

JAMES L. SIMONTON, Ph.D., P.E.

Clinical Associate Professor

Program Coordinator

Engineering Management

University of Tennessee Space Institute, Tullahoma, TN 37388

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EDUCATION

Ph.D. Industrial Engineering	Texas Tech University	2004
M.S. Systems and Engr. Mgt.	Texas Tech University	2001
B.S. Textile Technology & Mgt.	Texas Tech University	1979

EXPERIENCE

Teaching

University of Tennessee Space Institute	Associate Professor Program Director	February 2012 To Present
Texas Tech University	Assistant Professor	Sept. 2005- January 2012
	Visiting Assistant Professor	January 2005- August 2005

Industrial/Research

International Textile Center Lubbock, TX	Engineer/Researcher	March 1997- January 2005
Lindale Manufacturing Lindale, GA	Production Superintendent	January 1994- March 1997
Motorola Seguin, TX	Senior Maintenance Engineer	April 1993- January 1994
West Point Pepperell New Braunfels, TX	Weave Room Superintendent	August 1991- April 1993
	Plant Technical Assistant	May 1989- August 1991

	Industrial Engineer	February 1988- May 1989
Collins and Aikman Clinton, OK	Facilities Engineer	March 1985- February 1988
West Point Pepperell New Braunfels, TX	Management Positions	May 1979- February 1985

STATE IN WHICH REGISTERED

Texas # 99768

CURRENT INDUSTRIAL ACTIVITIES

Board of Directors: Agricultural Bioenergy Products LLC (Founding Member and CEO)

Board of Directors: Biosynergies LLC (Founding Member)

Board of Directors: 4A Technologies LLC (Founding Member)

PATENTS

International PCT Application: PCT/US09/53547 61/088,178 MODULARIZED UREA PRODUCTION USING A BIOMASS FEEDSTOCK, Filed 8/12/2008: Terry R. Collins, James L. Simonton, and Mario G. Beruvides

Provisional U.S. Patent: 61/088,178 MODULARIZED UREA PRODUCTION USING A BIOMASS FEEDSTOCK, Filed 8/12/2008: Terry R. Collins, James L. Simonton, and Mario G. Beruvides

International PCT Application: PCT/US10/45324 MODULARIZED SYSTEM AND METHOD FOR UREA PRODUCTION USING STRANDED NATURAL GAS, Filed 10/12/2010, Terry R. Collins, James L. Simonton, and Mario G. Beruvides

Provisional U.S. Patent: 61/088,253 SYSTEM, METHOD AND APPARATUS FOR PRODUCING FERTILIZER AND/OR MIXED FUELS, Filed 8/12/2008: James L. Simonton, Jesse Lozada Jr., Terry R. Collins, and Mario G. Beruvides

RESEARCH ACTIVITIES

Active Projects

“System Dynamic Model (SDM) for High Reliability Organizations” McElwain, K. *, Simonton, J., and Beruvides, M. Department of Defense, \$109,441

2011 Submitted Projects

Phase I: “Feasibility and Design of Urea Fertilizer Plants in Ecuador” Ministry of Industries, Ecuador , James Simonton, \$344,22 11/10/2011(award date 12/3/2011)

Related submissions in process

Phase II: “Feasibility Study for the Implementation of Bio-Mass to Fertilizer in Ecuador” Ministry of Industries, Ecuador, Simonton, J. and Beruvides, M. \$1,300,000

“Bio-mass Utilization in Ecuador and Other Developing Countries,” USAID, USDA, Simonton, J. \$500,000 (related to the Ecuadorian Award)

Completed Projects

“Development of Project Management Option for the M.S. in Systems and Engineering Management” Distance Education Enrollment Enhancement Working Group, October 10, 2008 – August 15, 2009, \$18,000 (Smith, M. Farris, J. and Simonton, J.)

“Quantifying the Purchasing Power of Public Transportation in Texas“ TxDOT, RMC-6194. September 1, 2008 – August 31, 2009, \$120,308 (Cherrington, L. (Tx A&M) Simonton, J., and Beruvides, M.)

“CELDI: Human Interaction in Logistics Systems- Supplement,” NSF I/UCRC Program, NSF01-116 EEC-I/UCRC, October 1, 2007 - September 31, 2008, \$13,892 (T. Matis, J.L. Simonton).

“Economic Feasibility of Cottonseed Oil Based Bio-Diesel,” International Cotton Research Center (ICRC) funded by the USDA-CSREES Year 2, September 1, 2007 - August 30, 2008, \$20,764 (J. Simonton).

“Operational Grant for Center for Engineering Logistics and Distribution,” NSF I/UCRC Program, NSF01-116 EEC-I/UCRC, September 1, 2005 - August 31, 2010, \$87,500 (T. Matis, S. Liman, J. Burns, and J. Simonton).

“Utilizing Agricultural Biomass in Energy Production and Economic Development,” State Energy Conservation Office (SECO), October 1, 2006 - September 30, 2008, \$136,529 (C. Fedler, C. Lyford, M. Beruvides, and J. Simonton).

“Public Transportation Maintenance Knowledge and Resource Sharing Project,” Texas Department of Transportation, March 15, 2007 - January 31, 2008, \$395,000 (M. Beruvides, P. Nash, and J. Simonton).

“Economic Feasibility of Cottonseed Oil Based Bio-Diesel,” International Cotton Research Center (ICRC) funded by the USDA-CSREES, September 1, 2006 - August 30, 2007, \$89,464 (T. Collins and J. Simonton).

“Economic Analysis and Feasibility of Cottonseed Oil as a Bio-Diesel Feed Stock,” NCPA/PYCO Industries, CELDi - TTU 05:02, January 1, 2006 - December 2006, \$50,000 (T. Collins and J. Simonton).

“Feasibility of Gin Waste Hydro-Mulch and Cottonseed Based Bio-Diesel,” Cotton Incorporated, January 1, 2006 - December 31, 2006, \$15,000 (T. Collins and J. Simonton).

“Utilization of Ginned Fiber for the Examination of White Speck Content in Texas Cotton,” International Cotton Research Center (ICRC) Phase II funded by the USDA-CSREES, September 1, 2005-August 31, 2006, \$56,980 (M.G. Beruvides and J.L. Simonton).

“Utilization of Ginned Fiber for the Examination of White Speck Content in Texas Cotton,” International Cotton Research Center (ICRC) Phase I funded by the USDA-CSREES, September 1, 2004 - August 31, 2005, \$53,521 (M.G. Beruvides and J.L. Simonton).

“Development of New Product, Blends, Treatments, and Fabric Construction, Which Emphasize Texas Natural Fibers,” Texas Food and Fiber Commission, September 1, 2003-August 31, 2004, \$45,000 (J.L. Simonton).

“Economic Feasibility of Manufacturing Fuel Pellets from Cotton By-Products,” Small Business Innovation Research funded by the USDA, May 15, 2003-November 30, 2003, \$75,000 (M.G. Beruvides, G. Holt, and J.L. Simonton).

“Development of Test Methodology for Systemic Exploration of Immature Fiber Content in Texas Cotton,” Advance Research Project funded by Texas Higher Education Coordinating Board, January 1, 2002-December 31, 2003, \$142,496 (J.L. Simonton and M.G. Beruvides).

“Investigation of Cotton Processing to Remove Neps, Immature Fibers and Short Fibers,” Texas Food and Fiber Commission, September 1, 2001-August 31, 2002, \$50,000 (J.L. Simonton).

“Development and Evaluation of Measurements of Properties of Fibers, Yarn, and Fabrics,” Texas Food and Fiber Commission, September 1, 2001-August 31, 2002, \$52,500 (J.L. Simonton).

“Development and Evaluation of Measurements of Properties of Fibers, Yarn, and Fabrics,” Texas Food and Fiber Commission, September 1, 2000-August 31, 2001, \$30,000 (J.L. Simonton).

PUBLICATIONS

Journal Articles in Preparation

“A Case Study of Cooperative Purchasing Programs in Transportation” Ng, E., Beruvides, M., Simonton, J.

“Lean Principles Applied to Hospitality Services at a State University” Velusamy, S *. and Simonton, J. 5/2011

“Performance Testing of Biodiesel Manufactured from Cotton Seed Oil” Collins, T., Holt, G., Simonton, J., Buser, M., and Jones, K. 5/2011

“Comparison of Biomass Gasification for Electricity in G-20 Countries” Chaivichitmalakul, S *, Simonton, J.

Journal Publications Submitted in Review

“Regional Maintenance Center: An Analysis of Existing Literature and State-of-the-Art Matrix Analysis” Beruvides, M., Simonton, J. Ng, E., and Peimbert-Garcia, R. (Engineering Management Journal Special Transportation Edition)

“A Case Study of Cooperative Purchasing Programs in Transportation Organizations” Beruvides, M., Simonton, J., Waters, N., Palikhe, H, and Chaivichitmalakul, S. *Journal of Public Transportation* (9/21/2011)

“Enhancing Performance Through Statistical Analysis: A Case Study in Glass Industry”, Castillo, K.*, Smith, N., and Simonton, J. (2010) *Engineering Management Journal*, Submitted 4/26/2010 EMJ-S-10-00045 “A Model for Supply Chain Design Considering the Cost of Quality” Castillo, K.*, Smith, N., and Simonton, J. (2010) *Applied Mathematical Modeling, Simulation and Computation for Engineering and Environmental Systems* (2/19/2011)

“Performance Testing of Biodiesel Manufactured from Cotton Seed Oil” Collins, T, Holt, G., Simonton, J., Buser, M., and Jones, K. (2010) *Journal of Cotton Science*, 1/15/2010

Journal Publications Accepted into Press

"The Impact of the Cost of Quality on Serial Supply Chain Network Design" by Castillo-Villar, Krystal; Smith, Neale; Simonton, James, *International Journal of Production Research* TPRS-2011-IJPR-0846.R1

“A Strategic Model for Serial Supply Chain Network Design Including Quality” Castillo, K.*, Smith, N., and Simonton, J. *International Journal of Production Research* TPRS-2011-IJPR-0846 (10/20/2011)

“The Economic Cost of Quality for Green Manufacturing: A Life Cycle Assessment Approach” Chiu-Wei, C, Beruvides, M., and Simonton, J. *The International Journal of Life Cycle Assessment* (8/18/2011)

“Heuristic Procedure for a Combinational Optimization Problem in Supply Chain Design Incorporating Cost of Quality” Castillo, K.*, Smith, N., and Simonton, J. (2011) *International Journal of Biomedical Soft Computing and Human Sciences*

Journal Publications

- “An Analysis of the Viability of Cottonseed Oil Based Biodiesels: A Cost Modeling Perspective”, Simonton, J., Collins, T., Holt, G., and Beruvides, M. (2011), *American Society of Engineering Management: Engineering Management Journal, Engineering Management Journal*, Volume 23, Issue 3
- “Evaluation of Select Equipment Sequences for Optimal Fiber Recovery from Stripper Harvested Cotton” Holt, G., Simonton, J., Wanjura, J., Knabb, C., and Pelletier, M. (2011) *Journal of Cotton Science*, 15:1-9
- “Site Assessment Instrument for Regional Maintenance Center”, Beruvides, M. Simonton, J, Ng, E. (2010), *Journal of Public Transportation*, Volume 13, No.1, pp 39-54
- “The Concept of a Regional Maintenance Center”, Waters, N., Beruvides, M., Simonton, J. Ng, E. (2009), *Journal of Public Transportation*, Volume 12: 105-118
- “Multi Scenario Pellet Fuel Manufacturing Operation Utilizing Cotton Waste”, Simonton, J.L., Holt, G.A., Beruvides, M.G., and Barroso, L.A. (2008), *Journal of Cotton Science*. Volume 12: 138-142
- “Pilot Study to Examine The Relationship Between AFIS Fiber Properties And White Speck Occurrence” Originally published in *Journal of Cotton Science*. Volume 11: 159-167 (2007), Republished in *Fibre 2 Fashion* (2008) (Altintas, P.Z., Simonton, J.L., and Beruvides, M.G.)
- “Multi Scenario Pellet Fuel Manufacturing Operation Utilizing Cotton Waste”, *Journal of Cotton Science*. Simonton, J.L., Holt, G.A., Beruvides, M.G., and Barroso, L.A. (2007). Volume 12: 138-142
- “Pilot Study to Examine The Relationship Between AFIS Fiber Properties And White Speck Occurrence” *Journal of Cotton Science*. Volume 11: 159-167, (2007). (Altintas, P.Z.*, Simonton, J.L., and Beruvides, M.G.)
- “Expert and Novice Operator Comparison with Scanner Based Image Analysis for White Speck Detection on Dyed Yarn,” *Journal of Cotton Science*, Vol. 9:110-114, 2005 (J.L. Simonton and M.G. Beruvides).
- “White Speck Quantification: A Human Inspection Technique,” *Journal of Cotton Science*, Vol. 8, pg. 205-212, 2004 (J.L. Simonton, M.G. Beruvides, and M.D. Etheridge).
- “Utilization of Cotton Gin By-Products for the Manufacturing of Fuel Pellet: An Economic Perspective,” *Journal of the Applied Engineering in Agriculture*, Vol. 20, No. 4, pg. 423-430, 2004 (G. Holt, J.L. Simonton, A. Canto, and M.G. Beruvides).
- “Engineering Economic Analysis of a Cotton By-Product Fuel Pellet Operation,” *Journal of Cotton Science*, Vol. 7, pg. 205-216, 2003 (G. Holt, J. Simonton, M. Beruvides, and A. Canto).

“Texas Trooper Uniforms: Assessment of Fabrics, Comfort, and Wear,” *Family and Consumer Sciences Research Journal*, 2002 (P.E. Horridge, D.K. Caddel, and J.L. Simonton).

TECHNICAL PUBLICATIONS

Technical Report, “Quantifying the Purchasing Power of Public Transportation in Texas”
Beruvides and Simonton, RMC 0-6194 Sponsored by Texas Department of Transportation

Technical Report, “Utilizing Agricultural Biomass in Energy Production and Economic Development”, Fedler, C., Hanson, J., Beruvides, M., Simonton, J. and Lyford, C. Contract Number CM707 State Energy Conservation Office

Technical Report “Public Transportation Maintenance Knowledge and Resource-Sharing Project (Regional Maintenance Project)”, Beruvides, Nash, and Simonton, Interagency Cooperation Contract Number 51-7XXIA006 Sponsored by Texas Department of Transportation (Public Transportation Division)

Technical Report “Fiber and Spinning Performance Test on Texas’ Commercial Cotton Crop,” Texas Food and Fiber Commission, Austin, TX, 2001 (E. Hequet, D. Ethridge, J. Simonton, and P. Williams).

Technical Report “Development and Evaluation of Measurements of Properties for Fibers, Yarns, and Fabrics,” Texas Food and Fiber Commission, 2001 (E. Hequet, S.S. Ramkumar, J. Simonton, and D. Ethridge).

OTHER PUBLICATIONS

“Renewed Focus on Neps,” *Textile Topics*, Lubbock, TX, 2004 (M.D. Ethridge and J.L. Simonton).

“Evaluation of Dyed Cotton Yarn for Measuring White Specks,” *Textile Topics*, Lubbock, TX, 2001 (J.L. Simonton).

(* - denotes my Ph.D. student)

PEER REVIEWED CONFERENCE PUBLICATIONS

“High Reliability Operations: Systems Dynamic and Economic Analysis Modeling of B&W Pantex Plant High Explosive Operations”, McElwain, K. * , Bromley, M., Simonton, J., and Beruvides, M. ASEM Conference. Lubbock, Texas (Fall 2011)

- “Enhancing Performance Through Statistical Analysis: A Case Study in the Glass Industry”
Castillo, K.*, Smith, N., and Simonton, J. ASEM Conference. Lubbock, Texas (Fall 2011)
- “A Case Study Questionnaire of Cooperative Purchasing Programs in Transportation”,
Simonton, J., Beruvides, M., Waters, N., Chaivichitmalakul, S., and Palikhe, H. Proceedings
of the ASEM Conference. Fayetteville, Arkansas (Fall 2010)
- “Green Manufacturing: A Discussion of Environmental Performance Evaluation”, Chi-Wei, C.*,
Beruvides, M., and Simonton, J. Proceedings of the ASEM Conference. Fayetteville,
Arkansas (Fall 2010)
- “Toward Integrating Cost of Quality in Supply Chain Network Design” Castillo, K.*, Smith, N.,
and Simonton, J. Proceeding of the IERC, June 2010, Cancun, Mexico (Spring 2010)
- “Cost of Quality: Interdisciplinary Cooperation Between Accounting and Quality Functions”,
Castillo, K.* and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall
2009)
- “Performance Improvement in the Glass Melting Process Through Statistical Analysis”, Castillo,
K.* and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall 2009)
- “A Systemic Approach to Economic Stimulus from an Engineering Management Perspective,”
Jones, J.* and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall
2009)
- “Approximation of Operational Quality Cost in Organizations,” Cheng-Chu *, Beruvides, M.,
and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall 2009)
- “Theoretical Analysis of Green Strategies in Manufacturing Industries”, Cheng-Chu *,
Beruvides, M., and Simonton, J., IERC Conference, Miami, Florida (May 2009)
- “Rural Transit Regional Maintenance Center Economic Modeling,” Beruvides, M., Simonton, J.,
Ng, E., Chaivichitmalakul, S., and Waters, N.. Proceedings of ASEM Conference West Point,
New York, November 11-15, 2008
- “The Modification of Eco-Efficiency Indicators with Embedded Eco-Indicators and Cost of
Quality” Cheng-Chu *, Beruvides, M., and Simonton, J. (2008) Proceedings of IIE
Conference, Vancouver, Canada (May 2008)
- “Conceptual Model for Cost of Quality in Green Manufacturing”, Cheng-Chu *, Beruvides, M.,
and Simonton, J (2007) Proceedings of the ASEM Conference, Chattanooga, TN (Fall 2007)
- “Cost of Quality Analysis of Cotton Fiber to Fabric Systems”. Altintas, P. *, Beruvides, M., and
Simonton, J. (2007) Proceedings of the ASEM Conference, Chattanooga, TN (Fall 2007)
- “Cost Modeling of Cottonseed Oil Based Bio-diesel,” IERC, Chattanooga, TN, May 20, 2007,
(J.L. Simonton, T. Collins, and J. Jones)

- “An Approach for an Operational Definition of Excessive Landscape Irrigation Runoff to Improve Water Policies,” ICASALS Conference, Lubbock, TX, November 16, 2006, (L.A. Barroso *, M.G. Beruvides, J.L. Simonton, and J.R. Merriott).
- “Preliminary Study Examining a Systemic Approach to Recycling Water and Biomass for Rural Economic Development,” ICASALS Conference, Lubbock, TX, November 16, 2006 (P.Z. Altintas *, J. Hanson, L.A. Barroso, M.G. Beruvides, C.B. Fedler, and J.L. Simonton).
- “Pilot Study to Examine the Relationship Between AFIS Fiber Properties and White Speck Occurrence,” *Proceedings of the Beltwide Cotton Conference*, January, 2006 (P.Z. Altintas *, J.L. Simonton, and M.G. Beruvides).
- “Effects of Aggressive Card Treatments,” *Proceedings of the Beltwide Cotton Conference*, January, 2006 (L.A. Barroso *, J.L. Simonton, and M.G. Beruvides).
- “Application of Engineering and Management Principles to Improve Cotton’s Position as a Quality Raw Material,” *Proceedings of the ASEM Conference*, 2005 (J.L. Simonton and M.G. Beruvides).
- “Multi-Scenario Case Study of a Fuel Pellet Manufacturing Operation Utilizing cotton Waste,” *Proceedings of the Beltwide Cotton Conference*, 2004 (G. Holt, J.L. Simonton, A. Canto, D. Chui, P. Altintas, A.S. Sandoval, and M.G. Beruvides).
- “Feasibility Study for Constructing and Operating a Facility to Manufacture Fuel Pellets from Cotton By-Products,” *Journal of the American Society of Agricultural Engineers*, Paper #031165, 2003 (G. Holt, J. Simonton, M. Beruvides, and A. Canto).
- “Economic Feasibility of Manufacturing Fuel Pellets from Cotton By-Products,” *Proceedings of the Beltwide Cotton Conference*, 2003 (G. Holt, J.L. Simonton, A. Canto, and M. G. Beruvides).
- “Effect of Textile Treatments on White Speck Counts in Dyed Yarns,” *Proceedings of the Beltwide Cotton Conference*, 2003 (J.L. Simonton, M.G. Beruvides, P.Z. Altintas, and K. Kang).
- “Quantification of White Specks,” *Proceedings of the Beltwide Cotton Conference*, 2002 (J.L. Simonton, M.G. Beruvides, and M.D. Ethridge).
- “A Pilot Study: Using Dyed Cotton Yarn for the Quantification of White Specks,” *Proceedings of the Beltwide Cotton Conference*, 2001 (J.L. Simonton, E.F. Hequet, and M. G. Beruvides).
- “Effect of Cotton Preparation on AFIS and HVI Measurements,” *Proceedings from the Beltwide Cotton Conference*, 2000 (E.F. Hequet, J.L. Simonton, W.D. Cole, and P. Williams).

(* - denotes my *Ph.D. student*)

PRESENTATIONS

- “Enhancing Performance Through Statistical Analysis: A Case Study in the Glass Industry” Castillo, K. *, Smith, N., and Simonton, J. ASEM Conference. Lubbock, Texas (Fall 2011)
- “A Case Study Questionnaire of Cooperative Purchasing Programs in Transportation”, Simonton, J., Beruvides, M., Waters, N., Chaivichitmalakul, S., and Palikhe, H. Proceedings of the ASEM Conference. Fayetteville, Arkansas (Fall 2010)
- “Green Manufacturing: A Discussion of Environmental Performance Evaluation” Chi-Wei, C. *, Beruvides, M., and Simonton, J. Proceedings of the ASEM Conference. Fayetteville, Arkansas (Fall 2010)
- “Toward Integrating Cost of Quality in Supply Chain Network Design” Castillo, K. *, Smith, N., and Simonton, J. Proceeding of the IERC, June 2010, Cancun, Mexico (Spring 2010)
- “Cost of Quality: Interdisciplinary Cooperation Between Accounting and Quality Functions,” Castillo, K. * and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall 2009)
- “Performance Improvement in the Glass Melting Process Through Statistical Analysis,” Castillo, K. * and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall 2009)
- “A Systemic Approach to Economic Stimulus from an Engineering Management Perspective,” Jones, J. * and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall 2009)
- “Approximation of Operational Quality Cost in Organizations,” Cheng-Chu, Beruvides *, M., and Simonton, J., Proceeding of the ASEM Conference, Springfield, MO (Fall 2009)
- “Theoretical Analysis of Green Strategies in Manufacturing Industries”, Cheng-Chu *, Beruvides, M., and Simonton, J., IERC Conference, Miami, Florida (May 2009)
- “Rural Transit Regional Maintenance Center Economic Modeling,” Beruvides, M., Simonton, J., Ng, E., Chaivichitmalakul, S., and Waters, N.. Proceedings of ASEM Conference West Point, New York, November 11-15, 2008
- “The Theoretical Analysis of Green Strategies in Manufacturing Industries,” Cheng-Chu *, Beruvides, M., and Simonton, J., IERC Conference (May 2009)
- “The Modification of Eco-Efficiency Indicators with Embedded Eco-Indicators and Cost of Quality” Cheng-Chu, Beruvides, M., and Simonton, J. (2008) Proceedings of IIE Conference, Vancouver, Canada (May 2008)

- “Rural Transit Regional Maintenance Center Economic Modeling,” Beruvides, M., Simonton, J., Ng, E., Chaivichitmalakul, S., and Waters, N. Proceedings of ASEM Conference West Point, New York, November 11-15, 2008
- “Modification of Eco-Efficiency Indicators with Embedded Eco-Indicators and Cost of Quality,” Cheng-Chu *, Beruvides, M., and Simonton, J. Proceedings of IIE Conference, Vancouver, Canada (May 2008)
- “Utilizing Agricultural Biomass in Energy Production and Economic Development,” Fedler, C., Hanson, J., Beruvides, M., Simonton, J. and Lyford, C. Contract Number CM707 State Energy Conservation Office
- Technical Report “Public Transportation Maintenance Knowledge and Resource-Sharing Project (Regional Maintenance Project)”, Beruvides, Nash, and Simonton, Interagency Cooperation Contract Number 51-7XXIA006 Sponsored by Texas Department of Transportation (Public Transportation Division)
- “Systemic Understanding of Stock Market Index Behavior Using Control Theory”, Barroso, L. *, Beruvides, M. and *Simonton, J. (2007) Proceedings of the ASEM Conference, Nashville, TN (Fall 2007)
- “Conceptual Model for Cost of Quality in Green Manufacturing”, Cheng-Chu *, Beruvides, M., and Simonton, J (2007) Proceedings of the ASEM Conference, Nashville, TN (Fall 2007)
- “Cost of Quality Analysis of Cotton Fiber to Fabric Systems”. Altintas, P. *, Beruvides, M., and Simonton, J. (2007) Proceedings of the ASEM Conference, Nashville, TN (Fall 2007)
- “Utilization of Texas Biomass,” High Plains Plant and Soil Science, Seminar Series 1/23/07, USDA Plant Stress Laboratory, Lubbock, Texas
- “An Approach for an Operational Definition of Excessive Landscape Irrigation Runoff to Improve Water Policies,” ICASALS Conference, Lubbock, TX, November 16, 2006, (L.A. Barroso *, M.G. Beruvides, J.L. Simonton, and J.R. Merriott).
- “Preliminary Study Examining a Systemic Approach to Recycling Water and Biomass for Rural Economic Development,” ICASALS Conference, Lubbock, TX, November 16, 2006 (P.Z. Altintas *, J. Hanson, L.A. Barroso, M.G. Beruvides, C.B. Fedler, and J.L. Simonton).
- “Pilot Study to Examine the Relationship Between AFIS Fiber Properties and White Speck Occurrence,” presented at the Beltwide Cotton Conference, San Antonio, TX, January 3-6, 2006 (P.Z. Altintas *, J.L. Simonton, and M.G. Beruvides).
- “Effects of Aggressive Card Treatments,” presented at the Beltwide Cotton Conference, San Antonio, TX, January 3-6, 2006 (L.A. Barroso *, J.L. Simonton, and M.G. Beruvides).

“Application of Engineering and Management Principles to Improve Cotton’s Position as a Quality Raw Material,” presented at the ASEM Conference, Virginia Beach, VA, Fall 2005 (J.L. Simonton and M.G. Beruvides).

“Multi-Scenario Case Study of a Fuel Pellet Manufacturing Operation Utilizing Cotton Waste,” presented at the Beltwide Cotton Conference, Memphis, TN, 2004 (G. Holt, J.L. Simonton, A. Canto, D. Chui, P. Altintas, A.S. Sandoval, and M.G. Beruvides).

“Economic Feasibility of Manufacturing Fuel Pellets from Cotton By-Products,” presented at the Beltwide Cotton Conference, Memphis, TN, 2003 (G. Holt, J.L. Simonton, A. Canto, and M.G. Beruvides).

“Effect of Textile Treatments on White Speck Counts in Dyed Yarns,” presented at the Beltwide Cotton Conference, Memphis, TN, 2003 (J.L. Simonton, M.G. Beruvides, P.Z. Altintas, and K. Kang).

“Quantification of White Specks,” presented at the Beltwide Cotton Conference, Memphis, TN, 2002 (J.L. Simonton, M.G. Beruvides, and M.D. Ethridge).

“A Pilot Study: Using Dyed Cotton Yarn for the Quantification of White Specks,” presented at the Beltwide Cotton Conference, Memphis, TN, 2001 (J.L. Simonton, E.F. Hequet, and M.G. Beruvides).

“Effect of Cotton Preparation on AFIS and HVI Measurements,” presented at the Beltwide Cotton Conference, Memphis, TN, 2000 (E.F. Hequet, J.L. Simonton, W.D. Cole, and P. Williams).

Ph.D Students Graduated

Krystel Castillo-Villar: Graduating 12/2011 “**A Strategic Model for Supply Chain Network Design Including Cost of Quality**” (Dual Ph.D. Degree Program with Monterey Tech, Mexico)

Kootak Kang: Graduating 8/2011, Dissertation title: “**The Effect of Cotton Genotype on the Frequency Distribution of Fiber Characteristics**”

Siva Chaivichitmalakul: Graduating 5/2011, Dissertation title: “**Economic Model of Biomass Gasification in Developing and Developed Countries**” (Successfully defended 3/9/2011)

Cheng-Cheu Chiuwei: Graduated 5/2010, Dissertation title: “**The Economics of Cost of Quality for Green Manufacturing**”

Pelin Altintas: Graduating 12/2010, Dissertation title: “**Taguchi Method and Principal Component Analysis Application for Yarn White Speck Quality Defect**” (Continuation of Master’s work)

Ph.D. Candidates

Joshua Jones: Graduating 12/2011, Dissertation title: **“A Systemic Approach to Economic Stimulus from an Engineering Management Perspective”**

Current Ph.D. Students

Dale Moon
William Bingham
Jeff Tseng
Kurt McElwain (will defend proposal in Fall 2011)
Sagar Godse

M.S. Students Graduated

Senthilkumar Velusamy: Graduating 5/2011, **“Lean Principles Applied to Hospitality Services at a State University”**

Pelin Altintas: Graduated 12/2009, **“Taguchi Method and Principal Component Analysis Application for Yarn White Speck Quality Defect”**

Ph.D. Committees Served

Binod Maharjan, “Flight Gate Assignment and Proactive Flight Gate Reassignment Optimization for Hub and Spoke Airline Operations” 12/2010

Vanlapha Santithammark, “Vulnerability of Electric Power Systems to Terrorist Attack” 10/2010

Deokkyo Oh, “The Corporate Social Responsibility and Corporate Growth: Is Being Socially Responsible Profitable” Rawls School of Business 8/2010

Natalie Waters, “An Empirical Study on Knowledge: Work Team Schemas and Their Impacts on Peak Performance” 5/2010

Ean Ng, “In Search of Rate of Return: The Case Study of External and Internal Investment in Solving Multiple Rate of Return” 7/2009

Cesar Maldonado, “Influence of Intellectual Capital Intermediaries on Technical Workforce Capacity” 5/2009

Wayne Rodin, “A Cost of Quality Economic Analysis on the Value of Six Sigma Quality Programs in Government Organizations” 3/2009

Geraldo Perez, “Natural Gas Imbalance System Optimization” 2/2009

Daniel McGrath, “On the Application of Non-zero Sloping Analysis to Complex Systems: A Case Study Involving Mutual Funds” 7/2008

Marcus Banasik, “A Study of the Cost of Quality in a Renewable Resource Environment” 5/2008

Janis Tolk, “Predicting Required Maintenance and Repair Funding Based on Standard Facility Data Elements” 5/2008

Raja Jayaraman, “On Minimizing Expected Warranty Cost in 1-Dimension and 2-Dimensions With Different Repair Options” 5/2008

Jeffery Hanson, “Modeling Agricultural Recycling Systems for Systems Size and Economic Potential” 12/2007

M.S. Committees Served

Vibhor Jain, “Zero-Norm Optimization: Models and Applications” 12/2010

Nikil Bhat Inanjai, “A Preliminary Decision Support System for the Selection of Lean Tools” 6/2009

Naveen Rathi, “A Framework for the Implementation of Lean Techniques in Process Industry” 4/2009

Vanlapha Santithammarak, “Model of Improving the Logistics Process for Propane Delivery” 8/2008

HONORS AND AWARDS

IIE Outstanding Professor 2009/10

Texas Tech Alumni Association New Faculty Award for 2008

IIE Outstanding Professor 2006/2007

Honorable Mention for ASEM dissertation of the year competition 2005

SERVICE

Elected to Faculty Senate Fall 2011

Spring 11 – Undergraduate Advisor

Spring 11 – Undergraduate Scholarship Committee

Fall 10 – Undergraduate Advisor

Summer 10 – Freshman Orientation Advisor

Spring 10 – National Treasurer for ASEM Honor Society

Spring 10 – Undergraduate Advisor

Fall 09 – Undergraduate Advisor

Summer I 09 – Freshman Orientation Advisor

Spring 09 – Undergraduate Advisor

Spring 08 – Graduate Advisor

Spring 08 – Graduate Committee

Spring 08 – Safety Committee

Spring 07 - New Faculty Search Committee

Spring 07 – Undergraduate Curriculum Committee (IE)

Fall 06 – Bagley Chair Search Committee (IE)

Fall 06 – Diversity Committee (TTU)

Fall 06 – Faculty Awards Committee (COE)

Spring 06 – IE Scholarship Committee

Spring 06 – Committee for Updating IE Graduate Brochure

Fall 05 to current – IIE Faculty Advisor

SOCIETY MEMBERSHIPS

American Society of Engineering Management
Epsilon Mu Eta, Engineering Management Honor Society
Institute of Industrial Engineers
Alpha Pi Mu

INVITED PRESENTATIONS

“Utilization of Sugarcane Bagasse Biomass for the production of Ammonia Fertilizer”, 10/21/10
Presentation :SESCOOP board of presidents, State of Santa Catralina, Brazil

“Utilization of Sugarcane Bagasse Biomass for the production of Ammonia Fertilizer”, 10/20/10
Presentation : Alexandre Augusto Julio Gomes, Secretary of Agriculture, Brasilia, Brazil

“Utilization of Sugarcane Bagasse Biomass for the production of Ammonia Fertilizer”, 10/20/10
Presentation :CONTAG board members, Brasilia, Brazil

“Utilization of Sugarcane Bagasse Biomass for the production of Ammonia Fertilizer”, 10/19/10
Presentation : Jorge Santana De Olivera, Secretary of State for the state of Sergipe, Brazil

“Utilization of Sugarcane Bagasse Biomass for the production of Ammonia Fertilizer”, 10/21/10
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Presentation : Jorge Santana De Olivera, Secretary of State for the state of Sergipe, Brazil

“Biomass and Stranded Natural Gas to Fertilizer”, 10/1/09 Invited Speaker: Ministry of
Production, Quito, Ecuador

“Biomass to Fertilizer”, 6/14/2009 Invited Speaker: Ministry of Agriculture, Quito, Ecuador
“Application of Systems Thinking to Complex Problems”, 12/15/2008 Invited Speaker: Nanjing
University of Aeronautics and Astronautics, Nanjing, China

“Application of Systems Thinking to Complex Problems”, 12/16/2008 Invited Speaker: Institute
of Green Design and Manufacturing, School of Mechanical and Automotive Engineering, Heifi
University of Technology, Heifei, China

“Systems Thinking”, 12/17/2008 Invited Speaker: Tianjin University of Science and
Technology, School of Economics and Management, Tianjin, China

“Systems Thinking”, 12/19/2008 Invited Speaker: Tianjin University of Technology and Education, Tianjin, China

High Plain Plant and Soil Science Seminar Series, Bio-fuels Seminar, 1/22/2007 Guest Speaker: “Utilization of Texas Agricultural Biomass”