

## PUBLICATIONS

### Refereed Journals

1. Young, T.M., D.G. Perhac, F.M. Guess and R.V. León. 2008. Bootstrap confidence intervals for percentiles of reliability data for wood plastic composites. *Forest Products Journal*. *Submitted*.
2. Edwards, D.J., F.M. Guess, T.M. Young and H. Bensmail. 2008. Bootstrap confidence intervals for percentiles of reliability of modern engineered wood. *IIE Transactions*. *Submitted*.
3. Labbé, N., N. André and T.M. Young. 2008. Extraction of information from LIBS spectral data by multivariate analysis. *Applied Optics*. *Submitted*.
4. Kim, H., F.M. Guess and T.M. Young. 2008. An extension of regression trees to generate better predictive models. *IIE Transactions*. *In Press*.
5. Young, T.M., L.B. Shaffer, F.M. Guess, H. Bensmail and R.V. León. 2008. A comparison of multiple linear regression and quantile regression for modeling the internal bond of medium density fiberboard. *Forest Products Journal*. 58(4):39-48.
6. Clapp, N.E., Jr., T.M. Young and F.M. Guess. 2008. Predictive modeling the internal bond of medium density fiberboard using a modified principal component analysis. *Forest Products Journal*. 58(4):49-55.
7. Shaffer, L.B., T.M. Young, F.M. Guess, H. Bensmail and R.V. León. 2008. Using R software for reliability data analysis. *International Journal of Reliability and Application*. *In Press*.
8. André, N., H.W. Cho, S.H. Baek, M.K. Jeong and T.M. Young. 2008. Enhanced prediction of internal bond strength in a medium density fiberboard process using multivariate methods and variable selection. *Wood Science and Technology*. *In Press*.
9. Young, T.M., B.H. Bond and J. Wiedenbeck. 2007. Implementation of a real-time statistical process control system in hardwood sawmills. *Forest Products Journal*. 57(9):54-62.
10. Young, T.M., D.G. Hodges and T.G. Rials. 2007. The Forest Products Economy of Tennessee. *Forest Products Journal*. 57(4):12-19.
11. Wang, Y., T.M. Young, F.M. Guess and R.V. León. 2007. Exploring reliability of oriented strand board's tensile and stiffness strengths. *International Journal of Reliability and Application*. 8(1):113-126.
12. Perhac, D.G., T.M. Young, F.M. Guess and R.V. León. 2007. Exploring reliability of wood-plastic composites: stiffness and flexural strengths. *International Journal of Reliability and Application*. 8(2):153-173.
13. André, N., T.M. Young and T.G. Rials. 2006. On-line monitoring of the buffer capacity of particleboard furnish by near-infrared spectroscopy. *Applied Spectroscopy*. 60(10):1204-1209.

14. Guess, F.M., J.C. Steele, T.M. Young and R.V. León. 2006. Applying novel mean residual life confidence intervals. *International Journal of Reliability and Application*. 7(2):177-186.
15. Chen, W., R.V. León, T.M. Young and F.M. Guess. 2006. Applying a forced censoring technique with accelerated modeling for improving estimation of extremely small percentiles of strengths. *International Journal of Reliability and Application*. 7(1):27-39.
16. Guess, F.M., X. Zhang, T.M. Young and R.V. León. 2005. Using mean residual life functions for unique insights into strengths of materials data. *International Journal of Reliability and Application*. 6(2):79-85.
17. Gu, H., T.M. Young, W.W. Moschler and B.H. Bond. 2004. Potential sources of variation that influence the final moisture content of kiln dried hardwood lumber. *Forest Products Journal*. 54(11):65-70.
18. Wang, S., P.M. Winistorfer and T.M. Young. 2004. Fundamentals of vertical density profile formation in wood composites – Part 3. MDF density formation during hot-pressing. *Wood and Fiber Science*. 36(1):17-25.
19. Guess, F.M., D.J. Edwards, T.M. Pickrell and T.M. Young. 2003. Exploring graphically and statistically the reliability of medium density fiberboard. *International Journal of Reliability and Application*. 4(4):157-170.
20. Young, T.M. and F.M. Guess. 2002. Developing and mining higher quality information in automated relational databases for forest products manufacture. *International Journal of Reliability and Application*. 3(4):155-164.
21. Young, T.M. and F.M. Guess. 2002. A statistical analysis of tree-harvesting worker safety. *International Journal of Reliability and Application*. 3(2):59-79
22. Young, T.M. and P.M. Winistorfer. 2001. The effects of autocorrelation on real-time statistical process control with practical solutions for the forest products industry. *Forest Products Journal*. 51(12):70-77.
23. Wang, S., P.M. Winistorfer, T.M. Young, and C. Helton. 2001. Step-closing pressing of medium density fiberboard. Part 2: Influences on the panel performance and layer characteristics. *Holz als Roh-und Werkstoff*. 59(5):311-318
24. Wang, S., P.M. Winistorfer, T.M. Young, and C. Helton. 2001. Step-closing pressing of medium density fiberboard. Part 1: Influence on the vertical density profile. *Holz als Roh-und Werkstoff*. 59(1/2):19-26.
25. Young, T.M., P.M. Winistorfer and S. Wang. 1999. Multivariate control charts of vertical density profile attributes. *Forest Products Journal*. 49(5):79-86.
26. Young, T.M. and P.M. Winistorfer. 1999. Statistical process control and the forest products industry. *Forest Products Journal*. 49(3):10-17.
27. Winistorfer, P.M., T.M. Young and E. Walker. 1996. Modeling and comparing vertical density profiles. *Wood and Fiber Science*. 28(1):133-141.

28. Young, T.M. and F.M. Guess. 1994. Reliability processes and corporate structures. *Microelectronics and Reliability*. 34(6):1107-1119.
29. Idassi, J.O., T.M. Young, P.M. Winistorfer, D.M. Ostermeier and R.B. Woodruff. 1994. A customer-oriented marketing method for hardwood lumber companies. *Forest Products Journal*. 44(7/8):67-73.
30. Graveel, J.G., T.M. Young, M. Balbach, D.A. Munn and J.S. Panter. 1993. Journal of Natural Resources and Life Sciences Education: why the new title and scope? *Journal of Natural Resources and Life Sciences Education*. 22(2):81-86.
31. Young, T.M., D.M. Ostermeier, J.D. Thomas and R.T. Brooks. 1991. The economic availability of woody biomass for the Southeastern United States. *Bioresources Technology*. 37(1):7-16.
32. Young, T.M., D.M. Ostermeier and D.W. Domenech. 1988. Average wood chip trucking costs for the Southeastern United States. *Southern Journal of Applied Forestry*. 12(4):267-269.
33. Ostermeier, D.M., T.M. Young and L.A. Weaver. 1988. Fossil-fuel-using industries: their awareness and perceptions of wood energy. *Forest Products Journal*. 38(10):53-58.
34. Young, T.M. and D.M. Ostermeier. 1986. A survey of nonforest products industrial wood energy users. *Forest Products Journal*. 37(2):57-61.
35. Bongiorno, J.B. and T.M. Young. 1984. Statistical appraisal of timber with an application to the Chequamegon National Forest. *Northern Journal of Applied Forestry*. 1(4):72-76.

### **Refereed Proceedings**

1. Steele, J.C., F.M. Guess, T.M. Young and R.V. León. 2008. Modern developments and applications of mean residual life in engineering. *Indian Statistical Institute 75<sup>th</sup> Anniversary Handbook on Reliability and Quality Control*. Eds. Anis. Calcutta, India. *In Press*.
2. Young, T.M. and A.M. Taylor. 2007. Real-time statistical process control and components of variance systems for reducing lumber thickness variation in hardwood sawmills. *International Scientific Conference on Hardwood Processing, September 24-26, 2007 Quebec City, Canada*. Pages 171-180. Proceedings on-line at [www.ischp.ca/pdf/ISCHP\\_Proceedings.pdf](http://www.ischp.ca/pdf/ISCHP_Proceedings.pdf)
3. Taylor A.M., T.M. Young, C. Steiner and M.K. Jeong. 2007. Hardwood lumber manufacturing optimization using NIR spectroscopy. *International Scientific Conference on Hardwood Processing, September 24-26, 2007 Quebec City, Canada*. Pages 157-163. Proceedings on-line at [www.ischp.ca/pdf/ISCHP\\_Proceedings.pdf](http://www.ischp.ca/pdf/ISCHP_Proceedings.pdf)
4. Young, T.M. and P.M. Winistorfer. 1999. Advanced information technology and chip quality improvement. *TAPPI 1999 Pulping Conference*. 3:871-880.

## Proceedings

1. Young, T.M., Y. Wang, D.G. Hodges and F.M. Guess. 2008. Decision tree applications for forestry and forest products manufacturers. Proc. of 2008 Southern Forest Economics Workshop. Savannah, GA. Ed. Tommy Tye. Center for Forest Business, University of Georgia, Athens. *In Press*.
2. Young, T.M. and B.H. Bond. 2008. Applications of real-time statistical process control and other statistical methods for improved lumber drying quality. Proc. Quality Drying for the 21<sup>st</sup> Century: Energy and Market Realities. Bellingham, WA. November 15-17, 2006. Forest Products Society. Madison, WI. *In Press*.
3. Young, T.M. and T.G. Rials. 2005. Real-time statistical process control systems for sawmills. Proc. of the SawTech 2005. The 9th International Conference on Sawing Technology. Las Vegas, NV. p. 25-42.
4. Young, T.M., N. André and C.W. Huber. 2004. Predictive modeling of the internal bond of MDF using genetic algorithms with distributed data fusion. Proc. 8<sup>th</sup> European Panel Products Symposium. Llandudno, United Kingdom. p. 45-59.
5. Young, T.M. and C.W. Huber. 2004. Predictive modeling of the physical properties of wood composites using genetic algorithms with considerations for distributed data fusion. Proc. of the 38<sup>th</sup> International Particleboard/Composite Materials Symposium. Washington State University. Pullman, WA. p. 145-153.
6. Young, T.M. 2002. Statistical process control applications for pressline parameters and products. Composite Panels Association 2002 Pressline Technology Seminar Proceedings. Composite Panel Association. Gaithersburg, MD. p. 374-393.
7. Young, T.M., B.H. Bond and J. Wiedenbeck. 2002. Reducing lumber thickness variation using real-time statistical process control. Current Topics in the Processing and Utilization of Hardwood Lumber. Proc. of 30<sup>th</sup> National Hardwood Lumber Association Annual Meeting. Fall Creek Falls, TN. p. 103-113.
8. Young, T.M., B.H. Bond, P.M. Winistorfer and J.D. Cox. 2000. Statistical process control for sawmills. Proc. of the 28<sup>th</sup> Annual Hardwood Symposium. (West Virginia Now The Future for the Hardwood Industry?). National Hardwood Lumber Association. Canaan, WV. p. 31-42.
9. Young, T.M., P.M. Winistorfer and T.A. McKinney 1999. Continuous improvement strategies for MDF manufacture. Proc. of the 33<sup>rd</sup> International Particleboard Composite Materials Symposium. Washington State University. Pullman, WA. p. 67-77.
10. Young, T.M. and P.M. Winistorfer. 1998. Recovering more from your hardwood lumber: reducing thickness variation. Proc. of the 26<sup>th</sup> Annual Hardwood Symposium (Technology and Market Information for the Next Millennium). National Hardwood Lumber Association. Cashiers, NC. p. 109-120.
11. Young, T.M. 1997. Estimation of variance components using control charts with applications in MDF manufacturing. Proc. 3<sup>rd</sup> South Carolina Statewide Quality Conference. Myrtle Beach, SC.

12. Young, T.M. 1996. Process improvement through “real-time” statistical process control in MDF manufacture. Proc. of Process and Business technologies for the Forest Products Industry. Forest Products Society, Madison, WI. p. 50-51.
13. Young, T.M., D.M. Ostermeier, J.D. Thomas and R.T. Brooks. 1989. Economic availability of woody biomass fuel chips for 13 southeastern United States. Proc. International Energy Agency (Task VI, Activity 2, Integrated Harvesting Systems Workshop). New Orleans, LA. p. 45-60.
14. Young, T.M., D.M. Ostermeier and R.W. Mulach. 1989. Simulation of harvesting systems for economic supply models. Proc. (Task VI, Activity 3, Harvesting Small Trees and Forest Residues). Auburn, AL. p. 170-183.
15. Young, T.M., J.D. Thomas and D.T. Curtin. 1988. Industrial fuel-chip supply simulator (IFCHIPSS). Proc. Harvesting Machines and Systems Evaluation Workshop. Blacksburg, VA. p. 82-91.
16. Young, T.M., R.W. Mulach and D.M. Ostermeier. 1987. IFCHIPSS: Industrial Fuel Chip Supply Simulator - An overview of its structure. Proc. Ninth Annual Southern Forest Biomass Workshop. Gulfport, MS. p. 186-201.
17. Weaver, L.A. and T.M. Young. 1986. Market constraints to industrial wood energy use in the southeastern United States. Proc. Eighth Annual Southern Biomass Research Conference. Knoxville, TN. p. 133-145.
18. Young, T.M. 1985. A market segmentation strategy for the industrial wood energy market. Proc. 15<sup>th</sup> Annual Southern Forest Economic Workshop. Athens, GA. p. 90-100.
19. Young, T.M., D.M. Ostermeier and D.F. Walsh. 1985. Energy market assessment for woody biomass. Proc. Energy from Biomass: Building on a Generic Technology Data Base. Argonne National Laboratory Pub. ANL/CNSV-TM-157. Argonne, IL. p. 223-234.
20. Young, T.M. and D.M. Ostermeier. 1984. Information sources available for evaluating changes in forest land ownership and forest land use. Proc. 14<sup>th</sup> Annual Southern Forest Economics Workshop. Memphis, TN. p. 131-142.

### **Technical Abstracts without Proceedings**

1. Young, T.M. 2008. Regression tree models of the strength properties of oriented strand board (OSB) using real-time industrial data. OSB World Symposium IV. April 28-30, 2008. Structural Board Association. San Antonio, TX.
2. Young, T.M. 2008. Regression tree models of the strength properties of engineered wood panels using real-time industrial data. 42<sup>nd</sup> International Wood Composites Symposium and Technical Workshop. April 1-2, 2008. Washington State University. Seattle, WA.
3. Guess, F.M., J.C. Steele, T.M. Young and R.V. León. 2008. Modern developments and applications of mean residual life and engineering. International Conference on Present Practices and Future Trends in Quality and Reliability. Eds. Anis. Calcutta, India. January 22-25.

4. Guess, F.M., J.C. Steele, T.M. Young and R.V. León. 2008. Applying novel mean residual life confidence intervals. International Conference on Present Practices and Future Trends in Quality and Reliability. Eds. Anis. Calcutta, India. January 22-25.
5. Young, T.M. and A.M. Taylor. 2007. Target size and sawing variation reduction. Remaining Competitive in Hardwood Lumber Production. Princeton, WV. [www.cpe.vt.edu/rchlp/index.html](http://www.cpe.vt.edu/rchlp/index.html). (invited).
6. Perhac, D.G., T.M. Young, F.M. Guess and R.V. León. 2007. Exploring reliability of wood-plastic composites: stiffness, tensile, and flexural strengths. June 11. 61<sup>st</sup> Forest Products Society International Meeting.
7. Young, T.M. 2006. Quality control for the wood composite industry. 2006. Forest Products Society Mid-South Section Annual Meeting, March 27-28. Nacogdoches, TX. (invited).
8. André, N., T.M. Young and T.G. Rials. 2006. On-line buffer capacity prediction of particleboard furnish by near infrared (NIR) spectroscopy. 60<sup>th</sup> Forest Products Society International Meeting. June 25-28. Newport Beach, CA.
9. Kim, H., F.M. Guess and T.M. Young. 2006. Using data mining tools of decision trees in quality and reliability applications – brief example for modern engineered wood. 2006 Joint Research Conference on Statistics in Quality, Industry and Technology. June 7-9. Knoxville, TN. (invited).
10. Bensmail, H., L. Shaffer and T.M. Young. 2006. Using software R for statistical and reliability analysis of the internal bond of medium density fiberboard. 60<sup>th</sup> Forest Products Society International Meeting. June 25-28. Newport Beach, CA.
11. Rials, T.G., N. André and T.M. Young. 2006. Monitoring wood composites manufacture using near infrared spectroscopy. 33<sup>rd</sup> Annual FACSS Conference. September 24-28. Lake Buena Vista, FL. (poster)
12. Chen, W., R.V. León, F.M. Guess and T.M. Young. 2005. Applying the forced censoring technique to accelerated modeling for better and less expensive estimation of extremely small percentiles of strengths. SAS/JMP User Conference Annual Meeting, June 7-8. Cary, NC. (poster)
13. Guess, F.M., R.V. León, W. Chen and T.M. Young. 2005. Forcing a closer fit in the lower tails of a distribution for better estimating extremely small percentiles of strengths. 59<sup>th</sup> Forest Products Society International Meeting. June 19-22. Québec City, Canada.
14. Kim, J., F.M. Guess, and T.M. Young. 2005. Using data mining tools of decision trees in reliability applications. 58<sup>th</sup> Forest Products Society International Meeting. June 30. Grand Rapids, MI.
15. Young, T.M. 2003. Forest products priorities for the future, Oct. 28-29. U.S. Forest Service Conference, Forest Products Laboratory. Madison, WI. (poster).
16. Young, T.M. 2003. Forest products in Tennessee. Governor's Conference on Economic Development, Sept. 3-4. Nashville, TN. (poster).

17. Young, T.M. 2003. Real-time predictive statistical modeling of the internal bond of medium density fiberboard (MDF) using commercial database platforms. IUFRO AI Division 5 Conference. Rotorua, New Zealand. (invited).
18. Edwards, D.J., F.M. Guess and T.M. Young. 2003. Improving and managing information quality in forest products. 8<sup>th</sup> International Conference on Information Quality (ICIQ). Massachusetts Institute of Technology Sloan School of Management. Boston, MA.
19. Kim, H., F.M. Guess and T.M. Young. 2003. Using data mining tools of decision trees in reliability Applications. International Workshop on Reliability and its Applications. Seoul, Korea.
20. Boston, C.E. and T.M. Young. 2003. Statistical failure models for the internal bond of medium density fiberboard. 57<sup>th</sup> Forest Products Society International Meeting. Seattle WA.
21. Gu, H., T.M. Young, W.W. Moschler and B.H. Bond. 2003. Potential sources of variation that influence the final moisture content of kiln dried hardwood lumber. 57<sup>th</sup> Forest Products Society International Meeting. Seattle WA. (poster)
22. F.M. Guess, T.M. Pickrell, T.M. Young and D.J. Edwards. 2003. Statistical reliability analysis of the internal bond of medium density fiberboard. 57<sup>th</sup> Forest Products Society International Meeting. Seattle WA. (poster).
23. van Houts, J., and T.M. Young. 2003. Advanced information technology systems for predictive modeling of wood composite properties. 57<sup>th</sup> Forest Products Society International Meeting. Seattle WA.
24. Young, T.M. 2002. Statistical process control applications for pressline parameters and products. 2002 Composite Panels Association Pressline Seminar Series. Composite Panel Association. Gaithersburg, MD. Three presentations at in: Charlotte, NC; Portland, OR; and Ottawa, Ontario. (invited).
25. Young, T.M. 2002. Real-time modeling of the internal bond of medium density fiberboard (MDF) using commercial software and database platforms. 6<sup>th</sup> European Panel Products Symposium. Llandudno, United Kingdom.
26. Young, T.M. 2002. Developing and mining higher quality information in automated relational databases for forest products manufacturers. C. Warren Neel Conference on Statistical Data Mining & Knowledge Discovery. Knoxville, TN. p. 25. (invited).
27. Rials, T.G. and T.M. Young. 2002. Efficient resource utilization through statistical process control in the forest products industry. Agriculture and Food Science in the 21<sup>st</sup> Century. A University Science Exhibit on Capitol Hill. Washington, D.C. (poster)
28. Young, T.M. and C.H. Huber. 2001. Modeling the core temperature gradient of MDF with control limits for data signatures. 35<sup>th</sup> International particleboard/Composite Materials Symposium. Washington State University. Pullman, WA. p. 183 (invited)
29. Young, T.M. and C.H. Huber. 2001. Process modeling of internal bond in MDF manufacture. Forest Products Society 55<sup>th</sup> International Meeting. Baltimore, MD. June 26. p. 56 (invited).

30. Young, T.M. and T.N. Williams. 2001. A modified six-sigma approach to improving the quality of hardwood flooring. Forest Products Society 55<sup>th</sup> International Meeting. June 25. Baltimore, MD.
31. Young, T.M. 2000. Advanced information technology for MDF manufacture. Forest Products Society 54<sup>th</sup> International Meeting. Lake Tahoe, NV. (invited).
32. Young, T.M. 2000. Statistical process control applications for improving chip quality using human machine interface technology. Summer 2000 Meeting of TAPPI MOTAG South. Atlanta, GA. (invited).
33. Young, T.M. and P.M. Winistorfer and C.H. Huber. 2000. Process modeling of internal bond in MDF manufacture. 34<sup>th</sup> International Particleboard/Composite Materials Symposium. Washington State University. Pullman, WA. (invited).
34. Young, T.M., P.M. Winistorfer and B.H. Bond. 1999. Human machine interface platforms for statistical process control in hardwood lumber manufacture. 53<sup>rd</sup> International Meeting of the Forest Products Society. Boise, ID.
35. Nieh, W.L.S., H.J. Kennedy, E. Walker and T.M. Young. 1995. Statistical analysis of the effects of face resin gel time on particleboard properties - a plant case. Proc. of the 29<sup>th</sup> International Particleboard/Composite Materials Symposium. Washington State University. Pullman, WA. (poster)
36. Winistorfer, P.M., T.M. Young and E. Walker. 1994. Modeling and comparing vertical density profiles. Proc. of the 28<sup>th</sup> International Particleboard/Composite Materials Symposium. Washington State University. Pullman, WA. (poster)

#### **Trade Journals**

1. Léon, R.V., F.M. Guess and T.M. Young. 2005. "JMP" into stats at the University of Tennessee at Knoxville. JMPer Cable. 19:7-8. Cary, NC
2. Young, T.M. 2000. The Tennessee Quality Lumber Initiative (TQLI). Article on front cover of the Hardwood Research Bulletin. No. 512, January 2000. National Hardwood Lumber Association. Memphis, TN. p1.
3. Young, T.M. 1999. Applying statistical process control to reduce hardwood lumber thickness target sizes. National Hardwood Lumber Association Newsletter. No. 501. December. p1.
4. Young, T.M. 1999. Efficiency technique hews new niche. InSites. 6(2):6-7.
5. Young, T.M. 1999. Tennessee Quality Lumber Initiative. National Hardwood Lumber Association Newsletter. No. 501. January. p1.
6. Young, T.M., D.M. Ostermeier, J.D. Thomas and R.T. Brooks, Jr. 1991. Computer model simulates supply, cost of chips. Forest Industries. 118(8): 20-21.
7. Wells, G.R., T.M. Young and K. Hoyt. 1989. Referrals to consulting foresters: policies of forestry agencies of seven states in the Tennessee Valley. The Consultant. 34(3):67-69.

## **Final Reports**

1. André, N., T.M. Young and C.W. Huber. 2008. Real-time prediction of buffer capacity and formaldehyde (HCHO) emissions of medium density fiberboard (MDF) using real-time near infrared (NIR) spectroscopy. The University of Tennessee and Georgia-Pacific Chemicals, LLC. *In Press*.
2. Dawson, C., J. Allen, Jr. and T.M. Young. 2006. MIGANN ver 1.0 machine intelligence genetic algorithm neural network system for the engineered wood industry. USDA SBIR Phase-I Final Report. 111p. with video DVD of system. Washington, D.C.
3. Young, T.M., C.W. Huber and J. van Houts. 2006. EWood version 3.0. A statistical process modeling system for optimizing the product quality of manufactured wood composites. The University of Tennessee and Georgia-Pacific Resins, Inc. 101p.
4. Young, T.M., C.E. Pope and S. Peskar. 2004. Tennessee Quality Lumber Initiative (TQLI). Reducing lumber thickness variation using wireless technology with real-time statistical process control. Final report for contract R112219-079. 212p.
5. Young, T.M., J. van Houts and C.E. Pope. 2003. Predictive modeling of the internal bond of medium density fiberboard (MDF). Georgia-Pacific Resins, Inc. Atlanta, GA.
6. Young, T.M., J. van Houts, R. Springer and M. Looslie. 2002. Tennessee Quality Lumber Initiative (TQLI) – Reducing lumber thickness variation and targets using real-time statistical process control. Final Report for Boise Corporation (Contract R112218-080) and The University of Tennessee Special Wood Utilization Grant (R112218-054). 203p.
7. Young, T.M., B.H. Bond, C. Boston, J. Wiedenbeck, R. James and S. Morgan. 2002. Tennessee Quality Lumber Initiative (TQLI) – Reducing lumber thickness variation and targets using real-time statistical process control. Final Report for Anderson-Tully Corporation (R112219-10) and U.S. Forest Service (Contract R112218-089) and The University of Tennessee Special Wood Utilization Grant (R112218-054). 282p.
8. Young, T.M., R. Shaw and J. Peterson. 2001. Tennessee Quality Lumber Initiative (Boise Cascade Corporation) – Phase I, reducing lumber target sizes and thickness variation for softwood lumber. Final Report for Boise Cascade Corporation (Contract R112218-80) and The University of Tennessee Special Wood Utilization Grant (R112218-54). 54p.
9. Buggeln, R. and T. Young. 2001. Wood waste generation by secondary wood products manufacturers. The University of Tennessee, Center for Industrial Services. Knoxville, TN. 26p.
10. Young, T.M., P.M. Winistorfer and J.D. Cox. 2000. Tennessee Quality Lumber Initiative (TQLI) – Phase I: reducing lumber target sizes using real-time statistical process control. Final Report for Wood Utilization Special Research Grant R112218-054. 124p.

11. Winistorfer, P.M., T.M. Young, and D.M. Ostermeier. 1993. The application of statistical process control to the logging industry. Final Report for American Pulpwood Association Timber Harvesting and Transportation Safety Foundation. 51p.
12. Young, T.M. and D.M. Ostermeier. 1989. IFCHIPSS – The Industrial Fuel Chip Supply Simulation Model. Final Report for Contract with Southeastern Regional Biomass Energy Program as administered by the Tennessee Valley Authority. 141p.
13. Young, T.M. and D.M. Ostermeier. 1986. Analyzing market constraints in woody Biomass energy production. Final Report for Contract TV-64566A through the Southeastern Regional Biomass Energy Program as administered by the Tennessee Valley Authority. 172p.

### **KEYNOTE PRESENTATIONS**

1. Young, T.M. 2005. Louisiana-Pacific Corporations Annual Quality Meeting, April 12-13. Nashville, TN.
2. Young, T.M. and F.M. Guess. 2005. SAS/JMP User Conference Annual Meeting, June 7-8. Cary, NC.
3. Young, T.M. 2004. TECO Industry Advisory Council Meeting. March 7. Fort Lauderdale, FL.
4. Young, T.M. 2002. An introduction to statistical process control (SPC) as applied to sawmills. Virginia Forest Products Association, 44<sup>th</sup> Annual Convention. Williamsburg, VA.
5. Young, T.M. 2002. Successful applications of real-time statistical process control. American Society of Quality, 9<sup>th</sup> Annual Spring Quality Conference. Boise State University. Boise, ID.
6. Young, T.M. 2002. An introduction to statistical products control in hardwood flooring manufacture. Armstrong Industries. August 1. Nashville, TN.

### **M.S. Theses Directed**

- Perhac, D.G. 2007. An applied statistical reliability analysis of the modulus of elasticity and modulus of rupture for wood-plastic composites. M.S. Thesis. The University of Tennessee. Knoxville. 102p. (download at <http://www.spcforwood.com>)
- Shaffer, L.B. 2007. Examining regression analysis beyond the mean of the distribution using quantile regression. M.S. Thesis. The University of Tennessee. Knoxville. 94p. (download at <http://www.spcforwood.com>)
- Wang, Y. 2007. Reliability analysis of oriented strand board's strength with a simulation study of the median censored method for estimating of lower percentile strength. M.S. Thesis. The University of Tennessee. Knoxville. 85p. <http://www.spcforwood.com>)
- Steele, J.C. 2006. Function domain sets confidence intervals for the mean residual life function with applications in production in medium density fiberboard. M.S. Thesis. The University of Tennessee, Knoxville. 108p.

- Chen, W. 2005. A reliability case study on estimating extremely small percentiles of strength data for the continuous improvement of medium density fiberboard product quality. M.S. Thesis. The University of Tennessee, Knoxville. 69p.
- Edwards, D.J. 2004. An applied statistical reliability analysis of the internal bond of medium density fiberboard. M.S. Thesis. The University of Tennessee, Knoxville. 123p.
- Williams, T.N. 2001. A modified six-sigma approach to improving the quality of hardwood flooring. M.S. Thesis. The University of Tennessee, Department of Forestry, Wildlife & Fisheries. 190p.