. Zheng, D. Northeast Forestry University Press (ISBN 7-81008-536-0), Harbin, China. P. 76-84.
11. Wang, J. 1992. Operations Research and Expert System in Optimal Tree Stem Bucking. Jilin Press of Science and Technology (ISBN 7-5384-0963-7/S.164), Changchun, China. 278 pp.
12. Che, C., Z. Yang, J. Wang, and S. Shi. 1990. Defects and Measurements of Tree Stems. Jilin Press of Science and Technology (ISBN 7-5384-0644-1/S.128), Changchun, China. 419 pp.

Papers in Proceedings

1. Liu, W. and J. Wang. 2016. Integrated Techno-Economic and Life Cycle Analyses of Biomass Utilization for Biofuels and Bioproducts. IN: Proceedings of the 59th SWST International Convention. March 6-11, 2016. Curitiba, Brazil.
2. Grushecky, S. and J. Wang. 2013. The impact of natural gas development on forest operations in West Virginia. 2013 Council of Forest Engineering. July 7-10, 2013. In Proceedings: Council on Forest Engineering, Annual Meeting. Missoula, Montana.
3. Hartley, D and J. Wang. 2013. Optimizing woody biomass supply chains in the northeastern United States. 2013 Council of Forest Engineering. July 7-10, 2013. In Proceedings: Council on Forest Engineering, Annual Meeting. Missoula, Montana.
4. Hartley, D and J. Wang. 2012. Analysis of harvesting logistic on woody biomass supply chains for community based bioenergy projects in West Virginia. In Proceedings: Council on Forest Engineering, Annual Meeting," Engineering New Solutions for Energy Supply and Demand", September 9-12, New Bern, NC. September 10, 2012.
5. Wu, J., J. Wang, D. Hartley. 2011. Economic Modeling of Woody Biomass Utilization for Bioenergy: A Case Study in West Virginia. IN: ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 228: Forest Based Biomass: Harvesting, Processing, Transport and Storage.
6. Singh, K., J. Wang, L. Sivanandan, J.S. Brar, Saurabh Kumar. 2011. Influence of Environmental Decomposition of Logging Residues on Fuel Properties. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 228: Forest Based Biomass: Harvesting, Processing, Transport and Storage.
7. Wang. J. 2011. Role of Forest in Terrestrial Carbon Sequestration. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 249: Biomass Carbon Trading and Green House Gas Emission.
8. Q. Cheng, J. Wang. 2011. Pyrolysis Behavior of Biomass and Coal for Energy Production Investigated by TGA-FTIR Analysis. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 337: Co-Processing and Conversion of Biomass/Coal Mixtures.
9. Brar, J.S., K. Singh, J. Zondlo, J. Wang. 2011. Co-Gasification of Appalachian Hardwood Residue and Coal. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 337: Co-Processing and Conversion of Biomass/Coal Mixtures.
10. Brar, J.S., K. Singh, J. Zondlo, J. Wang. 2011. Co-Gasification of Coal and Biomass: A Review. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 337: Co-Processing and Conversion of Biomass/Coal Mixtures.
11. Wu, J., J. Wang, Q. Cheng, and J. McNeel. 2010. Economic assessments of coal and biomass to liquid fuels in central Appalachia. IN: Proceedings of 2010 ASABE Annual International Meeting. Pittsburgh, PA. June 20-23, 2010.
12. Cheng, Q., A. Adebayo, J. Wang, and S. DiFazio. 2010. Green pretreatments on genetically improved hybrid poplar for ethanol production. : Proceedings of 2010 ASABE Annual International Meeting. Pittsburgh, PA. June 20-23, 2010.
13. Wang, J., P. Edwards, G. Hamons, and T. Goff. 2010. Assessing RUSLE and hill-slope soil movement in the central Appalachians. : Proceedings of 2010 ASABE Annual International Meeting. Pittsburgh, PA. June 20-23, 2010.

14. Wang, J., Q. Cheng, A. Adebayo, S. DiFazio. 2010. Assessments of hybrid poplar utilization for biofuels. IN: Proceedings of International conference on sustainable management of multi-propose poplar plantations (IUFRO). Siyang, Jiangshu, China. May 28-30, 2010.
15. Wang, J. J. Wu, and, J. McNeel. 2010. Sustainability of woody biomass utilization for bioenergy. IN: Proceedings of International conference on sustainable management of multi-propose poplar plantations (IUFRO). Siyang, Jiangshu, China. May 28-30, 2010.
16. Benktesh, S., J. Wang, and C. Altizer. 2010. Modeling forest biomass in atmospheric carbon reduction in West Virginia. IN: Proceedings of the Council on Forest Engineering (COFE), 33rd Annual International Conference, Auburn, AL. June 6-9, 2010.
17. Sharma, B., J. Wang, J. Brooks, and G. Miller. 2009. Optimizing forest harvest strategies for timber production and carbon sequestration. IN: Proceedings of Society of American Foresters 2009 National Convention. Sept. 30 – Oct. 4, 2009. Orlando, Florida.
18. Wang, J., C. LeDoux, and W. Goff. 2009. Effects of Soil Compaction on Individual Tree Growth in the Central Appalachian Hardwood Forest Region. IN: Proceedings of the Council on Forest Engineering (COFE), 32nd Annual International Conference, Lake Tahoe, CA 15-18 June 2009.
19. Cheng, Q., L. Muszynski, S. Shaler and J. Wang. 2009. Property Changes of Wood Polypropylene Composites due to Extended Moisture Cycling. Forest Product Society, 10th International Conference on Wood & Biofiber Plastic Composites & Cellulose Nanocomposites Symposium, May 11-13, 2009, Madison, WI, USA.
20. Wang, J., J. Armstrong, J. Wu, and W. Lin. 2008. An Analysis of Appalachian Hardwood Markets in China. IN: Proceedings of the 51st Annual Convention of the Society of Wood Science and Technology. November 10-12, 2008. Concepcion, Chile.
21. Cheng, Q., S. Wang, D. Harper, J. Wang, and Y. Liu. 2008. Elastic modules of single cellulose fibrils evaluated by atomic force microscopy. IN: Proceedings of International Symposium in Wood Science and Technology – IAWPS 2008. September 27-29, 2008. Harbin, China.
22. Cheng, Q., S. Wang, T. Rials, J. Wang, and Y. Liu. 2008. Cellulose fibril reinforced poly (vinyl alcohol) nanocomposites. IN: Proceedings of International Symposium in Wood Science and Technology – IAWPS 2008. September 27-29, 2008. Harbin, China.
23. Wang, J., T. Goff, and J. McNeel. 2008. A comparison of hardwood log bucking practices in West Virginia. IN: Proceedings of the 31st Annual Meeting of Council on Forest Engineering, June 22-25, 2008, Charleston, SC.
24. Wu, J., J. Wang, and J. McNeel. 2008. Economic modeling of woody biomass utilization for biofuels: a case study in West Virginia. IN: Proceedings of the 31st Annual Meeting of Council on Forest Engineering, June 22-25, 2008, Charleston, SC.
25. Wang, J, J. McNeel, and S. Grushecky. 2007. Conversions of woody biomass to biofuels. IN: Proceedings of the 3rd International Forest Engineering Conference. October 1 to 5, Mont-Tremblant, Quebec, Canada.
26. Hamons, G, J. Wang, P. Edwards, and M. Strager. 2007. Modeling sediment movement in forested watersheds using hillslope attributes. IN: Proceedings of the 3rd International Forest Engineering Conference. October 1 to 5, Mont-Tremblant, Quebec, Canada.
27. Wang, J. and J. McNeel. 2007. Woody biomass resources, utilization, and opportunities for biofuels in central Appalachia, USA. IN: Proceedings of the 2007 International Bio-Eco Conference, June 26-28, Tianjin, China.
28. Goff, W. and J. Wang. 2007. Application and effectiveness of forestry best management

practices in West Virginia, USA. IN: Proceedings of the American Society of Agricultural and Biological Engineers (ASABE) 2007 Annual International Meeting, Minneapolis, Minnesota. June 17-20, 2007.
29. Liu, J. and J. Wang. 2006. A 3D optimal bucking system for central Appalachian hardwood species. In: Proceedings of the 29th Council on Forest Engineering (COFE) Annual Meeting (Chung and Han eds), July 30 – August 2, 2006. Coeur d'Alene, Idaho. pp. 473-482.
30. Wang, J., C. LeDoux, M. Vanderberg, and Y. Li. 2006. Effects of soil compaction on residual stand growth in central Appalachian hardwood forest: A preliminary study. In: Proceedings of the 29th COFE Annual Meeting (Chung and Han eds), July 30 – August 2, 2006. Coeur d'Alene, Idaho. pp. 333-341.
31. Goff, W., J. Wang, and M. Strager. 2006. Spatial analysis of application, effectiveness, and compliance of forestry best management practices in West Virginia, USA. IN: Proceedings of the American Society of Agricultural and Biological Engineers (ASABE) 2006 Annual International Meeting, Portland, Oregon. July 9-12, 2006.
32. Goff, T., J. Wang, J. McNeel, and S. Grushecky. 2005. Application, effectiveness, and compliance assessment of forestry best management practices in West Virginia. In: Proceedings of the 28th COFE Annual Meeting, July11-14, 2005. Fortuna, California.
33. Beatty, W., J. Wang, J. McNeel, and P. Edwards. 2004. Spatial analysis of to-stream sediment delivery in central Appalachian forested watersheds. In: Proceedings of the 27th COFE Annual Meeting, April 28-31, 2004. Hot Springs, Arkansas.
34. Li, Y, J. Wang, G. Miller, and J. McNeel. 2004. Production economics of harvesting young hardwood stands in central Appalachia. In: Proceedings of the 27th COFE Annual Meeting, April 28-31, 2004. Hot Springs, Arkansas.
35. Wang, J., M. Jones, J. McNeel, and P. Edwards. 2003. Soil compaction caused by timber harvesting in central Appalachian hardwood forest. In: Proceedings of the 26th COFE Annual Meeting, Sept. 7-10, 2003. Bar Harbor, Maine.
36. Wang, J., C. LeDoux, and Y. Li. 2003. Modeling and simulating two cut-to-length harvesting systems in central Appalachian hardwoods. In: Proceedings of the 26th COFE Annual Meeting, Sept. 7-10, 2003. Bar Harbor, Maine.
37. Milauskas, S. and J. Wang. 2003. A survey of West Virginia logger characteristics. In: Proceedings of the 26th COFE Annual Meeting, Sept. 7-10, 2003. Bar Harbor, Maine.
38. Wang, J., Y. Li, and G. Miller. 2002. A 3D stand generator for Appalachian hardwood forests. In: IUFRO S4.11 Symposium on Statistics and Information Technology in Forestry, September 8 -12, 2002. Virginia Tech, Blacksburg, Virginia.
39. Long, C., J. Wang, J. McNeel, and J. Baumgras. 2002. Production and cost analysis of feller-buncher and grapple skidder system in central Appalachian hardwood forest. In: Proceedings of the 25th COFE Annual Meeting, June 16-20, 2002. Auburn, Alabama.
40. Vanderberg, M., J. Wang, J. McNeel, and C. LeDoux. 2002. Hardwood log damage and degrade occurring during harvesting operations in central Appalachia. In: Proceedings of the 25th COFE Annual Meeting, June 16-20, 2002. Auburn, Alabama.
41. Wang, J., J. McNeel, and J. Baumgras. 2001. A computer-based time study system for timber harvesting operations. In: Proceedings of the 24th COFE Annual Meeting, July 15-19, 2001. Snowshoe, West Virginia.
42. Wang, J. and C. LeDoux. 2000. Modeling ground-based timber harvesting systems using computer simulations. In: Proceedings of the 81st Annual Meeting of Canadian

Woodlands Forum and the 23rd Annual Meeting of Council on Forest Engineering (COFE), Sept. 11-15, 2000. Kelowna, B.C., Canada.

43. Wang, J. and W. Greene. 1997. Stand, harvest, and equipment interactions caused by harvesting prescriptions. In: Proceedings of the 20th Annual meeting of Council on Forest Engineering. July 28-31, 1997. Rapid City, South Dakota.
44. Wang, J. and W. Greene. 1996. An interactive simulation of partial cutting operations of feller-bunchers. In: Proceedings of the Joint Meeting of the 19th Annual COFE Meeting and IUFRO S3.04-00. General Technical Report NC-186. USDA Forest Service, July 29 - August 1, 1996. St. Paul, Minnesota.
45. Greene, W. and J. Wang. 1995. Timber sale size and economics of logging systems. In: Proceedings of the 18th Annual meeting of Council on Forest Engineering, June 5-8, 1995. Cashiers, North Carolina.
46. Wang, J. 1995. Study on the optimal tree-stem bucking system. In: Proceedings of P3.07 of the 20th IUFRO World Congress, Loren D. Kellogg, ed., August 6-12, 1995. Tampere, Finland.

TECHNICAL PRESENTATIONS:

1. Wang, J. 2016. Biomass for value-added bioproducts. Italian National Research Council – Tree and Timber Institute. December 6, 2016. Florence, Italy. (Invited)
2. Wang, J. 2016. Biomass conversions for bioproducts. Chinese Academy of Forestry, Institute of Forest Products of Chemical Engineering. October 18, 2016. Nanjing, China. (Invited)
3. Wang, J., R. Jackson, H. Ghadimi, K. Singh, and J. Schuler. 2016. Economic and environmental impacts of woody biomass utilization in the central Appalachian region. USDA NIFA Project Directors Meeting. October 18-20, 2016. New Orleans, LA. (Invited)
4. Wang, J. 2016. Carbon uptake by West Virginia forests. WV Governor Tomblin's Energy Summit. October 6-7, 2016. Stonewall Resort, Roanoke, WV. (Invited)
5. Wang, J., D. DeVallance, J. McNeel and C. Jiang. 2016. Bioproducts and bioenergy from underutilized woody biomass. WV Governor Tomblin's Energy Summit. October 6-7, 2016. Stonewall Resort, Roanoke, WV. (Invited poster)
6. Wang, J., D. Bhattacharyya, and C. S. Grushecky. 2016. Coal and biomass to liquid fuels. WV Governor Tomblin's Energy Summit. October 6-7, 2016. Stonewall Resort, Roanoke, WV. (Invited poster)
7. Wang, J. 2016. Biomass carbon sequestration through biomass utilization for bioenergy. NEWNio All-Hands Meeting. September 22, 2016. Online Seminar. (Invited)
8. Wang, J. 2016. Biomass for high value-added bioproducts. The 2016 Benedum Distinguished Scholar Lecture. West Virginia University, Morgantown, WV. October 4, 2016. (Invited)
9. Wang, J. 2016. Biomass supply chains for value-added bioproducts. Northeast Forestry University. Harbin, China. July 12, 2016. (Invited)
10. Wang, J. 2016. Integrated techno-economic and life cycle analyses of biomass for bioproducts. Northeast Forestry University. Harbin, China. July 13, 2016. (Invited)
11. Wang, J. 2016. Forestry education and biomass energy. Northeast Forestry University. Harbin, China. July 7, 2016. (Invited)

12. Wang, J. and X. Xie. 2016. Enhancing the nanostructure if the lignocellulosic call wall as a natural template for highly ordered mesoporous carbon. USDA Nanotechnology Project Directors Annual Meeting. State College, PA. June 6-7, 2016. (Invited)
13. Wang, J. Carbon sequestration through sustainable forest and biomass management. Renewable Energy in West Virginia: Projects and Prospects in 2016. Huntington, WV. May 12, 2016. (Invited)
14. Liu, W. and J. Wang. 2016. Integrated Techno-Economic and Life Cycle Analyses of Biomass Utilization for Biofuels and Bioproducts. The 59th SWST International Convention – Forest Resources: Moving toward a sustainable future. March 6-11, 2016. Curitiba, Brazil.
15. Wang, J. 2016. TEA and LCA Case Scenarios for the NEWBio Demonstrations. The Northeast Woody/Warm-season Biomass Consortium All-Hands Meeting. January 28, 2016. Morgantown, WV. (Invited)
16. Wang, J. 2015. Integrated Techno-Economic and Life Cycle Analyses – Real Case Studies in the northeastern U.S. NEWBio Leadership F2F Meeting. December 4, 2015. State College, PA. (Invited)
17. Wang, J., X. Xie, R. Jackson, H. Ghadimi, W. Liu, and D. Hartley. 2015. Economic and environmental impacts of woody biomass utilization in the central Appalachian region. USDA NIFA Project Directors Meeting. November 2-6, 2015. Denver, CO. (Invited)
18. Richard, T, T. Volk, L. Smart, J. Wang, B. Kinne. 2015. Northeastern Woody/Warm-season Biomass Consortium. USDA NIFA Project Directors Meeting. November 2-6, 2015. Denver, CO. (Invited)
19. Liu, W. and J. Wang. 2015. Life cycle assessment and techno-economic analysis of energy crops utilization for biofuels in the northeastern United States. 2015 FORMEC Forest Engineering: Making a positive contribution. Linz, Austria. October 4-8, 2015.
20. Wang, J. 2015. Modeling and optimization of woody biomass supply chains for bioenergy and bioproducts. An international workshop on Forest Ecosystem Services for Biodiversity and Bioeconomy. Beijing, China. September 14-20, 2015. (Invited)
21. Wang, J. 2015. Biomass utilization for bioenergy and bioproducts. International Visitor Meeting hosted by WVU Int. Office with US DOE and US Dept. of State for 20 international visitors from 19 countries. September 9, 2015. Morgantown, WV. (Invited)
22. Yu, Z., J. Wang, S. Liu, S. Piao, P. Ciais, S.W. Running, B. Poulter, J.S. Rentch, and P. Sun. 2015. Decrease in winter respiration explains 20% of northern forest annual carbon sink enhancement over the last 30 years. The 2015 ESA Annual Meeting. Baltimore, Maryland, USA, August 9-14, 2015.
23. Wang, H., S. Liu, J. Wang, Z. Shi, J. Xu, P. Hong, A. Ming, H. Yu, L. Chen, L. Lu, and D. Cai. 2015. Litter chemistry, soil microbial priming and community composition regulate the accrual and chemical composition of soil organic carbon in subtropical forest. The 2015 ESA Annual Meeting. Baltimore, Maryland, USA, August 9-14, 2015.
24. Liu, W. and J. Wang. 2015. Economic and environmental analyses of coal and biomass to liquids: A case study in West Virginia. 2015 Gasification systems and coal & coal-biomass to liquids workshop. US Department of Energy National Energy Technology Laboratory. August 10-11, 2015. Morgantown, WV. (Invited)

25. Wang, J., S. Spatari, and T. Brown. 2015. Integrated techno-economic and life cycle analyses for the NEWBio. The 3rd Northeast Woody/Warm-season Biomass Consortium annual meeting. August 3-5, 2015. Morgantown, WV. (Invited)
26. Wang, J., J. McNeel, D. DeVallance, X. Xie. Bioproducts and Bioenergy from Woody Biomass. National STEM Teachers Workshop, Bioenergy and Bioproducts Education Program, Horseheads, NY, July 27-30, 2015. (invited)
27. Wang, J. 2015. Biomass feedstock logistics - Northeast Woody/Warm-season Biomass Consortium. NEWBio Teachers Training Workshop. July 15, 2015. Morgantown, WV. (invited)
28. Wang, J. 2015. Woody biomass harvesting and logistics. Northeast Forestry University. July, 9, 2015. Harbin, China. (invited)
29. Wang, J. 2015. Life cycle assessments of biomass utilization for biofuels and bioproducts. Northeast Forestry University. July, 7, 2015. Harbin, China. (invited)
30. Wang, J. 2015. Biomass to biofuels and bioproducts. International Center for Bamboo and Rattan. June 30, 2015. Beijing, China. (invited)
31. Falcon, A. and J. Wang. 2015. Effects of densification on sugar extraction from woody biomass (poster). 58th Society of Wood Science and Technology International Convention – Renewable Materials and the Bioeconomy. June 7-12, 2015. Jackson, Wyoming.
32. Xu, J. and J. Wang. 2015. Fractionation of the liquefied lignocellulosic biomass for the production of platform chemicals. 58th Society of Wood Science and Technology International Convention – Renewable Materials and the Bioeconomy. June 7-12, 2015. Jackson, Wyoming.
33. Wang, J. 2015. Woody Biomass Harvest and Logistics in France. The Northeast Woody/Warm-season Biomass Consortium (NEWBio). March 17, 2015.
34. Wang, J., J. McNeel, D. DeVallance, X. Xie. 2015. Biofuels and Energy Efficient Bioproducts from Underutilized Woody Biomass. Presented at 2015 Innovation & Entrepreneurship Day at the State Capitol, Charleston, WV. January 28, 2015.
35. Wang, J., J. Zondlo, J. McNeel, D. DeVallance, and X. Xie. 2015. Bioproducts and bioenergy from underutilized biomass. U.S. Department of Energy National Energy Technology Laboratory, Morgantown, WV. May 12, 2015.
36. Yu, Z., J. Wang, S. Liu, S. Piao, SW. Running, B. Poulter, J. Rentch, and P. 2015. Sun. Effects of snow cover variations on spatial patterns of carbon emissions in northern forests. 5th North America Carbon Program meeting. Washington DC, USA, Jan 26-29, 2015.
37. Wang, J., R. Jackson, H. Ghadimi, W. Burnett, and K. Singh. 2014. Economic and environmental impacts of woody biomass utilization in the central Appalachian region. USDA NIFA Project Directors Meeting. October 29-31, 2014. Washington, DC. (Invited)
38. Richard, T, T. Volk, L. Smart, J. Wang, B. Kinne. 2014. Northeastern Woody/Warm-season Biomass Consortium. USDA NIFA Project Directors Meeting. October 29-31, 2014. Washington, DC. (Invited)

39. Wang, J. 2014. Biomass and fuels conversion. New Energy and Industrial Technology Development. US Department of Energy NETL and WVU Research Office, Morgantown. October 16-17, 2014. (Invited)
40. Wang, J., D. DeVallance, and X. Xie. 2014. Biomass utilization for biofuels and bioproducts. National AFV Day Odyssey. West Virginia University National Research Center for Coal and Energy, Morgantown, WV. October 15, 2014.
41. Wang, J. 2014. System modeling and simulation in forest operations and biomass management. Swedish University of Agricultural Sciences. Umea, Sweden. October 9-10, 2014. (invited)
42. Wang, J. 2014. Woody biomass utilization for bioenergy: Opportunities and challenges in biomass harvest and logistics in the northeastern US. IUFRO 2014 World Congress. Salt Lake City, UT USA, October 5-12, 2014.
43. Yu, Z., J. Wang, S. Liu. 2014. Snow Cover Variation Altered the Spatial Pattern of Carbon Emission in Northern Forests. IUFRO 2014 World Congress. Salt Lake City, UT USA, October 5-12, 2014.
44. Wang, J. and D. Hartley. 2014. Optimizing bioenergy supply chain configurations for the northeastern United States. The 5th Forest Engineering Conference and the 47th International Symposium on Forestry Mechanization. September 23-26, 2014. Gerardmer, France.
45. Wang, J. 2014. Appalachian hardwood sawmilling efficiency and log processing optimization. A workshop on promoting hardwood processing and economy. September 4, 2014. USDA Forest Service Wood Education Resource Center, Princeton, WV. (Invited)
46. Hartley, D. and J. Wang. 2014. Biomass harvesting and logistics. Biomass Utilization for Green Materials and Energy Conference. September 2, 2014. Morgantown, WV. (invited)
47. Liu, W., Wang, J., Cafferty, K.G., Spatari, S., Volk, T. 2014. A life cycle assessment of hybrid willow harvest and logistics in the Northeastern U.S. The 2014 NEWBio Annual Meeting. July 31 – August 1, 2014. Geneva, NY.
48. Hartley, D. and J. Wang. 2014. Woody biomass harvesting and logistics modeling. The 2014 NEWBio Annual Meeting. July 31 – August 1, 2014. Geneva, NY.
49. Richard, T, T. Volk, L. Smart, J. Wang, B. Kinne. 2014. Northeastern Woody/Warm-season Biomass Consortium. US DOE Biomass 2014: Growing the future bioeconomy. July 29-30, 2014. Washington, DC.
50. Wang, J. 2014. Biomass feedstock logistics - Northeast Woody/Warm-season Biomass Consortium. NEWBio Teachers Training Workshop. July 21-25, 2014. Morgantown, WV.
51. Wang, J. 2014. Biomass energy and bioproducts. International Center for Ratten and Bamboo. Beijing, China. June 24, 2014. (invited)
52. Wang, J. 2014. Life cycle analysis of biomass utilization for bioenergy. Northeast Forestry University, Harbin, China. June 20, 2014. (invited)
53. Wang, J. 2014. Climate change and forest carbon sequestration. Guangxi University, Nanning, Guangxi Province, China. June 17, 2014. (Invited)
54. Wang, J. 2014. Sustainable forest management and carbon sequestration. Experimental Center of Tropical Forests, Chinese Academy of Forestry. Pingxiang, Guangxi Province, China. June 13, 2014. (Invited)

55. Wang, J. and J. Zondlo. 2014. Biomass to biofuels and bioproducts. US Department of Energy NETL and WVU Research Office, Morgantown. April 30, 2014. (Invited)
56. Wang, J., J. McNeel, D. DeVallance, and X. Xie. 2014. Biofuels and Energy Efficient Bioproducts from Underutilized Woody Biomass. Industries of the Future Day at the Capitol. January 28-29, 2014. Charleston, WV.
57. Wang, J. 2013. Economic and environmental impacts of woody biomass utilization in the central Appalachian region. 2013 USDA NIFA Project Directors Meeting and the AAIC 25th Anniversary Meeting. October 13-16, 2013. Washington, DC. Invited Speaker
58. Liu, W. and J. Wang. 2013. A life cycle analysis of coal and biomass to liquid fuels in West Virginia. The LCA XIII Conference. Sept. 30-Oct. 3, 2013. Orlando, FL.
59. Wang, J. and D. Hartley. 2013. NEWBio Materials Flow for data sampling and data management. Sept. 19, 2013. NEWBio All-Hands Meeting.
60. Wang, J. 2013. Biomass and Bioenergy Research at WVU. WVU Research Office Meeting with VP Dr. Rick Spinard and Associate VP Dr. Rich Holdren for Research of Oregon State University. August 19, 2013. Morgantown, WV. (invited)
61. Yu, Z., J. Wang, S. Liu, P. Sun, W. Liu. Inconsistent NDVI trends from AVHRR, MODIS, and SPOT sensors in the Tibetan Plateau. The Second International Conference on Agro-Geoinformatics, Fairfax, VA, August 12-16, 2013.
62. Wang, J. 2013. Updates on biomass harvest, preprocessing and logistics. Annual meeting of the Northeast Woody/Warm-season Biomass Consortium. August 15-17, 2013. State College, PA. (invited)
63. Richard, T., T. Volk, J. Wang, L. Smart. 2013. The Northeast Woody/Warm-Season Biomass Consortium. US Department of Energy Biomass 3013 Conference – How the advanced bioindustry is reshaping American energy. July 31 – August 1, 2013. Washington, DC.
64. Hartley, D. and J. Wang. 2013. Impact of spatial distribution and terrain on the delivered cost of woody biomass feedstocks. 2013 ASABE International Meeting. July 21-24, 2013. Kansas City, Missouri.
65. Hartley, D. and J. Wang. 2013. Optimizing woody biomass supply chains in the northeastern United States. 2013 Council of Forest Engineering. July 7-10, 2013. Missoula, Montana.
66. Grushecky, S. and J. Wang. 2013. The Impact of Natural Gas Development on Forest Operations in West Virginia. 2013 Council of Forest Engineering. July 7-10, 2013. Missoula, Montana.
67. Wang, J. 2013. Biomass feedstock logistics. Northeast Woody/Warm-season Biomass Consortium, Teachers Workshop. July 8-12, 2013. Morgantown, WV. (Invited Speaker)
68. Wang, J. 2013. Woody biomass harvesting and logistics. Northeast Forestry University. Harbin, China. July 1, 2013. Invited Speaker.
69. Wang, J. 2013. Biomass and Bioenergy, Opportunities and Challenges. China Agricultural University. Beijing, China. June 27, 2013. Invited Speaker.
70. Wang, J. 2013. Forest management strategies and carbon sequestration. Yunnan Provincial Academy of Forestry. Kunming, Yunnan. June 17, 2013. Invited Speaker.
71. Wang, J. 2013. Woody biomass utilization for bioenergy. Chinese Academy of Forestry, Research Institute of Resource Insects. Kunming, Yunnan. June 17, 2013. Invited Speaker.
72. Everman, A. and J. Wang. 2013. Analysis of filtration processes on urea pretreated woody biomass. 2013 Joint Convention of Forest Products Society and Society of Wood Science and Technology. June 9-11, Austin, TX.

73. Hartley, D.S and J. Wang. 2013. Analysis of Woody Biomass Supply Chains in the Northeastern United States. 67th International Convention of the Forest Products Society. June 9-11, Austin, TX.
74. Estep, G.D., D. DeVallance, and J. Wang. 2013. Market feasibility of a coal-biomass to liquid fuel facility in the southern West Virginia region. Poster presentation at the Forest Products Society 67th International Convention, Austin, Texas. June 9.
75. Hartley, D.S. and J. Wang. 2013. Woody Biomass Supply Chains in the Northeastern United States: An Economic Analysis. Northeast Agricultural and Biological Engineers Conference. June 16-19, Altoona, PA.
76. Wang, J., J. McNeel, D. DeVallance, D. Hartley, and G. Estep. 2013. Biofuels and energy efficient products from underutilized woody biomass. Industries of the Future Day at the Capitol, Charleston, WV. March 11, 2013. [poster and products display]
77. Wang, J. 2012.Biomass Energy and Forest Carbon Sequestration, International Visitor Leadership Program- Climate Change: Renewable Energy, Morgantown, WV. Feb 20, 2012. Invited speaker.
78. Wang, J. 2012. Developments in Woody Biomass Processing and Logistics. 2012 Bioenergy Short Course, Penn State University, State College, PA. Feb 29, 2012. Invited Speaker.
79. Wang, J. and S. Grushecky. 2012. Bioenergy and Biofuels. West Virginia Land & Mineral Owners Assoc. 2012 Annual Meeting. Morgantown, WV. May 10, 2012. Invited Speaker.
80. Wang, J. 2012. Forest Carbon Sequestration and Bioenergy. International Visitor Leadership Program- Renewable Energy. Morgantown, WV. July 18, 2012. Invited Speaker.
81. Wang, J. 2012. Woody biomass-Harvest and Logistics. Northeast Forestry University, Harbin, China. July 2, 2012. Invited Speaker.
82. Wang, J. 2012. Forest Carbon Optimization and Climate Change. Chinese Academy of Forestry, Beijing, China. June 20, 2012. Invited Speaker.
83. Wang, J. 2012. Biomass Energy Update. WV Division of the Society of American Foresters, September 4-5. Morgantown, WV. September 5, 2012. Invited Speaker.
84. Wang, J. and D. Hartley. 2012. Biofuels and Energy Efficient Bioproducts from Underutilized Woody Biomass. Research Showcase for Energy and the Environment highlighting innovation by WVU Faculty. West Virginia University, Morgantown, WV. September 6, 2012 [poster]
85. Hartley, D. and J. Wang. 2012. Analysis of Harvest Logistics impact on Woody Biomass Supply Chains. 66th International Convention of the Forest Products Society, June 3-6, 2012, Washington, DC. June 5, 2012.
86. Wang, J., J. McNeel, D. DeVallance, D. Hartley. 2012. Biofuels and Energy Efficient Bioproducts from Underutilized Woody Biomass. Industries of the Future Day at the Capitol, Charleston, WV. January 24, 2012. [poster]
87. Hartley, D., J. Wu., J. Wang. 2012. Economic modeling of woody biomass utilization for bioenergy: a case study in West Virginia. 2012 Bioenergy Short course, Penn State University, State College, PA. Feb 29, 2012. [poster]
88. Hartley, D. and J. Wang. 2012. Biomass Harvesting and Logistics in the Northeast United States. NEWBio Kickoff meeting, State College, PA, August 20, 2012. [poster]
89. Everman, A; J. Wang. 2012. Promoting woody biomass utilization for value-added bioproducts via addition of urea to the hot water extraction process. LIINC Conference. April 11, 2012. Morgantown, WV.

90. Everman, A; J. Wang. 2012. Lignin, hemicellulose and cellulose separation from woody biomass via the addition of urea to the hot water extraction process. 66th International Convention of the Forest Products Society, June 3-6, 2012. Washington D.C, June 4, 2012
91. Jin, W., K. Singh, J. W. Zondlo, J. Wang, J.S. Brar, S. Kumar. 2012. Pyrolysis and torrefaction behavior of hardwood components. American Society of Agricultural and Biological Engineers' 2012 Annual International Meeting, Dallas, TX, July 28-August 1, 2012.
92. Jin, W., K. Singh, J. W. Zondlo, J. Wang, J.S. Brar, S. Kumar. 2012. Woody Biomass Torrefaction: A Review. American Society of Agricultural and Biological Engineers' 2012 Annual International Meeting, Dallas, TX, July 28-August 1, 2012.
93. Carraso, J., G. Oporto, and J. Wang. 2012. Co-firing torrefied woody biomass with coal: A new challenge for power generation. 2012 Central Hardwood Conference, March 26-28 (2012), Morgantown, WV, and Forest Product Society 66th International Convention, June 3-5 (2012), Washington DC.
94. Lin. W. and J. Wang. 2012. A Life Cycle Assessment of Forest Carbon Balance and Carbon Emissions of Timber Harvesting in West Virginia, USA. SWST/ICBR International Convention. August 27-31, 2012. Beijing, China.
95. Hartley, D and J.Wang.2012. Analysis of harvesting logistic on woody biomass supply chains for community based bioenergy projects in West Virginia. Council on Forest Engineering, Annual Meeting," Engineering New Solutions for Energy Supply and Demand", September 9-12, 2012. New Bern, NC.
96. Wang, J. and J. Zondlo. 2012. Biomass research and development at West Virginia University. Coal and Biomass Conference. Morgantown, WV. September 19, 2012.
97. Wang, J. 2012. Woody biomass utilization for biofuels: Opportunities and challenges. International Conference on Biomass Energy Technologies. Nanjing, China. October 22-24, 2012. Invited Keynote Speaker.
98. Wang, J. 2012. Management strategies and utilization of forest biomass. International Conference on Forest Management and Climate Change – the 2nd Forest Science Forum. Beijing, China. October 14-16, 2012. Invited Speaker.
99. Wang, J. 2012. Operational models, system analyses and simulations. Recent progress in silvicultural technology – a workshop on new technologies, simulation and system analyses. Swedish University of Agricultural Sciences, Umea, Sweden. November 1-2, 2012. Invited Keynote Speaker.
100. Wang, J. 2012. Biomass harvest and logistics modeling. Webinar – The Northeast Woody/Warm-season Biomass Consortium. December 6, 2012. Invited Speaker.
101. Wu, J., J. Wang, and J. McNeel. 2011. Modeling greenhouse gas emissions of forest biomass utilization for biopower. Society of American Foresters National Convention. November 2-7, 2011. Honolulu, HI.
102. Sharma, B. and J. Wang. 2011. Economic opportunities of forest carbon sequestration and biomass utilization. Society of American Foresters National Convention. November 2-7, 2011. Honolulu, HI.
103. Lin W., J. Wang, and D. Summerfield. 2011. Assessments of the Impacts of Economic Downturn on the Appalachian Hardwood Sawmills. International Scientific Conference on Hardwood Processing. October 16-18, 2011. Blacksburg, VA, USA.

104. Lin W., J. Wang, and D. Summerfield. 2011. Energy Consumption and Efficiency of Hardwood Sawmills in the Appalachian Region. International Scientific Conference on Hardwood Processing. October 16-18, 2011. Blacksburg, VA, USA.
105. Wang, J. 2011. Promoting woody biomass utilization for bioenergy and bioproducts. Northeast Biomass Conference and Trade Show. General Session – Biomass Utilization and Research in the Northeast. Pittsburgh, PA. October 11-13, 2011. (invited)
106. Wang, J. 2011. Woody biomass utilization for bioenergy. Jiangsu Provincial Academy of Forestry. Nanjing, Jiangsu Province. August 2, 2011. (invited)
107. Wang, J. 2011. Pretreatments of woody biomass for biofuels and bioenergy. Research Institute of Chemical Industry of Forest Products, Chinese Academy of Forestry. Nanjing, China. August 3, 2011. (invited)
108. Wang, J. 2011. Modeling atmospheric carbon reduction through sustainable forest management. International Conference on Response of Forests and Adaptation Management to Climate Change. Yichun, Heilongjiang, China. Aug. 8-10, 2011. (Invited)
109. Wu, J., J. Wang, D. Hartley. 2011. Economic Modeling of Woody Biomass Utilization for Bioenergy: A Case Study in West Virginia. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 228: Forest Based Biomass: Harvesting, Processing, Transport and Storage.
110. Singh, K., J. Wang, L. Sivanandan, J.S. Brar, Saurabh Kumar. 2011. Influence of Environmental Decomposition of Logging Residues on Fuel Properties. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 228: Forest Based Biomass: Harvesting, Processing, Transport and Storage.
111. Wang. J. 2011. Role of Forest in Terrestrial Carbon Sequestration. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 249: Biomass Carbon Trading and Green House Gas Emission.
112. Q. Cheng, J. Wang. 2011. Pyrolysis Behavior of Biomass and Coal for Energy Production Investigated by TGA-FTIR Analysis. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 337: Co-Processing and Conversion of Biomass/Coal Mixtures.
113. Brar, J.S., K. Singh, J. Zondlo, J. Wang. 2011. Co-Gasification of Appalachian Hardwood Residue and Coal. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 337: Co-Processing and Conversion of Biomass/Coal Mixtures.
114. Brar, J.S., K. Singh, J. Zondlo, J. Wang. 2011. Co-Gasification of Coal and Biomass: A Review. ASABE 2011 Annual International Meeting, August 7-10, Louisville KY. Session 337: Co-Processing and Conversion of Biomass/Coal Mixtures.
115. Cheng, Q., J. Wang, K. Singh, and J. Zondlo. 2011. TGA-FTIR analysis of woody biomass and coal for energy production. 65th International Convention of Forest Products Society. June 19-21, 2011. Portland, Oregon.
116. Singh, K., J. Wang, L. Sivanandan, J. Brar, and S. Kumar. 2011. Influence of environmental decomposition of logging residues on fuel properties. 65th International Convention of Forest Products Society. June 19-21, 2011. Portland, Oregon.
117. Wang, J., J. McNeel, Q. Cheng, and D. DeVallance. 2011. Biofuels and Energy Efficient Bioproducts from Underutilized Woody Biomass. 11th Annual IOF-WV Day at the State Capitol. Charleston, WV. January 18, 2011.

118. Wang, J., P. Edwards, and W. Goff. 2010. Assessing changes to in-stream turbidity following construction of a forest road in West Virginia. TMDL 2010: Watershed Management to Improve Water Quality. Baltimore, Maryland, USA. November 14-17, 2010.
119. Wang, J. and W. Lin. 2010. Using laser log scan data to optimize log recovery. Hardwood Log Scanning, Defect Identification, and Recovery Optimization Workshop. USDA Forest Service, Princeton, WV. Nov. 3, 2010. (Invited).
120. Sharma, B. and J. Wang. Modeling terrestrial carbon sequestration and potential enhancement options. 2010 SAF National Convention. Albuquerque, New Mexico. October 27-30, 2010.
121. Wang, J. 2010, Forest and Woody Biomass Utilization Research at West Virginia University. National Research Council of Italy, Institute of Agro-Environmental & Forest Biology. Paolina, Italy. October 6, 2010. (Invited)
122. Wang, J., J. Wu, D. DeVallance, and J. Armstrong. 2010. Appalachian hardwood products export – an analysis of the current Chinese market. Joint Session of the UNECE Timber Committee and Society of Wood Science and Technology International Convention. Geneva, Switzerland. October 11-14, 2010.
123. Cheng, Q. and J. Wang. 2010. Green nanocomposites reinforced with cellulosic crystals isolated from hardwood residues and hybrid poplar. Joint Session of the UNECE Timber Committee and Society of Wood Science and Technology International Convention. Geneva, Switzerland. October 11-14, 2010.
124. Wang, J., J. Wu, D. DeVallance, and J. Armstrong. 2010. Competitiveness of Appalachian hardwood products in China. Global Competitiveness of Hardwood Products: Strategies for Success in a Chinese Market. Lansdowne Resort, Lansdowne, Virginia. August 22-24, 2010. (Invited).
125. Cheng, Q., A. Adebola, J. Wang, and S. DiFazio. 2010. Green pretreatments on woody biomass for ethanol production. BBI International, Biomass Magazine, Northeast BIOMASS Conference & Expo. Boston, MA. August 4-6, 2010.
126. Singh, K., J. Wang, and J. Zondlo. 2010. Co-gasification of coal and biomass. DOE – Consortium for Fossil Fuel Science. Pittsburgh, PA. August 3-4, 2010. (Invited speaker).
127. Cheng, Q., J. Wang, J. McNeel. 2010. Cellulosic Nanocomposites from Hardwood Residues and Hybrid Poplar. FPS 64th International Conference. Madison, WI. June 20-22, 2010.
128. Adebayo, A., Q. Cheng, J. Wang, J. McNeal. 2010. Properties and enzymatic Hydrolysis of Pretreated hybrid Poplar wood for Sugar Production. FPS 64th International Conference. Madison, WI. June 20-22, 2010.
129. Sharma, B., J. Wang, M. Strager, Q. Cheng. 2010. Multiple criteria evaluation modeling for tract level log landing site selection. FPS 64th International Conference. Madison, WI. June 20-22, 2010.
130. Lin, W., J. Wang, T. Goff. 2010. Effects of small hardwood sawmill sawing practices on lumber recovery in West Virginia. FPS 64th International Conference. Madison, WI. June 20-22, 2010.
131. Ma, J., J. Wu, J. Wang. 2010. A computer-aided optimal bucking system for the northeastern species of China. FPS 64th International Conference. Madison, WI. June 20-22, 2010.

132. Wu, J., J. Wang, Q. Cheng, and J. McNeel. 2010. Economic assessments of coal and biomass to liquid fuels in central Appalachia. 2010 ASABE Annual International Meeting. Pittsburgh, PA. June 20-23, 2010.
133. Cheng, Q., A. Adebayo, J. Wang, and S. DiFazio. 2010. Green pretreatments on genetically improved hybrid poplar for ethanol production. 2010 ASABE Annual International Meeting. Pittsburgh, PA. June 20-23, 2010.
134. Wang, J., P. Edwards, G. Hamons, and T. Goff. 2010. Assessing RUSLE and hill-slope soil movement in the central Appalachians. 2010 ASABE Annual International Meeting. Pittsburgh, PA. June 20-23, 2010.
135. Wang, J. and B. Sharma. 2010. Modeling forest harvest scheduling and terrestrial carbon sequestration. International symposium on forests, carbon and water in response to climate change. Tengchong, Yunnan, China. June 16-18, 2010. (Invited speaker).
136. Wang, J., Q. Cheng, A. Adebayo, S. DiFazio. 2010. Assessments of hybrid poplar utilization for biofuels. International conference on sustainable management of multi-propose poplar plantations (IUFRO). Siyang, Jiangshu, China. May 28-30, 2010. (Invited speaker).
137. Wang, J. J. Wu, and, J. McNeel. 2010. Sustainability of woody biomass utilization for bioenergy. International conference on sustainable management of multi-propose poplar plantations (IUFRO). Siyang, Jiangshu, China. May 28-30, 2010. (Invited).
138. Benktesh, S., J. Wang, and C. Altizer. 2010. Modeling forest biomass in atmospheric carbon reduction in West Virginia. Council on Forest Engineering (COFE), 33rd Annual International Conference, Auburn, AL. June 6-9, 2010.
139. Wang, J. and J. McNeel. 2010. Energy System Dynamics – Biofuels. U.S. Department of Energy, National Energy Technology Laboratory, Work Planning Meeting, Pittsburgh, PA. May 3-4, 2010.
140. Lin, W., J. Wang, and E. Thomas. 2010. A 3d Optimal Sawing System for Small Sawmills in Central Appalachia. 17th Central Hardwood Forest Conference. April 5-7, 2010. Lexington, Kentucky.
141. Sharma, B. and J. Wang. 2010. Status and Potential of Terrestrial Carbon Sequestration in West Virginia. 17th Central Hardwood Forest Conference. April 5-7, 2010. Lexington, Kentucky.
142. Spong, B., J. Wang, and D. Summerfield. 2010. Characteristics of West Virginia Loggers during Economically Difficult Times. 17th Central Hardwood Forest Conference. April 5-7, 2010. Lexington, Kentucky.
143. Brooks, J., J. Wang, and C. LeDoux. 2010. Thinning Strategies to Increase the Regional Availability of Oak Timber in the Mid-Appalachian Region. 17th Central Hardwood Forest Conference. April 5-7, 2010. Lexington, Kentucky.
144. Wang, J. 2010. Forestry and Forest Industry in China. Annual Meeting of Allegheny Society of American Foresters. Stonewall Jackson, WV, Feb. 16-18, 2010. (Invited speaker).
145. Wang, J., J. McNeel, Q. Cheng, and A. Adebayo. 2010. Biofuels and Energy Efficient Biomaterials from Underutilized Woody Biomass Resources. 10th Annual IOF-WV Day at the State Capitol. Charleston, WV. January 26, 2010.

146. Wu, J., J. Wang, J. McNeel, M. Sperow, and B. Sharma. 2009. Economic analysis of woody biomass to ethanol in central Appalachia. Society of American Foresters 2009 National Convention. Sept. 30 – Oct. 4, 2009. Orlando, Florida.

147. Sharma, B., J. Wang, and S. Liu. 2009. Forest harvesting scheduling and visualization system for enhancing long-term carbon sequestration. Society of American Foresters 2009 National Convention. Sept. 30 – Oct. 4, 2009. Orlando, Florida.

148. Sharma, B., J. Wang, J. Brooks, and G. Miller. 2009. Optimizing forest harvest strategies for timber production and carbon sequestration. Society of American Foresters 2009 National Convention. Sept. 30 – Oct. 4, 2009. Orlando, Florida.

149. Wang, J., C. LeDoux, and W. Goff. 2009. Effects of Soil Compaction on Individual Tree Growth in the Central Appalachian Hardwood Forest Region. Council on Forest Engineering (COFE), 32nd Annual International Conference, Lake Tahoe, CA. June 15-18, 2009.

150. Cheng, Q., J. Wang, J. McNeel, A. Adebayo. 2009. Cellulose Crystals from Central Appalachian Hardwood Residues for Polymer Reinforcement. Forest Product Society, 63rd International Conference, June 21-23, 2009, Boise, Idaho, USA.

151. Cheng, Q., J. Wang, J. McNeel. 2009. Microfibrillated Cellulose Fibrils Isolated by High Intensity Ultrasonication and High Pressure Homogenizer. Forest Product Society, 63rd International Conference, June 21-23, 2009, Boise, Idaho, USA.

152. Adebayo, A., J. Wang, Q. Cheng. 2009. Alkali Mixtures and Hydrogen Peroxide Treatments of Central Appalachian Hardwood Residues for Sugar Production. Forest Product Society, 63rd International Conference, June 21-23, 2009, Boise, Idaho, USA.

153. Cheng, Q., J. Wang, J. McNeel. 2009. Biodegradable Nanocomposites from Wood Cellulose Residuals. Forest Product Society, 10th International Conference on Wood & Biofiber Plastic Composites & Cellulose Nanocomposites Symposium, May 11-13, 2009, Madison, WI, USA.

154. Cheng, Q., L. Muszynski, S. Shaler, J. Wang. 2009. Property Changes of Wood Polypropylene Composites due to Extended Moisture Cycling. Forest Product Society, 10th International Conference on Wood & Biofiber Plastic Composites & Cellulose Nanocomposites Symposium, May 11-13, 2009, Madison, WI, USA.

155. Cheng, Q., J. Wang, J. McNeel, S. Wang. 2009. Nanocomposites Reinforced with Cellulose Fibrils in Micro and Nano Scales. Technical Association of Pulp and Paper Industry (TAPPI), 2009 International Conference on Nanotechnology for the Forest Products Industry, Edmonton, Alberta, Canada 23-26 June 2009.

156. Adebayo, A., J. Wang. G. Cheng, and J. McNeel. 2009. Enzymatic hydrolysis of ultrasonicated yellow poplar residue for ethanol production. Sun Grant Initiative Energy Conference. March 10-13, 2009. Washington, DC.

157. McNeel, J. and J. Wang. 2009. Sustainable energy – biomass conversion and utilization. WVU Advanced Energy Initiative Review. West Virginia University, Morgantown, WV. February 19, 2009.

158. Wang, J. and J. McNeel. 2009. Biomaterials and Bioenergy Research Activities at the Biomaterials and Wood Utilization Research Center. NETL-WVU Materials Workshop.

National Research Center for Coal and Energy, West Virginia University, Morgantown, WV. January 6, 2009. (Invited).

159. Wang, J., J. Wu, and J. McNeel. 2008. Economic feasibility of utilizing wood residues as feedstock for biofuels in West Virginia. Northeast Renewable Energy Conference. August 25-28, 2008. State College, PA.
160. Wang, J. 2008. Computer simulations and system modeling in forest biomass management. International symposium of heads of forest research institutions on the occasion of the 50th anniversary of the Chinese Academy of Forestry – Forest research in response to global change. October 27-28, 2008. Beijing, China. (Invited).
161. Wang, J. and J. Wu. 2008. Economic modeling of woody biomass utilization for biofuels. Invited Presentation at Beijing Forestry University. October 30, 2008. Beijing, China. (Invited).
162. Wang, J. 2008. Appalachian hardwood residue properties and potentials for biofuels. Invited Presentation at Northeast Forestry University. November 4, 2008. Harbin, China. (Invited).
163. Wang, J., J. Armstrong, J. Wu, and W. Lin. 2008. An Analysis of Appalachian Hardwood Markets in China. The 51st Annual Convention of the Society of Wood Science and Technology. November 10-12, 2008. Concepcion, Chile.
164. Cheng, Q., S. Wang, D. Harper, J. Wang, and Y. Liu. 2008. Elastic modules of single cellulose fibrils evaluated by atomic force microscopy. International Symposium in Wood Science and Technology – IAWPS 2008. September 27-29, 2008. Harbin, China.
165. Cheng, Q., S. Wang, T. Rials, J. Wang, and Y. Liu. 2008. Cellulose fibril reinforced poly (vinyl alcohol) nanocomposites. International Symposium in Wood Science and Technology – IAWPS 2008. September 27-29, 2008. Harbin, China.
166. Hamons, G., J. Wang, T. Goff, and P. Edwards. 2008. Effects of Hill-slope Attributes and Road Construction on Sediment Movement in Forested Watersheds in West Virginia. 2008 ASABE Annual International Meeting in Providence, RI June 29-July 2, 2008
167. Grushecky, S., J. Wang, and B. Spong. 2008. Supplying new markets with forest products from West Virginia. Small Wood 2008 and Bioenergy & Wood Products, May 13-15, 2008. Madison, WI.
168. Grushecky, S., C. Hassler, and J. Wang. 2008. Lumber yields and economic feasibility of merchandising pulpwood in West Virginia. Small Wood 2008 and Bioenergy & Wood Products, May 13-15, 2008. Madison, WI.
169. Wang, J., T. Goff, and J. McNeel. 2008. A comparison of hardwood log bucking practices in West Virginia. The 31st Annual Meeting of Council on Forest Engineering, June 22-25, 2008, Charleston, SC.
170. Wu, J., J. Wang, and J. McNeel. 2008. Economic modeling of woody biomass utilization for biofuels: a case study in West Virginia. The 31st Annual Meeting of Council on Forest Engineering, June 22-25, 2008, Charleston, SC.
171. Adebola B. A, J. Wang, and T. Guff. 2008. Appalachian hardwood residue properties and potentials for bioenergy utilization. 62nd FPS International Convention, St. Louis, Missouri, June 22-24, 2008.
172. Sharma, B.D., J. Wang, and G. Miller. 2008. A GIS-based approach to stand visualization and spatial pattern analysis in a mixed hardwood forest in West Virginia. The 16th Central Hardwood Forest Conference, Lafayette, IN. April 7-9, 2008.
173. Dhungana, S., Wang, J., Grushecky, S. 2008. Development of an Expert System for

Assessing Woody Biomass for Bioenergy Production. 16th Central Hardwood Forest Conference held in Lafayette, IN. April 7 - 9, 2008.

174. Wang, J. and J. McNeel. 2008. Biomass utilization and bioenergy research at West Virginia University. Oakridge National Lab. January 21-22, 2008. Oak Ridge, TN.
175. Wang, J., J. McNeel, J. Wu, and W. Goff. 2008. Woody Biomass Sustainability for Bioenergy Production in West Virginia. The USDA CSREES Bio Energy Awareness Days – Grand Challenge, June 19-22, 2008, Washington, DC. (Invited).
176. McNeel, J. and J. Wang. 2008. Biomaterials and Wood Utilization Research in West Virginia. The 2008 U.S. Congress Showcase, February 9-10, 2008. Capitol Hill, Washington, DC. (Invited).
177. Wang, J, and W. Goff, and P. Edwards. 2007. Changes to in-stream turbidity following construction of a forest road in a forested watershed. 2007 Virginia/West Virginia Water Research Symposium. November 26-30, 2007, Blacksburg, VA.
178. Wang, J. 2007. Conversions of woody biomass to biofuels. The 3rd International Forest Engineering Conference. October 1-5, 2007. Mont-Tremblant, Quebec, Canada.
179. Hamons, G., J. Wang, P. Edwards, and M. Strager. 2007. Modeling sediment movement in forested watersheds using hill slope attributes. The 3rd International Forest Engineering Conference. October 1-5, 2007. Mont-Tremblant, Quebec, Canada.
180. Wang, J. 2007. Woody Biomass Resources, Utilization, and Opportunities for Biofuels in Central Appalachia, USA. 2007 International Bio-Eco Conference, June 26-28, 2007. Tianjin, China. (Invited).
181. Wang, J. and J. McNeel. 2007. Wood-based fuels. West Virginia BioEnergy Forum. August 3, 2007. West Virginia Department of Agriculture, Morgantown West Virginia. (Invited).
182. Goff, T. and J. Wang. 2007. Application and Effectiveness of Best Forestry Management Practices in West Virginia. The ASABE Annual International Meeting, June 17-20, 2007. Minneapolis, Minnesota.
183. Wang, J., S. Grushecky, and J. McNeel. 2007. Woody Biomass Resources, Uses, and Opportunities in West Virginia. The 61st Forest Products Society International Convention. June 10-13, 2007. Knoxville, Tennessee.
184. Goff, W. and J. Wang. 2007. Assessment of lumber edging, trimming, and grading practices in small sawmills across West Virginia. The 61st Forest Products Society International Convention. June 10-13, 2007. Knoxville, Tennessee.
185. Grushecky, S., C. Hassler, T. Pahl, and J. Wang. 2007. Lumber yields and economic feasibility of merchandising black cherry pulpwood in West Virginia. The 61st Forest Products Society International Convention. June 10-13, 2007. Knoxville, Tennessee.
186. Wang, J. and J. McNeel. 2007. Wood Biomass and Opportunities for West Virginia Biodiesel. West Virginia Bioenergy Forum. April 4, 2007. West Virginia Department of Agriculture, Charleston, West Virginia. (Invited).
187. Wang, J. and J. McNeel. 2007. Biomass and Bioenergy Research Development at West Virginia University. Southern Bioenergy Summit, February 27-28, 2007. Southeastern University Research Association, Washington, DC.
188. Wang, J., S. Grushecky, and J. McNeel. 2006. Wood residue production and utilization in West Virginia: A review. The 5th Annual Southern BioProducts Conference. April 3-4, 2006. Choctaw, Mississippi.
189. Wang, J., C. LeDoux, and M. Vanderberg. 2006. Effects of soil compaction on residual

stand growth in central Appalachian hardwood forest: A preliminary study. The 29th COFE Annual Meeting, July 30 – August 2, 2006. Coeur d'Alene, Idaho.

190. Wang, J., Y. Li, and G. Miller. 2006. Modeling spatial patterns and 3D stand generator for central Appalachian hardwood forests. The 12th Symposium for Systems Analysis in Forest Resources. September 5-8, 2006. Burlington, Vermont.
191. Wang, J. 2006. Sustainable forest operations in West Virginia's watersheds. West Virginia Water Conference 2006 – Ensuring water resources for West Virginia's Future. October 11-13, 2006. Stonewall Resort, Roanoke, WV.
192. Wang, J. 2006. Research activities in forest operations/management at West Virginia University. Industrial Forest Operations Coop Meeting at Virginia Tech. September 15, 2006. Blacksburg, VA. (Invited).
193. Goff, W., J. Wang, and M. Strager. 2006. Spatial analysis of application, effectiveness, and compliance of forestry best management practices in West Virginia, USA. The ASABE 2006 Annual International Meeting, Portland, Oregon. July 9-12, 2006. (Goff presented)
194. Wang, J., S. Grushecky, Y. Li, and J. McNeel. 2006. Hardwood log merchandising and bucking practices in West Virginia. The 15th Central Hardwood Forest Conference, Knoxville, TN. February 27 – March 1, 2006. (Yaoxiang Li presented)
195. Liu, J. and J. Wang. 2006. A 3D optimal bucking system for central Appalachian hardwood species. The 29th COFE Annual Meeting, July 30 – August 2, 2006. Coeur d'Alene, Idaho. (Jingang Liu presented)
196. Goff, T., J. Wang, J. McNeel, and S. Grushecky. 2005. Application, effectiveness, and compliance assessment of forestry best management practices in West Virginia. The 28th COFE Annual Meeting, July11-14, 2005. Fortuna, California.
197. Wang, J. 2005. Environmental impact assessments of forest operations. International Seminar on Natural Resources Economy Sustainable Development (NRESD) in State Forest Areas of China, June 24-25, 2005. Harbin, China. (Invited)
198. Wang, J. 2005. System modeling and computer simulations in forest resource management. International Seminar on Natural Resources Economy Sustainable Development (NRESD) in State Forest Areas of China, June 24-25, 2005. Harbin, China. (Invited)
199. Beatty, W., J. Wang, P. Edwards, and J. McNeel. 2004. Spatial analysis of to-stream sediment delivery in central Appalachian forested watersheds. The 27th COFE Annual Meeting, April 28-31, 2004. Hot Springs, Arkansas.
200. Li, Y., J. Wang, G. Miller, and J. McNeel. 2004. Production economics of harvesting young hardwood stands in central Appalachia. The 27th COFE Annual Meeting, April 28-31, 2004. Hot Springs, Arkansas.
201. Wang, J., M. Jones, P. Edwards, and J. McNeel. 2003. Soil compaction caused by timber harvesting in central Appalachian hardwood forest. The 26th COFE Annual Meeting, September 7-10, 2003. Bar Harbor, Maine.
202. Wang, J., C. LeDoux, and Y. Li. 2003. Modeling and simulating two cut-to-length harvesting systems in central Appalachian hardwoods. The 26th COFE Annual Meeting, September 7-10, 2003. Bar Harbor, Maine.
203. Milauskas, S. and J. Wang. 2003. A survey of West Virginia logger characteristics. The 26th COFE Annual Meeting, September 7-10, 2003. Bar Harbor, Maine.
204. Wang, J., J. McNeel, and S. Milauskas. 2002. A review of best forestry management practices in West Virginia. Forestry Best Management Practices Research Symposium,

April 15-17, 2002. Atlanta, Georgia.

205. Wang, J. 2002. Forest operations in U.S. hardwood forests" in the Workshop of Hardwood States Export Group at International Woodworking Fair 2002, August 19 – 25, 2002. Atlanta, Georgia.
206. Wang, J., S. Grushecky, and J. Brooks. 2002. An integrated computer-based timber cruising system for central Appalachian hardwoods. The International Union of Forest Research Organization (IUFRO) S 4.11 Symposium on Statistics and Information Technology in Forestry, September 8 -12, 2002. Virginia Tech, Blacksburg, Virginia.
207. Wang, J., Y. Li, and G. Miller. 2002. A 3D stand generator for central Appalachian hardwood forests. The International Union of Forest Research Organization (IUFRO) S 4.11 Symposium on Statistics and Information Technology in Forestry, September 8 -12, 2002. Virginia Tech, Blacksburg, Virginia.
208. Long, C., J. Wang, J. McNeel, and J. Baumgras. 2002. Production and cost analysis of feller-buncher and grapple skidder system in central Appalachian hardwood forest. The 25th COFE Annual Meeting, June 16-20, 2002. Auburn, Alabama.
209. Vanderberg, M., J. Wang, J. McNeel, and C. LeDoux. 2002. Hardwood log damage and degrade occurring during harvesting operations in central Appalachia. The 25th COFE Annual Meeting, June 16-20, 2002. Auburn, Alabama.
210. Wang, J., J. McNeel, and J. Baumgras. 2001. A computer-based time study system for timber harvesting operations. The 24th Annual Meeting of Council on Forest Engineering (COFE), July 15-19, 2001. Snowshoe, West Virginia.
211. Wang, J. and C. LeDoux. 2000. Modeling ground-based timber harvesting systems using computer simulations. The 81st Annual Meeting of Canadian Woodlands Forum and the 23rd Annual Meeting of Council on Forest Engineering (COFE), Sept. 11-15, 2000. Kelowna, B.C., Canada.
212. Wang, J. and W. Greene. 1997. Stand, harvest, and equipment interactions caused by harvesting prescriptions. The 20th Annual meeting of Council of Forest Engineering (COFE), July 28-31, 1997. Rapid City, South Dakota.
213. Wang, J. and W. Greene. 1996. An interactive simulation of partial cutting operations of feller-bunchers. Joint meeting of IUFRO S3.04 and the 19th Council on Forest Engineering, July 29-August 1, 1996. Marquette, Michigan.
214. Greene, W. and J. Wang. 1995. Timber sale size and economics of logging systems. In: Proceedings of the 18th Annual meeting of Council on Forest Engineering, June 5-8, 1995. Cashiers, North Carolina.
215. Wang, J. 1995. Study on the optimal tree-stem bucking system. The 20th IUFRO World Congress P3.07 session, August 6-12, 1995. Tampere, Finland.
216. Wang, J. and R. Haarlaa. 1994. Time study on the excavator with attachments in forest operations, Scandinavian Forest Research in Europe: Operational Research, August 30-Sept. 4, 1994. Randers, Denmark.
217. Wang, J. 1994. On logging accidents in China. Seminar on Clothing and Safety in Forestry sponsored by FAO/ECE/ILO, June 27 - July 1, 1994. Kuopio, Finland.
218. Wang, J. 1993. Forest resources and logging operations in China. VALMET Logging, October 3, 1993. Tampere, Finland.

HONORS AND AWARDS:

- 2016 The Benedum Distinguished Scholar Award, West Virginia University, Morgantown, West Virginia.
- 2015 Outstanding Researcher. The Davis College of Agriculture, Natural Resources and Design, West Virginia University, Morgantown, West Virginia.
- 2014 Researcher of the Year. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia.
- 2011 Outstanding Researcher. The Davis College of Agriculture, Natural Resources and Design, West Virginia University, Morgantown, West Virginia.
- 2011 Excellent Overseas Expert Award, Chinese Academy of Forestry, Beijing, China.
- 2010 Researcher of the Year. Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia.
- 2008 Bioenergy Awareness Days "Grand Challenge" Winner, the United States Department of Agriculture, Washington, DC.
- 2008 Overseas Expert of International Cooperation and Innovation, the Chinese Academy of Forestry, Beijing, China.
- 2008 "Longjiang Scholar", Heilongjiang Provincial Department of Education, Harbin, China.
- 2007 The Mid-Career Award. The Davis College of Agriculture, Forestry, and Consumer Sciences, West Virginia University, Morgantown, West Virginia.
- 2006 The Hoyt Faculty Excellence Award. The Hoyt Foundation, West Virginia University, Morgantown, West Virginia.
- 2005 Outstanding Researcher. The Davis College of Agriculture, Forestry, and Consumer Sciences, West Virginia University, Morgantown, West Virginia.
- 2004 Researcher of the Year. Division of Forestry, West Virginia University, Morgantown, West Virginia.
- 1993 Excellent Scientific Researcher Award. Northeast Forestry University, Harbin, China.
- 1993 The article "Measurement and Analysis of the Gravity Center Variation of Tree-stems," awarded second prize by the Association of Forest Engineering of Heilongjiang Province, Harbin, China.
- 1992 The project "Design and Application of Model DZ1 Log Grapple," awarded the third prize of science by Yakeshi Forestry Administrative Bureau, Inner Mongolia, China.
- 1992 Young Forest Scientist Award. Society of Forestry of Heilongjiang Province of China, Harbin, China.
- 1991 Excellent Paper Award for the article "Mechanics and mechanical properties of loading mechanism in forestry", Northeast Forestry University, Harbin, China.
- 1990 The article "Structural Design and Calculation of A New Log Grapple," awarded the first prize of science by Heilongjiang Provincial Committee of Science and Technology, Harbin, China.
- 1988 Excellent Paper Award for the article "Design and Applications of Model DZ1 Log Grapple," Northeast Forestry University, Harbin, China.

CONFERENCES AND WORKSHOPS HOSTED/CHAIRED:

- 2016. Session Organizer and Moderator. Woody and Bamboo Biomass Management and Utilization for Bioenergy and Bioproducts. IUFRO Regional Congress for Asia and Oceania 2016. October 24-27, 2016. Beijing, China.
- 2016. Session Organizer/Moderator. Biomass and Bioenergy. The 59th SWST International Convention – Forest Resources: Moving toward a sustainable future. March 6-11, 2016. Curitiba, Brazil.
- 2015. Hosted and co-chaired the 2015 Annual Meeting and Field Tour of the Northeast Woody/Warm-season Biomass Consortium. August 3-5, 2015. Morgantown, WV. (120 participants)
- 2015. Co-Chair and Organizer. Forest Ecosystem Services for Biodiversity and Bioeconomy, an international workshop. Beijing, China. September 14-20, 2015. (100 participants)
- 2014. Session Organizer and Moderator. Biobased Products and Bioenergy. IUFRO 2014 World Congress. Salt Lake City, UT USA, October 5-12, 2014.
- 2014. Chair and Organizer. A workshop on Promoting Hardwood Processing and Economy. September 4, 2014. USDA Forest Service Wood Education and Resource Center, Princeton, WV. (30 participants)
- 2014. Chair and Organizer. Biomass Utilization for Green Materials and Energy Conference. September 2, 2014. WVU Erickson Alumni Center, Morgantown, WV. (60 participants)
- 2013. Session Chair. The LCA XIII Conference. Sept. 30-Oct. 3, 2013. Orlando, FL
- 2012. Session Chair and Scientific Committee Member. International Conference on Biomass Energy Technologies. Nanjing, China. October 22-24, 2012.
- 2012. Session Chair. Management strategies and utilization of forest biomass. 3rd International Conference on Forest Management and Climate Change. Beijing, China. October 14-16, 2012
- 2012. Co-Organizer, presenter. Coal and Biomass Conference. Morgantown, WV. September 19, 2012.
- 2011. Co-sponsor, moderator, discussion panelist, and presenter. International Conference on Response of Forests and Adaptation Management to Climate Change. International Union of Forest Research Organizations (IUFRO), Chinese Academy of Forestry, Asia-Pacific Network for Sustainable Forest Management and Rehabilitation and Asia Pacific Association of Forestry Research Institutions. Yichun, Heilongjiang, China. Aug. 8-10, 2011. (200 participants)
- 2010. Co-organizer and co-chair. Hardwood Log Scanning, Defect Identification, and Recovery Optimization Workshop. USDA Forest Service Wood Education and Resource Center, Princeton, WV. Nov. 3, 2010. (8 participants).
- 2010. Organizer and Chair. 3D Lumber Edging, Trimming, and Grading Optimization System Workshop. USDA Forest Service Wood Education and Resource Center, Princeton, West Virginia. September 9, 2010. (25 participants).
- 2010 Organizer and Chair. Global Competitiveness of Hardwood Products: Strategies for Success in a Chinese Market, August 22-24, 2010, Lansdowne Resort, Lansdowne, Virginia. (54 participants)
- 2009. Organizer and Chair. 3D Lumber Edging and Trimming Software Application Workshop. West Virginia University, Morgantown, West Virginia. January 16, 2009. (15

participants).

- 2008. Organizer and Chair. 3D Lumber Edging and Trimming Software Assessment Workshop. West Virginia University, Morgantown, West Virginia. October 15, 2008. (10 participants).
- 2007 Organizer and Chair. Appalachian Woody Biomass to Ethanol Conference, September 5-6, 2007, Shepherdstown, West Virginia. (80 participants)
- 2001 Organized/sponsored the 2001 Council on Forest Engineering Annual Meeting, and served as the Editor of the Proceedings. (100 participants)

LEADERSHIP AND SERVICES:

- Associate Editor, *Forest Science*, Society of American Foresters.
- Editorial Board Member, *International Journal of Forest Engineering*, Forest Products Society.
- Editorial Board Member, *Forest Engineering*, Chinese Society of Forest Engineering.
- Editorial Board Member and Associate Editor, *Forest Ecosystems*, a Springer Open Journal.
- Invited Lead Guest Editor. Biomass-Based Materials and Technologies for Energy. A Special Issue for Advances in Materials Science and Technology. 2015. http://www.hindawi.com/journals/amse/si/912752/cfp/
- Invited Lead Guest Editor, International Journal of Forestry Research, Special Issue on Forest Biomass Utilization for Biofuels and Bioproducts. 2014. http://www.hindawi.com/journals/ijfr/.
- Faculty Senate Member, Research and Scholarship Committee, West Virginia University Faculty Senate (2015-2016), West Virginia University, Morgantown, West Virginia.
- Chair, Promotion and Tenure Committee (2014-2017), Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia.
- Chair, Search Committees for three faculty members (2010-2011), Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia.
- Chair, Forest Products Society, Timber Production and Harvesting Technical Group (2009-2012), http://www.forestprod.org/timb-tig.html.
- Chair, Information and Technology Committee, Davis College of Agriculture, Forestry, and Consumer Sciences (2006-2007), West Virginia University, Morgantown, West Virginia.
- Member of Search Committee for Associate Provost for Outreach and Engagement (2014), West Virginia University, Morgantown, WV.
- Invited Review Panelist. American Association for the Advancement of Science – Woody Biomass Utilization for Energy. April 2-3, 2015.
- Invited as an Opponent for a Ph.D. Candidate Defense at Swedish University of Agricultural Sciences. October 10, 2014. Umea, Sweden.
- Invited Review Panelist, China National Science Foundation – Forest Biomass and Bioproducts Projects. May 10-20, 2015.
- Invited Panelist. Research Workshop for New Faculty, WVU Research Office. Morgantown, WV. September 8, 2014.
- Invited Panelist, US Department of Transportation North Central Regional Sun Grant Center. July 23-25, 2014. Chicago, IL.

- Invited Panelist, USDA NIFA AFRI Fellowship Program. May 28-31, 2013. Washington, DC.
- Invited Reviewer, USDA NIFA AFRI Sustainable Bioenergy. July 2013.
- Invited Panelist, USDA NIFA AFRI Bioenergy CAP. January 17-21, 2011. Washington, DC.
- Invited Reviewer, USDA SBIR – Forest Carbon Projects. 2011, 2012.
- Invited Reviewer, China National Science Foundation – Forest Management Projects.
- Invited Panelist, the USDA/DOE 2009 Biomass Research and Development Initiative (BRDI). July 14-16, 2009. Washington, DC.
- Invited Review Panelist, the USDA/DOE 2008 Biomass Research and Development Reviews. January 8-10, 2008. Denver, CO.
- Moderator, the 2007 Northeast Sun Grant Feedstock Summit. November 11-13, 2007. Cornell University, Ithaca, NY.
- Session Chair and Moderator, Woody Biomass Utilization Challenges and Opportunities, the 61st International Convention, Forest Products Society, Knoxville, TN, USA.
- Served in the review panel for two work units in Southern Research Station and Northern Research Station, USDA Forest Service.
- Served as a moderator for the 2006 Council on Forest Engineering Annual Meeting.
- On a regular basis, I have served as a reviewer for 20+ scientific journals including *Biomass & Bioenergy, Biofuels, Bioproducts & Biorefining, Energy & Fuels, Renewable Energy, Forest Science, Forest Ecology and Management, Canadian Journal of Forest Research, Biosystems Engineering, European Journal of Forest Research, Scandinavian Journal of Forest research, Computers and Electronics in Agriculture, Journal of Forestry, Forest Products Journal, International Journal of Forest Engineering, Wood and Fiber Science, Holzforschung, Journal of Hazardous Materials, Soil Biology and Biochemistry, Sustainability, PLOS ONE, Ecological Research, and Education Research and Reviews.*

MEMBERSHIP:

- Society of American Foresters (Associate Editor of Forest Science).

- Council on Forest Engineering.

- Forest Products Society (Trustee, Carolina-Chesapeake Section, 2005-2007; Chair, Timber Production and Harvesting Technical Group, 2009-2012).

- American Society of Agricultural and Biological Engineers (Session Chair, T11 and T12).

- Society of Wood Science and Technology (Member of the SWST Emerging and Critical Issues Committee).

- IUFRO – Divisions 3 and 5 (Deputy Coordinator of Life Cycle Analysis Working Party under 5.12.00 Sustainable Utilization of Forest Products).