

CURRICULUM VITAE

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ADDRESSES:

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PRESENT POSITION:

E.L. Derr Endowment Professor,
Department of Industrial, Manufacturing and Systems Engineering, Texas Tech
University

SUMMARY: Dr. Zhang has raised \$18,120,326 research funding from NSF, Texas ATP, NIST, SME and other government and industry agencies, in which about \$9.28 million are cash funds from US agencies, and \$9.15 million from Chinese agencies (all cash funding are all competitive research grants), and \$0.7 million are in-kind capital equipment funds. Currently, he has three research proposals with close to 1 million requests are under review by NSF. He served as over 50 major invited speakers for industry and government agencies and established wide collaborative linkages with industry. He has graduated 22 PhD students and 23 Master students and served more than 50 graduate committee members. He is associate editor in three international journals and serves as advisory board member in the IJAMT. He was elected as Fellow of ASME in 2008, Fellow of CIRP in 2010 and Fellow of SME in 2016.

SUMMARY OF PUBLICATIONS AND CITATIONS (Google Scholar):

- Books: 2 published.
- Edited Proceedings: 2 published.
- Refereed Journal Articles: 122 published.
- Refereed Book Chapters: 10 published.
- Conference Proceedings: 131 published.
- 4626 total citations as of 03/22/2017.
- Average number of citations per paper: 17.32 as of 03/22/2017.
- H-index: 31 as of 03/22/2017.

EDUCATION

Ph.D.	Manufacturing Engineering	Technical University of Denmark	1989
M.S.	Mechanical Engineering	University of Aalborg - Denmark	1986
B.S.	Mechanical Engineering	Tianjin University of Science and Technology	1976

APPOINTMENTS AND EMPLOYMENT

7/2017– present	E.L. Derr Endowed Professor	Department of Industrial, Manufacturing and Systems Engineering Texas Tech University	Lubbock, TX
5/2013 – 6/2017	Interim Chair E.L. Derr Endowed Professor	Department of Industrial, Manufacturing and Systems Engineering Texas Tech University	Lubbock, TX
5/2000 – 4/2013	Professor	Texas Tech University, Department of Industrial Engineering	Lubbock, TX
5/2010 – present	Distinguished Visiting Professor of Nations 1000 recruitment plan	Dalian University of Technology School of Mechanical Engineering	Dalian, China
6/2006 – 5/2010	Chang Jiang Visiting Professor	Hefei University of Technology School of Mechanical Engineering	Hefei, China
5/2000 – 12/2006	Director	Texas Tech University, Center for Applied Research in Advanced Manufacturing	Lubbock, TX
1/1998 – 8/1998	Visiting Professor	The Technical University of Denmark, Dept. of Manufacturing Engineering	Denmark
6/1998 – 7/1998	Visiting Professor	Tsinghua University, Institute of Manufacturing Engineering	Beijing, China
4/1998 – 5/1998	Visiting Professor	Swiss Federal Institute of Technology, Dept. of Mechanical Engineering	Switzerland
9/1995 – 8/2000	Associate Professor	Texas Tech University, Department of Industrial Engineering	Lubbock, TX
9/1990 – 8/1995	Assistant Professor	Texas Tech University, Department of Industrial Engineering	Lubbock, TX

1989 – 1990	Research Scientist	University of Texas, Department of Mechanical and Industrial Engineering	El Paso, TX
1976 – 1984	Lecturer	Tianjin University of Science & Technology	Tianjin, China
1969 - 1973	Machinist and Process Planner	Tianjin Hong-Zhuan Machine Tools Co.	Tianjin, China

AFFILIATE ORGANIZATIONS

International Institution for Production Engineering Research (CIRP) – Fellow
 American Society of Mechanical Engineers (ASME) – Fellow
 Society of Manufacturing Engineers (SME) – Fellow
 Institute of Industrial Engineers (IIE) – Senior Member
 The Institute of Electrical Electronics Engineers (IEEE) - Member
 American Society of Engineering Education (ASEE) - Member
 North American Manufacturing Research Institution (NAMRI)
 Society of Design and Process Science (SDPS) – Founding Member
 Phi Beta Delta.
 Faculty Advisor for SME Student Chapter, Texas Tech University

AWARDS AND HONORS

Chief-Scientist for The National 973 Research Plan of China on the subject of remanufacturing, 2010-2016
 US delegate - US NSF-China NSFC workshop on sustainable manufacturing, 2014
 Panel member of China National Science Achievement Award, 2012
 US delegate, China-America Technology, Engineering Summit, 2006
 Honor Professor, Shandong University of Science and Technology, 2002-present.
 China Bridge International Fellowship by Rockefeller-CBI foundation and NSFC, 1998-2001
 Honor Professor, Tianjin University of Science and Technology, 1995-present.
 Halliburton Excellence Teaching Award, College of Engineering, Texas Tech University, 1993.

MAJOR AREAS OF INTEREST

Remanufacturing of Mechanical Equipment,
 Sustainable Manufacturing,

Manufacturing Systems and Material Processing,
 Manufacturing Enterprise Systems,
 Reverse Manufacturing and Reverse Logistics,
 Product and Process Modeling,
 Automated Tolerancing Analysis and Synthesis,
 Intelligent Manufacturing.

RESEARCH PROJECTS AND SPONSORSHIPS (HELD 1991-PRESENT)

<u>Project Title</u>	<u>Granting Agencies and Sponsors</u>	<u>Amount</u>	<u>Years</u>
Nano-mechanical testing equipment for laser deposition-additive manufacturing of superior performance nano-structured metal based materials	Department of Defense (Co-Pi)	\$186,651	2017
Novel Material Systems for the Next Generation of Flexible Pavement Systems	Texas Department of Transportation (Co-PI, collaborative research with dept. of civil, chemical and mechanical engineering)	\$4.2million	2015-2019
Collaborative Research: Understanding and Optimizing a Supercritical Fluids Process for Recycling of Printed Circuit Boards	National Science Foundation, (PI, in collaboration with Arizona State University)	\$99,931	2012 - 2014
Fundamental Scientific Research on Remanufacturing of Mechanical Equipment	National 973 Fundamental Scientific Research Program, The Ministry of Science and Technology, China, The Chief Scientist and Project Director)	\$6.3million (¥38.0million)	2012 - 2016
Fundamental Research on Energy Model of High-End CNC Machine Tool for Low Carbon Manufacturing	China Ministry of Education/Foreign Experts Bureau, (PI)	\$150,000 (¥900,000)	2012 - 2015
International Collaboration on Mechanical Equipment Remanufacturing	China Ministry of Education/Foreign Experts Bureau (Co-PI with Chinese research partners in China)	\$1.5million (¥9.0million)	2012 - 2015

A Supercritical Fluids Material Process Model for Recycling of Printed Circuit Boards	EAGER - National Science Foundation, (Co-PI in collaboration with Arizona State University)	\$105,985	2009 - 2011
International Collaboration on Sustainable Manufacturing	China Ministry of Education/Foreign Experts Bureau (Co-PI with Chinese research partners in China)	\$1.2million (¥7.2million)	2008 - 2012
Collaborative research on Sustainable Manufacturing and Reverse Logistics	Image Microsystems Inc., Austin, Texas	\$322,539	2008 - 2011
Life Cycle Analysis for End-of-Life Set-top-box Refurbishing and recycling	ATC Logistics and Electronics, Inc.	\$31,925	2008 - 2009
Energy Saving Based Innovative Product Design Method	Vice President for Research at Texas Tech University, Lubbock, Texas	\$35,000	2008 - 2009
Reverse Logistic Problems for Plastic Recycling	Image Microsystems, Austin, Texas	\$250,000	2006 - 2008
GOALI: A Reverse logistic Business model for end-of-life electronic product recovery and recycling	National Science Foundation, (PI, with four industrial Co-PIs)	\$100,000	2004 - 2006
A Prototype Model of Printed Circuit Boards Recycling Process	Advanced Research Program/ Advanced Technology Program of the Texas Higher Education Coordinating Board (PI)	\$276,500	2004 - 2006
End-of-Life Dell Computers Recovery and Recycling Management	Image Microsystems (PI)	\$166,500	2003 - 2005
Exploratory Research: An Alternative Process Model For Printed Circuit Boards Recycling+ REU	National Science Foundation (PI, in collaboration with Chemical Eng. and Chemistry Depts., TTU)	\$111,982	2002 - 2003

Development of an Internet-Based Curriculum on Manufacturing Education for 21 st Century	Teaching, Learning, and Technology Center Texas Tech University	\$49,965	2001 - 2002
An Innovative Management System for End-of-Life Electronic Product Disassembly and Recycling	Technology Development and Transfer program of the Texas Higher Education Coordinating Board (PI)	\$354,600	2000 - 2002
Research Experience for Undergraduates	National Science Foundation, (PI)	\$10,000	1999 - 2000
Tolerance Graph for Tolerance Control in Process Planning	National Science Foundation, (PI)	\$207,638	1997 - 2000
A Proactive Material Management System to Support Decision Making for Ultimate Disposition of Solid Wastes in the Pantex Plant	Amarillo National Resource Center for Plutonium (PI)	\$75,000	1998 - 1999
Modularity Analysis in Support of Environmentally Conscious Design and Electromechanical Products	Texas State Government Through Center for Applied Automation and Research (PI)	\$10,000	1998 - 1999
Waste Management Analysis for End-of-Life Product Dismantling	Texas State Government Through Center for Applied Automation and Faculty Development Funds Research (PI)	\$7,500	1997 - 1998
Faculty Development Funds	Teaching, Learning, and Technology Center of TTU	\$3,000	1997
Equipment and Faculty Development of Manufacturing Laboratory in TTU	SME Engineering Education Foundation (Co-PI)	\$69,740	1997 - 1998
A Disassembly Model for PC Recycling	Advanced Technology Program of Texas Higher Education Coordinating Board (PI)	\$68,800	1996 - 1998

Equipment for Manufacturing Laboratory Foundation at Texas Tech University	SME Engineering Education (PI)	\$405,690	1996 - 1997
Automated Manufacturing System Life Cycle Economics	Texas State Government Through Center for Applied Automation and Research (PI)	\$8,500	1996 - 1997
Initiation of Cost Reduction for General Electric Appliance's Model xxx Product-96	General Electric Appliances Co. Louisville, KY (PI)	\$29,972	1996
Implementing the Integrated Model of Design Process Planning, and Production by Using Pro-Engineer on Workstation Platform	Texas State Government through Center for Applied Automation and Research (PI)	\$8,500	1996 - 1997
Equipment for Manufacturing Laboratory at Texas Tech University	SME Engineering Education Foundation (PI)	\$24,475	1995 - 1996
An Object-Oriented Integration Model for Product Design-Process Planning-Production Scheduling	Texas State Government Through Center for Applied Automation and Research (PI)	\$15,000	1994 - 1995
Equipment for Manufacturing Laboratory at Texas Tech University	SME Engineering Education Foundation (PI)	\$52,745	1994 - 1995
Joint Summer Research with NIST	National Institute of Standards and Technology (PI)	\$2,500	1993
Equipment for Manufacturing Laboratory at Texas Tech University	SME Engineering Education Foundation (PI)	\$27,165	1993 - 1994
A Test Bed Integrated Process Planning Systems	National Science Foundation (PI)	\$90,000	1992 - 1995

Equipment for Manufacturing Laboratory at Texas Tech University	SME Engineering Education Foundation (PI)	\$23,023	1992 - 1993
Life-Cycle Engineering Design	Sub-contract from The Technical University of Denmark (PI)	\$7,500	1992 - 1993
Equipment for CAD/CAM Laboratory at Texas Tech University	Southwestern Bell Education Foundation (Co-PI)	\$1,400,000	1992 - 1997
Automation Research Center	Texas State Government through Center for Applied Automation and Research (Co-PI)	\$85,000	1992 - 1993
Incremental Automation and Integration	Texas State Government(Co-PI)	\$47,000	1991 - 1992

PUBLICATIONS

Books

1. *Advanced Tolerancing Techniques (editing)*, John Wiley and Sons, Inc., New York, p. 588 1997 (H.C. Zhang).
2. *Computerized Manufacturing Process Planning Systems*, Chapman and Hall, p. 326, London, 1993 (H.C. Zhang and L. Altung).

Edited Proceedings

3. *Concurrent Product Design and Environmentally Conscious Manufacturing*, (editing) published by ASME Express, New York, 1997 (Samir Bidates and Hong C. Zhang).
4. *Manufacturing Science and Engineering*, (Contributing editor) published by ASME Express, New York, Vol.1 & 2, 1995.

Book Chapters

5. "Diesel engine block remanufacturing: Life cycle assessment", *Handbook of Manufacturing Engineering and Technology*, pp. 3313-3341. Springer London. 2014.

6. “Remanufacturing and Remaining Useful Life Assessment”. *Handbook of Manufacturing Engineering and Technology*, pp. 3137-3193. Springer London. 2014.
7. “Disassembly for End-of-Life Electromechanical Products,” Chapter 9 of *Environmentally Conscious Manufacturing*, John Wiley & Sons, Inc., pp211-264, 2007
8. “Tolerance Analysis for Setup Planning in CAPP,” Chapter 16 of *Advanced Tolerancing Techniques*, John and Wiley and Sons, Inc., pp. 427-460, 1997.
9. “Integration of Process Planning and Production Scheduling,” Chapter 12 of *Integration Product, Process and Enterprise Design*, Chapman and Hall, pp. 340-389, 1997.
10. “Manufacturing Process Planning,” Chapter 29 of *Handbook of Manufacturing and Automation*, John Wiley & Sons, Inc., pp. 587-616, 1994 (H.C. Zhang).
11. “Techniques for Process Planning for Manufacturing Systems,” chapter in *Control and Dynamic Systems, Advances in CAM/CIM*, Academic Press, Vol. 60, pp. 177-202, San Diego, CA, 1994 (L. Alting and H.C. Zhang).
12. “Manufacturing Functions Integration for Process Planning and Production Scheduling,” chapter in *Control and Dynamic Systems, Advances in CAM/CIM*, Academic Press, Vol. 61, pp. 155-196, San Diego, CA, 1994 (H.C. Zhang and S. Mallur).
13. “Design Decision Support in Concurrent Engineering,” chapter in *Control and Dynamic Systems, Advances in Concurrent Engineering*, Academic Press, Vol. 62, pp. 171-196, San Diego, CA, 1994 (H.C. Zhang and G.C.H. Winkenwerder).
14. “C Language Programming for IBM PC,” *Tianjin Publish House of Science and Technology*, p. 341, 1987 (H.C. Zhang, et al).

Articles in Archival Journals

15. “Fatigue life assessment of centrifugal compressor impeller based on FEA”. *Engineering Failure Analysis*, Vol. 60, pp. 383–390. 2016. (Shujie Liu, Chi Liu, Yawei Hu, Sibao Gao, Yifan Wang, Hongchao Zhang.)
16. “Real-Time Reliability Self- Assessment in Milling Tools Operation”. *Quality and Reliability Engineering International*, Vol. 32, No. 7. pp. 2245–2252. 2016. (Shujie Liu, Yawei Hu, Chi Liu and Hongchao Zhang.)

17. “States and prospects of crack arrest and healing technology”. *Journal of mechanical engineering*, Vol. 52, No. 7, pp. 122-132. 2016. (Deiwei Deng, Jing Yu, Qianqian Liu, Tao Yu and Hongchao Zhang.)
18. “Effect of laser power on microstructure and properties of nickel based alloy in laser cladding”. *Chinese Journal of Rare Metals*. Vol. 40, No. 1, pp. 20-25. 2016. (Deiwei Deng, Jinhua Sun, Xinlin Wang and Hongchao Zhang.)
19. “Crack healing in SUS304 stainless steel by electropulsing treatment”. *Journal of Cleaner Production*, Vol. 113, pp. 989-994. 2016. (Tao Yu, Dewei Deng, Gang Wang, Hongchao Zhang.)
20. “Life cycle assessment of a large-scale centrifugal compressor: A case study in China”. *Journal of Cleaner Production*, Vol. 139, pp. 810-820. 2016. (Shitong Peng, Tao Li, Mengmeng Dong, Junli Shi, Hongchao Zhang)
21. “Influences of deposition strategies and oblique angle on properties of AISI316L stainless steel oblique thin-walled part by direct laser fabrication”. *Optics & Laser Technology*, Vol. 80, pp. 138-144. 2016. (Xinlin Wang, Dewei Deng, Meng Qi, Hongchao Zhang.)
22. “Synthesis and Applications of Semiconducting Graphene”. *Journal of Nanomaterials*, vol. 2016. Article ID 6375962, 19 pages, 2016. doi:10.1155/2016/6375962 (Shahrima Maharubin, Xin Zhang, Fuliang Zhu, Hong-Chao Zhang, Gengxin Zhang, and Yue Zhang)
23. “Energy Consumption and Saving Analysis for Laser Engineered Net Shaping of Metal Powders”. *Energies*, Vol. 9, No. 10, pp. 763-774. 2016. (Liu, Z., Ning, F., Cong, W., Jiang, Q., Li, T., Zhang, H., & Zhou, Y)
24. “Exploring optimal timing for remanufacturing based on replacement theory”. *CIRP Annals-Manufacturing Technology*, Vol. 65, No. 1, pp. 447-450, 2016. (Liu, Zhichao, Feri Afrinaldi, Hong-Chao Zhang, and Qihong Jiang) (SCI, EI)
25. “Environmental benefits of remanufacturing: A case study of cylinder heads remanufactured through laser cladding”. *Journal of Cleaner Production*, Vol. 133, pp. 1027-1033. 2016. (Liu, Zhichao, Qihong Jiang, Tao Li, Shiyun Dong, Shixing Yan, Hongchao Zhang, and Binshi Xu) (SCI, EI)
26. “Comparative life cycle assessment of remanufacturing cleaning technologies”, *Journal of Cleaner Production*, Vol. 137, pp. 475-489. 2016. (Shitong Peng, Tao Li, Zijue Tang, Junli Shi, Hongchao Zhang) (SCI, EI)

27. "Laser ablation of electrodes for Li-ion battery remanufacturing". *The International Journal of Advanced Manufacturing Technology*, pp. 1-10, 2016. (Ramoni, Monsuru Olalekan, Yang Zhang, Hong-Chao Zhang, and Tewodros Ghebrab) (SCI, EI)
28. "Fatigue life assessment of centrifugal compressor impeller based on FEA". *Engineering Failure Analysis*, Vol. 60, pp. 383-390, 2016. (Shujie Liu, Chi Liu, Yawei Hu, Sibao Gao, Yifan Wang, Hongchao Zhang) (SCI)
29. "Fatigue life assessment of the centrifugal compressor impeller with cracks based on the properties of FV520B". *Engineering Failure Analysis*, Vol. 66, pp. 177-186, 2016. (Liu, Chi, Shujie Liu, Sibao Gao, Yawei Hu, Shixin Zhang, and Hongchao Zhang) (SCI)
30. "Remanufacturing cathode from end-of-life of lithium-ion secondary batteries by Nd:YAG laser radiation". *Clean Technologies and Environmental Policy*, Vol. 18, No. 1, pp. 231-243, 2016. (Wei-wei Liu, Heng Zhang, Li-hong Liu, Xiao-chuan Qing, Zi-jue Tang, Ming-zheng Li, Jin-song Yin, Hong-chao Zhang) (SCI, EI)
31. "Feasibility study of a new approach to removal of paint coatings in remanufacturing". *Journal of Materials Processing Technology*, Vol. 234, pp. 102-112. 2016. (Li, Ming-Zheng, Wei-Wei Liu, Xiao-Chuan Qing, Yue Yu, Li-Hong Liu, Zi-Jue Tang, Hai-Jiang Wang, Ya-Zhou Dong, and Hong-Chao Zhang) (SCI, EI)
32. "Real-Time Reliability Assessment in Milling Tools Operation". *Quality and Reliability Engineering International*, Accepted 25 October 2015. (Shujie Liu, Yawei Hu, Chi Liu, Hongchao Zhang) (SCI, EI)
33. "Loss and Benefit Caused by a Diesel Engine: From the Perspective of Human Health". *Journal of Industrial Ecology*, Accepted 2015. (Feri Afrinaldi, Hong Chao Zhang, Zhi Chao Liu, Annette Hernandez) (SCI, EI)
34. "Effects of Mass Energy and Line Mass on the Clad Characteristics in Laser Cladding Process". *Lasers in Engineering*, Accepted 2015. (X-L. Wang, D-W. Deng, H-C. Zhang) (SCI)
35. "Machinery Condition Prediction Based on Wavelet and Support Vector Machine". *Journal of Intelligent Manufacturing*, Online dated: 05 Feb 2015. (Shujie Liu, Yawei Hu, Chao Li, Huitian Lu, Hongchao Zhang) (SCI, EI)
36. "An Ontology-based Knowledge Framework for Engineering Material Selection". *Journal Advanced Engineering Informatics*, Vol. 29, No. 4, pp. 985-1000, 2015. (Yingzhong Zhang, Xiaofang Luo, Yong Zhao, Hong-chao Zhang) (SCI, EI)

37. “The Construction and Parameters Impact Analysis of the Model of Cutting Specific Energy”. *Chinese Journal of Mechanical Engineering*, Vol. 8, No. 26, pp. 1098-1104, 2015. (Zhang Hongchao, Kong Lulu, Li Tao, Chen Junchao) (In Chinese: EI)
38. “Life Cycle Assessment: State of the Art and Future Perspective”. *Recent Patents on Mechanical Engineering*, Vol. 8, pp. 211-221, 2015. (Junli Shi, Zhichao Liu, Hongchao Zhang, Qihong Jiang, Tao Li) (EI)
39. “Supercritical carbon dioxide cleaning of metal parts for remanufacturing industry”. *Journal of Cleaner Production*, Vol. 93, pp. 339-346, 2015. (Wei-wei Liu, Ming-zheng Li, Tim Short, Xiao-chuan Qing, Yan-ming He, Yan-zeng Li, Li-hong Liu, Heng Zhang, Hong-chao Zhang) (SCI, EI)
40. “Energy Consumption and Environmental Emissions Assessment of a Refrigeration Compressor Based on Life Cycle Assessment Methodology”. *The International Journal of Life Cycle Assessment*, Vol. 20, No. 7, pp. 947-956, 2015. (Shi Junli, Li Tao, Zhang Hongchao, Peng Shitong, Liu Zhichao, Jiang Qihong) (SCI)
41. “Comparative Life Cycle Assessment of remanufactured liquefied natural gas and diesel engines in China”. *Journal of Cleaner Production*, Vol. 101, pp. 129-136, 2015. (Shi Junli, Li Tao, Zhang Hongchao, Peng Shitong, Liu Zhichao, Jiang Qihong.) (SCI, EI)
42. “Effect of single Z-increment on laser cladding forming”. *Laser technology*, Vol. 39, No. 5, pp. 702-705, 2015. (Wang Xinlin, Deng Dewei, Hu Heng, Zhang Hongchao) (In Chinese)
43. “Pre-treatment of remanufacturing cleaning by use of supercritical CO₂ in comparison with thermal cleaning”. *Clean Technologies and Environmental Policy*, vol. 17, No. 6, pp. 1563-1572, 2015. (Mingzheng Li, Weiwei Liu, Tim Short, Xiaochuan Qing, Yazhou Dong, Yanming He, Hong-Chao Zhang) (SCI, EI)
44. “A rule-based system for trade-off among energy consumption, tool life, and productivity in machining process”. *Journal of Intelligent manufacturing*, Vol. 26, No. 6, pp. 1217-1232, 2015. (Asif Iqbal, Hong-Chao Zhang, Lulu Kong, Ghulam Hussain) (SCI)
45. “Experimental Investigation of Residual Stress Relief Using Pre- and Post-clad Heating in the Laser Cladding Process”. *Lasers in Engineering*, Vol. 31, pp. 11-277, 2015. (H. Hu, A. Iqbal, X-L. Wang, H-C. Zhang) (SCI)
46. “A New Profile Measurement Method for Thin Film Surface”. *Open Automation and Control Systems Journal*, Vol. 6, pp. 480-487, 2014. (ShuJie Liu, Yuan L. Zhang, Hong C. Zhang) (EI)

47. "Machinery Condition Prediction Based on Support Vector Machine Model with Wavelet Transform". *Journal of Donghua University*, Vol. 31, No. 6, pp. 831-834, 2014. (Shujie Liu, Huitian Lu, Chao Li, Yawei Hu, Hongchao Zhang) (EI)
48. "Residual Life Prediction under Condition Monitoring". *Computer Modeling and New Technologies*, Vol. 18, No. 5, pp. 55-60, 2014. (Shujie Liu, Yawei Hu, Chao Li, Hongchao Zhang.) (EI)
49. "Error Separation for Wide Area Film Measurement". *Sensors & Transducers journal*, Vol. 178, No. 9, pp. 130-134, 2014. (Shujie Liu, Zuolan Yuan, Hongchao Zhang)
50. "Profile Measurement of Resist Surface Using Multi-Array-Probe System". *Sensors & Transducers journal*, Vol. 178, No. 9, pp. 135-139, 2014. (Shujie Liu, Yuanliang Zhang, Zuolan Yuan)
51. "Analysis of the relationship of crack arrest effects with fusion zone size by current detour and Joule heating". *The International Journal of Advanced Manufacturing Technology*, pp. 1-10, 2014. (Yu, J. Zhang, H., Deng, D., Liu, Q., Hao, S.) (SCI)
52. "Numerical calculation and experimental research on crack arrest by detour effect and joule heating of high pulsed current in remanufacturing". *Chinese Journal of Mechanical Engineering*, Vol. 27, No. 4, pp. 745-753, 2014. (Yu, J., Zhang, H., Deng, D., Hao, S., Iqbal, A.) (SCI)
53. "Energy and exergy analyses of atomic layer deposition of Al₂O₃ nano-film process". *International Journal of Exergy*, Vol. 15, No. 1, pp. 62-75, 2014. (Li, T., Wang, F., Zhang, H.C., Yuan C.) (SCI)
54. "Life Cycle Assessment of an Engine with Input-Output Based Hybrid Analysis Method". *Journal of cleaner production*, Vol. 78, pp. 131-138, 2014. (Qihong Jiang, Tao Li, Zhichao Liu, Hongchao Zhang, Keda Ren) (SCI, EI)
55. "Life Cycle Assessment-based Comparative Evaluation of Originally Manufactured and Remanufactured Diesel Engines". *Journal of Industrial Ecology*, Vol. 18, No. 4, pp. 567-576, 2014. (Liu, Z., Li, T., Jiang, Q., Zhang, H.) (SCI, EI)
56. "A Fuzzy Logic Based Aggregation Method for Life Cycle Impact Assessment". *Journal of Cleaner Production*, Vol. 67, pp. 159-172, 2014. (Feri Afrinaldi, Hongchao Zhang) (SCI)
57. "Energy Modeling of Electrochemical Anodization Process of Titanium Dioxide Nanotubes". *ACS Sustainable Chemistry & Engineering*, Vol. 2, No. 3, pp. 404-410, 2014. (Bingbing Li, Xianfeng Gao, Hong-Chao Zhang, Chris Yuan) (SCI)

58. “An environmentally friendly approach for contaminants removal using supercritical CO₂ for remanufacturing industry”. *Applied Surface Science*, Vol. 292 No. 15, pp. 142-148, 2014. (Weiwei liu, Bin Zhang, Yanming He, Hongchao Zhang) (SCI)
59. “Recent Research and Development of Typical Cutting Machine Tool’s Energy Consumption Model”. *Chinese Journal of Mechanical Engineering*, Vol. 50, No. 7, pp. 102-111, 2014. (Tao Li, Lulu Kong, Hongchao Zhang, Asif Iqbal) (In Chinese: EI)
60. “A system boundary identification method for life cycle assessment”. *International Journal of Life Cycle Assessment*, pp. 1-15, 2013.(Tao Li, Hongchao Zhang, Zhichao Liu, Qingdi Ke, Leo Alting) (SCI, EI)
61. “Simulation and experiment for crack arrest in remanufacturing”. *International Journal of Advanced Manufacturing Technology*, pp. 1-10, 2013. (Jing Yu, Hongchao Zhang, Dewei Deng, Asif Iqbal, Shengzhi Hao) (SCI)
62. “Shape Memory Polymer Nanocomposites for Application of Multiple-Field Active Disassembly: Experiment and Simulation”. *Environmental Science & Technology*, Vol. 47, No. 22, pp. 13053-13059, 2013. (Carrell, J., Zhang, H.C., Wang, S., Tate, D.) (SCI)
63. “Delaminating/Recycling of Printed Circuit Boards Using a Supercritical Carbon Dioxide Process”. *Journal of Cleaner Production*, Vol. 41, pp. 174-178, 2013. (Sanyal, S., Ke, Q., Zhang, Y., Ngo, T., Carrell, J., Zhang, H.C., Dai, L.) (SCI)
64. “Application of Electro-Magnetic Heat Effect on crack arrest in remanufacturing bland”. *Chinese Journal of Mechanical Engineering*, Vol. 49, No. 7, pp. 21-28, 2013. (Hongchao Zhang, Jing Yu, Zhisheng Hao, Yanfang Peng.) (In Chinese: EI)
65. “Environmental Emissions and Energy Consumptions Assessment of a Diesel Engine from the Life Cycle Perspective”. *Journal of Cleaner Production*, Vol. 53, pp. 7-12, 2013. (Tao Li, Zhichao Liu, Hong-Chao Zhang, Qihong Jiang) (SCI, EI)
66. “End-of-life (EOL) issues and options for electric vehicle batteries”. *Clean Technologies Environmental Policy*, Vol. 15, No. 6, pp. 881-891, 2013. (Monsuru Olalekan Ramoni, Hong-Chao Zhang) (SCI, EI)
67. “An entropy-based metric for product remanufacturing”. *Journal of Remanufacturing*, Vol. 2, No. 2, 2012, (Monsuru O Ramoniand, Hong-Chao Zhang) (EI)
68. “Investigation of a Multiple Trigger Active Disassembly Element”. *The Annals of the CIRP*, Vol. 61, pp. 27-30, 2012. (Zhang, H.C., Carrell, J., Wang, S., Tate, D., Imam, S.) (SCI, EI)

69. “A PCA-based Method for Construction of Composite Sustainability Indicators”. *The International Journal of Life Cycle Assessment*, Vol. 17, No. 5, pp. 593-603, 2012. (Tao Li, HongChao Zhang, Chris Yuan, Zhichao Liu, Chengcheng Fan) (SCI, EI)
70. “Carbon footprint comparison of sign substrate made from recycled e-waste plastic versus aluminum”. *International Journal of Sustainable Engineering*, Vol. 5, pp. 76-83, 2012. (Honglei Wang, Elizabeth K. Walker, Alex Abadi, Guanghong Duan, Hong-chao Zhang) (SCI, EI)
71. “Energy Factor Analysis in Modular Product”. *Applied Mechanics and Materials*, Vols. 130-134, pp. 1314-1317, 2012. (QingdiKe, Hong-Chao Zhang, Guangfu Liu, Bingbing Li) (SCI, EI)
72. “Overview of Energy Consumption Model for Manufacturing Processes”. *Applied Mechanics and Materials*, Vols. 130-134, pp. 2288-2293, 2012. (Bingbing Li, Hong-Chao Zhang, Qingdi Ke, Li Ding, Lei Zhang) (SCI, EI)
73. “Multi-Objective Tooling Optimization for Sustainable Manufacturing”. *International Journal of Engineering Research and Application*, Vol. 2, No. 1, pp. 853-862, 2012. (Kai Jin, Hua Li, Hong C. Zhang, SwiteshNage).
74. “Development and Analysis of Design for Environment Oriented Design Parameters”. *Journal of Cleaner Production*, Vol. 19, No. 15, pp. 1723-1733, 2011. (Lei Zhang, Yang Zhan, Zhifeng Liu, Hong-Chao Zhang, Bingbing Li) (SCI, EI)
75. “Decision Analysis in Sustainable Product Development”. *Advanced Materials Research*, Vols. 468-471, pp. 370-373, 2012. (Gang Chen, Hong Chao Zhang, Chang Yong Chu) (SCI, EI)
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INVITED (SPEECHES) TO INDUSTRIES AND GOVERNMENT AGENCIES

1. “Keynote speech: Fundamental Challenges of Remanufacturing Research,” 20th CIRP International Conference on Life Cycle Engineering (LCE), Singapore, April 2013.
2. “Scientific Challenges and Fundamental Research on Remanufacturing in China,” The 3rd US-China Dialogue on Remanufacturing, The Department of Commerce, Washington D.C., September 2012.
3. “Sustainable Manufacturing: Challenges and Opportunities,” Workshop on Research Direction and Funding Emphasis for Fundamental Scientific Research of China, The Ministry of Science and Technology China, Beijing, China, June 2012.

4. "Energy Model for high-end Mechanical Equipment and Low Carbon manufacturing," Roundtable of National Science Foundation China, Changsha, China, January 2011.
5. "Energy and Sustainability Issues in Additive Manufacturing Engineering," National Science Foundation Workshop for Additive Manufacturing, Washington DC, March 2009.
6. "Web-based System for Electronic Product Disassembly Recycling and Materials A Management," National Institute of Standards and Technology, Gaithersburg, Maryland, March 2009.
7. "Product Analysis and Materials break up study on sit-top-box and related products," ATC Logistics and Electronics, Fort Worth, Texas, April 2008.
8. "Technical Challenges for Plastic Recycling and Reverse Logistics," Image Microsystems Inc., Austin, Texas, April 2008.
9. "Research on Quantitative Assessment Methods of Environmental Performance in Green Design," 15th CIRP International Conference on Life Cycle Engineering, The University of New South Wales, Sydney, Australia, March 2008.
10. "Studies of Waste Printed Circuit Board Recycling Using Supercritical Fluids CO₂," 15th CIRP International Conference on Life Cycle Engineering, The University of New South Wales, Sydney, Australia, March 2008.
11. "Review of Current End-of-Life Options for Electronics and Future Automatic Disassembly Options with Shape Memory Materials with Carbon Nanotubes for Electronics," 15th CIRP International Conference on Life Cycle Engineering, The University of New South Wales, Sydney, Australia, March 2008.
12. "Use of an Energy-Saving Concept to Assess Life-Cycle Impact in Engineering," 15th CIRP International Conference on Life Cycle Engineering, The University of New South Wales, Sydney, Australia, March 2008.
13. "Sustainable Manufacturing: Research and Practice," China Quality Certification Center, Beijing, China, June 2007.
14. "Sustainable Manufacturing: Research, Practice and Application," China National Science Foundation, Beijing, China, July 2007.
15. "Sustainable Manufacturing Research Activities at Texas Tech University," Motorola Research and Development Center, Tianjin, China, July 2006.
16. "Sustainable Manufacturing Research Activities at Texas Tech University," Haier Corp. Headquarters of Haier Research and Development Center, Qingdao, China, July 2006.

17. "Refurbished Cell Phone – Business Prospects," Aftermarket Technology (ATC) Corp., Fort Worth TX, May 2005.
18. "Production Analysis and Application of Lean Manufacturing in Reverse Manufacturing Processes," Image Microsystems, Inc., Austin, TX, May 2005.
19. "Cell Phone Recycling: Current Practices and Economic Analysis," Aftermarket Technology (ATC) Corp., Fort Worth TX, March 2005.
20. "Product Recycling Study for Siemens S46 Cell Phone," ATC Corp., Fort Worth TX, November 2004.
21. "An Innovative Process Model for End-of-life Printed Circuit Board De-lamination and Metal extraction," Dell Inc., Austin, TX, January 2004.
22. "End-of-Life Electronic Product Materials Recovery and Recycling at TTU" Image Microsystems (including Dell Computer representative, Texas Commission and Environmental Quality Recycling, and other media agencies), Austin, TX, July 2003.
23. "Graduate Study for Master of Science in Manufacturing Systems and Engineering – A New Graduate Degree Program in Texas Tech University," Applied Materials, Austin Texas, September 2002.
24. "Graduate Study for Master of Science in Manufacturing Systems and Engineering – A New Graduate Degree Program in Texas Tech University," National Instruments, Austin Texas, September 2002.
25. "Environmentally Conscious Design and Manufacturing: A Review of Electronic Products Disassembly and Recycling," Keynote speech, the International Conference on Frontiers of Design and Manufacturing 2000, Hangzhou, China, June 2000
26. "A Decision Making Model for Materials Management of End-of-Life Products in the Pantex Plant," Amarillo National Resource Center for Plutonium, Amarillo, TX, January 1999.
27. "Green Product and Process Design and Relative Research Activities International," Institute of Manufacturing Engineering, Tsinghua University, Beijing, China, June 1998.

28. "A Proactive Material Management Model for Dismantled Nuclear Weapon Recycling," Swiss Federal Institute of Technology, Lausanne, Switzerland, April 1998.
29. "A Disassembly Model for End-of-Life Electro-mechanical Products Recycling," Department of Manufacturing Engineering, The Technical University of Denmark, March 1998
30. "A Disassembly Model for End-of-Life Personal Computer Recycling," Instituto Tecnológico de cd. Juárez, Mexico, October 1997.
31. "Modularity Analysis Method for Environmentally Conscious Electronic Products Design," Texas Instruments, Lewisville, TX, June 23, 1997.
32. "The Advanced Manufacturing Lab in Texas Tech University and its Current Research Project," and "A Disassembly Model for Electromechanical Orientated Weapon Dismantling," Pantex Plant, Amarillo, TX, February 10, 1997.
33. "A Disassembly Model for End-of-Life Personal Computers Recycling," Compaq Computers Corporation, Houston, TX, October 31, 1996.
34. "A Disassembly Model for End-of-Life Products Recycling," Pantex Plant, Amarillo, TX, July 8, 1996.
35. "Analysis and Cost Reduction Strategies for General Electric Appliances Model AP1 Washer-96," General Electric Appliances, Louisville, KY, June 18, 1996.
36. "A Disassembly Model for End-of-Life Products Recycling," Sandia National Research Laboratory, Albuquerque, NM, May 10, 1996.
37. "Suggested Solutions of Production Line Balancing and Throughput of GEA's Assembly Production Line," General Electric Appliances, Louisville, KY, April 24 1996.
38. "A Generic Disassembly Model for End-of-Life Products," Pantex Plant, Amarillo, TX, February 1996.

39. "Research Activities on Environmentally Conscious Manufacturing in TTU," Microelectronics and Computer Technology Corporation (MCC), Austin, TX, December, 1995.
40. "Initiation of Cost Reduction for GEA's Washer-96 Production," General Electric Appliances, Louisville, KY, November 1995.
41. "Integrated Process Planning and Production Scheduling: Past, Present, and Future," Shanghai Jiaotong University, June, 1995.
42. "Concurrent Engineering and Agile Manufacturing," Tianjin University, May 1995.
43. "Concurrent Engineering and Agile Manufacturing," Tianjin University, May 1995.
44. "A PC Recycling Model," Compaq Computer Corporation, Houston, TX, April, 1995.
45. "An Object-Oriented Model for DFM," Texas Instruments, Dallas, TX, August, 1994.
46. "Research Activities within the Laboratory for Intelligent and Integrated Manufacturing Systems (LIIMS)," Texas Instruments, Dallas, TX, May, 1994.
47. "Collaborative Opportunities with LIIMS," Caterpillar Company, Peoria, IL, May, 1994.
48. "Knowledge Based Process Planning Research in TTU," National Centers for Manufacturing Science (NCMS), Ann Arbor, MI, March, 1994.
49. "Integrated Process Planning and Automated Tolerancing Analysis," Texas Instruments, Dallas, TX, July 1993.
50. "Cooperative Research Opportunity in Texas Tech University," CAM-I/IMAR, St. Louis, MO, July 1992.
51. "Research Activities of CAPP in Texas Tech University: (1) Automated Tolerancing Analysis for Setup Selection of CAPP, (2) Integrated Process Planning and Job Shop Scheduling," National Institute of Standards and Technology (NIST), Gaithersburg, MD, March 1992.

52. "Computer Aided Process Planning: Past, Present, and Future," CAM-I Meeting, Arlington, TX, November 1991.

53. "An Integrated Model of Process Planning and Production Scheduling," CAM-I Meeting, Arlington, TX, November, 1991.

PRESENTATIONS AT INTERNATIONAL MEETINGS

1. "Exploring optimal timing for remanufacturing based on replacement theory". 66th CIRP GA 2016, Guimarães, Portugal, 21-27, August 2016.
2. "Simplified Life Cycle Assessment and Analysis of Remanufacturing Cleaning Technologies". 22nd CIRP Conference on Life Cycle Engineering, Sydney, Australia, April 7-9, 2015.
3. "Supercritical CO₂ Cleaning of Carbonaceous Deposits on Diesel Engine Valve". 22nd CIRP Conference on Life Cycle Engineering, Sydney, Australia, April 7-9, 2015.
4. "WT-SVM Model Based Machinery Condition Prediction". The 2014 International Conference on Quality, Reliability, Risk, Maintenance and Safety Engineering. Dalian, China, July 22-25, 2014.
5. "A Binary Linear Programming Approach for LCA System Boundary Identification". The 20th CIRP Conference on Life Cycle Engineering, Singapore, April 17-19, 2013.
6. "Three Dimensional Sustainability Assessment: A case of combustion motor industry in China". The 20th CIRP International Conference on Life Cycle Engineering (LCE), Singapore, April 17-19, 2013.
7. "Chemical Reaction Thermodynamic Model of Low Pressure CVD for Nano TiO₂ Film Preparation". 2012 IEEE International Symposium on Sustainable Systems and Technology (ISSST), Boston, USA, May 16-18, 2012.
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9. "Overview of Energy Consumption Model for Manufacturing Processes". The 3rd International Conference on Mechanical and Electrics Engineering, Hefei, China, September 23-25, 2011.
10. "Remanufacturing Engineering Literature Overview and Future Research Needs". The 18th CIRP International Conference on Life Cycle Engineering, Braunschweig, Germany, May 2-4, 2011.
11. "Energy-saving Optimal Design Based on Transfer Function". The 17th CIRP International Conference on Life Cycle Engineering, Hefei, China, May 19-21, 2010.
12. "A review of sustainable manufacturing measurement from product life cycle perspective". The 17th CIRP International Conference on Life Cycle Engineering, Hefei, China, May 19-21, 2010.
13. "A Surplus Asset Management Model for Environmental Impact Analysis of EOL Electronic Products". The ASME 2009 International Manufacturing Science and Engineering Conference, West Lafayette, IN. Oct 4-7, 2009.
14. "End-of-Life Analysis of Analog CATV Converters". The 2009 IEEE International Symposium on Sustainable Systems & Technology (ISSST), Tempe, Arizona, May 18-20, 2009.
15. "Improvement of home appliances design based on energy-saving concept: Case studies on hair dryer and coffee maker". The 2008 IEEE International Symposium on Electronics & the Environment, Washington, D.C., USA, May 19-21, 2008.
16. "Review of Current End-of-Life Options for Electronics and Future Automatic Disassembly Options with Shape Memory Materials with Carbon Nanotubes for Electronics". The 15th CIRP International Conference on Life Cycle Engineering, Sydney, March, 2008.
17. "Integrating Energy-saving Concept into General Product Design". 32nd International Electronics Manufacturing Technology Symposium, San Jose, USA. October 3-5, 2007.

18. "Research on decision-making method for green design based on green utility similarity". The IEEE International Symposium on Electronics and the Environment, Orlando, Florida, May 7-10, 2007.
19. "An Environmentally Benign Process Model Development for Printed Circuit Board Recycling". The IEEE International Symposium on Electronics and the Environment, Scottsdale, AZ, USA, May 8-11, 2006.
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23. "An Economic Analysis Model with Environmental Strategies Embedded for End-of-Life Management of Electronics Products". 2004 ASME International Mechanical Engineering Congress and Exposition, Anaheim, California, USA, November 13-20, 2004.
24. "An Economic Model for End-of-Life Management of Printed Circuit Boards". The IEEE International Symposium on Electronics and the Environment, May 10-13, Scottsdale, AZ, USA, 2004.
25. "Design for the Environment: Methodologies, Tools, and Implementations". The Seventh World Conference on Integrated Design and Process Technology, Austin, Texas, December, 2003.
26. "An Environmental Conscious Management Model for End-of-Life Electron-mechanical Products," IEEE International Symposium on Electronics and the Environment, Boston, USA, May 19-22, 2003.

27. "Printed Circuit Boards Recycling: A State-of Art Survey". Proceedings of the IEEE International Symposium on Electronics and the Environment, San Francisco, USA, May, 2002.
28. "Comparison of AHP and Reference Point Method in the Environmental Decision Support Model". IEEE International Symposium on Electronics and the Environment, San Francisco, USA, May, 2002.
29. "A Semi-quantitative Methodology of Environmentally Conscious Design for Electromechanical Products". 2001 IEEE International Symposium on Electronics and the Environment, ISEE-2001, Denver Colorado, May 7-9, 2001.
30. "A Prototype Model for Surplus Asset Management and Environmental Impact of End-of-Life Electronic Products". International Conference on Computers and Industrial Engineering, (28th ICC&IE) CD-RAM, Cocoa Beach, Florida, March 5-7, 2001.
31. "Life-Cycle Engineering: Issues, Tools, and Research". Integrated Design and Process Technology, IDPT 2000 CD-RM, Dallas, Texas, June 4–8, 2000.
32. "Modularity Analysis in Support of Green Design Electro-Mechanical Products". International Conference on Advanced Manufacturing Systems and Manufacturing Automation (AMSMA' 2000), Guangzhou, China, June, 2000.
33. "Graph-Aided and Tolerance-Oriented Automatic Setup Planning for Prismatic Parts in CAPP". 1999 NSF grantee's conference, Design & Manufacturing, CD-RAM, January, 1999.
34. "A Quantitative Approach in Environmentally Conscious Product Design Support," 1999 IEEE International Symposium on Electronics and the Environment, Danvers, Massachusetts, May 11-13, 1999,
35. "A 'GATO' Algorithm for the Setup Planning of Prismatic Parts," The 27th North American Manufacturing Research Conference, Berkeley, California, May 25-28, 1999.
36. "Industrial Ecology – Toward a Sustainable Design and Manufacturing: Overview", The 3rd S.M.Wu's Symposium on Manufacturing Science, Wuhan, China, June 10-12, 1998,

37. "Environmental Conscious Design: An introduction to EDST," The First International Workshop on Intelligent Manufacturing Systems, Lausanne, Switzerland, April 15, 1998,
38. "Introduction to a Disassembly Model for PC Recycling," CIRP International Symposium, Advanced Design and Manufacturing in the Global Manufacturing Era, August 21-22, 1997, Hong Kong.
39. "An Environmentally Conscious Evaluation/Design Support Tool for Personal Computers," 1997 IEEE International Symposium on Electronics & The Environment, San Francisco, CA, May 8, 1997.
40. "Form Feature and Tolerance Transfer from a 3D Model to a Setup Planning System," The 2nd World Conference on Integrated Design & Process Technology, Austin, TX, December 1996 (H.C. Zhang, F. Zhou, T.C. Kuo, and S. Huang).
41. "A Graph-Based Approach for Disassembly of EOL Product Recycling," 19th IEEE/CPMT International Electronics Manufacturing Technology Symposium, Austin, TX, October 15, 1996 (H.C. Zhang).
42. "Disassembly Model for Recycling PCs," 24th North American Manufacturing Research Conference, Ann Arbor, MI, May 21, 1996 (H.C. Zhang).
43. "Life Cycle Engineering: Design for Recycleability," The First World Conference on Integrated Design and Process Technologies, Austin, TX, December 9, 1995 (H.C. Zhang).
44. "Integrated Product, Process, and Production Modeling (IP³M) for Manufacturing Process Planning," The First World Conference on Integrated Design and Process Technology, Austin, TX, December 7, 1995 (H.C. Zhang).
45. "Integrated Process Planning and Production Scheduling: Object-Oriented Approach," ASME International Mechanical Engineering Congress and Exposition, San Francisco, CA, November 15, 1995 (H.C. Zhang).
46. "Life Cycle Engineering: Concepts and Researches," ASME International Mechanical Engineering Congress and Exposition, San Francisco, CA, November 16, 1995 (H.C. Zhang).

47. "On the Use of Knowledge Based Connectionist Models in CAPP Systems," ASME International Mechanical Engineering Congress and Exposition, Chicago, IL, November 17, 1994 (H.C. Zhang).
48. "A Graphical Method for Datum Set-up Selection in Process Planning," ASME International Mechanical Engineering Congress and Exposition, Chicago, IL, November 17, 1994 (H.C. Zhang).
49. "A Neural Network Approach for Datum Selection in CAPP," ASME International Mechanical Engineering Congress and Exposition, Chicago, IL, November 17, 1994 (H.C. Zhang).
50. "Tolerance Analysis in Process Planning for NC Machining," ASME International Mechanical Engineering Congress and Exposition, Chicago, IL, November 18, 1994 (H.C. Zhang).
51. "IPPS - An Integrated Process Planning Systems," 22nd NAMRC of SME, Evanston, IL, May, 1994 (H.C. Zhang).
52. "An Introduction to an Integrated and Intelligent Process Planning Model," ASME 114th Winter Annual Meeting, New Orleans, LA, December 1, 1993 (H.C. Zhang).
53. "A Neural-Expert Hybrid Knowledge Acquisition Model for Process Planning," SME Autofact 93, Chicago, IL, November, 1993 (H.C. Zhang).
54. "A Prototype to Integrate Process Planning and Job Shop Scheduling Functions," CIRP Annual Meeting in Edinburgh, UK, August, 1993 (H.C. Zhang).
55. "An Introduction to an Integrated Process Planning Model," Manufacturing International 1992 Conference, Dallas, TX, March, 1992 (H.C. Zhang, J. Mei, and S. Mallur).
56. "Operational Dimensioning and Tolerancing in CAPP," CIRP Annual Meeting in Stanford University, August, 1991 (H.C. Zhang, J. Mei, and R.A. Dudek).
57. "Expert Process Planning Systems: The state-of-the-art," Conference of the 21st CIRP International Seminar on Manufacturing Systems, Stockholm, Sweden, June 5-6, 1989 (H.C. Zhang and L. Alting).

58. "Introduction to an Intelligent Process Planning System for Rotational Parts," ASME-Winter Annual Meeting, Chicago, IL, November, 1988 (H.C. Zhang and L. Altng).

REPORTS AND REFERENCE MANUALS

1. "A Decision Making Model for Materials Management of End-of-Life Products in the Pantex Plant," Final Grant Report to Amarillo National Resource Center for Plutonium, project # 98 - 17, August, 1999.
2. "Tolerance Graph for Tolerance Control in Process Planning," Annual Grant report to National Science Foundation, contract # DMI-9714029, December, 1998.
3. "A Disassembly Model for PC Recycling," Annual Grant Report to Advanced Technology Program of Texas Higher Education Foundation, #063644-130, July, 1997.
4. "A Test Bed Integrated Process Planning Systems," Final Grant Report to NSF Program of Design and Integration Engineering, #DDM-9211657, August, 1996.
5. "Implementing the Integrated Model of Design, Process Planning, and Production Scheduling by Using Pro-Engineer on Workstations Platform," Report to Center for Applied Automation and Research, August, 1996.
6. "Application of CAD/CAM Software in TTU - Annual Report Grant #595-2155," Report to SME Engineering Education Foundation, July, 1996.
7. "A Disassembly Model for PC Recycling Semi-Annual Report Grant #003644-130," Report to Texas Higher Education Coordinating Board, June, 1996.
8. "Analysis and Cost Reduction Strategies for General Electric Appliances Model AP1 Washer-36," Final Project Report to General Electric Appliances Project Steering Committee, May, 1996.
9. "Progressive Report of GEA's Cost Reduction Project," Report to General Electric Appliances Project Steering Committee, March, 1996.

10. "An Object-Oriented Integration Model to Product Design-Process Planning-Production Scheduling," Report to Director of Center for Applied Automation and Research, September, 1995.
11. "Application of CAD/CAM Software in TTU - Annual Report Grant #594-1986," Report to SME Engineering Education Foundation, September, 1995.
12. "Tolerance Analysis for Setup Planning and Datums Selection in CAPP - Decision Rules," Report to NIST's Process Planning Laboratory, December, 1994.
13. "Integration of Process Planning and Production Scheduling: Overview, Analysis, and Object-Oriented Modeling," Report to NIST's Process Planning Laboratory, November, 1994.
14. "Application of CAD/CAM Software in TTU - Annual Report Grant #593-1856," Report to SME Engineering Education Foundation, September, 1994.
15. "Annual Report to CFAR's 93-94 Support Funding," Report to Center for Applied Research in Robotics and High Technology, August, 1994.
16. "Testbed for Integrated Process Planning Systems - Annual Grant Report," Report to NSF Program of Design and Integration, June, 1994.
17. "Integration of ALPS and IPPM - Implementation in NIST," Report to NIST's Process Planning Laboratory, December, 1993.
18. "Application of CAD/CAM Software in TTU - Annual Report of Grant #592-1694," Report to SME Engineering Education Foundation, October, 1993.
19. "Annual Report to CFAR's 92-93 Support Funding," Report to Center for Applied Research in Robotics and High Technology, August, 1993.
20. "Testbed for Integrated Process Planning Systems - Annual Grant Report," Report to NSF Program of Design and Integration, June, 1993.
21. "XPLAN-R Expert Process Planning System for Rotational Parts - Reference Manual Version 2.0 for IBM PC XT/AT," Institute for Production Development, Laboratory of Process and

Production Engineering, Building 425, Technical University of Denmark, Lyngby, Denmark, 1989.

22. “Overview of CAPP and Development of XPLAN,” Institute of Manufacturing Engineering, Technical University of Denmark, Lyngby, Denmark, 1987.

TEACHING

Courses Taught at Texas Tech University

Graduate

- IE 5331 - Advanced Topics in Industrial Engineering (Concurrent Engineering)
- IE 5331 - Advanced Topics in Industrial Engineering (Industrial Ecology and Environmentally Conscious Design and Manufacturing)
- IE 5351 - Advanced Manufacturing Processes
- IE 5352 - Advanced Manufacturing Engineering
- IE 5353 – Sustainable Manufacturing
- IE 5354 - Programmable Control Systems
- IE 5355 - Computer Aided Manufacturing
- IE 5357 – Manufacturing Facility Design and Layout

Undergraduate

- IE 3301 - Engineering Economic Analysis
- IE 3351 - Manufacturing Process I
- IE 3371 - Production Control
- IE 4351 - Facilities Planning and Design
- IE 4352 - Manufacturing Processes II
- IE 4353 - Materials Fabrication

GRADUATE STUDENTS, POST DOCTORS SUPERVISION

Graduate Students Supervision (completed)

Doctoral Students

John Jonnalagadda

In Vitro Characteristics of Porous Biodegradable PCL/PGA Cartilage Scaffolds Fabricated via Solid State Cryomilling
Department of Industrial Engineering, 2015

- Feri Afrinaldi, Ph.D *A Methodology for Measuring Sustainability in Three Dimensional Life Cycle Assessment*, May 2015
- Shayla Swain *Fabrication of Electrospun Biopolymer/SWNT Fibers for Bone Plate Applications*, Department of Industrial Engineering, 2014
- Monsuru Ramoni, Ph.D *Laser Surface Cleaning-Based Method for Electric Vehicle Battery Remanufacturing*, December, 2013
- Bingbing Li, Ph.D. *Thermodynamic Analysis and Sustainability Improvement of Nanoparticles Synthesis Processes with Application to Titanium Dioxide*, May, 2012, (Currently post-doctor research in University of Wisconsin at Milwaukee, WI)
- John Carrel, Ph.D. *Multi-Trigger Mechanism with Shape Memory Polymer Nanocomposite*, May, 2012, (Currently employed as lecturer by Industrial Engineering Department of Texas Tech University, Lubbock, TX)
- Qingdi Ke, Ph.D. *Life Cycle Assessment for Remanufacturing*, December, 2011, (Currently employed as Associate professor in Mechanical School of Hefei University of Technology, China)
- Hua Li, Ph.D., *Energy-saving Based Innovative Product Design Method*, June, 2009, (Currently employed as Associate Professor of Department of Mechanical and Industrial Engineering, Texas A&M University at Kingsville, TX)
- Ouyang Xi, *An Alternative Environmentally Benign Process For Printed Circuit Board Recycling*, May 2006. (Currently employed as Senior Engineer by Offshore Engineering Department of ABS Americas)

- James Jianzhi Li, *A Multi-Agent Negotiation Based Decision Framework for Extensible Product Life Cycle*, December 2003. (Currently employed as Associate Professor at Department of Manufacturing Engineering, University of Texas-Pan American, Edinburg, TX)
- Lily Xueqing Qian, *Environmental Analysis Model for Modular Design of Electromechanical Products*, May, 20003, (was employed as Visiting Assistant Professor of Padnos School of Engineering, Grand Valley State University, Grand Rapids, MI)
- Kai Jin *A Multiple Objective Decision Making Model for Materials Management of End-of-Life Electronic Products*, August, 2002, (Currently employed as Professor of Department of Mechanical and Industrial Engineering, Texas A&M University at Kingsville, TX)
- Edward E. Lin *Graph-Matrix-Based Automated Tolerance Analysis and Setup Planning in Computer-Aided Process Planning*, July, 2000, (Currently employed as a Senior Advisory Software Engineer by Seagate Technology Corp. Fremont CA).
- Steven Yue Yu *Modularity Analysis Scheme in Support of Environmentally Conscious Design for Electro-Mechanical Product*, July, 1999, (Currently employed as a Research Engineer by i2 technologies Corp. Dallas, TX).
- Michael S. Sanders *A Organizational Problem Diagnosis and Improvement Methodology for Small Enterprises* 1999, (was employed as an Assistant Professor by Kettering University, MI) (co-chair with Dr. Jerry Ramsey)
- David Daguang Zhang *Objected-Oriented Modeling for Integrated Process Planning and Production Scheduling System*, December, 1997, (Currently employed as a General Manager by Reltec Corp., Bedford, TX).

Robert Tsai-Chi Kuo *A Disassembly Model for End-of-Life Products Recycling*, July, 1997, (Currently employed as an Professor by Chung Yuan Christian University, Taoyuan, Taiwan).

Jiannan Mei *Tolerance Analysis for Setup Planning in Computer-Aided Process Planning*, May, 1996, (Currently employed as the Vice President for Engineering by Durcan Company, Michigan).

Samuel Hongdao Huang *A Graph-Matrix Approach to Setup Planning in Computer-Aided Process Planning (CAPP)*, December, 1995, (Currently employed as Professor by the University of Cincinnati, OH).

Master Students

Yingge Zhou *Laser cladding technology on high speed gear*
2016

Osmani, Fahad *Life cycle assessment of Flexible Pavement Systems*
2016

Kshirsagar, Snigdha *Life cycle assessment of Flexible Pavement Systems*
2016

Yang Zhang *Remanufacturing Technologies on Electric Vehicle Battery*
2014

Cheng Cheng Fan *Quantitative Measuring for Sustainable Manufacturing and Correlated International Standards*. May 2010.

John Carrell, *Design and Analysis of Shape Memory Polymer Snap-Fits for Active Disassembly*, December 2009.

- Sunil Mohite, *Environmental Assessment and Study and Recycling Feasibility for PC drivers and Cell phones*, December 2005.
- Rohit Kulkarni, *A Life Cycle Assessment Tool for End-of-Life Personal Computers*, August, 2005.
- Puneet Shrivastava, *Web-based End-of-Life Electronic Products Recovery and Recycling Decision Support System*, May, 2005.
- Yingchun Yuan, *An Alternative Process Model for Printed Circuit Boards Recycling by Means of Cryogenic Methodology*, December, 2004.
- Nikhil U. Rao, *Economic Model for End-of-Life Management of Printed Circuit Board Recovery and Recycling*, December 2003
- John Stephen Campbell, *The Research and Development of an Air Separation Conveyor for Obsolete Electronic Products Recycling*, May 2003, (Currently employed as Manufacturing Director by Cummins Southern Plains, Ltd. Dallas, Texas).
- Sam Zong Gao *An Object-Oriented System Design for a Web-based Electronic Product Disassembly and Recycling System*, May 2002, (Currently as a Software Development Engineer working in China).
- Catherine Zhang *Environmentally Conscious Supply Chain: A Case Study on Electronic Industry*, May 2001, (Currently employed as a System Engineer by CVI Laser Corp., Albuquerque, NM).
- Shah Galib Habib *Comparison of Geometric Visualization and Finite Difference Method in Analyzing the Die-Casting Process*, Department of Industrial Engineering, 2001, (Current employed as a System Engineer by Compaq Computers in Houston Texas), (co-chair with Dr. Arif Sirinterlikci).

- Adib Mahmood Khan *A Prototype Model for Surplus Asset Management and Environmental Impact of End-of-Life Electronic Products*, December, 2000, (Currently employed as a Product Structure Engineer by Applied Materials Corp., CA).
- Amy Feng Zhou *Form Feature and Tolerance Transfer from a Three-Dimensional Solid Model to a Setup Planning System*, August, 1996, (Currently employed as a Software Engineer by Reltec Corp., Bedford, TX).
- Shanshan Chen *Graphical Simulation Software for the Tool Path Within an Integrated CAD/CAM/CNC Environment*, December, 1995, (Currently employed as a Senior Industrial Engineer by Motorola., Fort worth, TX).
- Samuel Hongdao Huang *Decision Making Module for Integration of Process Planning and Scheduling*, December, 1992.
- Srinidhi Mallur *Integration of Process Planning and Scheduling Functions*, May, 1992, (Currently employed as a Product Design Engineer by an automotive company, Detroit Michigan).

Graduate Student Supervision (in progress)

- Maharubin, Shahrma *Research on electrical vehicle batteries remanufacturing*
(Expected completion, 2018)
- Zhichao Liu *Research on the coupling mechanism of power-powder in laser cladding* (Expected completion, 2018)
- Yang Zhang *Remanufacturing Technologies on Electric Vehicle Battery*
(Expected completion, 2017)
- Kim Hoyeol *Sustainability in Additive Manufacturing*,
(Expected completion, 2016)

- John Zanoﬀ *Approach that Assess Product Reliability: Utilization of Processes that are Program Phase Dependent*, Department of Mechanical Engineering, 2009
- Christopher Adams *Developing Transdisciplinary Engineering Metrics Using Data Mining Techniques*, Department of Mechanical Engineering, 2009
- Keith Lee Jones *The Application of Mathematical Ecology and Spatial Clustering Analysis Techniques for Hailpad Measurements*, Department of Industrial Engineering, 2008
- Hua Song *Green Supply Chain – A Reverse Logistics Model and Waste Application for Electronics*, Department of Industrial Engineering, 2005
- Bulent Gunus *Axiomatic Product Development Lifecycle (APDL) Model*, Department of Mechanical Engineering, 2005.
- Tharat Ittharat *The Integrated Economic Production Quantity Model for Inventory and Quality*, Department of Industrial Engineering, 2004.
- Supphasak Phongarant *Reactive Parallel Machine Scheduling Using Hybrid – Intelligence to Minimize Weighted Tardiness Makespan, and Cost of Rescheduling*, Department of Industrial Engineering, 2004.
- Junning Sun *Probabilistic Optimization of Structure for Crashworthiness*, Department of Mechanical Engineering, 2004.
- Arisa Kosadat *Integrated Online Auctions Using Revenue Management*, Department of Industrial Engineering, 2003.
- Viput Ongsakul *Common Due Date Scheduling With Batch Delivery*,

Department of Industrial, Engineering, 2001.

Vasa Kosadat *Integrated Supply Chain Model*, Department of Industrial Engineering, 2001.

Seonwan Myung *Evaluation of an Automated Three-Dimensional Compensation Algorithm for Visual Display Misalignment and Effects of Display Formats in Three-Dimensional Telerobot Manipulation*, Department of Industrial Engineering, 2000.

Waters Wanyama *Analytical and Experimental Determination of the Acoustic Power Output From Linearly Planer Vibrating Surfaces*, Department of Mechanical Engineering, 2000.

Susan Shuxia Lu *System Self-Assessment of Performance Reliability on Multi-variant Time Series Modeling*, Department of Industrial Engineering, 1999.

Huitian Lu *Automated System Self-Assessment of Survival*, Department of Industrial Engineering, 1998.

E. Allen Carrigo III *A Synergistic Methodology and Adaptive Model for Material Management in a Discrete Manufacturing Environment*, College of Business Administration, 1997.

Elliot J. Montes, Jr. *The Multiple Resource Constrained Scheduling Problem*, Department of Industrial Engineering, 1997.

Ta-Tao Chuang *A Conceptual Model and An Implementation of Adoptive Decision Support Systems*, College of Business Administration, 1998.

Changxing Lin *Calibration and 3 Dimensional Scene Reconstruction Using Epipolar Constraints on a Structural Light Computer Vision System*, Department of Industrial Engineering, 1997.

- Wen-Ruey Lee *A Study on the Profit-Based Quality-Productivity Relationship Model and its Verification in Manufacturing Industries*, Department of Industrial Engineering, 1997.
- Sanjukta Patro *Neural Networks and Evolutionary Computation for Real-Time Quality Control*, Department of Industrial Engineering, 1997.
- Gang Qi *Wavelet-Based Acoustic Emission Analysis on Composite Materials*, Department of Mechanical Engineering, 1996.
- Hoonyong Yoon *Psychophysical and Physiological Study of One-Handed and Two-Handed Combined Tasks*, Department of Industrial Engineering, 1996.
- Thomas A. Ottaway *A Conceptual Model and Prototype of an Adaptive Production Control System*, College of Business Administration, 1995.
- Shawn D. Bird *A Reference Architecture for Distributed Intelligent Systems and a Preliminary Description Language for Their Integration*, College of Business Administration, 1993.
- K.C. Wong *Current-Mode Analog-to-Digital Conversion Techniques*, Department of Electrical Engineering, 1993.
- Kuo Ping Huang *Scheduling the Extended Machine Interference Problem*, Department of Industrial Engineering, 1993.
- Jin-Pin Liou *Scheduling Flowshops with Limited In-Process Wait*, Department of Industrial Engineering, 1992.
- Georges Abdul-Nour *Effect of Different Maintenance Policies on the Just-in-Time Production System*, Department of Industrial Engineering, 1991.

Masters Students

- Bindu Madhava Tambraparni *Manufacturing graphene-based nano-composites for thermal management applications*, Department of Industrial Engineering, 2010.
- Sameera Muthya *Introduction of Silver Nano-rods for Superior Electrical Conductivity in Polyaniline Nano-composites*, Department of Industrial Engineering, 2006.
- Olga Karabelchtchikova *Modeling of Multi-pass Grinding Effect on Residual Stresses Distribution and Surface Integrity of D2 Thread rolling Dies*, Department of Industrial Engineering, 2004.
- Iulian Gherasoiu *Characterization and Integration of Control Structures for Hierarchical Process Control in Production Systems*, Department of Industrial Engineering, 1999
- Mehmud Zaglul Karim *Statistical Process Control Performance Characterization Under Field Conditions*, Department of Industrial Engineering, 1997.
- Javed Shamin *Analysis and Simulation of Dispatching Rules in an Assembly Shop*, Department of Industrial Engineering, 1994.
- Henning Oeltjenbruns *Strategic Planning in Incremental Automation-Manufacturing Systems and Machinery Justification*, Department of Industrial Engineering, 1993.
- Emmanuel R. Peters *Simulated Annealing for Common Due Date Scheduling*, Department of Industrial Engineering, 1993.
- Kancherla, Aravind *Interdisciplinary Graduate Degree of Master of Science*, Graduate School, Texas Tech University, 1992.
- Gunner C. Heinrich *Determination of Static and Dynamic Deformations on the Surface and the Interior of Transparent Objects Using*

Holographic Interferometry, Department of Mechanical Engineering, 1992.

Carman W. Campagna

Interdisciplinary Graduate Degree of Master of Science, Graduate School, Texas Tech University, 1993.

Wu Ying

Long-Term Average Hourly, Daily, and Annual Temperature Prediction Model, Department of Civil Engineering, 1992.

Post Doctoral Fellows and Visiting Scholars

Dr. Monsuru O. Ramoni

Laser Surface Cleaning -Based method for Electric vehicle Remanufacturing.

Dr. Guofu Lian

Research on coupling mechanism of power-powder in Laser cladding additive manufacturing technology

Dr. Jibin Jiang

Research and application of Laser cladding Additive manufacturing in remanufacturing industry

Dr. Changfeng Men

Environmentally Conscious Design and Manufacturing on Electric Product.

Dr. Gang Li

Life cycle assessment of Electromechanical Product

Dr. Lei Zhang

Energy Consumption Modeling for Manufacturing Processes

Dr. Zhoubao Wu

Environmentally Conscious Design and Manufacturing on Electromechanical Product and Process Development.

Dr. Sam Huang

A Disassembly Model for End-of-Life Electronics recycling (currently Professor in Department of Mechanical and Industrial, The University of Cincinnati, Cincinnati, OH).

Dr. Hua Dong

Integration of Automated CAPP and CNC Machines (currently working in a software company, San Jose, CA).

Dr. Junning Song

*An Alternative Environmentally Benign Process For Printed
Circuit Board Recycling.*

SERVICES

University Services

Member of International Council, Texas Tech University, (2005-2010)
Member of Tenure Advisory Committee, Texas Tech University, (1999-2004)
Member of the Faculty Senate, Texas Tech University, (1999-2003)
Member of Faculty Development Committee, Texas Tech University, (1998-2001)
Member of Tenure Hearing Committee, Texas Tech University, (1996-1997)
Member of the Faculty Status and Welfare Committee, Texas Tech University, (2000-2003)
Faculty Advisor, Student Chapter of Society of Manufacturing Engineers, (1991-2003)

College

Committee of Kohl's Family Scholarship, (2001- present)
Member of Department of Civil Engineering Tenure/Promotion Committee, 2001
Member of Department of Petroleum Engineering Promotion Committee, 2000
Director of the Center for Applied Research in Advanced Manufacturing, (1999-2006)
Member of Engineering Graphics Steering Committee, (1994)
Member of Library Oversight Committee, (1993)
Member of Courses Review and Consolidation Committee, (1992)
Member of Grade Appeals Committee, (1991)

Department

Chair of Faculty Position Search Committee (2007)
Member of Graduate Committee (Since 2007)
Member of Department Chairman Search Committee, (2005)
Member of Faculty Position Search Committee, (2001)
Member of Department Chairman Search Committee, (2001)
Faculty Advisor, Undergraduate Students, (1992-1999)
Faculty Liaison to the TTU Library, (1991-2005)
Graduate Advisor Industrial Engineering, (1999-present)

SCIENTIFIC AND SCHOLARLY SERVICES

Grant Proposal Review

Panel proposal review, National Science Foundation, USA, Division of Civil Mechanical and Manufacturing Innovation, 2012 - present

Proposal review Panel member of National Science Foundation of China, Division of Materials and Mechanical engineering, 2010-present

Proposal review committee member of Society of Manufacturing Engineers Education Foundation, since 1998 – 2006

Panel proposal review, National Science Foundation, USA, Division of Design, Manufacturing & Industrial Innovation, 1997-1998

Peer review, National Science Foundation, USA, Division of Electrical and Communication Systems, 1996-1997

Peer review, University Research Grants Council of Hong Kong, 1997 - present.

Peer review, Foundation for Research, Science and Technology, New Zealand, 1997

Peer review, Natural Sciences and Engineering Research Council of Canada, 1997-1998

Peer review, City University of Hong Kong, Research Committee, 1997 - present

Editorial Board Member of International Journals

Associate Editor, *IEEE Transactions on Components, Packaging, and Manufacturing Technology*, IEEE, Corp., New York.

Advisory Board Member, *International Journal of Advanced Manufacturing Technology*, Springer London, UK.

Editorial Board Member, *International Journal of Sustainable Manufacture* InderScience Publishers, UK.

Editorial and Advisory Board of Chinese Journal of Mechanical Engineering, Beijing, China, (2003-Present).

Editorial Board member, “*Product and Process Development*” under the Journal of “*Robotics and Computer Integrated Manufacturing*, Pergamon, London, UK. (1999- 2003)

Associate Editor, *Engineering Design and Automation*, John Wiley & Sons, Inc., New York. (1994-1999).

Guest Editor, *Special Issue on Environmentally Conscious Manufacturing for Engineering Design and Automation*, Vol. 4, 1997, John Wiley & Sons, Inc., New York.

Journal Reviewer (1990-Present)

1. *Advances in Engineering Software*
2. *Computer and Industrial Engineering*
3. *Computers in Industry*
4. *Computer Aided Design*
5. *Chinese Journal of Mechanical Engineering*
6. *Clean Technologies and Environmental Policy*
7. *Engineering Design and Automation*
8. *European Journal of Operation Research*
9. *Ecological Indicators*
10. *Information Sciences: An International Journal*
11. *IIE Transactions*
12. *IEEE Transactions on Components, Packaging, and Manufacturing Technology*
13. *IEEE Transactions on Robotics and Automation*
14. *International Journal of Advanced Manufacturing Technology*
15. *International Journal of Computer Integrated Manufacturing*
16. *International Journal of Intelligent Automation and Soft Computing*
17. *International Journal of Lifecycle Assessment*
18. *International Journal of Production Research*
19. *International Journal of Reliability, Quality and Safety Engineering*
20. *International Journal of Robotics and Computer-Integrated Manufacturing*

21. *International Journal of Energy for a Clean Environment*
22. *International Journal of Sustainable Manufacturing*
23. *Journal of Cleaner production*
24. *Journal of Design and Manufacturing*
25. *Journal of Industrial Ecology*
26. *Journal of Intelligent Manufacturing*
27. *Journal of Manufacturing Systems*
28. *Journal of Product and Process Development*
29. *Journal of Mechanical Engineering Science*
30. *Journal of Manufacturing Science and Engineering*
31. *Materials and Design*
32. *Procedia CIRP, The International Academy for Production Engineering*
33. *Resource, Conservation and Recycling*
34. *Science of the Total Environment*
35. *Transactions of ASME on Journal of Engineering Design*
36. *Transactions of ASME on Journal of Engineering for Industry*
37. *Transactions of ASME on Journal of Manufacturing Science and Engineering*
38. *Technological Forecasting & Social Change*
39. *Waste Management & Research*

Involvement in Conferences

Chair of the AeroDef Poster Challenge Advisory Board, 2017 AeroDef Manufacturing conference, Fort Worth Convention Center, Fort Worth, Texas, March 6-9, 2017.

Scientific Committee Member, 13th Global conference on sustainable manufacturing – Decoupling growth from resource use (GCSM, 2015), Ho Chi Minh City / Binh Duong, Vietnam, Sep 16 – Sep 18, 2015.

Scientific Committee Member, 12th Global conference on sustainable manufacturing – Emerging Potentials. (GCSM, 2014), Johor Bahru, Malaysia, Sep 22 – Sep 24, 2014.

International Advisory Board Member, 9th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2015, Sustainability through innovation in product life cycle design), Tokyo, Japan, Dec 2 - Dec 4, 2015.

International Committee of EcoDesign Member, 8th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2013, Sustainable society from ideality to reality via green innovation), Jeju Island, South-Korea, Dec 4 - Dec 6, 2013.

International Advisory Board Member, 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2011), Kyoto, Japan, Nov 30 - Dec 2, 2011.

Organizing Committee Chairman, the 17th CIRP International Conference on Life Cycle Engineering (LCE 2010) 19-21, Hefei, China, May 2010.

International Scientific Committee Member, the 21th CIRP International Conference on Life Cycle Engineering (LCE 2014), Trondheim, Norway, 18-20 June 2014.

International Scientific Committee Member, the 20th CIRP International Conference on Life Cycle Engineering (LCE 2013), Singapore 17-19 April, 2013

International Scientific Committee Member, the 19th CIRP International Conference on Life Cycle Engineering (LCE 2012), Berkeley, USA, May 23 - 25, 2012

International Scientific Committee Member, the 18th CIRP International Conference on Life Cycle Engineering (LCE 2011), Braunschweig, Germany, May 2nd - 4th, 2011.

International Scientific Committee Member, the 16th CIRP International Conference on Life Cycle Engineering (LCE 2009), Cairo, Egypt, April 28, - May 2, 2009.

Conference Organizing Committee member, the 2nd CIRP Conference on Assembly Technologies and Systems, Toronto, ON, Canada. September 2008,

Program Committee member, the 8th International Conference on Frontiers of Design and Manufacturing, 2008.

Program Vice Chairman, the 8th World Conference on Integrated Design and Process Technology, 2005.

Program Committee member, the 7th International Conference on Frontiers of Design and Manufacturing, 2006.

Program Committee member, the 6th International Conference on Frontiers of Design and Manufacturing, 2004.

Program Committee member, the 5th International Conference on Frontiers of Design and Manufacturing, 2002.

Program Committee member, the 4th International Conference on Frontiers of Design and Manufacturing, 2000.

Program Committee member, the 3rd International Conference on Frontiers of Design and Manufacturing, 1998.

Executive Committee Member, the CE3 Concurrent Engineering Research and Application, CE2005.

Organizer: Symposium of Environmental issues in the Product Life Cycle, sponsored by Division of Manufacturing Engineering, ASME International Mechanical Engineering Congress and Exposition, November, 13-19, 2004, Anaheim, California, USA.

Program Committee member, the 6th International Conference on Frontiers of Design and Manufacturing, 2004.

Program Chairman, the 7th World Conference on Integrated Design and Process Technology, 2004.

International Committee Member, the 11th ISEP International Conference on Concurrent Engineering: Research and Application, July, 2004.

Program Vice-Chairman, the 7th World Conference on Integrated Design and Process Technology, 2004.

Program Chairman, the 6th World Conference on Integrated Design and Process Technology, 2003.

Program Committee member, the 5th International Conference on Frontiers of Design and Manufacturing, 2002.

International Committee Member, the 2000 Pacific Conference on Manufacturing, Detroit, Michigan, 2000.

Program Committee member, the 4th International Conference on Frontiers of Design and Manufacturing, 2000.

Technical Committee Member, the Fourth International Conference on Manufacturing Science and Engineering, Hangzhou China, 2000.

Technical Committee Member, the Third International Conference on Engineering Design and Automation, Vancouver, Canada, 1999.

Organizer: Symposium of Environmentally Conscious Design and Manufacturing, sponsored by Division of Manufacturing Engineering and Division of Engineering Design, ASME International Mechanical Engineering Congress and Exposition, November, 1997, Dallas, TX.

Technical Committee Member, the Second International Conference on Engineering Design and Automation, Alaska, (1997).

Technical Committee Member of Grantee's Conference, National Natural Science Foundation of China, 1997.

Organizer: Symposium of Life Cycle Engineering (also named Environmentally Conscious Design and Manufacturing), sponsored by Division of Manufacturing Engineering, ASME International Mechanical Engineering Congress and Exposition, November 12-17, 1995, San Francisco, CA.

Chairman and Co-Chairman of technical sessions for: International Mechanical Engineering Congress and Exposition, ASME, since 1993; The World Conference on Integrated Design and Process Technology, since 1995; North America Manufacturing Research Conference, 1995.

Paper reviewer for ASME Design Engineering Technical Conference, 1993-present

Paper reviewer for North America Manufacturing Research Institute, SME, 1992-present

Paper reviewer for ASME Winter Annual Meeting Division of Design, Division of Manufacturing Engineering 1991-present

Book Review for Publishers

Van Nostrand Reinhold, New York

John Wiley and Sons, New York

Golden and Breach, Novato, CA

Tenure and Promotion External Review

Oregon State University, School of Mechanical, Industrial and Manufacturing Engineering

The University of Texas – Pan American, Department of Manufacturing Engineering

Northeastern University, Department of Industrial Engineering

The University of Michigan - Dearborn, Department of Industrial and Manufacturing Systems Engineering

The George Washington University, Department of Mechanical Engineering

Texas A&M University, Department of Engineering Technology

External Examiner for Ph.D. Dissertation

Department of Mechanical and Production Engineering, the National University of Singapore

Department of Industrial Engineering, State University of New York at Buffalo

National and International Society Committee Members

Member of ASME/CRTD Research Committee on Sustainable Manufacturing (2006–Present)

IEEE International Electronics Manufacturing Technology Symposium, Technical Committee Member and Technical Program Co-Chair, 2007

IEEE International Symposium on Electronics & the Environment, Technical Program Co-Chairs of the 2003-2006 IEEE.

IEEE Conference Steering Committee of Electronics and Environment, 2002

IEEE Technical Committee of Electronics and Environment (1995-Present)

Proposal review committee of Society of Manufacturing Engineers Education Foundation
(1998 – 2006).

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