

Engineering Technology Scholarly Activity 2013-15

Anaya, Leticia – Senior Lecturer

2014	Canchola, R. and Anaya, L (2014), "Technology Acceptance Model (TAM) for Engineering 3D CAD Systems", 2015 ASEE Midwest Section Conference, University of Arkansas, Fort Smith, Arkansas September 24-26, 2014. (Mr. Ruben Canchola was an ETEC Graduate Student)
2013	Baron-Riveros, G., and Anaya, L, (2013), "Stochastic Modeling of an Inventory Two Product Commonality Process" (Pending.) and Alali, M., Foster, P., and Anaya, L. (2013), "Brine/Soil Corrosion Testing of Metals for the Automotive Industry" , (Pending)
2013	Anaya, L. and Visinescu, L., (2013), "International Engineering Education Journals: Past, Present and Potential Research Directions," 2013 ASEE Annual Conference, June 23 - 26, 2013. Atlanta, GA
2013	Anaya, L. Evangelopoulos, N. (2013), " Man vs. Machine: A Comparison of Latent Dirichlet Allocation to Humans as Classifiers of Unstructured Customer Comments ' Decision Sciences Journal (Pending)
2013	Alfadhli, H. and Anaya, L., "Newspaper Vendor Problem Simulation of Manufacturing Operations," ASEE Southeastern Section Conference , March 10-12, 2013, Tennessee Technological University, Cookeville, TN.
2013	Anaya, L. Visinescu, L., (2013), "International Engineering Education Journals: Past, Present and Potential Research Directions," 2013 ASEE Annual Conference. Atlanta, Georgia

Barbieri, Enrique – Professor & Chair

2014	S. Yousefi, N. Joshua, H. Bostanci, E. Barbieri, "Automation of a Heat-Shrink Tubing Process", IAJC/ISAM Joint International Conference, Orlando, FL
2014	E. Barbieri, "Answering a Renewed Call for Action in Engineering Technology", ASEE Annual Conference and Exposition, Indianapolis, IN

Funding

2014-2014	E. Barbieri and A. Boggiano, University of North Texas, \$52,000. "Inventivas de la Inventiva: Employing KUHF -Engines of Our Ingenuity- to Increase Engineering Awareness and Education Opportunities in the Hispanic Community" Project websites: http://www.uh.edu/engines/episodes-spanish.html ; http://inventiones.coe.uh.edu/index.cfm ; http://www.kntu.com/index.php?option=com_content&view=category&id=34&Itemid=69	United Engineering Foundation	\$52,000
2013-2014	H. Bostanci, A. Nouri, and E. Barbieri, "Automated Heat Shrink Harnessing Device (AHSHD) – Phase I (of 3), 2013-14,	Labinal/Safran Inc., Denton, Texas.	\$14,356
2013-2013	E. Barbieri, A. Boggiano, A. Albarran (UNT: \$87,950); A. Bencomo, B. Robin (UH: \$15,900) "Inventivas de la Inventiva: Employing KUHF -Engines of Our Ingenuity- to Increase Engineering Awareness and Education Opportunities in the Hispanic Community", Jan-Dec 2013.	United Engineering Foundation	\$103,850

Bostanci, Huseyin – Assistant Professor

2015	Bostanci, H., Joshua, N.E. *, "Nucleate Boiling of Dielectric Liquids on Hydrophobic and Hydrophilic Surfaces," Proc. ASME IMECE 2015, Houston, TX, November 13-29, 2015.
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Engineering Technology Scholarly Activity 2013-15

2015	Bagheri, A. *, Bostanci, H., Foster, P.R., "Preliminary Analysis of an Innovative Rotary Displacer Stirling Engine," Proc. ASME IMECE 2015, Houston, TX, November 13-29, 2015.
2015	Yaddanapudi, S.J. *, Bostanci, H., "Spray Cooling with R-134a and HFO-1234yf for Thermal Management of Automotive Power Electronics," Proc. ASME IMECE 2015, Houston, TX, November 13-29, 2015.
2014	Yousefi-Darani, S., Joshua, N.E. *, Bostanci, H. , Barbieri, E., "Automating a Heat Shrink Tubing Process," Proc. IAJC/ISAM Joint Int. Conf., ISBN 978-1-60643-379-9, Orlando, FL
2014	Joshua, N.E. *, Ajakumar, D.K. *, Bostanci, H. , "Nucleate Boiling of Dielectric Liquids on Hydrophobic-Patterned Surfaces," Proc. ASME IMECE 2014, Quebec, Canada
2014	Bostanci, H. , Rini, D.P., Kizito, J.P., Singh, V., Seal, S., Chow, L.C., "High Heat Flux Spray Cooling with Ammonia: Investigation of Enhanced Surfaces for HTC," International Journal of Heat and Mass Transfer, vol. 75, pp. 718-725.
2013	Bostanci, H., Singh, V., Rini, D.P., Kizito, J.P., Seal, S., Chow, L.C. "Micro Scale Surface Modifications for Heat Transfer Enhancement", ACS Applied Materials and Interfaces, vol 5 (19), pp. 9572-9578
2013	Wu, W., Bostanci, H., Chow, L.C., Hong, Y., Ding, J.S., Su, M., Kizito, J.P. "Heat Transfer Enhancement of PAO in Microchannel Heat Sink using Nano-Encapsulated Phase Change Indium Particles", International Journal of Heat and Mass Transfer, vol. 58, pp. 348-355
2013	Wu, W., Bostanci, H., Chow, L.C., Hong, Y., Ding, J.S., Su, M., Kizito, J.P., "Jet Impingement of Air-particle Suspension with Nanoencapsulated Phase Change Materials", ASME Journal of Heat Transfer, vol. 135, pp. 052202

Funding

2015-2016	H. Bostanci (PI), J. Davis (SP), "NPI-UNT Partnership on Nuclear Education Program and Systems Engineering Initiative Team"	Nuclear Power Institute-Texas A&M Engineering Experiment Station	\$40,774
2015-2015	H. Bostanci (PI), J. Davis (SP), "Planning for the Establishment of Systems Engineering Initiative Teams at UNT"	Nuclear Power Institute-Texas A&M Engineering Experiment Station	\$5,000
2014-2015	H. Bostanci, "Spray Cooling System"	American Science & Engineering, Inc	\$26,577
2013-2014	H. Bostanci, A. Nouri, E. Barbieri, "Phase I: Automated Heat Shrink Harnessing Device"	Safran/Labinal Inc., Denton	\$14,356
2013-2014	H. Bostanci, "Spray Cooling: An Advanced Thermal Management Technique for Space Applications"	NASA Texas Space Grant Consortium New Investigator Program	\$10,000
2013-2014	H. Bostanci, "Advanced Thermal Management of Hybrid Vehicle Electronics"	UNT Research Opportunity Program (ROP)	\$7,500
2013-2014	H. Bostanci, "Energy Assessment on a Small-Scale House via Air Infiltration and Thermography Tests"	ASHRAE	\$5,000
2013-2013	H. Bostanci, "Development of Novel Surfaces for Enhanced Thermal Management of High Power Devices"	UNT Research Initiation	\$7,500

Engineering Technology Scholarly Activity 2013-15

Boubekri, Nourredine – Professor

2015	Boubekri, N. Ian Cole “Mist characterization in Drilling 1018 steel”. The Journal of Macro Trends in Technology and innovation; Vol 3, issue 1
2015	Boubekri, N. Ian Cole “A Technology Enabler in Machining: Nanofluids in Minimum Quantity Lubrication”. The Journal of Macro Trends in Technology and innovation; Vol 3,issue 1
2015	Boubekri, M; Boubekri, N; “Use of 3D printing Technology in Architectural Research” ;Journal of Engineering and Architecture; Vol 3,No 2
2015	Boubekri, N, Alqahtani, M, “Economics of Additive Manufacturing” Int’l Journal of Advances in Mechanical &Automotive Engg. (IJAMAE) Vol 2,issue 1
2015	<i>Boubekri,N.,Shaikh,V., “Minimum Quantity Lubrication (MQL) in Machining:Benefits and Drawbacks”, Journal of Industrial and Intelligent Information, Vol 3, No 3</i>
2014	Shaikh, V., Boubekri, N., and Scharf, T. W., “Microlubrication effects during end milling AISI 1018 steel”, <i>International Journal of Manufacturing, Materials and Mechanical Engineering</i> , 3(4), (2014),IJMMME-JPD4112.Pages 14-29.
2014	<i>Shaikh,V.,Boubekri,N.,Sharf,T.W., “Analyzing the Effectiveness of Microlubrication Using Vegetable Oil-Based Metal Working Fluid During End Milling”, International Journal of Manufacturing Engineering, V(2014);Article ID 261349</i>
2013	N. Boubekri ,Vasim Shaikh, "Minimum Quantity Lubrication (MQL) in Machining"; Journal of Management and Engineering Integration, Vol 6,No2, pp 51-61, 2013
2013	Shaikh, V., Boubekri, N., and Scharf, T. W., (2013), Microlubrication effects in milling AISI 1018 steel: An approach towards Green Manufacturing, 120th ASEE Annual Conference and Exposition
2013	Shaikh, V., and Boubekri, N., Wear analysis during end milling AISI 1018 steel using microlubrication, European International Journal of Science and Technology, Vol: 2, Number: 8, (2013), pp. 216-225
2013	N. Boubekri, Vasim Shaikh "Management of Lubricants in Machining"; 19 Annual International Conference on Industry, Engineering, and Management Systems; FI March 2013

Funding

2014-2015	“Research and Development in Additive manufacturing (3D Printing)”	Emerson Corporation	\$24,000
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Foster, Phillip – Associate Professor

2013	P. R. Foster, “Liquid Cooled Stirling Engine with a Segmented Rotary Displacer”, United States Patent No: US 8,495,873 B2; July 2013
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Engineering Technology Scholarly Activity 2013-15

Huang, Zhenhua – Assistant Professor

2014	Dai, K., and Huang, Z. (2014). Bridge field testing by using wireless and laser Doppler sensing technologies – case studies. <i>Proceedings of 7th International Conference on Bridge Maintenance, Safety and Management</i> , July 2014, Shanghai, China.
2014	Dai, K., Li, X.S, Song, X.S, Chen, G.S, Pan, Y., Huang, Z. (2014). Monitoring of CO2 geological storage based on the passive surface waves, <i>International Journal of Mining Science and Technology</i> , 24(5): 707–711.
2014	Huang, Z.C, Al-Saad, Q.UNTS, Nasrazadani, S., and Wu, H.F. (2014). Understanding and optimizing the Geosynthetic-reinforced steep slopes, <i>Electronic Journal of Geotechnical Engineering</i> , 19(T): 5793-5811.
2014	Huang, Z.C, Shi, S.Q., and Cai, L. (2014). Experimental analysis on strength and failure modes of wood beam-column connections, <i>Frontier Structural and Civil Engineering</i> , 8(3): 260–269.
2013	Adeleye, T.* ,Huang, M., Huang, Z., and Sun, L. (2013) Predicting loss for large construction companies, <i>ASCE Journal of Construction Engineering and Management</i> , 139(9), 1224-1236
2013	Dai, K., Huang, Y., Huang, Z., Zong, G. and Shi, W. (2013). Experimental case studies on wireless and wired sensors, <i>Proceedings of 2013 SPIE Smart Structures/NDE SSN09</i> , San Diego, California.
2013	Huang, Z. and Wu H.F. (2013). Full-scale testing of civil structures using wireless sensing technologies, <i>Proceedings of 2013 SPIE Smart Structures/NDE SSN09</i> , San Diego, California
2012	Dai, K. and Huang Z. (2012). Novel sensing techniques for full-scale testing of civil structures, <i>Frontier Structural and Civil Engineering</i> , 6(3), 240-256
2012	Huang, Z., Hedric, A.C.* , and Yanagi, N.* (2012). Experimental evaluation of wood beam-column connection strength equations and failure modes in NDS 2005, presentation at 2012 Structures Congress, Chicago, Illinois

Funding

2013-2016	Z. Huang, E. Kougianos, and S. Wang, “A New Interdisciplinary Technology Education Strategy Using State-of-art Wireless Sensor Network”	NSF	199,000
2014-2014	UNT-IGRO: Global Discovery: Workshops and Collaborative Research Activities on Global Wind and Earthquake Hazard Mitigations	UNT	\$9,715
2013-2014	NSF-RAPID: Investigation of the Blast Loading for the Fertilizer Plant Explosion at West, Texas	NSF-RAPID	\$10,000

Kougianos, Elias – Associate Professor

2015	S. P. Mohanty, E. Kougianos and V. P. Yanambaka*, “Ultra-Fast Variability-Aware Optimization of Mixed-Signal Designs using Bootstrapped Kriging”, in proceedings of the 16th IEEE International Symposium on Quality Electronic Design (ISQED), 2015, pp. 239 – 242, (blind review)
2015	S. Joshi*, E. Kougianos and S. P. Mohanty “Simscape based Ultra-Fast Design Exploration of Graphene-Nanoelectronic Systems”, in proceedings of the 14th IEEE Computer Society Annual Symposium on VLSI (ISVLSI), 2015, pp. 292 – 296 (blind review).
2015	E. Kougianos, S. Joshi*, and S. P. Mohanty “Multi-Swarm Optimization of a Graphene FET Based Voltage Controlled Oscillator Circuit”, in proceedings of the 14th IEEE Computer Society Annual Symposium on VLSI (ISVLSI), pp. 567 – 572 (blind review).
2015	V. P. Yanambaka*, S. P. Mohanty, E. Kougianos, D. Ghai and G. Thakral, “Process Variation Analysis and Optimization of a FinFET based VCO”, <i>IEEE Transactions on Semiconductor Manufacturing</i>
2015	S. Joshi*, S. P. Mohanty and E. Kougianos, “Everything You Wanted to Know about PUFs”, <i>IEEE Potentials</i>

Engineering Technology Scholarly Activity 2013-15

2015	. E. Kougianos, and S. P. Mohanty, "A Nature-Inspired Firefly Algorithm Based Approach for Nanoscale Leakage Optimal RTL Structure", <i>VLSI Integration Journal (Elsevier)</i> , Vol. 51
2014	A. Khan*, S. P. Mohanty, and E. Kougianos , "Statistical Process Variation Analysis of a Graphene FET based LC-VCO for WLAN Applications", in proceedings of the <i>15th IEEE International Symposium on Quality Electronic Design (ISQED) 2014</i> , pp. 569-574 (blind review).
2014	O. Okobiah*, S. P. Mohanty, and E. Kougianos , "Kriging Bootstrapped Neural Network Training for Fats and Accurate Process Variation Analysis", in proceedings of the <i>15th IEEE International Symposium on Quality Electronic Design (ISQED) 2014</i> , pp. 365-372 (blind review).
2014	T. S. Das, P. Ghosal, S. P. Mohanty, and E. Kougianos , "A Performance Enhancing Hybrid Locally Mesh Globally Star NoC Topology", in proceedings of the <i>23rd ACM/IEEE Great Lakes Symposium on VLSI (GLSVLSI) 2014</i> , pp. 69-70 (blind review , 29 regular papers, 20 short papers, and 27 poster papers accepted out of 79 submissions, acceptance rate 42.4%).
2014	E. Agu*, S. P. Mohanty, E. Kougianos , and M. Gautam*, "Simscape Based Design Flow for Memristor Based Programmable Oscillators", in proceedings of the <i>23rd ACM/IEEE Great Lakes Symposium on VLSI (GLSVLSI) 2014</i> , pp. 223-224 (blind review , 29 regular papers, 20 short papers, and 27 poster papers accepted out of 79 submissions, acceptance rate 42.4%).
2014	O. Okobiah*, S. P. Mohanty, and E. Kougianos , "Exploring Kriging for Fast and Accurate Design Optimization of Nanoscale Analog Circuits", in proceedings of the <i>13th IEEE Computer Society Annual Symposium on VLSI (ISVLSI) 2014</i> , pp. 244 – 247, 2014 (blind review).
2014	S. P. Mohanty, M. Gomathisankaran, and E. Kougianos , "Variability-Aware Architecture Level Optimization Techniques for Robust Nanoscale Chip Design", <i>Elsevier International Journal on Computers and Electrical Engineering (IJCEE)</i> , Vol. 40, No. 1, January 2014, pp. 168-193.
2014	S. P. Mohanty and E. Kougianos , "Incorporating Manufacturing Process Variation Awareness in Fast Design Optimization of Nanoscale CMOS VCOs", <i>IEEE Transactions on Semiconductor Manufacturing (TSM)</i> , Vol. 27, No. 1, February 2014, pp. 22-31.
2014	O. Okobiah*, S. P. Mohanty, and E. Kougianos , "Nano-CMOS Thermal Sensor Design Optimization for Efficient Temperature Measurement", <i>VLSI Integration Journal (Elsevier)</i> , Vol. 47, No. 2, March 2014, pp. 195-203.
2014	O. Okobiah*, S. P. Mohanty, and E. Kougianos , "Fast Design Optimization through Simple Kriging Metamodeling: A Sense Amplifier Case Study", <i>IEEE Transactions on Very Large Scale Integration Systems (TVLSI)</i> , Vol. 22, No. 4, April 2014, pp. 932-937.
2014	S. P. Mohanty, and E. Kougianos , "Polynomial Metamodel Based Fast Optimization of Nano-CMOS Oscillator Circuits", <i>Analog Integrated Circuits and Signal Processing (Springer)</i> , Vol. 79, No. 3, June 2014, pp. 437-453.
2014	S. P. Mohanty and E. Kougianos , "Polynomial Metamodel-Based Fast Optimization of Nanoscale PLL Components", Book Chapter in <i>Models, Methods, and Tools for Complex Chip Design: Selected Contributions from FDL 2012</i> , Jan Haase (Editor), Springer, 2014, pp. 179-200. ISBN: 978-3-319-01417-3.
2013	U. Choppali, E. Kougianos, S. P. Mohanty and B. Gorman, "Influence of Annealing on Polymeric Precursor ZnO Thin Films on Sapphire", <i>Elsevier Journal of Thin Solid Films (TSF)</i> , Vol. 545, October 2013, pp. 466-470.

Engineering Technology Scholarly Activity 2013-15

2013	*O. Okobiah, S. P. Mohanty, and E. Kougianos, "Geostatistical-Inspired Fast layout Optimization of a Nano-CMOS Thermal Sensor", IET Circuits, Devices & Systems (CDS), Vol. 7, No. 5, September 2013, pp. 253-262.
2013	*O. Okobiah, S. P. Mohanty, and E. Kougianos, "Fast Statistical Process Variation Analysis Using Universal Kriging Metamodeling", in proceedings of the 56th IEEE International Midwest Symposium on Circuits & Systems (MWSCAS) 2013, pp. 277-280.
2013	*G. Zheng, S. P. Mohanty, E. Kougianos, and *O. Okobiah "Polynomial Metamodel Integrated Verilog-AMS for Memristor-Based Mixed-Signal System Design", in proceedings of the 56th IEEE International Midwest Symposium on Circuits & Systems (MWSCAS) 2013, pp. 916-919
2013	O. Okobiah, S. P. Mohanty, and E. Kougianos, "Geostatistics Inspired Fast Layout Optimization of a Nanoscale CMOS Phase Locked Loop", 14th IEEE International Symposium on Quality Electronic Design (ISQED) 2013, pp. 562 -567, 2013.
2013	G. Zheng, S. P. Mohanty, E. Kougianos, and O. Okobiah, "iVAMS: Intelligent Metamodel-Integrated Verilog-AMS for Circuit-Accurate System-Level Mixed-Signal Design Exploration", 24th IEEE International Conference on Application-specific Systems, Architectures and Processors (ASAP) 2013, pp. 75-78, 2013.

Funding

2015-2016	S. Mohanty and E. Kougianos, "Low-Latency Embedded Vision Processor (LLEVS)"	NSF	45,000
2013-2016	Z. Huang, E. Kougianos, and S. Wang, "A New Interdisciplinary Technology Education Strategy Using State-of-art Wireless Sensor Network"	NSF	199,000
2010-2013	E. Kougianos and S. P. Mohanty (UNT), R. Mahapatra (TAMU), "Introduction of Nanoelectronics Courses in Undergraduate Computer Science and Computer Engineering Curricula"	NSF	180,000

Mirshams, Reza - Professor

2014	Melissa Maria Monroy-Hernandez, Lorena Romero-Salazar, Reza Mirshams, Juan Carlos Arteaga-Arcos, "Determination of Mechanical Properties on Different Mexican Composite Portland Cements by Atomic Force Microscopy Nanoindentation," ATINER CONFERENCE PAPER SERIES No: CIV2014-1232.
2014	Reza Mirshams, Yong Tao, Xun Yu, Azize Akcayoglu, "Assessment Development for Accreditation of an Innovative Mechanical and Energy Engineering Program," Proceedings of IMECE 2014 ASME International Mechanical Engineering Congress and Exposition IMEC2014. Montreal, Quebec, Canada.
2014	Reza Mirshams and Ashish Srivastava, "Effect of Pile-Up on Nanoindentation Measurements of Polycrystalline Bulk Metals," Advance Materials Research, Vol. 853, pp. 143-150, DOI:10.4028/www.scientific.net/AMR.853.317.
2014	Fang Wang, Boshen Fu, Huiyang Luo, Sarah Staggs, Reza A. Mirshams, William L. Cooper, Seong Y. Park, Moon J. Kim, Craig Hartley, Hongbing Lu, "Characterization of the Grain-Level Mechanical Behavior of Eglin Sand by Nanoindentation," Journal of Experimental Mechanics, DOI 10.1007/s11340-013-9845-z.
2014	Aleksandra Fortier, Vikranth Gullapalli, Reza A Mirshams, "Review of Biomechanical Studies of Arteries and Their Effect on Stent Implant Performance," International Journal of Cardiology

Engineering Technology Scholarly Activity 2013-15

2014	Reza A. Mirshams, Zhenghang Zhao, Zhiqiang Wang, "Experimental Analysis and Computational Modeling of Pile-Up Formation in Nanoindentation," Mex. J. Mat. Sci. Eng. 1 1-11.
2013	Reza A. Mirshams, *Ashish K. Srivastava, "Effect of Pile-Up on Nanoindentation Measurements of Polycrystalline Bulk Metals" 2013 International Conference on Materials Science, Machinery and Energy Engineering,(MSMEE 2013), pp. 145-150, Hong Kong.
2013	Uzochukwu. C. Okafor, Reza Mirshams, "Mechanical Properties of D2 and A2 Tool Steels Evaluated Using Nanoindentation", 2013 ECTC Proceedings ASME Early Career Technical Conference Hosted by ASME District E and Oral Roberts University Support Provided by the ASME Old Guard and the Committee on Early Career Development, Tulsa, OK

Funding

2013	UNT-UAEM Joint Seed Funding	UNT	5,000
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Nasrazadani, Seifollah – Professor & Associate Chair

2015	CHAPTER 2 of "Handbook of Oil and Gas Industries," S. Nasrazadani, Sh. Hassani, "Modern Analytical Techniques and Materials Characterizations in Failure Analysis," Elsevier Publishing Company USA.
2015	S. Nasrazadani, R. Eghtesad*, E. Sudoi*, S. Vupputuri*, J.D. Ramsey, M. T. Ley, "Application of Fourier transform infrared spectroscopy to Study Concrete Degradation Induced by Biogenic Sulfuric Acid", Materials and Structures, DOI 10.1617/s11527-015-0631-5
2015	Sravanthi Vupputuri*, Badu Z. Fathepure, Gregory G. Wilber, Elias Sudoi*, Seifollah Nasrazadani, M. Tyler Lay, Joshua D. Ramsey, "Isolation of a Sulfur-Oxidizing Streptomyces sp. From Deteriorating Bridge Structures and its Role in Concrete Deterioration" International Biodeterioration & Biodegradation Vol. 97
2015	Changlei Xia*, Sheldon Q Shi, Liping Cai, Seifollah Nasrazadani "Increasing the Nanoparticle Loading Efficiency by Introducing External Pressure during the Inorganic Nanoparticle Impregnation Process for Natural Fibers," International Journal of Industrial Crops and Products vol. 69
2015	S. Nasrazadani, N. Gupta*, A. Bastola*, "Flow Accelerated Corrosion of Welded Small Bore A106 Carbon Steel Pipe," CORROSION 2015- annual conference of National Association of Corrosion Engineers, March 15-19 Dallas TX
2015	S. Nasrazadani, "Advanced Analytical Techniques for Characterization of Rusted Steels," CORROSION 2015- annual conference of National Association of Corrosion Engineers, March 15-19 Dallas TX
2015	Waleed K. Yaseen* . Mustafa A. Rawshdeh*. Teresa D. Golden, Seifollah Nasrazadani, and Mohammad A. Omary, "Utilizing Hydrophobic Coatings in Corrosion Protection and Anti-Icing, Poster session of ACS Southeast (SERMACS)/Southwest (SWRM) regional meeting
2014	S. Nasrazadani and Tyler Springfield, " Application of Infrared Spectroscopy in Cement Alkali Quantification", Journal of Materials and Structures, Vol.47, pp. 1607- 1615

Engineering Technology Scholarly Activity 2013-15

2014	S. Nasrazadani, Elias Sudoi, "Effect of Welding on Flow Accelerated Corrosion of Carbon Steel Pipes", Proceedings of Corrosion 2014 Conference & Expo, San Antonio Texas March 9-13, 2014.
2014	Z. Huang, Q. Al-Saad, and S. Nasrazadani, Understanding and Optimizing Geosynthetic-Reinforced Steep Slopes, Electronic Journal of Geotechnical Engineering, Vol. 19, 2014.
2013	S. Nasrazadani and D. Henkis*, "A Recent Experience in Utilization of Online Resources in Teaching Undergraduate Dynamics", Proceedings of the 2013 ASEE Gulf-South Annual Conference, The University of Texas at Arlington, March 21-23, 2013
2013	S. Nasrazadani, K. Kallenberger*, and H. Vaughan*, "Design and Construction of a Cost Effective Jominy Bar Testing Setup", Journal of Materials Education, Vol. 35 (3-4): pp. 57-70 (2013).
2013	S. Nasrazadani and P. White*, "Failure Analysis of a Fractured Wrench Socket", Journal of Failure Analysis and Prevention, Vol. 13: pp. 673-677 (2013).
2013	S. Nasrazadani and T. Springfield*, "Application of Fourier transform infrared spectroscopy in cement Alkali quantification", Journal of Materials and Structures (DOI) 10.1617/s11527-013-0140-3 Rilem 2013.

Funding

2014-2017	S. Nasrazadani "Development of New Accelerated Corrosion Test(s) for All-Aluminum Microchannel and Tube and Fin Heat Exchangers"	ASHRAE	\$179,250
2015	S. Nasrazadani "Investigation of Airside Fouling on Outdoor Heat Exchangers"	ASHRAE	200,000
2015	S. Nasrazadani, H. Bostanci, "Impact of Gaseous Contamination and High Humidity on the Reliable operation of Information Technology Equipment in Data Centers"	ASHRAE	250,00
2015	S. Nasrazadani (PI) 100%, Chemical Solutions to Concrete Durability Problems	TxDOT	147,406
2015	S. Nasrazadani "Materials Selection of Golf Club Heads"	Niki golf	5,000
2014	S. Nasrazadani, "Characterization of regulators coating system"	EPM	3,200
2014	S. Nasrazadani, Scholarship award sponsored by DFW Chapter	NACE	5,000
2013	S. Nasrazadani "Failure Investigation of Gas Regulator and Screw Set, Emerson Process Management"	Regulator Technologies, Inc.	6,000
2013	S. Nasrazadani "Characterization of Packaging Materials"	Pepsico	10,000

Wang, Shuping – Associate Professor

2014	S. Wang, C. Zhang, C. Davis, M. Alt, Z. Ji, Y. Han, and M. L. Gardner, "Optical metrology techniques and apparatus for lens assembly," Proc. SPIE, vol. 9272, (Invited, 2014).
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Engineering Technology Scholarly Activity 2013-15

Funding

2015	"Testing of Sugru for Fiber Optic Communication Applications,"	Sanmina Corporation	1,000
2013-2016	Z. Huang, E. Kougiannos, and S. Wang, "A New Interdisciplinary Technology Education Strategy Using State-of-art Wireless Sensor Network"	NSF	199,309
2014	S. Wang "The Development of Innovative Optical Metrology Techniques and Apparatus -Phase II," \$15,000, Sanmina Corporation, 3/1/2014 – 6/30/2014.	SANMINA-SCI, Carrollton, TX	15,000
2013	S. Wang, "The Development of Innovative Optical Metrology Techniques and Apparatus"	SANMINA-SCI, Carrollton, TX	38,000
2013-2014	Ami Moore, Sanjukta Pookulangara, Manjula Salimath, Shuping Wang, and Zuoming Wang "Interdisciplinary Mentoring of Foreign-born Female Academics,"	UNT Provost Office	4,000

Yu, Cheng – Associate Professor

2015	Lu, X., Xie, L., Yu, C., Lu X., (2015). "Development and Application of a Simplified Model for the Design of a Super-Tall Mega-Braced Frame-Core Tube Building." Elsevier, Engineering Structures 110
2015	Tian, H.W., Li, Y.Q., Yu, C. (2015). "Testing of Steel Sheathed Cold-Formed Steel Trussed Shear Walls." Thin-Walled Structures, 09/2015; 94
2015	Yu, C., Li, C.* (2015). "Behavior and Strength of Cold-Formed Steel Shear Walls using Composite Panels." Advances in Structural Engineering, Vol 18, No. 7
2014	Yanagi, N., Yu, C.*, "Effective Strip Method for the Design of Cold-Formed Steel Framed Shear Wall with Steel Sheet Sheathing", ASCE, Journal of Structural Engineering, 140(4), 04013101. 10.1061/(ASCE)ST.1943-541X.0000870
2014	Balh, N., DaBreo, J., Ong-Tone, C., El-Saloussy, K., Yu, C., Rogers, C.A.* "Design of steel sheathed cold-formed steel framed shear walls", Thin-Walled Structures 75: 76-86.
2014	Zhang, J.*, Cao, W., Yu, C., Dong, H. "Shake Table Test of Reinforced Concrete Wall Structure with Concealed Bracings", Proceedings of ICE – Structures and Buildings, ICE Publishing. Vol. 167, Issue 10, February 2014, Pages 598-609. DOI: 10.1680/stbu.13.00035
2014	Zhang, J.*, Cao, W., Meng, S., Yu, C., Dong, H. "Shaking Table Experimental Study of Recycled Concrete Frame-Shear Wall Structures", Earthquake Engineering and Engineering Vibration, Springer. 2014, 13(2):257-267. DOI:10.1007/s11803-014-0228-y
2014	Ahmadi, M., Zhang, H., Yu, C., Wahrmund, J. "Determining Elastic and Shear Moduli of cold-Formed Steel at Elevated Temperatures Using a New Sonic Resonance Method." Nondestructive Testing and Evaluation, Volume 29, No. 1, 1-13.

Engineering Technology Scholarly Activity 2013-15

2013	Ahmadi, M., Zhang, H*, Yu, C., Wahrmund, J. "Determining Elastic and Shear Moduli of cold-Formed Steel at Elevated Temperatures Using a New Sonic Resonance Method", Nondestructive Testing and Evaluation, Sep 2013.
2013	Yu, C., Panyanouvong, M.X.* "Bearing Strength of Cold-Formed Steel Bolted Connections with a Gaps", Elsevier, Thin-Walled Structures. Volume 67, June 2013, Pages 110-115
2013	De Leon, D, Reyes, A., Yu, C. "Probabilistic Assessment of the Structural Safety of Bolted And Welded Connection for Seismic Zones", Elsevier, Journal of Constructional Steel Research. 88 (2013) 15-20.
2013	Yanagi, N.* and Yu, C. "Effective Strip Method for the Design of Cold-Formed Steel Framed Shear Wall with Steel Sheet Sheathing." J. Struct. Eng. , 10.1061/(ASCE)ST.1943-541X.0000870 , 04013101.
2013	Yanagi, N.*, Yu, C. "Effective Strip Model for Cold-Formed Steel Shear Wall using Steel Sheet Sheathing", Proceedings of the 21st International Specialty Conference on Cold-Formed Steel Structures, St. Louis, MO
2013	Yu, C., Xu, K. "Shear Strength of Cold-Formed Steel Sheet in Bolted Connections Using Oversized Holes." ASCE, Journal of Structural Engineering, 139, 860-864.

Funding

2015	C. Yu, "REU-Supplement: Deflection Characteristics of Innovative Cold-Formed Steel Shear Walls Using Corrugated Steel Sheet Sheathing." Proposal # 1541570	National Science Foundation	12,000
2015-2016	C. Yu "REU-Supplement: Effect of Non-Structural Materials to the Behavior of Corrugated Steel Sheet Shear Walls." Proposal # 1520457	National Science Foundation	10,000
2015-2016	"Experimental Study on System Reliability of Cold-Formed Steel Roof Trusses."	American Iron and Steel Institute	20,000
2015-2016	C. Yu "Advancing Building Information Modeling (BIM) for Cold-Formed Steel Structures." AISI Standards Council Small Project Fellowship Program	American Iron and Steel Institute	6,000
2015	C. Yu, Master Research Contract	KEYMARK enterprises	25,300
2014-2016	C. Yu and Jeff Martin (Verco Decking). "Innovative High-Performance Cold-Formed Steel Walls for Light Framed Construction", Grant # 1445065, National Science Foundation, 2014 – 2016,	NSF PFI:AIR-TT	\$199,653
2014	C. Yu, Research Contract	FRAMECAD America	500
2013-2014	C. Yu, "Structural Behavior of CFS Trusses"	KEYMARK Enterprises, LLC	3,500
2013-2014	C. Yu, "Load Bearing Clip Angle Design"	American Iron and Steel Institute	\$20,000 (Cost Share \$11,741)
2012-2013	C. Yu, "Enhance UNT's Education and Research Capacities through Linkages with Top Universities in China and Thailand"	UNT International	5,000
2010-2016	CAREER: Comprehensive Research on Cold-Formed Steel Sheathed Shear Walls: Special Detailing, Design, and Innovation	National Science Foundation	433,610

Zhang, Haifeng – Associate Professor

2015	B., Y. Ye*, H. F. Zhang, and J. A. Kosinski, "Experimental measurement of the frequency shifts of degenerate thickness-shear modes in a rotated Y-cut quartz resonator subject to diametrical forces," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 62, no. 3, pp. 560-564
2014	Y. Y. Bao and H. F. Zhang , "Feasibility Study of Langasite Wafer Active Sensors for High Temperature Structural Health Monitoring," The 12th International Conference on Motion and Vibration, Sapporo, Japan, 2014
2014	J. A. Kosinski, H. F. Zhang , Y. Y. Bao, "Measurement of the Second Order Elastic Constant of Langasite Crystals," ASME 2014 Conference on Smart Materials, Adaptive Structures and Intelligent Systems, Newport, RI, 2014
2014	H. F. Zhang and M. Ahmadi*, "Resonance tuning of a multi-piezoelectric bimorph beams energy harvester connected by springs," <i>Ferroelectrics</i> , vol. 460, pp. 34-48, 2014.
2014	H. F. Zhang and Y. Y. Bao*, "Sensitivity analysis of multi-layered C-Axis inclined Zig-zag zinc oxide thin film resonators as a viscosity sensor," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 61, pp. 525-534, 2014.
2014	Y. Y. Bao*, H. F. Zhang , M. Ahmadi*, K. M. Afazul*, and F. H. Wu, "Measurements of Young's and Shear Moduli of Rail Steel at Elevated Temperatures," <i>Ultrasonics</i> , vol. 54 pp. 867-873, 2014.
2014	M. Ahmadi*, H. F. Zhang , and J. Tian, "Investigation of piezoelectric Energy harvesting at Elevated Temperatures," <i>Ferroelectrics</i> , vol. 460, pp. 138-148, 2014.
2014	H. F. Zhang and K. Afazul*, "Design and analysis of a connected broadband multipiezoelectric bimorph beams energy harvester," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 61, pp. 1016-1023, 2014.
2013	H. F. Zhang, J. A. Kosinski, and K. Afazul*, "Apparatus for measurement of acoustic wave propagation under uniaxial loading with application to measurement of third-order elastic constants of piezoelectric single crystals," <i>Review of Scientific Instrument</i> , vol. 84, pp. 054901-1-5, 2013
2013	H. F. Zhang, J. A. Turner, J. S. Yang and J. A. Kosinski, Y. Y. Bao*, "Experimental measurement of the electroelastic effect in thickness mode langasite resonators," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 60, pp. 970-974, 2013
2013	H. F. Zhang, J. A. Kosinski, "Analysis of contributions of nonlinear material constants to stress-induced velocity shifts of quartz and langasite surface acoustic wave resonators," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 60, pp. 975-985, 2013
2013	H. F. Zhang, J. A. Kosinski, Y. Xie*, and J. A. Turner, "Drive level dependence of doubly rotated langasite resonators with different configurations," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 60, pp. 963-969, 2013
2013	M. Ahmadi*, H. F. Zhang, Y. Cheng, and J. Wahrmond, "Determining elastic and shear moduli of cold-formed steel at elevated temperatures using a new sonic resonance method," <i>Nondestructive Testing and Evaluation</i> , V. 29, pp. 1-13, 2013.
2013	H. F. Zhang, J. A. Turner, J. S. Yang and J. A. Kosinski, "Experimental measurements of the force-frequency effect of thickness mode langasite resonators," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 60, pp. 1475-1478, 2013.
2013	H. F. Zhang, "Optimal Cuts to extract the third-order piezoelectric constants and electrostrictive constants of langasite single crystals through the electroelastic effect," <i>IEEE Transaction on Ultrasonics, Ferroelectrics and Frequency Control</i> , vol. 60, pp. 1453-1466, 2013.
2013	H. F. Zhang, "Analysis of thickness vibrations of C-Axis inclined Zig-Zag multi-layered zinc oxide thin film resonators," <i>Ferroelectrics</i> , vol. 445, pp. 96-106, 2013.
2013	H. F. Zhang, Tinghui Fan*, "Wireless electric field sensor based on a langasite resonator," <i>Proceedings of IEEE International Frequency Control Symposium</i> , pp. 458-461, 2013.

Engineering Technology Scholarly Activity 2013-15

Funding

2015-2018	Collaborative Research: Energy harvesting nanorods-enhanced MEMS temperature-insensitive gas sensor for combustion monitoring and control," Lead PI: Haifeng Zhang, Wang Guoan, Lei Zuo, David Lin	NSF	\$499,469
2015-2018	Lei Zuo (Stony Brook University), Haifeng Zhang (University of North Texas), Jie Lian (Rensselaer Polytechnic Institute), "Self-powered wireless dual-mode langasite sensor for pressure/temperature monitoring of nuclear reactors"	DOE	\$800,000 (SBU: \$365,243, UNT: \$284,757, RPI: \$150,000)
2013-2016	H. Zhang, L. Zuo, B. K. Sinha, NSF GOALI: "Collaborative Research: Self-powered Dual-mode Piezoelectric Resonant Pressure/Temperature Sensors for Oil and Gas Field Explorations"	NSF	\$382,000 (UNT: \$192,000, SBU: \$190,000)
2012-2013	Wireless Transmission of an Acoustic Signal Using an Unpowered Piezoelectric Crystal Transducer-Lead Magnesium Niobate Titanate (PMN-PT),	Once Upon a Time Foundation	9,318
2010-2014	H. Zhang, Integrated analysis of piezoelectric resonators as components of electronic systems	Army Research Office	\$386,670