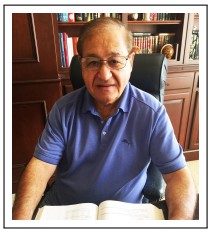

Atila Ertas, Ph.D.

Curriculum Vitae

1. PRESENT TITLE

Professor and Director of, Academy of Transdisciplinary Studies, Texas Tech University.

EDUCATION

1984 **Ph.D. in Mechanical Engineering**, Texas A&M University.

1978 **M.S. in Mechanical Engineering**, Texas A&M University.

1970 **B.S. in Mechanical Engineering**, Istanbul Yildiz State Academy of Engineering and Architecture, Turkey .

1968 **B.S. in Marine Machine Engineering**, Merchant Marine Academy, Istanbul, Turkey .

RESEARCH INTEREST

Transdisciplinary design and related research topics; material galling and coating; tribiology; nonlinear dynamics; acoustic; test method development; 3D printing.

PROFESSIONAL EXPERIENCE

1992 - 2014 **Professor**, Department of Mechanical Engineering, Texas Tech University.

1988 - 1992 **Associate Professor**, Department of Mechanical Engineering, Texas Tech University.

1988 - 1992 **Associate Professor**, Department of Mechanical Engineering, Texas Tech University.

1985 - 1998 **Assistant Professor**, Department of Mechanical Engineering, Texas Tech University.

01/1985 - 08/1985 **Visiting Assistant Professor**, Department of Mechanical Engineering, Texas A&M University.

08/1982 - 12/1984 **Full Time Lecturer**, Department of Mechanical Engineering, Texas A&M University.

Sum - 1983 **Research Engineer**, AMOCO Research Center, Tulsa, Oklahoma.

1981 - 1982 **Material Control Supervisor**, Tubular Finishing Works, Inc., Navasota Texas.

Texas Tech University, Department of Mechanical Engineering, Lubbock, TX, 79409-1021
(806) 535 8644 • *(806) 834 5788* • *aertas@coe.ttu.edu*

1977 - 1981 **Production Supervisor**, *Leadman and Foreman*, ALENCO, Bryan, Texas.

1974 - 1977 **Language and Master Study**.

1968 - 1974 **Marine Engineer**, Turkish Cargo Lines, Istanbul, Turkey.

SCIENTIFIC AND PROFESSIONAL AFFILIATIONS

- Fellow, The American Society of Mechanical Engineers (ASME)
- Fellow, Society for Design and Process Science (SDPS)
- Fellow, The Academy of Transdisciplinary Learning & Advanced Studies
- Senior Research Fellow, IC^2 Institute, The University of Texas at Austin (1996-2019)
- Founding Fellow, Luminary Research Institute, Gaya Foundation, Taiwan
- Honorary Member, The Academy of Transdisciplinary Learning & Advanced Studies
- Honorary Member, Center for Transdisciplinary Research (CIRET), France

HONORS, AWARDS AND NATIONAL RECOGNITIONS

(a) Awards at Texas Tech University

Spring-1987 Halliburton Award in recognition of outstanding achievement and professionalism in education, research and service to students

1988 Texas Tech Ex–Student Association, "The New Faculty Award" in recognition of outstanding dedication to academic achievement

1990 selected as the most memorable teacher by ME students

1991 Pi Tau Sigma Outstanding Teaching Award

1991 Halliburton Award in recognition of outstanding achievement and professionalism in education, research and service to students

Fall-1991 selected as the most memorable teacher by ME students.

1992 President's Excellence in Teaching for 1992

1993 George T. and Gladys Hanger Abell Faculty Award for overall excellence in teaching in both the undergraduate and graduate levels, with consideration of service and research as they benefit the instruction

March 1994 Pi Tau Sigma Honorary member

1995 Spring 1994 semester students accorded one of the highest rating teacher in ME Department.

1995 College of Engineering Outstanding Research Award

1997 President's Academic Achievement Award, (given to the faculty who have demonstrated distinction in teaching, research and service)

2002 Best Professor Award, PI TAU SIGMA, Texas Tech University, Mechanical Engineering (given in 2003 for the year 2002)

2010 Dr. Ertas has been recognized as one of the distinguished former students of Texas A&M, Mechanical Enginering Department (during the last 25 years only 12 former students received this recognition)

Fall-2014 Distinguished Achievement Award in recognition of pioneering effort in Transdisciplinary Research and Education

2020 Integrated Scholars Award: for outstanding teaching, research and service, and generating synergy among the three functions.

(b) National Awards

1990 A. Ertas, (advisor), J. McQuerry, D. Perkins, K. Scott, and K. Turner (senior student), "Backpack/Cot," Award for the Advancement of Arc Welded Design (The James F. Lincoln Arc Welding Foundation)

1991 A. Ertas, J. C. Jones (advisor), T. M. De La Cruz, "Picnic-Pak Automation for the Handicapped," Award for the Advancement of Arc Welded Design (The James F. Lincoln Arc Welding Foundation)

1994 Certificate of Recognition from the State of Texas Energy Conservation Office for entry in the 1994 National Energy Awards Program representing State of Texas with the research project entitled "A New Liquid Desiccant System Design for Peanut Drying"

1994 Industrial Technology National Award from US Department of Energy

January 2012 Gold Medal of Honor from The Academy of Transdisciplinary Learning & Advanced Studies

(c) Honors and Awards from Professional Societies

1986 Ralph James Award for recognition of outstanding service to the ASME Petroleum Division

1988 Service Award (ASME, ETCE) for Chairing the Offshore and Arctic Operation Symposium

1989 Service Award (ASME, ETCE) For Serving as Chairman of the Offshore and Arctic Operation Symposium

1989-1990 ASME Service Award in advancing the engineering profession as Faculty Advisor

1990 Service Award (ASME, ETCE) For Serving as Chairman of the Offshore Committee

1990-1991 ASME Service Award in advancing the engineering profession as Faculty Advisor

1991 Service Award (ASME, ETCE) For organizing the Expert System and Application Workshop

1992 Service Award (ASME, ETCE) For Serving as Co-Chairman of Dynamics and Vibrations Symposium

1992 Service Award (ASME, ESDA) For Outstanding Contribution as Technical Chairman and Organizer for the First Engineering System Design and Analysis Conference

1994 Service Award (ASME, ESDA) For Outstanding Contribution as Technical Chairman and Organizer for the Second Engineering System Design and Analysis Conference

1996 Distinguished Service Award for Exemplary Dedication to the Society for Design and Process Science and Exemplary Service in Pursuit of its Mission

1998 Excellence in Leadership Award in recognition of incomparable devotion and contributions as the catalyst and nurturer of the Society for Design and Process Science and all of the Society's activities and accomplishments

2003 George Kozmetsky Distinguished Achivement Award in recognition of distinguished and meritorious achievement in transdisciplinary education & research as evidenced by management effectiveness, motivational skill, use of creative and innovative methods, and outstanding leadership. Presented by the Society for Design and Process Science on December 4, 2003

EDITORIAL ACTIVITIES

- Associate editor of ASME Journal of Energy Resources Technology (1989-1995).
- Co-Editor-in-Chief of SDPS, Journal of Integrated Design and Process Science, (1996-June 2000).
- Invited Guest Editor of International Journal of Systems Integration (Vol. 8, No. 2, May 1998)
- Editorial board of Journal of Vibrations and Control (1996 - 1998).
- Director of Editorial Board of Journal of Transdisciplinary Engineering & Science (2012-Present)
- Co-editor of a special issue of Journal of METALS on "Powder Formed Parts for Additive Manufacturing-2020" (collection of research papers on 3D printing technology).

SIGNIFICANT PROFESSIONAL ACHIEVEMENTS

- Co-authored an interdisciplinary design textbook, "The Engineering Design Process, published by John Wiley & Sons, Inc.," which has been adopted by universities across the country.
- Established Institute for Design and Advanced Technology (IDEATE) at Texas Tech University
- Initiated an interdisciplinary undergraduate design course teaching in the college of engineering at Texas Tech University.
- Developed Transdisciplinary MS off campus graduate study for Raytheon Systems Comp.
- Developed Transdisciplinary Ph.D. on campus graduate study for Raytheon Systems Comp.
- Co-Founder (with Dr. M. M. Tanik) of an interdisciplinary ASME design conference in Europe entitled "ASME European Joint Conference on Engineering Systems Design and Analysis." This is the first and only ASME conference which will emphasize progress in the move toward globalization of the technical exchange of information pertaining to science and technology.
- Created, Founding President and Co-Founder of an international, interdisciplinary society called "Society for Design and Process Science," which builds bridges among established societies for engineering and computing (ASME, IEEE, etc.) and further servicing the need for a more in-depth interdisciplinary cooperation.
- Co-Founder of an international transdisciplinary society called "Software Engineering Society".
- Co-Founder of an international, interdisciplinary conference called "World Conference on Integrated Design and process Technology."
- Founder and founding Co-Editor-in-Chief of a journal called "SDPS Transactions, Journal of Integrated Design and process Technology."
- Established (ASME, ETCE) the Expert System and Application Symposium (with Dr. M. M. Tanik) .
- Established (ASME, ETCE) Computer Applications Symposium (with Dr. M. M. Tanik) .
- Established (ASME, ETCE) Dynamics and Vibrations Symposium.
- Creater and founding President of The Academy of Transdisciplinary Learning and Advanced Studies (ATLAS)–non-profit organization.
- Craeted and established George Kozmetsky Endowment (GKE).

SERVICE FOR ENGINEERING SOCIETIES AND INTERNATIONAL COMMITTEE

- ASME Petroleum Division Executive Committee Member (1994-1997).
- ASME ESDA (Engineering System Design and Analysis) Executive committee member (1994-1997).
- ASME Student Advisor (1987-1991).
- Symposium Vice-Chairman, ASME (ETCE) Offshore and Arctic Operation Symposium at Dallas (February, 1987).
- Symposium Chairman, ASME (ETCE) Offshore and Arctic Operation Symposium at New Orleans, 1988.
- Symposium Chairman, ASME (ETCE) Offshore and Arctic Operation Symposium at Houston, 1989.
- Chairman, Offshore and Arctic Operation Committee, ASME (ETCE), 1988-1989.
- Chairman, (ASME, ETCE) the Expert System and Application Workshop at Houston, 1991.
- Co-Chairman, (ASME, ETCE) Dynamics and Vibrations Symposium at Houston, 1992.
- Co-Chairman, (ASME, ETCE) Computer Applications Symposium at Houston, 1992.
- Technical Program Chairman, ASME European Joint Conference on Engineering System Design and Analysis, Istanbul June 29-July3, 1992.
- Co-Chairman, ASME First Biennial European Joint Conference on Engineering System Design and Analysis Organizing (ESDA) Committee, 1992.
- International Scientific Committee, COMES'S 93 (Computational Mechanical Engineering Science), Mechanism Design and Analysis Conference.
- International Program Committee member of the CAST'94 (Fourth International Workshop on Computer Aided Systems Technology).
- Organized short workshop on Undergraduate Educational Experience in Design at Texas Tech University during the ASME European Joint Conference on Engineering System Design and Analysis 1992.
- Organized Workshop on "Application of Desiccant Technology in Drying and Cooling Processes," Texas Tech University, May 24, 1993.
- Technical Program Chairman of ASME Second Biennial European Joint Conference on Engineering System Design and Analysis (ESDA), London July, 1994.
- Technical Program Co-Chairman, SDPS, The First Biennial World Conference on Integrated Design and Process Technology, Austin Texas, December 7-9, 1995.
- Advisory Board of Systems and Software Engineering Institute, University of Texas at Austin.
- Founding President, Society for Design and Process Science (December 1994- December 1995).
- Executive Vice President, Society for Design and Process Science (December 1995 - 1998).
- Technical Program Co-Chairman, SDPS, The Second Biennial World Conference on Integrated Design and Process Technology, Austin Texas, December 1-4, 1996.
- Technical Program Co-Chairman, SDPS, The Third Biennial World Conference on Integrated Design and Process Technology, Berlin, Germany, July 6-9, 1998.
- Steering Committee Chairman and Organizer, SDPS, The Fifth Biennial World Conference on Integrated Design and Process Technology, Dallas, Texas, June 4-8, 2000.
- Organized Workshop on Global Transdisciplinary Education, Research, and Training, Izmir, Turkey, September 2000.
- Organized Workshop on Knowledge & Data Engineering (KDE): Accomplishments and Research Needs, Vallejo, California, May 15-16, 2002.

- Technical Program Co-Chairman, SDPS, The Sixth Biennial World Conference on Integrated Design and Process Technology, Pasadena, California, June 23-28, 2002.
- Organized Workshop on Transdisciplinary Education and Research, October 28, 2002, Texas Tech University, College of Engineering, Lubbock, Texas.
- Organized Workshop (with Dr. Tanik and Dr. Maxwell) on Cyberinfrastructure Development for Engineering Research and Education through Transdisciplinary Paradigm, December 6, 2003, Austin, Texas.
- Technical Program Chairman and organizer, Integrated Design and Process Technology Symposium, Izmir-Kusadasi, June 28-July2, 2004.
- Steering Committee Co-Chairman, and Conference organizer, Integrated Design and Process Technology Conference, Beijing, China, June 12-16, 2005.
- Technical Program Co-Chairman and organizer, Integrated Design and Process Technology Conference, San Diego, California June 25-30, 2006.
- Technical Program Co-Chairman and organizer, Integrated Design and Process Technology Conference, Antalya, Turkey, June 3-8, 2007.
- Technical Program Co-Chairman and organizer, Integrated Design and Process Technology Conference, Taiwan, 1-6, 2008.
- Executive Director, Society for Design and Process Science Board (December 1999 - 2009).
- Technical Program Chairman and organizer, ATLAS Transdisciplinary, Transnational, Transcultural Annual meeting, Georgetown, Texas, May 23-28, 2010.
- Technical Program Chairman and organizer, ATLAS Transdisciplinary, Transnational, Transcultural Annual meeting, Taichung, Taiwan, June 4-9, 2012.
- Technical Program Chairman and organizer, ATLAS Transdisciplinary, Transnational, Transcultural Annual meeting, Taichung, Taiwan, June 8-13, 2014.
- Technical Program Chairman and organizer, ATLAS Transdisciplinary, Transnational, Transcultural Annual meeting, Suzhou, China, May 29 - June 2, 2016.
- Vice Chair and co-organizer, ATLAS Transdisciplinary, Transnational, Transcultural Annual meeting, Cluj-Napoca, June 3-6, 2018.

GRADUATE STUDENT SUPERVISION

(a) Dissertation Chaired

1992 Dr. Ghulam Mustafa, Applied Materials, Santa Clara, CA.

1992 Dr. Olkan Cuvalci, Applied Materials, Santa Clara, CA.

1992 Dr. Santos Garza, TI, Dallas, TX.

1993 Dr. Stephen Ekwaro-Osire, Professor, Texas Tech University, TX.

1999 Dr. Ismail Cicek, Istanbul Technical University, Istanbul, Turkey.

2000 Dr. Walter Wanyama, Automated Analysis Corporation, Clayton, NC.

May 2003 Dr. Mert Doganli, Ford Motor Company, Turkey.

Dec. 2003 Dr. Tugrul sabir, Applied Materials, Santa Clara, CA.

Dec. 2005 Dr. Bulent Gumus, TOBB Economy and Technology University, Ankara, Turkey.

Dec. 2009 Dr. Richard Landis, Raytheon Company, Dallas, TX.

Dec. 2009 Dr. Bobby McPeak, Raytheon Company, Dallas, TX.

Dec. 2009	Dr. John Zanoff, December 2009, Raytheon Company, Dallas, TX.
Dec. 2009	Dr. Abidin Yildirim, December 2009, Alabama University at Birmingham, Alabama.
Dec. 2009	Dr. Sukanta Ganguly, December, 2009, MedGoline, LLC, California.
May 2010	Dr. Tom Kollman, Raytheon Company, Dallas, TX.
May 2010	Dr. Emrah Gumus, Design Engineer, Aselsan, Defense & Space, Ankara, Turkey.
Sum. 2013	Dr. Marty Garcia, Chief Engineer Raytheon Company, Dallas, TX.
Sum. 2014	Dr. Vijay Ramomoorthy, California.
Dec. 2014	Dr. Timhoty Horton, Raytheon Company, Dallas, TX.
May 2015	Dr. Lindsey Williams, Technical Director, Engineer Raytheon Company, Dallas, TX.
May 2015	Dr. Michael W. Smith, Engineer, Raytheon Company, Dallas, TX.
Sum. 2015	Dr. Haputhanthri Shehan, Ford Motor Company, Detroit.
Dec. 2015	Dr. Ilseng John, Raytheon Company, Dallas, TX.
Sum. 2016	Dr. Turgut B. Baturalp, Texas Tech University, Lubbock, TX.
Sum. 2018	Dr. Adam Stroud, Metalworking Company, Ellwood Group, Houston, Texas.
Spring 2019	Dr. Robert (Bob) Stroud, Raytheon Company, Dallas, TX.
Fall 2021	Dr. Utku Gulbulak
Spring 2021	Dr. Samuel Denard, Raytheon Company, Dallas, TX.
Summer 2021	Dr. Daniel Moran, Raytheon Company, Dallas, TX.
Fall 2021	Dr. Brandon C. Woolley, Raytheon Company, Dallas, TX.

(b) MS Thesis and Report Option Chaired (Mechanical Engineering on Campus, 52 students)

B. K. Majumdar (December 1986); J. J. Luthan (May 1987); F. Zorba (December 1987); J. H. Lee (May 1988); E. K. Chew (May 1988); C. Malone (September 1988); G. Anlas (September 1988); S. Ekwaro-Osire(December 1988); G. Santos (December 1988); I. Kiris (May 1991); S. Kavasogullari (May 1991); A. S. Prakash (August 1991); Che-Heng Lin (August 1991); Mehmet Caglar (December 1992); Zhan, Yu Xiang (December 1992); Gaffar M. Ariful (December 1992); N. R. Setlur (May 1993); N. J. Prakash (May 1993); Hoque. A.K.M. Azizul (May 1993); Rahman Khalilur (December 1993); Christopher Boyce (May 1994); Melih (May 1994); F. M. Kara (May 1994); K. Kompella (August 1994); Lokesh Seetamshetti (August 19940; I. Cicek (May 1995); Kim Ookyong (December 1995); Sarang Babat (December 1995); Mary Taylor (December 1996); Walter Wanyama (August 1997); Bulent Gumus (December 1997); S. Firenza (May 1997); M. Helal (December 1997); Tulu Tanju (December 1998); Cagatay Guler (May 1999); Nadir Akkaya (August 1999); Mert Doganli (December 2000), Mark Landers (December 2000); J. Neville (May 2001); Tugrul Sabir (May 2001); Bulent Unuvar (December 2002); Etem G. Sayin (May 2004); Ilgaz Cumaliogl (December 2005); Vikas Subramanian (December 2005); Vinay Shankar (December 2005); Arun Prasad (May 2006); Birce Dikici (December 2006); Faruk Gungor (May 2007); Emrah Gumus (May 2007); Kefani Habtamu (December 2009), Melisa Otkur (December, 2010), Jace T. Lindsey (August, 2014), Ali Gursoy (December 2015).

(c) MS Report Option Chaired (Raytheon Master of Engineering; 115 students)

Thomas E. Kollman (December 2000); Steven E. Nelson (December 2000); Stephen J. Huss (December 2000);Richard H. Scott (December 2000); Mark D. Turner (December 2000);Donald Shipley (December 2000); Dionicio Quintanilla (December 2000); John N. Carbone (December 2000); Randy L. Brown (December 2000); Craig R. Stair (Decemeber 2000); Carl Tosetto (December 2000); Bradley Whittington (December 2001); Auldwyn Danny Grubb (December 2001); Jo Alamares (December 2001); Robert H. Price (December 2001); Richard L. Landis (December 2001); William W.Kaake Jr (December 2001); Steve Clemons (December 2001); Susan L. Armitage (December 2002); Belinda Brown (December 2002); S.S. Jernigan (December 2002); M. Clay Harden (December 2002); Francis David Kenny Jr (December 2002); Davinia B. Chism (December 2002); Donna Maestas (December 2002); Gary L. Irvin (December 2002); Jean Cathcart (December 2002); Julian Parker (December 2002); Kurt A. Himmelreich (December 2002); M.A. Solano (December 2002); M.A. Nguyen (December 2002); H. L. Moore Jr (December 2002) Anthony Lynn Peterson (December 2003); James M. Hart (December 2003); John E. Wright (December 2003); Brandeis Marquette (December 2003); Christopher A. Rynas (December 2003); Matthew Zimmerman (December 2003); Peter A. Polcari (December 2003); Timothy C. Smith (December 2003); Jaquidon Devenport (December 2003) ; Larry Welch (December 2003); T.J. Theodore (December 2003); Christopher Adams (December 2004);Kent A. Bacon (December 2004); Richard L. Koshak (December 2004); Marissa M. Barnard (December 2004); John Zanoff III (December 2004); Brent Granstaff (December 2004); Steve Wade Reynolds (December 2004); Schuyler L Deitch (December 2004); Terrence Chan (December 2004); Angelito S. Cruz (December 2004); Kimberly Yvette Ball (December 2004); Engman Kent Bond (December 2004); Todd Shipley (December 2004); Christian Joaquin Cruz (December 2005); Darren O'Rourke (December 2005); Laura J. Aguilar (December 2005); William J. Haas (December 2005); Dustin Hamill (December 2005); John M Harms (December 2005); Jonathan M. Clyburn (December 2005); Michael J Voss (December 2005); Carl McGaha (December 2005); Michael Hogan (December 2005); Tandy Penn (December 2005); Christopher Michael Camp (December 2006); Robert F. Flanagan (December 2006); Richard L. Garcia (December 2006); Mark Higginbotham (December 2006); Jon K. Ilseng (December 2006); Mark Midoux ; Aaron De Los Santos (December 2006); Dawn Simpson (December 2006); Jeff B. Smith (December 2006); Justa A. Trevino (December 2006); Herbert Williams III (December 2006); Robert Young (December 2006); Sundown Aronsson (December 2007); Hill Bullock (December 2007); Russell Drake (December 2007); Bill Duffney (December 2007); Bryan Fox (December 2007); Lonney Head (December 2007);Tim Horton (December 2007); Ashley Jones (December 2007); Hilaire Kadjo (December 2007); Richard Kendall (December 2007); David Kirsch (December 2007); Debra Metzger (December 2007); Darryl Nelson (December 2007); Steven Parker (December 2007);Michael Smith (December 2008);Dan Moran(December 2008);Lindsey Williams(December 2008); Curtis Beasley (December 2008); Stacie Johnson (December 2008); James Irion (December 2008); Jason Liebert (December 2008);Leandrew Davis (December 2008);Daniel Pettus (December 2008); Don Williams (December 2008); Anthony C. Perry (December, 2009); Jorge A. Canals (December, 2009); Stanley K. Wood (December, 2009); Chris Guggenberger (December, 2009); Marty Garcia (December, 2009); Kyle Wills (December, 2009); Keith Schauer (December, 2009); Chris Thomas (December, 2009).

LABORATORY DEVELOPMENT

- Developed Dynamic Systems and Vibrations Laboratory for research.

- Developed Tribology Laboratory for research.
- Developed laboratory for Desiccant Technology (heating, cooling and power generation)
- Developed Fall Arresting System Laboratory for Fall and Slip research.
- Developed Multimedia Laboratory for teaching.
- Help to develop Mechanical System Laboratory for undergraduate education.
- Developed Acoustic Laboratory for research and education.
- Developed Bioinspired Design Lab (BDL).

SPONSORED RESEARCH CONTRACTS & GRANTS

Dr. Ertas has been PI or Co-PI on over 40 funded research projects totaling more than 7 million dollars funding sponsored by the State of Texas (Texas State Energy Conservation Office, TxDOT, AREP, ATP and TD&T programs); National Science Foundation; D-Technologists; Lithium Corporation of America; The American Society for Engineering Education and General Motors Corporation; H. S. Precision; Center for Disease Control, Department of Health and Human Service; Teledyne Merla; Exxon Production Research Company; Norton Chemical Process Products; Allen-Bradley; Tubular Finishing Works Corporation; Long Shot Inc.; Sumitomo Metal America; Ford Motor Company; DeLeon Peanut Company; TTU, Health Sciences Center; AT&T; Southwest Research Institute, Raytheon Systems Comp; EarthCO Building Systems Inc.

REFEREED JOURNAL PUBLICATIONS

1. A. Ertas. Linearization Technique for Probabilistic Riser Frequency Domain Analysis. *Trans. ASME Journal of Energy Resources Technology*, Vol. 108, No. 4, pp. 292–296, Dec. 1986.
2. A. Ertas and T. J. Kozik. Numerical Solution Techniques for Dynamic Analysis of Marine Riser. *Trans. ASME Journal of Energy Resources Technology,* Vol. 109, No. 1, pp.1–5, March 1987.
3. A. Ertas, P. Gandhidasan and J. J. Luthan. Feasibility Studies of Ammonia-Water Vapor Absorption Heat Transformer. *Trans. ASME Journal of Energy Resources Technology,* Vol. 109, No. 2, pp. 96–100, June 1987.
4. A. Ertas and T. J. Kozik. A Review of Current Approaches to Riser Modeling. *Trans. ASME Journal of Energy Resources Technology,* Vol. 110, No. 3, pp. 155–160, September 1987.
5. A. Ertas and T. J. Kozik. Fatigue Loads on the Foundation Due to Turbine Rotor Eccentricity. *Trans. ASME Journal of Energy Resources Technology,* Vol. 109, pp. 174–179, 1987.
6. A. Ertas, W. R. Blackstone, and B. K. Majumdar. The Effect of Tool Joint Stiffness on Drill Pipe Fatigue in Riser Ball Joints *Tran. ASME Journal of Engineering for Industry*, Vol. 112, pp. 369–374, 1989.
7. A. Ertas and J. H. Lee. Stochastic Response of Tension Leg Platform to Wave and Current Forces. *Trans. ASME Journal of Energy Resources Technology*, Vol. 111, pp. 221–230, 1989.
8. A. Ertas and E. K. Chew. Nonlinear Dynamic Response of a Rotating Machine. *International Journal of Nonlinear Mechanics*, Vol. 25, pp. 241–251, 1990.
9. A. Ertas and G. Anlas. Response of Two-Degree-of-Freedom Turbine-Housing System with Quadratic Nonlinearity. *Trans. ASME Journal of Energy Resources Technology*, Vol. 112, No:1, pp. 103-113, 1990.
10. A. Ertas, C. W. Malone, J. C. Jones, and T. B. Leamon. Design and Development of a Fall Arresting System. *Journal of Safety Research*, Vol. 21, No: 3, pp. 97-102, 1990.
11. T. J. Kozik, J. E. Lovell, and A. Ertas. Upper Ball Joint Variations Due to Riser Tensioner

and Vessel Motions-PART I: Derivation of General Equations. *Trans. ASME Journal of Energy Resources Technology,* Vol. 112, No:3, pp. 188-199, 1990.

12. T. J. Kozik, J. E. Lovell, and A. Ertas. Upper Ball Joint Variations Due to Riser Tensioner and Vessel Motions–PART II: Analysis and Computer Simulation. *Trans. ASME Journal of Energy Resources Technology,* Vol. 112, No:3, pp. 200-207, 1990.
13. A. Ertas, E. E. Anderson, and S. Kavasogullari. Comparison of Mass and Heat Transfer Coefficients of Liquid Desiccant Mixtures in a Packed Column. *Trans. ASME Journal of Energy Resources Technology,* Vol. 113, No. 1, pp. 1-6, March 1991.
14. P. Gandhidasan, A. Ertas, and E. E. Anderson. Review of Methanol and Compressed Natural Gas (CNG) as Alternative for Transportation Fuels. *Trans. ASME Journal of Energy Resources Technology,* Vol. 113, No. 2, pp. 101-107, June 1991.
15. A. Ertas, C. W. Malone, and J. C. Jones. Design and Development of a Fall Arresting Robot. *International Journal of Mechatronics,* Vol. 1. N0. 2, pp. 175-186, October 1991.
16. A. Ertas, and S. Ekwaro-Osire. Effect of Damping and Wave Parameters on Offshore Structure under Random Excitation. *Journal of Nonlinear Dynamics*, Vol. 2., pp. 119-136, December 1991.
17. A. Ertas, G. Mustafa. Real-Time Response of the Simple Pendulum: An Experimental Technique. *Experimental Techniques,* Vol. 16, No. 4, pp. 33-35, August 1992.
18. A. Ertas, H. J. Carper, O. Cuvalci, S. Ekwaro-Osire, and W. R. Blackstone. Experimental Investigation of Galling Resistance in OCTG Connections. *Tran. ASME Journal of Engineering for Industry,* Vol. 114, No. 1, pp. 100-104, February 1992.
19. A. Ertas, E. E. Anderson, and I. Kiris. Properties of a New Liquid Desiccant Solution–Lithium Chloride and Calcium Chloride Mixture. *Solar Energy,* Vol. 49, No. 2, pp. 205-212, 1992.
20. A. Ertas, M. Ghulam, and O. Cuvalci. A Comparison of Fracture Mechanics and S-N Curve Approaches in Designing Drill Pipe. *ASME Journal of Offshore mechanics and Arctic Engineering*, Vol. 114, pp. 205-211, August 1992.
21. A. Ertas, J. T. Krafcik, and S. Ekwaro-Osire. Performance of an Anisotropic Allman/DKT 3-Node Thin Triangular Flat Shell Element. *Composite Engineering*, Vol. 1, No. 1, pp. 269-280, 1992.
22. H.J. Carper, A. Ertas J. Isa, and O. Cuvalci. Effect of Material, Manufacturing, and Operating Variables on the Friction Coefficient in OCTG Connections. *Transaction of the ASME Journal of Tribology,* Vol. 114, No. 4, pp. 698-705, 1992.
23. A. Ertas, H. J. Carper, and W. R. Blackstone. Development of a Test Machine and Method for Galling Studies. *Journal of Experimental Mechanics,* Vol. 32, No:4, pp. 340-347, 1992.
24. A. Ertas, P. Gandhidasan, I. Kiris, and E.E. Anderson. Experimental Investigations on the Performance of a Regeneration Tower for Various Climatic Conditions. *Solar Energy,* Vol. 53, NO: 1, pp. 125-130, 1994.
25. Md. K. Rahman and A. Ertas. Acoustic Power Radiation From Rectangular Plate with Mixed Boundary Conditions. *Thin Walled Structures,* Vol. 18, pp. 3-22, 1994.
26. G. Mustafa and A. Ertas. Dynamics and Bifurcations of Coupled Column-Pendulum Oscillator. *Journal of Sound and Vibration*, Vol. 182(3), pp.393-413, 1995.
27. Md. K. Rahman and A. Ertas. Acoustic Radiation Efficiency of a Rectangular Plate with Different Boundary Conditions. *Structural Engineering Review*, Vol 7, No. 1, pp. 41-55, 1995.
28. A. Ertas, H. A. K. M. Azizul, and T. T. Maxwell. Experimental Study of Hay Drying with a Liquid Desiccant System. *ASHRAE Transactions*, Vol. 101, Pt.2, Paper No: 3900, pp. 229-239, 1995.
29. S. Ekwaro-Osire and A. Ertas. Response Statistics of a Beam-Mass Oscillator under Combined Harmonic and Random Excitation. *Journal of Vibration and Control*, Vol.1, No:2, pp.225-247,

1995.

30. G. Mustafa and A. Ertas. Experimental Evidence of Quasiperiodicity and Its Breakdown in the Column-Pendulum Oscillator. *ASME Dynamic Systems, Measurement, and Control,* Vol. 117, No. 2, pp. 218-225, 1995.
31. H. J. Carper and A. Ertas. Rating thread Compounds for Galling Evaluation. *Trans. of the ASME Journal of Tribology,* Vol. 117, NO. 4, pp. 639-645, 1995.
32. O. Cuvalci and A. Ertas. Pendulum as Vibration Absorber for Flexible Structures: Experiments and Theory. *ASME Journal of Vibration and Acoustics,* Vol. 118, pp. 1-9, 1996.
33. A. Ertas, H. A. K. M. Azizul, I. Kiris, and P. Gandhidasan. Low Temperature Peanut Drying Using Liquid Desiccant System. *Drying Technology, An International Journal,* Vol. 15, N0: 3&4, pp. 1045-1060, 1997.
34. A. Ertas, P. Gandhidasan, I. Kiris, E.E. Andersson, and M. Dolan. Experimental Investigations on the Performance of a Packed Bed Dehumidifier for Various Climatic Conditions. *Drying Technology*, An International Journal, Vol. 15, N0: 3&4, pp. 1061-1075, 1997.
35. M. M. Tanik and A. Ertas. Interdisciplinary Design and Process Science: A Discourse on Scientific Method for the Integration Age. *Journal of Integrated Design and Process Science*, Vol 1, No:1, pp. 78-94, 1997.
36. A. Ertas, S. Firenza, B. T. Tulu, O. Cuvalci, T. T. Maxwell, M Schubert, R. Henning and C. Butts. Design and Development of a New Peanut Curing Process for West Texas. *Drying Technology, An International Journal,* Vol. 17, N0: 6, pp. 1149 - 1159, 1999.
37. A. Ertas, O. Cuvalci, and H. Carper. Determination of Friction Characteristics of J-55 OCTG Connections Lubricated with Environmentally Safe Thread Compound. *Society of Tribologists and Lubrication Engineers, Tribology Transactions,* Vol. 42, No. 4, pp. 881-892, December 1999.
38. S. Y. Yu, H-C. Zhang and A. Ertas. Environmental Conscious Design: An Introduction to EDST. *SDPS Transactions: Journal of Integrated Design and Process Science*, Vol. 3, No. 4, pp. 27-38, December 1999.
39. A. Ertas, O. Cuvalci, and S. Ekwaro-Osire. Performance of Pendulum Absorber for a Non-Linear System of Varying Orientation. *Journal of Sound and Vibration,* Vol. 229, No. 4, pp. 913-933, January 2000.
40. A. Ertas, O. Cuvalci, C. Guler, and W. Wanyama. Development of a Proper Drying Region for West Texas Climate. *SDPS Transactions: Journal of Integrated Design and Process Science,* Vol.4, No.3, pp. 79-86, 2000.
41. A. Ertas, M. M. Tanik, and T. T. Maxwell. Transdisciplinary Engineering Education and Research Model. *SDPS Transactions: Journal of Integrated Design and Process Science*, Vol.4, No.4, pp. 1-11, 2000.
42. A. Ertas. The Academy of Transdisciplinary Education and Research (ACTER). *SDPS Transactions: Journal of Integrated Design and Process Science*, Vol.4, No.4, pp. 12-18, 2000.
43. O. Cuvalci, A. Ertas, I. Cicek, and S. Ekwaro-Osire. Nonlinear Vibration Absorber for a System Under Synusoidal and Random Excitation: Experiments. *Journal of Sound and Vibration,* 294 (4), pp. 701-718, 2002.
44. T.T. Maxwell and A. Ertas. Harnessing Complexity in Design. *SDPS Transactions: Journal of Integrated Design and Process Science,* Vol.6, No.3, pp. 63-74, 2002.
45. I. Cicek and A. Ertas. Experimental Investigation of Beam-Tip mass and Pendulum System Under Random Excitation. *Journal of Mechanical Systems and Signal Processing,* Vol. 16(6), pp.1059-1072, 2002.
46. W. Wanyama, A. Ertas, H-C. Zhang. Life-Cycle Engineering: A Review of Application, Issues,

Tools and Research. *International Journal of Computer Integrated Manufacturing,* Vol. 16, No. 4-5, pp. 307-316, Jul-Aug 2003.

47. A. Ertas, T.T. Maxwell, M.M. Tanik, V. Rainey. Transformation of Higher Education: The Transdisciplinary Approach in Engineering. *IEEE Transactions on Education, IEEE Transactions on Education,* Vol. 46, No:1, pp. 289-295, February 2003.
48. B. Gumus and A. Ertas. Requirement Management and Axiomatic Design. *SDPS Transactions: Journal of Integrated Design and Process Science,* Vol. 8, No. 4, pp. 19-31, 2004.
49. T.T. Maxwell, J.D. Nevill, and A. Ertas. Biomass Gasification Feed System Design and Avaluation. *ASME Transaction: Journal of Energy Recources Technology,* ol. 127, Issue 1, pp. 71-82, March 2005.
50. E. Selvi, Y. Ma, R. Aksoy, A. Ertas. A. White. High Pressure X-ray Diffraction Study of Tungsten Disulfide. *Journal of Physic and Chemistry of Solids*, 67 (2006) 2183-2186.
51. R. Ersoy, Y. Ma, E. Selvi, M. C. Chyu, A. Ertas, A. White. X-ray Diffraction Study of Molyndenum Disulfide to 38.8 GPa. *Journal of Physic and Chemistry of Solids,* 67 (2006) 1914-1917.
52. Cuumalioglu, I., A. Ertas, Y. Ma, and T. Maxwell. High Pressure Hydrogen Storage Tank: A Parametric Design Study. *Transactions of ASME, Journal of Pressure Vessel Technology,* Vol. 129, Issue 1, pp. 216-222, February 2007.
53. Cumalioglu, I., A. Ertas, Y. Ma, and T. Maxwell. State of The Art: Hydrogen Storage. *Transactions of ASME, Jounal of Fuel Cell Science and Technology,* Vol. 5, pp.34002-1- 34002-10, August 2008.
54. B. Gumus, A, Ertas, D. Tate, and I. Cicek. The Transdisciplinary Product Development Lifecycle (TPDL) Model. *Journal of Engineering Design,* 19(03), pp. 185-200, June 2008.
55. A. Ertas and G. S. Garza. Experimental Investigation of Dynamics and Bifurcations of an Impacting Spherical Pendulum. *Experimental Mechanics*, (2009) Vol.49, pp. 653-662.
56. Sukanta Ganguly, Pavandeep Kataria, Radmila Juric, Atila Ertas, and Murat M. Tanik. Sharing Information and Data Across Heterogeneous e-Health Systems. *Telemedicine and Health,* Vol. 15 No. 5, pp. 454-464, 2009.
57. D. Tate, T. Maxwell, A. Ertas, H-C, Zhang, P. Flueckiger, W.Lawson, A. D. Fontent, Chandler. Transdisciplinary Approaches for Teaching and Assessing Sustainable Design. *International Journal of Engineering Education,* Vol 26, No.2, pp.1-12, 2010.
58. Ertas, A. Understanding of Transdiscipline and Transdisciplinary Process. *Transdisciplinary Journal of Engineering & Science,* 1(1), 1-12, 2010.
59. Gumus, E., Ertas, A. Auto Parametric Vibration Absorber: Simulation Using Absolute Nodal Coordinate Formulation. *Journal of Biomechanics.* (43S1 ed., vol. 43, pp. 523-S74), 2010.
60. Otkur, M., Gumus, E., McPeak, B., Ertas, A. Impact Simulation for Generic Design. *Journal of Biomechanics,* (43S1 ed., vol. 43, pp. 523-S74), 2010.
61. T. Kollman and A. Ertas. Results of a Survey to Identfy Differences between Interdisciplinary and Transdisciplinary Research Processes. *Transdisciplinary Journal of Engineering & Science,* Vol: 1, No:1,pp.131- 141, 2010.
62. A. Ertas, T. Kollman and E. Gumus. Transdisciplinary Educational Performance Evaluation through Survey. *The International Journal of Engineering Education,* Vol. 27, No: 5, pp. 1094-1106, 2011.
63. Abidin Yildirim, Zekai Demirezen, Atila Ertas and Murat M. Tanik. Application of the Perron-Frobenius Theorem in Signal Classification and Identification. *International Journal of Computers, Information Technology and Engineering (IJCITAE)*, Vol.5 No.2, pp. 55-68, 2011.
64. B. G. McPeak and A. Ertas. The good, the bad, and the ugly: facts of tornado survival. *Natural*

Hazards, Vol.60 No: 3, pp. 915-935, 2012.
65. Ertas, A. Integrating Transdisciplinarity in Undergraduate Education. *Transdisciplinary Journal of Engineering & Science*, 1, pp. 128-144, 2012.
66. M. Lindsey Williams, Atila Ertas, and Derrick Tate. Using Stochastic Multi-Criteria Acceptability Analysis in Biologically Inspired Design as a Multi-Disciplinary Tool to Assess Biology-to-Engineering Transfer Risk for Candidate Analogs. *ASME Journal of Mechanical Design,* Vol. 136, No:11, pp. 1107-1114, 2014.
67. Atila Ertas, Kellilynn M. Frias, Derrick Tate, and Susan M. Back. Shifting Engineering Education from Disciplinary to Transdisciplinary Practice. *International Journal of Engineering Education,* Vol. 31, No. 1(A), pp. 94-105, 2015.
68. Vijay, R., Ertas, A., Tate, D. Assessing the Potential of Computer-Assisted Projective, Therapeutic Problem Solving. *International Journal on Artificial Intellegence Tools (IJAIT)*, 24(3), 1-14, 2015.
69. Ertas, A., Rohman, J., Chillakanti, P., Baturalp, T. B. Transdisciplinary Collaboration as a Vehicle for collective Intelligence: A Case Study of Engineering Design Education. *International Journal of Engineering Education,* Vol. 31 No.6(A), 1526-1536, 2015.
70. Ertas, A., M. W. Smith, D. Tate, W. D. Lawson, and T. B. Baturalp. Complexity of System Maintainability Analysis Based on the Interpretive Structural Modeling Methodology: Transdisciplinary Approach. *Journal of Systems Science and Systems Engineering*, 2016 25(2):254–268.
71. Ertas, A. Transdisciplinary Trans-Sector Integration in Education: Convergence. *Transdisciplinary Journal of Engineering & Science,* Vol. 6, pp. 24 -37, 2016.
72. Horton M. T., Kay M., Ertas, A., Tate D. A Hyperspectral Signature Method for E. coli: Impact on Public Health. *Transdisciplinary Journal of Engineering & Science,* Vol. 6, pp. 49-61, 2016.
73. Gumus, E., Ertas, A. Analysis of Free Pendulum Vibration Absorber Using Flexible Multi-Body Dynamics. *Shock and Vibration,* Volume 2016 (2016), Article ID 3253178, 19 pages, http://dx.doi.org/10.1155/2016/3253178
74. Ertas, A., Greenhalgh-Spencer, H., Gulbulak, U., Baturalp, T. B., Frias, K. Transdisciplinary Collaborative Research Exploration for Undergraduate Engineering Students. *International journal of Engineering Education,* Vol. 33, No. 4, pp.1242-1256, 2017.
75. Stroud A. W., Ertas, A. Development of a rolling finishing system to deliver net shape components from titanium structural extruded shapes. *Journal of Manufacturing Processes,* Vol. 32, pp. 187-198, 2018.
76. Stroud, A., Ertas, A. Complex Multi-System Integration Problems Associated with Titanium Metalworking and Manufacture: System of Systems Aproach–Part I. Metals, 9(4), 423, 2019. https://doi.org/10.3390/met9040423
77. Stroud, A., Ertas, A. Net Shape Extrusion of Titanium Bars through Coupled two Part Preform Manufacturing Process: System of Systems Approach–Part II. *Metals*, 9(4), 423, 2019. https://doi.org/10.3390/met9040423
78. Gulbulak U., and Ertas, A., and Students from Additive manufacturing class. Boosting Just-in-Time Supply Chain Innovation through Additive Manufacturing: A Transdisciplinary Educational-Experience. *Transdisciplinary Journal of Engineering & Science,* Vol. 10, pp. 199-223, 2019. doi: 10.22545/2020/00137
79. Stroud, R., Ertas, A., Mengel, S. Application of Cyclomatic Complexity in Enterprise Architecture Frameworks. *IEEE Systems Journal*, 13(3), 2166-2176, 2019.
80. Gulbulak, U., Ertas, A. Finite element driven design domain identification of a beating left ventricular simulator. *Bioengineering,*2019, 6, 83; doi:10.3390/bioengineering6030083
81. Moran, D., Gulbulak, U. Ertas, A., and students from 2020 Capstone Design, ME-Section-5 Class.

Complexity of Global Refugee Crisis: Needs for Global Transdisciplinary Collaboration. *Transdisciplinary Journal of Engineering & Science*, Vol. 11, pp. 115-131, 2020. doi: 10.22545/2020/00137

82. Ertas, A., Boyce, C. T.R., Gulbulak, U. Experimental Measurement of Bulk Thermal Conductivity of Activated Carbon with Adsorbed Natural Gas for ANG Energy Storage Tank Design Application. *Energies*, 2020, 13, pp. 1-15. 682; doi:10.3390/en13030682
83. Denard, S., Ertas, A., Mengel, S., and Ekwaro-Osire, S. Development Cycle Modeling: Process Risk. *Applied Science*. 2020, 10, pp.1-19. 5082; doi:10.3390/app10155082
84. Denard, S., Ertas, A., Mengel, S., and Ekwaro-Osire, S. Development Cycle Modeling: Resource Estimation. *Applied Science*. 2020, 10, pp. 1-16. 5013; doi:10.3390/app10145013
85. Woolley,B., Mengel, S., and Ertas, A. An evolutionary approach for the hierarchical scheduling of safety-and security critical multicore architectures. *Computers*, 2020, 9, 71, pp. 1-19. doi:10.3390/computers9030071
86. Gulbulak, U., Ertas, A., Pavelka, T., Baturalp, T. The Effect of Fundamental Curves on Geometric Orifice Area of Polymeric Bioprosthetic Heart Valves. *Journal of the Mechanical Behavior of Biomedical Materials*, 112, 104039. https://doi.org/10.1016/j.jmbbm.2020.104039.
87. Gulbulak, U., Ertas, A., Cordell, M. The Impact of Transdisciplinarity on Solving Complex Engineering Problems in an Ethnically Diverse Classroom *International Journal of Engineering Education*, Vol. 36, No. 6, pp. 1976–1987, 2020.
88. Smith, M., Lawson, W., Ertas, A., & Surles, J. Process of Measuring the Maintainability of Commercial Off-the-Shelf (COTS) Based Systems: A Complexity Approach. *Transdisciplinary Journal of Engineering & Science,* Vol. 11, pp. 32-61, 2020 . https://doi.org/10.22545/2020/0132
89. Brandon Woolley, B., Mengel, S., and, Ertas, A. An Evolutionary Approach for the Hierarchical Scheduling of Safety- and Security-Critical Multicore Architectures. *Computers*, 2020, 9, 71, pp. 1-19. doi:10.3390/computers9030071
90. Pratap Chillakanti, Stephen Ekwaro, and Atila Ertas. Evaluation of Technology Platforms for Use in Transdisciplinary Research. *Education Science,* 2021, 11, 23. https://doi.org/10.3390/educsci110100
91. Gulbulak, U., Gecgel, O., and Ertas, A. A Deep Learning Framework to Approximate the Geometric Orifice and Coaptation Area of Polymeric Heart Valves Under Time – Varying Transvalvular Pressure. *Journal of the Mechanical Behavior of Biomedical Materials,*2021, 117:104371. doi: 10.1016/j.jmbbm.2021.104371.
92. Moran, D., and Ertas, A., Gulbulak, U. A Unique Transdisciplinary Engineering-Based Integrated Approach for the Design of Temporary Refugee Housing Using Kano, HOQ/QFD, TRIZ, AD, ISM and DSM Tools. *Designs,* 2021, 5(2), 31; https://doi.org/10.3390/designs5020031.
93. A. Ertas and U. Gulbulak, and student groups. The COVID-19 Crisis and Complexity in the United States. *Transdisciplinary Journal of Engineering & Science,* Vol. 12, pp.39-60, 2021. https://doi: 10.22545/2020/00157
94. Çuvalcı, O., Ünker, F., Batuhan B. T., Gülbulak, U., Ertaş, A. Modal Control of Cantilever Beam Using a Gyrostabilizer. *Sound & Vibration*, SV, 2021, vol.55, no.4, DOI: 10.32604/sv.2021.015705

REFEREED CONFERENCE PROCEEDINGS PUBLICATIONS

1. A. Ertas and T. J. Kozik. Philosophy and Principles of Riser Modeling and Numerical Approaches. ASME, ETCE Offshore and Arctic Operations Symposium Proceedings, PD-Vol. 1, pp. 11–18, Feb. 1986.
2. A. Ertas, P. Gandhidasan and J. J. Luthan. Feasibility Studies of Ammonia-Water Vapor Absorption Heat Transformer. ASME ETCE Technical Economics, Synfuels and Coal Energy

Symposium Proceedings, PD-Vol. 8, pp. 51–57, Feb. 1987.

3. B. K. Majumdar and A. Ertas. A Review of Fatigue Information and Fatigue Damage of Offshore Structures. ASME, ETCE Offshore and Arctic Operations Symposium Proceedings, PD-Vol. 10, pp. 275–282 Feb. 1987.
4. A. Ertas, W. R. Blackstone, and B. K. Majumdar. The Effect of Tool Joint Stiffness on Drill Pipe Fatigue in Riser Ball Joints. ASME ETCE Offshore and Arctic Operations Symposium Proceedings, PD-Vol. 10, pp. 283–289, Feb. 1987.
5. A. Ertas, J. J. Luthan and J. H. Lawrence. Comparison of Vapor Absorption Heat Transformer with Opposite Characteristics Working Fluids. Analysis and Design of Advanced Energy Systems: Applications, ASME Winter Annual Meeting, Vol. 3-2, pp. 75–81, December 1987.
6. A. Ertas and J. H. Lee. Random Dynamic Analysis of Tension Leg Platform in Time and Frequency Domain. ASME ETCE Offshore and Arctic Operations Symposium Proceedings , PD-Vol. 26, pp. 35–43, January 1989.
7. A. Ertas, M. Ghulam, and O. Cuvalci. A Comparison of Fracture Mechanics and S-N Curve Approaches in Designing Drill Pipe. ASME ETCE Offshore and Arctic Operations Symposium Proceedings , PD-Vol. 26, pp. 45–50, January 1989.
8. A. Ertas, H. J. Carper, O. Cuvalci, S. Ekwaro-Osire, and W. R. Blackstone. Experimental Investigation of Galling Resistance in OCTG Connections. ASME, ETCE Offshore and Arctic Operations Symposium Proceedings, PD-Vol. 29, pp. 15–20, January 1990.
9. T. J. Kozik, J. E. Lovell, and A. Ertas. Upper Ball Joint Variations Due to Riser Tensioner and Vessel Motions-PART I: Derivation of General Equations. ASME ETCE Offshore and Arctic Operations Symposium Proceedings , PD-Vol.29, pp. 51-63, January 1990.
10. T. J. Kozik, J. E. Lovell, and A. Ertas. Upper Ball Joint Variations Due to Riser Tensioner and Vessel Motions–PART II: Analysis and Computer Simulation. ASME ETCE Offshore and Arctic Operations Symposium Proceedings , PD-Vol. 29, pp. 65–72, January 1990.
11. A. Ertas, E. E. Anderson, and I. Kiris. Properties of a New Liquid Desiccant Solution–Lithium Chloride and Calcium Chloride Mixture. ASES Annual Conference Proceedings, pp. 19–22, 1990, Austin Texas.
12. A. Ertas, G. Mustafa, and T. B. Leamon. Design of an Automated Simulated Stepping Dynamic Coefficient of Friction Measurement Device. ASME 1990 Computers in Engineering Conference and Exposition-Mechatronic Design Proceedings, Vol. 1, pp. 437-438, 1990.
13. A. Ertas, C. W. Malone, and J. C. Jones. Design and Development of a Fall Arresting Robot. ASME 1990 Computers in Engineering Conference and Exposition-Mechatronic Design Proceedings, Vol. 1, pp. 439-443, 1990.
14. A. Ertas, and G. Mustafa. A Complete Phase Space Analysis of an Autoparametric Vibration Absorber: A Novel Experimental Technique. Third Conference on Nonlinear Vibrations, Stability, and Dynamics of Structures and Mechanisms, June 25–27, 1990, Virginia Polytechnic Institute and State University, Blacksburg, Virginia (extended abstract in conference proceedings).
15. A. Ertas, G. Mustafa, and O. Cuvalci. Nonlinear Dynamic Interaction of a Fluid Break disc System of an Airplane Landing Gear. Third Conference on Nonlinear Vibrations, Stability, and Dynamics of Structures and Mechanisms, June 25–27, 1990, Virginia Polytechnic Institute and State University, Blacksburg, Virginia (extended abstract in conference proceedings).
16. A. Ertas, E. E. Anderson, and S. Kavasogullari. Comparison of Mass and Heat Transfer Coefficients of Liquid Desiccant Mixtures in a Packed Column. Solar Energy in the 1990s, Proceedings, SED-Vol. pp. 10, 55-60, 1990, ASME Winter Annual Meeting, Dallas, Texas.
17. S. Kavasogullari, P. Gandhidasan, A. Ertas, and E. E. Anderson. Performance of CaCl2 and LiCl

Liquid Desiccants in a Dehumidifying Packed Tower. ASME ETCE Emerging Energy Technology Symposium Proceedings , PD-Vol. 36, pp. 45-49, 1991.

18. A. Ertas, J. T. Krafcik, and S. Ekwaro-Osire. Explicit Formulation of an Anisotropic Allman/DKT 3-Node Thin Triangular Flat Shell Elements. ASME ETCE Composite Material Technology Proceedings , PD-Vol. 37, pp. 249-255, 1991.
19. A. Ertas, and G. Mustafa. Experimental Observation of Mode Locking and Interaction in the Beam-Pendulum System. ASME ETCE Dynamics and Vibration Symposium, PD-Vol. 44, pp. 21-27, 1992.
20. M. M. Tanik and A. Ertas. Design as a Basis for Unification: System Interface Engineering. ASME ETCE Computer Applications Symposium, PD-Vol. 43, pp. 113-114,1992.
21. A. Ertas, H. J. Carper, and W. R. Blackstone. Development of a Test Machine and Method for Galling Studies. 1992 SEM VII International Conference on Experimental Mechanics, Vol.2, pp. 1602-1610, Las Vegas, 1992.
22. S. Garza and A. Ertas. Investigation of the Dynamics and Bifurcations of an Impacting Spherical Pendulum with Large Deflections. Fourth Conference on Nonlinear Vibrations, Stability, and Dynamics of Structures and Mechanisms, June 7–11, 1992, Virginia Polytechnic Institute and State University, Blacksburg, Virginia (extended abstract in conference proceedings).
23. J. C. Jones, A. Ertas, K. Kirkpatrick, and Student Design Groups. Devices for Training and Increasing the Productivity of the Disabled: Undergraduate Educational Experience in Design. ASME European Joint Conference on Engineering System Design and Analysis Proceedings, PD-Vol 47-2, pp. 153-159, 1992.
24. A. Ertas, P. Gandhidasan, I. Kiris, E.E. Andersson, and M. Dolan. Experimental Investigations on the Performance of a Packed Bed Dehumidifier for Various Climatic Conditions. ASME 1992 Annual Meeting, HTD-Vol. 212, pp. 1-8, Anaheim, California.
25. Md. K. Rahman and A. Ertas. Acoustic Power Radiation From Rectangular Plate with Mixed Boundary Conditions. ASME ETCE Dynamics and Vibration Symposium, PD-Vol. 52, pp. 81-89, January 31-February 3, 1993, Houston.
26. A. Ertas, P. Gandhidasan, I. Kiris, and E.E. Andersson. Experimental Investigations on the Performance of a Regeneration Tower for Various Climatic Conditions. 1993 ASME International Solar Energy Conference Proceedings, pp.161-167, 1993.
27. A. Ertas and O. Cuvalci. Use of Pendulum for Passive Structural Vibrations Control: An Experimental Study. 14th ASME Biennial Conference on Mechanical Vibration and Noise, DE-Vol. 56, pp. 215-221, September 12-22, 1993.
28. M. Ghulam and A. Ertas. Nonlinear Interaction of a Parametrically Excited Coupled Column-Pendulum Oscillator. 14th ASME Biennial Conference on Mechanical Vibration and Noise, DE-Vol. 56, pp. 447-453, September 12-22, 1993.
29. O. Cuvalci and A. Ertas. Theoretical Study on Coupled Beam-Pendulum Dynamic Vibration Absorber. ASME ETCE Dynamics and Vibration Symposium, PD-Vol. 63, pp. 75-80, 1994.
30. H. J. Carper, A. Ertas, and O. Cuvalci. Effect of Contact Geometry and Other Tribological Variables on the Friction Coefficient in Threaded Connections. ASME ETCE Tribology Symposium, PD-Vol. 61, pp. 117-122, 1994.
31. A. Ertas, H. A. K. M. Azizul, I. Kiris, and P. Gandhidasan. Low Temperature Peanut Drying Using Liquid Desiccant System. ASME ETCE Emerging Energy Technology Symposium, PD-Vol. 57, pp. 175-181, 1994.
32. G. Mustafa and A. Ertas. Experimental Evidence of Quasiperiodicity and Its Breakdown in the Column-Pendulum Oscillator. ASME ETCE Dynamics and Vibration Symposium, PD-Vol. 63,

pp. 81-87, 1994.

33. Md. K. Rahman and A. Ertas. Acoustic Radiation Efficiency of a Rectangular Plate with Different Boundary Conditions. ASME ETCE Dynamics and Vibration Symposium, PD-Vol. 63, pp. 151-160, 1994.
34. A. Ertas J.C. Jones, and J.H. Lawrence. Development of Devices for providing Physical Exercise and mobility for the Disabled. PD-Vol. 64-4, pp. 205-210, ASME Engineering Systems Design and Analysis Conference (Bioengineering Symposium), 1994.
35. J.C. Jones and A. Ertas. Assistive Devices for the Disabled: Engineering Students Capstone Design Projects. PD-Vol.64-4, pp. 211-217, ASME Engineering Systems Design and Analysis Conference (Bioengineering Symposium), 1994.
36. M. M. Tanik, Cengiz Erbas, A. Ertas, and S. G. Gatchel. A theoretical Foundation for Rapid Prototyping of Time-Critical Systems. ASME Engineering Systems Design and Analysis Conference, PD-Vol.64-5, (Methodologies, Techniques, and Tools for Design Development Symposium), 1994.
37. A. Ertas and G. Mustafa. Dynamics of the Beam-Pendulum System with a General Orientation in the plane. Recent Advances in Engineering Science, Proceedings of the 31st Annual Technical Meeting of the Society of Engineering Science, pp. 285-286, 1994.
38. S. Ekwaro-Osire and A. Ertas. Response Statistics of a Beam-Mass Oscillator under Combined Harmonic and Random Excitation. Nonlinear and Stochastic Dynamics, ASME International Mechanical Engineering Congress and Exposition, AMD-Vol. 192, DE-Vol. 78, pp. 179-190, 1994.
39. Santos Garza and A. Ertas. Experimental Investigation of the Dynamics of Inverted Impacting Spherical Pendulum with Large Deflection. 1995 Design Engineering Technical Conference, Vibration of Nonlinear, Random, and Time-Varying Systems, DE-Vol. 84-1, Vol. 3, Part A, pp. 181-189, 1995.
40. J. C. Jones, A. Ertas, and M. Parten. Multidisciplinary Engineering Design Program at Texas Tech University. SDPS, The First World Conference on Integrated Design and Process technology, IDPT-Vol. 1, pp. 117-120, 1995.
41. M. M. Tanik, A. Ertas, and V. Rainey. On the Nature of Research, Education, and Training: A Partnership Model. SDPS, The First World Conference on Integrated Design and Process technology, IDPT-Vol. 1, pp. 506-510, 1995.
42. M. M. Tanik, R. T. Yeh, and A. Ertas. Integrated Design and Process Strategies. SDPS, The First World Conference on Integrated Design and Process technology, IDPT-Vol. 1, pp. 511-514, 1995.
43. M. E. Parten, D. Vines, J. C. Jones, and A. Ertas. Multidisciplinary Engineering project program. Proceedings Frontiers in Education, November 1996, Salt Lake City, Utah.
44. T. T. Maxwell, J. C. Jones, A. Ertas, G. Hagler, and R. Narayan. The Use of Re-Refined Oil in Vehicle Fleets. SAE,International Fall Fuels and Lubricants Meeting and Exposition,San Antonio, October 14-17, pp. 143-153, 1996.
45. A. Ertas, T. T. Maxwell, and J. C. Jones. IDEATE Graduate Design Program at Texas Tech University. SDPS, The Second World Conference on Integrated Design and Process technology,IDPT-Vol. 2, pp.386-388, 1996.
46. A. Ertas, W. T. Fair, C. Butts, and B. T. Tanju. A New Design Concept for an Automated Peanut Processing Facility,"' SDPS, The Second World Conference on Integrated Design and Process technology, IDPT-Vol. 3, pp. 197-201, 1996.
47. O. Cuvalci, B. Gumus, and A. Ertas, "An Experimental Investigation of Nonlinear System in Autoparametric Region. SDPS, The Second World Conference on Integrated Design and Process

technology, IDPT-Vol. 3, pp. 391-398, 1996.

48. O. Cuvalci, A. Ertas, I. Cicek and S. Ekwaro-Osire. Vibration Absorber for Flexible Structures: Experimental Study under Random and Sinusoidal Excitations. 1997 International Mechanical Engineering Congress and Exposition, .Active/Passive Vibration Control and Nonlinear Dynamics of Structures, DE-Vol. 95, AMD-Vol. 223, pp. 143-149, 1997.
49. S. Y. Yu, Hong-Chao Zhang and A. Ertas. Environmental Conscious Design: An Introduction to EDST. SDPS, The Third Biennial World Conference on Integrated Design and Process technology, Vol. 5, pp. 81-87, 1998.
50. A. Ertas, S. Firenza, B. T. Tulu, O. Cuvalci, T. T. Maxwell, M Schubert, R. Henning and C. Butts, Design and Development of a New Peanut Curing Process for West Texas. SDPS, The Third Biennial World Conferenceon Integrated Design and Process technology, Vol. 5, pp. 44-51, 1998.
51. A. Ertas, O. Cuvalci and S. Ekwaro-Osire. Dynamics of a Flexible Structure with Pendulum Studied at Various Angles Between Vertical and the Horizontal Positions. Seventh Conference Conference on Nonlinear Vibrations, Stability, and Dynamics of Structures, July 26-30, 1998, Virginia Polytechnic Institute and State University, Blacksburg, Virginia (extended abstract in conference proceedings).
52. O. Cuvalci, I. Cicek and A. Ertas. Effect of Surface Coating and Tin Plating on Friction Characteristics of P-110 Tubing for Different Thread Compounds. ASME/ETCE'99 Conference, (Proceeding in CD) Tribology-ETCE99-6626, Houston, Texas, February 1-3, 1999.
53. Cicek and A. Ertas. Experimental Investigation of Beam Tip Mass and Pendulum System Under Random Excitation. IMAC-XVIII, A Conference & Exposition on Structural Dynamics, San Antonio, TX, pp. 1618-1624, February 7-10, 2000.
54. Y. Yue, H-C. Zhang, A. Ertas, W. Wanyama, S. Ekwaro-Osire. Manufacturability in the Engineering Design Process: A Review. The Fifth Biennial World Conference on Integrated Design and Process Technology, SDPS (Proceedings in CD), Dallas, Texas, June 4-8, 2000.
55. W. Wanyama, A. Ertas, H-C. Zhang. Life-Cycle Engineering: A Review of Application, Issues, Tools and Research. The Fifth Biennial World Conference on Integrated Design and Process Technology, SDPS, (Proceeding in CD) Dallas, Texas, June 4-8, 2000.
56. A. Yildirim, M. N. Tanju, K. Abe, M. M. Tanik, and A. Ertas. An Internet Based Interactive Course on Digital Signal Processing. The Fifth Biennial World Conference on Integrated Design and Process Technology, SDPS (Proceedings in CD), Dallas, Texas, June 4-8, 2000.
57. Cicek and A. Ertas. Experimental Investigation of Beam Tip Mass and Pendulum System Under Random Excitation. IMAC-XVIII, A Conference & Exposition on Structural Dynamics, San Antonio, TX, pp. 1618-1624, February 7-10, 2000.
58. Y. Yue, H-C. Zhang, A. Ertas, W. Wanyama, S. Ekwaro-Osire. Manufacturability in the Engineering Design Process: A Review. CD- The Fifth Biennial World Conference on Integrated Design and Process Technology, SDPS, Dallas, Texas, June 4-8, 2000.
59. W. Wanyama, A. Ertas, H-C. Zhang. Life-Cycle Engineering: A Review of Application, Issues, Tools and Research. CD-The Fifth Biennial World Conference on Integrated Design and Process Technology, SDPS, Dallas, Texas, June 4-8, 2000.
60. A. Ertas, B. Gumus, and K.B. Unuvar. Framework of Knowledge-Based Design Process: Transdisciplinary Approach. Proceedings of the Sixth Biennial World Conference on Integrated Design and Process Technology, SDPS, Pasadena, California, June 23-28, 2002, CD (abstract, p.22, 2002).
61. T. Samir, A. Ertas, and M. Doganli. Sound Power Radiation From Simply Supported Rectangular Plates with Rectangular Concentric Cutouts. Proceedings of the Sixth Biennial World Conference

on Integrated Design and Process Technology, SDPS, Pasadena, California, June 23-28, 2002, CD (abstract, p.57, 2002).

62. M. Doganli, A. Ertas, and T. Samir. Sound Power Radiation From Clamped-Clamped Annular Plates. Proceedings of the Sixth Biennial World Conference on Integrated Design and Process Technology, SDPS, Pasadena, California, June 23-28, 2002, CD (abstract, p.72, 2002).
63. B. Gumus, A. Ertas, K.B. Unuvar, and M. Doganli. Requirements Traceability (RT) Throughout the System Development Lifecycle Using Axiomatic Design (AD) Approach. Proceedings of the Sixth Biennial World Conference on Integrated Design and Process Technology, SDPS, Pasadena, California, June 23-28, 2002, CD (abstract, p.64, 2002).
64. Doganli, A. Ertas, A. Yildirim. A Vibration Monitoring Method using Infrared Diodes. The Seventh World Conference on Integrated Design & Process Technology Conference Proceedings, pp. 855-860, IDPT-2003.
65. T. Samir, B. Yendler and A. Ertas. Finite Element Modeling for High Temperature Electrostatic Chuck. The Seventh World Conference on Integrated Design & Process Technology Conference Proceedings, pp.1150-1154, IDPT-2003.
66. I. Cicek and A. Ertas. Vibration Considerations for the Installation of Portable Computer Equipment on Military Aircraft. IDPT-2004, Vol. 1, pp. 142-151, 2004.
67. B. Gumus and A. Ertas. Requirement Management and Axiomatic Design. IDPT-2004, Vol. 1, pp. 52-62, 2004.
68. Resul Aksoy, Yanzhang Ma, Emre Selvi, Ming C. Chyu, Atila Ertas, and Allen White. High Pressure X-Ray Difraction Study of Molybdenum Disulfide. 2005 Region X GSTC Proceedings ASME and IDPT, Great International Southwest Region X Graduate Student Technical Conference, IDPT-Vol 2, pp.1-3, 2005.
69. E. Selvi, Y. Ma, R. Aksoy, A. Ertas, A. White, J.-S. Sandhu. Equation of State Measurement of Tungsten Disulfide to 25 GPa. 2005 Region X GSTC Proceedings ASME and IDPT, Great International Southwest Region X Graduate Student Technical Conference, IDPT-Vol 2, pp.98-100, 2005.
70. I. Cumalioglu, Y. Ma, A.Ertas, T. Maxwell. High Pressure Hydrogen Storage Tank: A Parametric Design Study. Society for Design & Process Science, IDPT 2006 Conference, Vol 1 pp.530-538, 2006.
71. I. Cumalioglu, A.Ertas, Y. Ma, T. Maxwell. High Pressure Hydrogen Storage Tank: A Parametric Design Study. Society for Design & Process Science, IDPT 2006 Conference, Vol 1, pp. 539-551, 2006.
72. J. M. Harms, D. Tate, and A. Ertas. Auction-based allocation of distributed resources in real-time. Ninth World Conference on Integrated Design and Process Technology (IDPT06), Society for Design and Process Science (SDPS), Vol 1, pp. 605-615, 2006.
73. D. Tate, A. Ertas, T.T. Maxwell. Transdisciplinary Approach for Design, Process, and Systems Education. Connected 2007 International Conference on Design Education, CD, Sidney, Australia, July 9-12, 2007.
74. S. Ganguly, M. M. Tanik, A. Ertas. Fast Event Based Web Programming Model. The Eleventh Biennial World Conference on Integrated Design and Process Technology, June 1-6, 2008, Taiwan, Vol 1, pp. 428-433, 2008. .
75. S. Ganguly, M. M. Tanik, A. Ertas. Information Extraction from Distributed Sources on the Web. The Eleventh Biennial World Conference on Integrated Design and Process Technology, June 1-6, 2008, Taiwan, Vol 1, pp. 434-440, 2008..
76. F. Gungor, E. Gumus, A. Ertas, S. Ekwaro-Osire, E. Nieto. Vibration Absorption of Tip

Appendage Using Digital Imaging. Society for Experimental Mechanics (SEM) Annual Conference & Exposition on Experimental and Applied Mechanics, CD, Florida, June 2-5, 2008.

77. S.E. Ekwaro-Osire, E.N. Nieto, E.G. Gumus, F.G. Gungor, A.E. Ertas. Effectiveness of Bi-unit Impact Vibration Absorber. Society for Experimental Mechanics (SEM) Annual Conference & Exposition on Experimental and Applied Mechanics, CD, Florida, June 2–5, 2008.
78. U. J. Tanik and A. Ertas. Transdisciplinary Healthcare Engineering: Implementing a Transdisciplinary Education and Research Program. Eleventh World Conference on Integrated Design and Process Technology (IDPT), Society for Design and Process Science (SDPS), Vol 1, pp. 458-467, 2008.
79. A. Yildirim, M. M. Tanik, and A. Ertas. A Survey of Spike Classification Techniques for Neural Prosthesis. Eleventh World Conference on Integrated Design and Process Technology (IDPT), Society for Design and Process Science (SDPS), Vol 1, pp. 308-314, 2008.
80. S. Gatchel, A. Yildirim, B. Gumus, Faruk Gungor, and A. Ertas. Neutral Density Filter Controller Design Using Transdisciplinary System Development Lifecycle Model. Eleventh World Conference on Integrated Design and Process Technology (IDPT), Society for Design and Process Science (SDPS), Vol 1, pp. 270-289, 2008.
81. Tate D., Ertas A., Maxwell T., Park K., Lawson W. Design and Development of a Large-Scale Compressed Earth Block Building System for Developed Countries. Clean Technology 2008, CD, Boston, MA, June 1-5, 2008.
82. A. Ertas and S. Garza. Dynamics of an Impacting Spherical Pendulum. International Symposium on Vibro-Impact Dynamics of Ocean Systems and Related Problems, Page-18, October 2-3, 2008, Somerset Inn, Troy, Michigan.
83. S. Ekwaro-Osire, E. Nieto, F. Gungor, E. Gumus, and A. Ertas. Performance of a Bi-Unit Damper using Digital Image Processing. Vibro-Impact Dynamics of Ocean Systems and Related Problems, Vol. 44, pp. 79-90, 2009, Springer.
84. A. Ertas and S. Garza. Dynamics of an Impacting Pendulum. Vibro-Impact Dynamics of Ocean Systems and Related Problems, Vol. 44, pp. 91, 2009, Springer.
85. D. Tate, T. Maxwell, Atila Ertas, Hong-Chao Zhang, Urs Peter Flueckiger, William Lawson, A. Dean Fontenot, John Chandler. Transdisciplinary Approaches for Teaching and Assessing Sustainable Design. Mudd Design Workshop VII: Sustaining Sustainable Design, CD, Harvey Mudd College, May 28–30, 2009.
86. Emrah Gumus and Atila Ertas. Application of ANCF Formulation to Beam-Pendulum Oscillator: Theory and Experiment. Transdisciplinary, Transnational and Transnational Annual Meeting, May 23-28, 2010.
87. Emrah Gumus and Atila Ertas. Auto Parametric Vibration Absorber: Simulation Using Absolute Nodal Coordinate Formulation. International Conference on Orthopaedic Surgery, Biomechanics and Clinical Applications, June 6-9, 2010, London, UK.
88. Tate, D., Williamson, L., Lawson, W., Park, K., Flueckiger, U., Liang, D., Ertas, A., Maxwell, T., Hames, G. Mainstreaming Earth-Based Building Envelopes in Developed Countries: The Impact of Large-Scale Compressed Earth Blocks. Georgetown. TX: ATLAS T^3 Bi-Annual Meeting Proceedings, TheATLAS Publications, Vol-1, pp. 168-174, May, 2010.
89. B. McPeak and A. Ertas. Uncovering the Secrets of Past Disasters Through Transdisciplinary Research. TheATLAS T^3 Bi-Annual Meeting Proceedings, ATLAS Publications, Vol-1, pp. 198-211, May, 2010.
90. Tom Kollman and A. Ertas. Defining Transdisciplinarity. ATLAS T^3 Bi-Annual Meeting Proceedings, TheATLAS Publications, Vol-1, pp. 22-38, May, 2010.

91. Gumus, E., Ertas, A. Beam-Pendulum Oscillator: Simulation Using Adams. ATLAS $T^3$3 Annual Meeting Proceedings, vol. 1, pp. pp. 114-118, 2010.
92. A. Ertas. Inclusion of Prevention through Design into Engineering Textbooks. NIOSH Prevention through Design Conference, Washington DC, August 22-24, 2011, http://www.asse.org/professionalaffairs_new/ptd.php.
93. Chillakanti, P., Ertas, A. LENSOO - Collaborative Learning and Social Networking Platform for Continuing Education. Proceedings of The 2012 International Conference on E-learning, E-Business, Enterprise Information Systems, and E-Government (EEE2012), Worldcomp 2012 (ISBN: 1-60132-209-7 ed., pp. 219-223, 2012). CSREA Press.
94. Landis, R., Ertas, A., Gumus, E., Gungor, F., In D. Adams, G. Kerschen, A. Carrella (Ed.). Free Pendulum Vibration Absorber Experiment: Using Digital Image Processing. (vol. 3, pp. 167-180, 2012). NW: The Society for Experimental Mechanics.
95. Ilseng, K. J., Wyrick, A. D., and Atila Ertas, A. Measuring Productivity and Performance in a System of Systems of Government Organizations, Educational Institutions and Industry to Meet the Needs of Society. Paper 16 in Proceedings of the 2013 International Annual Conference of the American Society for Engineering Management (10 pages), ASEM, Minneapolis USA, ISBN 978-0-9831005-6-0.
96. Ertas, A. Transdisciplinary Collaborative Research & Education. 2014 International Symposium for Transdisciplinarity on Individual and Social Transformation, June 13-14, Taipei, Taiwan, Invited Talk, 4 pages, 2014.
97. Stroud, R., Ertas, A. A Taxonomy for Enterprise Architecture Framework (10.1109/SYSCON.2015.7116853 ed., pp. 828-831). Systems Conference (SysCon), 2015 9th Annual IEEE International.
98. Ertas, A., Kellilynn M. Frias, Heather Greenhalgh-Spencer, Susan M. Back, A. Transdisciplinary Research Approach to Engineering Education. American Society for Engineering Education (ASEE) GSW 2015 conference, March 25-27, 2015, San Antonia, TX.
99. Baturalp, T. B., Ertas, A. State of the Art Mock Circulation Loop and a Proposed Novel Design (pp. 23-29, 2015). Proceedings of the International Conference on Biomedical Engineering and Science (BIOENG'15).
100. Stroud, R., Ertas, A. Enterprise Cyclomatic Complexity. Systems Conference (SysCon), 2016 10th Annual IEEE International (2016), 6 pages.
101. Gulbulak, U., Ertas, A. Finite Element Study of Left Ventricular Simulator: First Step Towards Cardiac Performance Simulation Platform. Advanced Theory and Simulations, 2016.
102. Gulbulak, U., Baturalp, T., Ertas, A. Design Domain Identification of a Beating Left Ventricular Simulator with Finite Element Modelling (vol. 65, pp. 3, 2019).
103. Denard, S., Mengel, S., Ertas, A., Ekwaro-Osire, S. Development cycle estimation modeling. Proceedings - 2019 IEEE Secure Development, SecDev 2019 (pp. 146, 2019).
104. Denard, S., Mengel, S., Ertas, A., Ekwaro-Osire, S. A quantitative development cycle model with risk analysis features. SRA 2019, Risk Analysis in the Data Analytics Era. (Poster), Arlington, VA., peer-reviewed/refereed. (2019).
105. Pavelka, T., Gulbulak, U., Baturalp, T., Ertas, A. Performance Evaluation of a Mock Circulation Loop with Bioprosthetic Heart Valves and a Beating Left Ventricle Simulator. Rice University, Houston, Texas, "Gold Coast Undergraduate Research Symposium," National, peer-reviewed/refereed. (2019).

CONFERENCE PRESENTATIONS AND PUBLICATION (not refereed)

1. Carper, H.J., Ertas, A, Isa, J., and Cuvalci, O. Effect of Material, Manufacturing, and Operating Variables on the Friction Coefficient in OCTG Connections. ASME ETCE Offshore and Arctic Operations Symposium, Tribology Workshop, Houston January, 1992 (presentation only).
2. Ertas, A. and A. Hoque, A. Liquid Desiccant System for Drying Application. ASME ETCE Emerging Energy Technology Symposium, January 31-February 3, 1993, Houston (oral presentation only).
3. Carper, H. J and Ertas, A. Screening of Lubricants for Galling Evaluation. ASME ETCE Offshore Operations Symposium, January 31-February 3, 1993, Houston (oral presentation only).
4. Mustafa, G. and Ertas, A. Some Results on the Dynamics of the Column-Pendulum Vibration Absorber. ASME ETCE Dynamics and Vibrations Symposium, January 31-February 3, 1993, Houston (oral presentation only).
5. Ertas, A., Cuvalci, O., and Carper, H. J. Determination of Friction Characteristics of J-55 OCTG Connections Lubricated with Environmentally Safe Thread Compound. Presented at the 1998 ASME/STLE International Tribology Conference & Exposition, Canada.
6. Ertas, A. and Cuvalci, O. Determination of Friction Characteristics of Cupper Plated Titanium Alloy OCTG Connections with Two Different Sliding Speeds. 1998 ASME, ETCE Conference, Houston, Texas (Presentaion only).
7. Ertas, A., Tanik, M. M. and Maxwell, T. T. Philosophy of Transdisciplinary Education and Research. Workshop on Global Transdisciplinary Education, Research, and Training, Kusadasi, Izmir, Turkey, September 3-6, 2000 (presentation only).
8. Ertas, A. The Academy of Transdisciplinary Science and Engineering: Education and Research for Changing Technology. Workshop on Global Transdisciplinary Education, Research, and Training, Kusadasi, Izmir, Turkey, September 3-6, 2000 (presentation only).
9. Ertas, A. Re-Thinking Fundamentals of Transdiscipline. The Sixth Biennial World Conference on Integrated Design and Process Technology, SDPS, Pasadena, California, June 23-28, 2002 (presentation only).
10. Ekwaro-Osire S. and Ertas, A. Galling Onset in OCTG Connections. Presented at the 2005 STLE, Annual Meeting, Las Vegas, Nevada 2005 STLE Annual Conference, May 15-19, 2005 (presentation only).
11. Denard, S., Mengel, S., Ertas, A., Ekwaro-Osire, S. A quantitative development cycle model with risk analysis features. SRA 2019, Risk Analysis in the Data Analytics Era. (Poster), Arlington, VA., peer-reviewed/refereed. (2019).
12. Ertas, A. Being Transdisciplinary in Engineering and Education. Academy of Transdisciplinary Learning & Advanced Studies Romania Conference (presentation only), 2018.

INVITED SPEAKER

1. Ertas, A., "The Response of Rotating Machinery to a Random Eccentricity Distribution in the Rotor," 3rd Reunion Academica de Ingenieria Mechanica Conferencias, San Luis Potosi, Mexico, Oct. 14–18, 1985.
2. Ertas, A. and E. K. Chew, "The Response of Seismically Mounted Rotor System with Cubic Nonlinearities," Second Conference on Nonlinear Vibrations, Stability, and Dynamics of Structures and Mechanisms, Virginia Polytechnic, June-1988.

3. Ertas, A. and S. Ekwaro-Osire, "A Linearization Technique Applied to a Tension Leg Platform Response Using Dual-input (Random Plus Bias) Describing Function," Third Conference on Nonlinear Vibrations, Stability, and Dynamics of Structures and Mechanisms, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, June-1990..
4. Ertas, A. and A. Hoque, "Liquid Desiccant System for Drying Application," ASME ETCE Emerging Energy Technology Symposium, Houston, January 31-February 3, 1993.
5. Ertas, A., "Inclusion of Prevention through Design into Engineering Textbooks," NIOSH Prevention through Design Conference, Washington DC, August 22-24, 2011, (Plenary Talk) http://www.asse.org/professionalaffairs_new/ptd.php.
6. Ertas, A., "Transdisciplinary Research & Education," TTU Transdisciplinary Research Academy inauguration, 2012 (Keynote Presentation).
7. Ertas, A. "Workshop on International Transdisciplinary Scientist Village: Building a model Sustainable Village,". ATLAS-2012-Conference.
8. Ertas, A. "Multi-National Research and Educational Programs," (Keynote Presentation). ATLAS-2012-Conference.
9. Ertas, A., "TD Education in USA at Texas Tech University," Transdisciplinary-Transnational-Transcultural (T^3) International Conference, Taichung, Taiwan, June 8-13, 2014 (Plenary Talk).
10. Ertas, A., "Transdisciplinarity," 2014 International Symposium for Transdisciplinarity on Individual and Social Transformation, June 13-14, 2014, Taipei, Taiwan, Invited (Plenary Talk).
11. Ertas, A., Invited talk on Prof. Ramamoorthy's Achievements. Workshop on Transdisciplinary Knowledge and Society (TransKS), 2016.
12. Ertas, A., Panel discussion: Being transdisciplinary in Engineering & Education, ATLAS International Conference, Cluj-Napoca, Romania, 2018.

BOOKS & EDITORSHIP

1. Ertas, A. and J. C. Jones. *The Engineering Design Process*, (design text book). John Wiley & Sons, Inc., New York, 1993, first addition, ISBN:0-471-51796-8 (525 pages).
2. Ertas, A. and J. C. Jones. *The Engineering Design Process*, (design text book). Second Addition, John Wiley & Sons, Inc., New York, 1996, , ISBN:0-471-51796-8 (614 pages).
3. Ertas, A. *Prevention through Design (PtD): Transdisciplinary Process*, (supplementary design text book) (Funding for this research was provided by the National Institute for Occupational Safety and Health under the National Occupational Research Agenda, Prevention through Design Initiative). 2010, , ISBN:0-9778129-4-4 (58 pages)..
4. Ertas, A. *Engineering Mechanics and Design Applications: Transdisciplinary Engineering Fundamentals*, (design text book). CRC Press, Taylor & Francis Group, New York, 2011, ISBN:0-9778129-3-6, (327 pages).
5. Ertas, A. *Transdisciplinarity Engineering Design Process*, (Text Book). John Wiley & Sons, Inc., New York, 2018, ISBN: 9781119474777 (818 pages).
6. A. Ertas and U. Gulbulak, 2021.*Managing System Complexity through Integrated Transdisciplinary Design Tools*, (design text book). ATLAS Publishing, 2021 (link: https://www.rb-tdinstitute.org/index.php/td-books-reports), ISBN: 978-0-9998733-1-1; doi:10.22545/2021b/B1. (193 pages).
7. Ertas, A. (Editors). *Additive Manufacturing Research & Applications*, MDPI Publishing, Switzerland, ISBN: 978-3-0365-3903-4.
8. Ertas, A. (Editors). *Transdisciplinarity: Bridging Natural Science, Social Science, Humanities & Engineering*. ATLAS Publications, (Research Monograph), 2011, ISBN:0-9778129-6-0 (172

pages).

9. Nicolescu, B., Ertas, A. (Editors). *Transdisciplinary Theory & Practice*. ATLAS Publications, (Research Monograph), 2013, ISBN:0-9778129-6-0 (210 pages).
10. Nicolescu, B., Ertas, A. (Editors). *Transdisciplinary Education, Philosophy, & Applications*. ATLAS Publications, (Research Monograph), 2014, ISBN:: 0-9778129-7-9 (272 pages).
11. Ertas, A., Nicolescu, B., Gehlert, S. (Editors). *Convergence: Transdisciplinary Knowledge & Approaches to Education and Public Health*. (Research Monograph), ATLAS Publishing, 2016, ISBN: 0-9778129-9-5, (334 pages).
12. Nicolescu, B., Yeh, R. T., Ertas, A. (Editors). *Being Transdisciplinary.* ATLAS Publishing (286 pages), 2019. ISBN: 978-0-9998733-1-1.
13. I. Konuk, B. F. Baugh, and A. Ertas (Editors). *Offshore and Arctic Operations*. The American Society of Mechanical Engineers, PD-Vol. 10, United Engineering Center, New York, 1987.
14. A. Ertas, B. F. Baugh, and I. Konuk (Editors). *Offshore and Arctic Operations.* The American Society of Mechanical Engineers, PD-Vol. 12, United Engineering Center, New York, 1988.
15. A. Ertas, D. Hui, and R. J. Urquhart (Editors). *Offshore and Arctic Operations*. The American Society of Mechanical Engineers, PD-Vol. 26, United Engineering Center, New York, 1989.
16. R. J. Urquhart, A. Ertas, and D. Hui (Editors). *Offshore and Arctic Operations.* The American Society of Mechanical Engineers, PD-Vol. 29, United Engineering Center, New York, 1990.
17. M. M. Tanik and A. Ertas. (Editors). *Expert Systems and Applications*. The American Society of Mechanical Engineers, PD-Vol. 36, United Engineering Center, New York, January 1991.
18. A. Ertas and B. A. Ovunc (Editors). *Dynamics and Vibrations.* The American Society of Mechanical Engineers, PD-Vol. 44, United Engineering Center, New York, January 1992.
19. M. M. Tanik and A. Ertas (Editors). *Computer Applications and Design Abstractions*. The American Society of Mechanical Engineers, PD-Vol. 34, United Engineering Center, New York, January 1992.
20. F. Veniali, A. Ertas et al., (Editors). *Design Analysis Machinability and Characterization of Composite Materials.* The American Society of Mechanical Engineers, United Engineering Center, New York, PD-Vol. 47-6, July 1992.
21. A. Ertas, B. Ovunc, and I. Konuk (Editors). *Structural Dynamics and Vibrations.* The American Society of Mechanical Engineers, United Engineering Center, PD-Vol. 47-5, July 1992.
22. A. Ertas, I. Konuk, et al., (Editors). *General Design Analysis Considerations/Applications.* The American Society of Mechanical Engineers, United Engineering Center, New York, PD-Vol. 47-1, July 1992.
23. A. E. Engin, A. Ertas, and U. Karakas (Editors). *Bioengineering*. The American Society of Mechanical Engineers, United Engineering Center, New York, PD-Vol. 47-2, July 1992.
24. A. Ertas, B. A. Ovunc, and I. I. Esat (Editors). . *Structural Dynamics and Vibrations.* The American Society of Mechanical Engineers, PD-Vol. 52, United Engineering Center, New York, January 1993.
25. B. A. Ovunc, A. Ertas, and I. I. Esat (Editors). *Structural Dynamics and Vibrations.* The American Society of Mechanical Engineers, PD-Vol. 63, United Engineering Center, New York, January 1994.
26. A. Ertas, I. I. Esat, and S. Peker (Editors). *Design: Analysis, Synthesis, and Applications.* The American Society of Mechanical Engineers, PD-Vol. 8-A, United Engineering Center, New York, 1994.
27. I. I. Esat, A. Ertas, and D. Tilley (Editors). *Design: Analysis, Synthesis, and Applications.* The American Society of Mechanical Engineers, PD-Vol. 8-B, United Engineering Center, New York,

1994.

28. F. Veniali, A. Ertas, A. Di Llio, M.J. Owen, V. Tagliaferri (Editors). *Integrated Design and Manufacturing of Composites.* The American Society of Mechanical Engineers, PD-Vol. 2, United Engineering Center, New York, 1994.
29. A.E. Engin and A. Ertas, (Editors). *Bioengineering.* The American Society of Mechanical Engineers, PD-Vol. 4, United Engineering Center, New York, 1994.
30. M.M. Tanik, A. Ertas, and I.I. Esat, (Editors). *Methodologies, Techniques, and Tools for Design Development.* The American Society of Mechanical Engineers, PD-Vol. 5, United Engineering Center, New York, 1994.
31. I.I. Esat, S.W.E. Earles, A. Ertas, (Editors). *Dynamic Systems, Simulation and Control.* The American Society of Mechanical Engineers, PD-Vol. 6, United Engineering Center, New York, 1994.
32. B. Ovunc I.I. Esat, G. T. Flowers, A. Ertas, (Editors). *Structural Dynamics and Vibrations*. The American Society of Mechanical Engineers, PD-Vol. 7, United Engineering Center, New York, 1994.
33. A. Ertas, C. V. Ramamoorthy, M. M. Tanik, I. I. Esat, F. Vaniali, and Taleb-Bendiab, (Editors). *Proceedings of the First Biennial World Conference on Integrated Design and process Technology.* The Society for Design and process Science, Austin, Texas, IDPT-Vol. 1, 1995.
34. I. I. Esat, F. Vaniali, J. Rasty, D. D. Gransberg and A. Ertas, (Editors). *Proceedings of the Second Biennial World Conference on Integrated Design and process Technology.* The Society for Design and process Science, Austin, Texas, IDPT-Vol. 3, 1996
35. A. Ertas, D. Gibson, F. Belli, F. Veniali, R. Noorani and P. Chedmall, (Editors). *Proceedings of the Third Biennial World Conference on Integrated Design and Process Technology - Design, Product Development and Manufacturing*. The Society for Design and process Science,Berlin, Germany, IDPT-Vol. 3, 1998.
36. A. Ertas, I.I. Esat, M. R. Eslami and K. Althoefer, (Editors). *Proceedings of the Third Biennial World Conference on Integrated Design and Process Technology, - General Design Analysis,Considerations and Applications*. The Society for Design and process Science,Berlin, Germany, IDPT-Vol. 6, 1998.
37. A. E. Erkan and A. Ertas, (Editors). *Proceedings of the Third Biennial World Conference on Integrated Design and Process Technology, - Bioengineering*. The Society for Design and process Science,Berlin, Germany, IDPT-Vol. 1, 1998.
38. M. M. Tanik and A. Ertas, (Editors). *Proceedings of the Proceedings of the Fifth Biennial World Conference on Integrated Design and Process Technology," The Society for Design and process Science, Dallas, Texas, IDPT-Vol. 1, 2000.*
39. *A. Ertas, M.M. Tanik, T.T. maxwell, and J. Pterson, "Proceedings of the Workshop on Transdisciplinary Education, Research, and Training*. The Society for Design and process Science, Pasadena, California, IDPT-Vol. 1, 2001.
40. H. Ehrig, B. J. Kraemer, and A. Ertas, (Editors). *Proceedings of the Sixth Biennial World Conference on Integrated Design and Process Technology.* The Society for Design and process Science, Pasadena, California, IDPT-Vol. 1, 2002.
41. J. Rasty , A. Ertas, and R. Couvillion, (Editors). *Proceedings of the First Joint ASME Region X/SDPS Graduate Student Technical Conference.* March 28-29, 2003, Houston, Texas.
42. A. Ertas et al., (Editors). *Proceedings of the Seventh Biennial World Conference on Integrated Design and Process Technology.* The Society for Design and process Science, Austin, Texas, IDPT-Vol. 2, 2003.

43. J. Rasty , A. Ertas, and R. Couvillion, (Editors). *Proceedings of the Second Joint ASME Region X/SDPS Graduate Student Technical Conference.* March 25-27, 2004, Longview, Texas.
44. A. Ertas, M.Tanik, and E. Orhun, (Editors). *Proceedings of the IDPT-2004 Symposium.* The Society for Design and process Science, IDPT-Vol. 1, 2004.
45. A. Ertas, S. Ekwaro-Osire, Peifan Ding, Kane H. Kim, Ben Hua, and Philip Sheu, (Editors). *Proceedings of the Eight Biennial World Conference on Integrated Design and Process Technology*. The Society for Design and process Science, IDPT-Vol. 1, 2005.
46. J. Rasty , A. Ertas, and R. Couvillion, (Editors). *Proceedings of the Third Joint ASME Region X/SDPS Graduate Student Technical Conference.* March 31- April 2, 2005, Lubbock, Texas, IDPT-Vol-2.
47. A. Ertas, A.M. Madni, B. Sorensen, T. Margaria, J. Ring, A Moini, S.R. Das, I.I. Esat, V.D. Andrea, (Editors). *Proceedings of the Eight Biennial World Conference on Integrated Design and Process Technology.* The Society for Design and process Science, IDPT-Vol. 1, 2006.
48. A. Ertas, A.M. Madni, B. Sorensen, S.R. Das, R. Juric, K. Itoh, I.I. Esat,J. Padberg, K. Hoffmann, (Editors). *Proceedings of the Tenth Biennial World Conference on Integrated Design and Process Technology.* The Society for Design and process Science, IDPT-Vol. 1, 2007.
49. A. Ertas, (Editors). *Proceedings of the Eleventh Biennial World Conference on Integrated Design and Process Technology.* The Society for Design and process Science, IDPT-Vol. 1, 2008.
50. A. Ertas, (Editors). *Proceedings of the Transdisciplinary-Transnational-Transcultural Conference Proceedings.* ATLAS Publications, 2010.

CHAPTERS

1. Tanik, M.M. and Ertas, A. *Techniques in Abstract Design Methods in Engineering Design Development, Invited Contributors for the book entitled*. Computer-Aided Manufacturing/Computer-Integrated Manufacturing, Academic Press,, pp. 285-328, 1994.
2. Tanik, M.M. and Ertas, A. *Interdisciplinary Design and Process Science: A Discourse on Scientific Method for the Integration Age.* included in the IC^2 monograph of selected papers, University of Texas at Austin, 1998.
3. Ertas, A. *Understanding of Transdiscipline and Transdisciplinary Process*. Transdisciplinarity: Bridging Natural Science, Social Science, Humanities & Engineering, ATLAS Publication, pp. 66-89, 2011.
4. Kollman, T. and Ertas, A. *Results of a Survey to Identfy Differences between Interdisciplinary and Transdisciplinary Research Processes*. Transdisciplinarity: Bridging Natural Science, Social Science, Humanities & Engineering, ATLAS Publication, pp. 160-172, 2011.
5. Greenhalgh-Spencer, H., Frias, K., and Ertas, A. *Transdisciplinary Content Pedagogy in Undergraduate Engineering Education: Being Pulled Up Short*. Transdisciplinary Higher education, A theoretical Basis Revealed in Practice, Editor: Paul Gibbs, Springger, pp. 73-89, 2017.