

Hsueh-Ming Steve WANG

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EDUCATION

- 1999 Ph.D., Industrial and Systems Engineering, Lehigh University, PA
- 1999 M.S., Management of Technology, Lehigh University, PA
- 1989 Master of Manufacturing Engineering, Northwestern University, IL
- 1983 B.S., Mechanical Engineering, National Chung Chang Institute of Technology, Taiwan

EXPERIENCE

ACADEMIC APPOINTMENTS

- 2012** Associate professor, Chair of ESM program, University of Alaska Anchorage
- 2010-2012** Associate professor, Chair of ESM department, University of Alaska Anchorage
- 2009** Adj. Beijing Cohort EMBA program for University of Taxes, Arlington
- 2007-2010** Assistant professor, Coordinator of ESM program, University of Alaska Anchorage
- 2005-2007** Assistant professor, Director of EMBA program, Chang Gung University, Taiwan
- 1999-2004** Adj. assistant professor, Graduate Institute of Commerce Automation and Management (ICAM), National Taipei Univ. of Technology, Dept. of SE, National Defense University, and Dept. of MIS, Shih-Chien University, Taiwan
- 1998-1999** Research Assistant, Industrial Engineering, Lehigh University, PA, USA
Re-engineering of facilities layout for PEM and Rhetch Co., PA.; Forecasting of Production Capacity for M. A. Hanna Co. PA, Lutron Activity Based Costing/Management PA
- 1995-1997** Teaching Assistant and Instructor, Industrial Engineering, Lehigh University, PA, USA
Time Motion Study, Advanced Manufacturing Processes

SUPERVISED RESEARCH PROJECTS

- *Analysis of Technology Change of Waste-to-Energy for Solid Waste Management* (Faculty Development Fund, supported by University of Alaska, Anchorage, **US\$ 9,000**) July 1, 2011 –December 31, 2011

- *Optimal Analysis of a Hybrid Solar-Wind Power Generation System with LPSP technology for LED Lighting System on UAA Campus* (Faculty Development Fund, supported by University of Alaska, Anchorage, **US\$ 9,000**) January 1, 2009 –June 30, 2009
- *Fall 2008/Spring 2009 Special United Academics Research Travel Grant Round Two for the Institute of Industrial Engineers Annual Conference & Expo 2009.*(Research Travel Fund, supported by University of Alaska, Anchorage, **US 1,000**) July 1, 2008 to June 30, 2009
- *Economical Analysis of Alaska Street Lights by using Light-Emitting Diode (LED) technology* (Alaska University Transportation Center supported by Federal Fund, **US\$ 185,282**) September 1, 2008 – September 1, 2010
- *Replacement Analysis of Alaska Street Lights by using Light-Emitting Diode (LED) energy saving technology* (Faculty Development Fund, supported by University of Alaska, Anchorage, **US\$ 9,000**) January 1, 2008 –June 30, 2008
- *Ubiquitous computing for an RFID system innovation for health evaluation center of Chang Gung Memorial Hospital implemented by Six Sigma* (supported by Chang Gung Memorial Hospital, **US\$10,000**) April 1, 2006 - March 30, 2007

TEACHING EXPERIENCE

University of Alaska, Anchorage	Graduate	Operations Research, Engineering Economy, Statistics
	Undergraduate	Project Quality Management, Engineers in Organizations, Project Cost Management, Total Quality Management, Technology Management, ESM Project, ESM Thesis
University of Texas, Arlington	Graduate	Engineering Economy
Chang Gung University	Graduate	Project Management
	Undergraduate	Project Management, Management of Technology, Total Quality Management, Information Technology and Competitive Advantages, Time Series Analysis
Shih-Chien University	Undergraduate	Statistics, Engineering Economics
National Taipei Univ. of Technology	Graduate	System Analysis and Design
	Undergraduate	Enterprise Resource Planning and Logistic Management
National Defense University	Graduate	Field Study Seminar
	Undergraduate	Business Statistics, Total Quality Management
National Defense University	Graduate	Quality Engineering, Supply Chain Management, Global manufacturing logistics, Sustainability and Life Cycle Cost Analysis
	Undergraduate	Acquisition Management, Statistical Process Control, Inspection and Sampling, Six Sigma Quality Management, Computer Integrated Manufacturing(CIM), Precision Engineering

INDUSTRY/NATIONAL LABORATORY APPOINTMENTS

1999-2004 Program Manager, Specialist, Chung Shan Institute of Science and Technology.

- Project manager for design of servo mechanisms for IC sputtering machine and manufacturing process for the body of ring laser gyroscope
- Member of institute re-engineering committee
- Implementation of balanced scorecard performance system for a nonprofit organization
- Pilot implementation of Earned Value Management system for program management

1989-1994 Technical and Project Mgr, Chung Shan Institute of Science and Technology, Taiwan.

1983-1988 Manufacturing Engineer, Chung Shan Institute of Science and Technology, Taiwan.

COMPUTER AND OTHER SKILLS

- *Matlab, SPSS, E Views, Arena, Lisrel, and Statgraphics.*
- *The Mediation Process, 40hrs training by Mares-Dixon & Associates, Feb. 2010*
- Fluent in Chinese and English; able to read Japanese

PATENTS

“Fixtures for Solar and Wind Hybrid Renewable Energy Modules for Renovated Streetlights”

- United States Design Patent, Pending

“System and Method for Optimizing Grid and Off Grid Changing with Hybrid Renewable Energy for LED streetlight

- United States Patent, Pending

“Method for measurement and verification of the optimum optical path for ring laser gyroscope”

- United States Patent, Patent No.: US6,396,585 B1, May 28, 2002.
- Taiwan Patent, Patent No.: Invention 129672, March, 2001.

JOURNAL PAPERS

Hsueh-Ming Steve Wang, “Sustainable design-centered Manufacturing,” *Advanced Manufacturing Review* (Submitted March, 2012)

Hsueh-Ming Steve Wang, Sheng Pen Wang, Wenyih Lee, “Reducing client waiting time in a Health Evaluation Center using the Design for Six Sigma method,” *Engineering Management Journal*, ISBN 1042-9247 (Revised on Jan, 2012)

Hsueh-Ming Steve Wang, K. M. Spohn, LuAnn Piccard, Lei Yao, “Feasibility Study of the Wind Power Generation System at Arctic Valley of Anchorage,” *Engineering Management Journal*, ISBN 1042-9247, pp.21-33, September, 2010

Hsueh-Ming Steve Wang, “Important factors for organizational performance evaluation through implementation of earned value management (EVM) in the north Taiwan,” *Journal of Project Management Society*, Japan (Accepted on August 18, 2008)

Hsueh-Ming Steve Wang, “The emerging trend and development of project management,” *Manager Today*, pp.146-157, Taiwan, April, 2008 (Invited in Chinese)

Hsueh-Ming Steve Wang, Ming-Yang Huang, “Strategy analysis of Taiwan defense industry,” *Strategy and International Research*, 4(2), Taiwan Research Institute, pp. 19-47, March, 2002. (Invited in Chinese)

Hsueh-Ming Steve Wang, G. Sathyanarayanan, and Louis Plebani, "Modeling considerations for ultrasonic machining," *Abrasives Magazine*, Oct/Nov, 1998; pp. 16-24.

Hsueh-Ming Steve Wang, Mi-Hsiang Wen and Lung Yung Lin, "Introduction of micro electromechanical systems (MEMS)," *Hsin Hsin Bimonthly of CSIST*, 1994 (in Chinese).

BOOK AND CHAPTERS

Hsueh-Ming Steve Wang, *Six Sigma Project Management*, Chinese Society for Quality, 2nd Edition, March 2005 (in Chinese)

Hsueh-Ming Steve Wang, *Management of the technology change for the PC based information system*, MS thesis, Lehigh University, Jan. 1999

Hsueh-Ming Steve Wang, *Analysis of the effect of the process parameters on material removal rate in Ultrasonic Machining*, PhD Dissertation, Lehigh University, Jan. 1999

Hsueh-Ming Steve Wang, G. Sathyanarayanan, and Louis Plebani, "Ultrasonic machining: 1907 to present," *Manufacturing Science and Technology*, Vol. 2 ASME, 1997, pp. 169-176.

Hsueh-Ming Steve Wang, G. Sathyanarayanan, and Louis Plebani, "Effect of creep feed grinding parameters on strength and finish of alumina," *Composites and Functionally Graded Materials*, ASME, 1997, pp. 411-415.

Hsueh-Ming Steve Wang, *Vibration control in a high-speed gantry type CNC machine*, Project report for Master of Manufacturing Engineering, Northwestern University, Sept. 1989

CONFERENCE PAPERS & PRESENTATIONS:

Hsueh-Ming Steve Wang, Leslie Simmons, Anthony Nakazawa, "Evaluation of Technological and Environmental Impacts of Plasma Gasification Process for Waste-to-Energy," ISERC, Orlando, Florida, May 19-23, 2012.

S. Jimmy Gandhi, Hsueh-Ming Steve Wang, "Obtaining a Competitive Advantage in Global Sourcing Projects by Implementing Social Sustainability Metrics," ISERC, Orlando, Florida, May 19-23, 2012.

Hsueh-Ming Steve Wang, "Sustainable design-centered Manufacturing," Invited speaker for The 4th International Conference on Advanced Manufacturing (ICAM) 2012, Yilan, Taiwan, March 4-8, 2012

Zhi Li, Hsueh-Ming Steve Wang, LuAnn Piccard, "Strategic Analysis of Project Portfolio Management for World Bank in China from 1996 to 2008," Proceeding of ASEM annual conference, Lubbock, TX, Oct. 19-22, 2011.

Hsueh-Ming Steve Wang, Lei Yao, "Feasibility Analysis of a Mini Smart Grid Photovoltaic System," IERC, Reno, Nevada, May 21-25, 2011.

- Hsueh-Ming Steve Wang, O. Bukhtiyarov, J. Chen, "Reliability Analysis of LED Based Streetlights on the Temperature effect," IES Annual Conference, Toronto, Nov. 5-9, 2010.
- Leslie Simmons, Hsueh-Ming Steve Wang, "The Critical Factors for Decision-making of the Technology Policies of the Industrialized Countries for Municipal Solid Waste Management" INFORMS, Austin, TX, Nov. 7-10, 2010.
- Hsueh-Ming Steve Wang, Muchiu Chang "Cognitive Oriented Integration for Innovation Management," INFORMS, Austin, TX, Nov. 7-10, 2010.
- Seong Dae Kim, Hsueh-Ming Steve Wang, "Curriculum Development for the Innovation Management Program for sustainability," INFORMS, Austin, TX, Nov. 7-10, 2010.
- Peter Lang, Hsueh-Ming Steve Wang, "Agility Management for the Project Sustainability," INFORMS, Austin, TX, Nov. 7-10, 2010.
- Hsueh-Ming Steve Wang, Oleg Bukhtiyarov, Jimmy Chen, "Analysis of the Warranty Limits for LED Based Streetlights by the Temperature Effect," 2010 International Conference on e-Business Engineering (ICEBE 2010), Shanghai, China, Oct. 20-22, 2010.
- Hsueh-Ming Steve Wang, LuAnn Piccard, C. Pedersen, L. Yao, "Schedule Slip Forecasting for Oil and Gas Engineering Projects," ASEM, Spring Field, MO, Oct. 15, 2009.
- Karl M. Spohn, Hsueh-Ming Steve Wang, LuAnn Piccard, L. Yao, "Wind Power Generation System Design for Arctic Valley in Anchorage, Alaska," ASEM, Spring Field, MO, Oct. 15, 2009.
- LuAnn Piccard, Hsueh-Ming Steve Wang, L. Yao, "Patent Mapping for Forecasting the Technology change of Light Emitted Diode (LED) Street lights," INFORMS, San Diego, CA, Oct. 12, 2009.
- Oleg Bukhtiyarov, LuAnn Piccard, Hsueh-Ming Steve Wang, "Optimization Analysis of Warranty for the Technology Change of LED streetlights," INFORMS, San Diego, CA, Oct. 12, 2009.
- L. Yao, LuAnn Piccard, Hsueh-Ming Steve Wang, "Replacement Analysis of Small off-grid Nuclear Reactors, ," INFORMS, San Diego, CA, Oct. 12, 2009.
- Hsueh-Ming Steve Wang, He Liu, LuAnn Piccard, "Optimal Analysis of a Hybrid Solar-Wind Power Generation System with LPSP Technology for LED Lighting System," INFORMS, San Diego, CA, Oct. 12, 2009.
- Hsueh-Ming Steve Wang, "RFID in Grouped-Patient Waiting Time of Health Evaluation Center," IERC, Miami, May 30, 2009.
- Hsueh-Ming Steve Wang, "Sustainability Design and Analysis of Light-Emitting Diode (LED) System," INFORMS, Washington, D. C., Oct. 14, 2008.
- Hsueh-Ming Steve Wang, Helen Liu, Jimmy Chen, "Replacement Analysis of the LED lighting Systems," the 4th Annual International Project Management Conference (PROMAC 2008), Anchorage, September 15th, 2008.
- Hsueh-Ming Steve Wang, Lin-Cheung Chen, Helen Liu, & Jang Ra, "Analysis of the Future R&D Collaboration and Competition Strategies for ICT & FPD Industries between Taiwan and South Korea, *Annual meeting of Production and Operation Management Society (POMS)*, May 8th, 2008.

- Hsueh-Ming Steve Wang, "Reducing Patient Waiting Time in a Health Evaluation Center Using the Six Sigma Method," *INFORMS*, Seattle, Nov. 6, 2007.
- Hsueh-Ming Steve Wang, "Adaptive control of the patient scheduling with RFID technology in a health evaluation center" *37th Annual Meeting of the Decision Sciences Institute*, San Antonio, USA, Nov. 2006.
- Hsueh-Ming Steve Wang, Yuan Tz Ho, "Analysis of the brand equity for Essence of Chicken in the Taiwan health food market," *2006 International Conference of Management of Healthcare and Biotechnology Industry*, Taipei, July 2006.
- Hsueh-Ming Steve Wang, Chien-Ting Lee, "Designing the Stock Trading Processes in the Proprietary Trading Department of a Securities Firm by Utilizing Six Sigma Method," *IFORMS Annual Meeting San Francisco*, USA, Nov. 2005.
- Hsueh-Ming Steve Wang, Wenyih Lee and Da-Ren He, "Uncertainty estimation of calibration curve in chemical analysis," *Proceedings of the 3rd ANQ Congress and 19th Asia Quality Symposium*, Taipei, Taiwan, pp. 819-828, Sept 2005.
- Hsueh-Ming Steve Wang, "Verification of the conditions for implementation of Earned Value Management (EVM) methodology in the governmental R&D organization in Taiwan," *Proceedings of Portland International Conference for Management of Engineering and Technology (PICMET)*, Portland, OR, U.S.A., July, 2005.
- Hsueh-Ming Steve Wang, M. Y. Huang, and F. S. Lin, "A study for the strategies of total quality management in Taiwan," *Proceedings of the 2001 Conference of Asian Quality Association*, Dajjeon, Korea, pp. 43-46, Nov. 2001.
- Hsueh-Ming Steve Wang, Chang Liang Hsu and Lung Yung Lin, "The application of Petri Nets for supply chain management," *Proceedings to The Sixth International Automation Conference*, Taipei, Taiwan, pp. 941-955, May 2000.
- Hsueh-Ming Steve Wang, Mi-Hsiang Wen and Lung Yung Lin, "A Stochastic approach to predict fracture zone and material removal rate in Ultrasonic Machining," *Proceedings of International Precision Engineering Conference*, Singapore, March 2000.
- Hsueh-Ming Steve Wang, Mi-Hsiang Wen, and Lung Yung Lin, "The measurement algorithm for the quality control of the interface between optic and mechanical device," *Proceedings of International Precision Engineering Conference*, Singapore, March 2000.
- Hsueh-Ming Steve Wang, Mi-Hsiang Wen, and Lung Yung Lin, "Low cost design for the CIM of different types of CNC controller," *Proceedings of Second International Conference on Manufacturing Technology*, Hong Kong, Dec 1993.
- Hsueh-Ming Steve Wang, Mi-Hsiang Wen, and Lung Yung Lin, "Improvement of rotary ultrasonic deep hole drilling of glass ceramics-Zerodur," *Proceedings of Seminar of the 7th international precision engineering*, Kobe, Japan, May 1993.

WORK IN PROGRESS

Plasma Gasification Process for Waste-to- Energy
The Feasibility Analysis of the Hybrid Alternative Energy Systems for the Rural Areas in Alaska

Technological Changes of Light Emitting Diode (LED) technology
Uncertainty Estimation of Calibration Curve
Health care system by using the Six Sigma methods
Project Portfolio Management

INVITED TALKS, COMMENTARIES AND WORKS

“Balanced Scorecard,” Arctic Slope Regional Corporation Energy Services, April 23, 2012.

“Decision Making – A peaceful mind generates power,” Rotary Club of Anchorage Russian Jack, August 30, 2011.

“The emerging trend and development of project and engineering management,” School of Traffic and Transportation Engineering, Changsha University of Science and Technology, China, Oct. 21, 2010.

“Quality Management System, ISO 9001:2008,” for CH2MHILL and American Society for Quality, Alaska Section, BP Energy Center, Oct. 29, 2009.

“Unlimited infinite – leading in the fundamental change,” Providence University, Taiwan, June, 18, 2009.

“Sustainability,” American Society for Quality, Alaska Section, BP Energy Center, March, 12, 2009.

“My humble observation for quality management in Alaska,” American Society for Quality, Alaska Section, BP Energy Center, January, 22, 2009.

“EQUATOR AQUARIAN CLINIC – Pediatric Health Care Center, Rwanda, East Africa,” Project Engineer for Design for Children Competition, January, 15, <http://designforthechildren.org/index.php>.

“Program Management- Recent research on program management of Alaska Pipelines”, National Project Management Association (NPMA), Taiwan, June, 24, 2008.

“The emerging trend of education program for engineering and science management,” Master Speech, Beijing Industrial University, China, May, 2008.

“The emerging trend of education program for project management,” Master Speech, Beijing Industrial University, China, May, 2008.

“The emerging trend and development of project management,” Keynote Speaker of the annual meeting of National Project Management Association (NPMA), Taiwan, Jan, 2008, Taiwan.

“The emerging trend of project management – project portfolio management,” ConocoPhillips, Anchorage, Dec. 2007.

“The application of blue ocean strategy and model simulation,” Top Level Managers Forum, Chang Gung Medical Center, Taiwan, March, 2006.

“The historical survey of the high-tech development and encouragement strategies for R&D activities in Hsinchu science park of Taiwan,” Hanbat University Forum, South Korean, June, 2005.

“Six sigma quality management,” Top Level of Quality Managers Forum, Department of Rapid Transit Systems, Taipei City Government , March, 2004 (in Chinese).

HONORS AND AWARDS

- 2010 Meritorious Service Award of American Society for Engineering Management
- 2005 Personal Quality Award of Chinese Society for Quality, Taiwan
- 2003 Second Grade Medal for senior excellent voluntary counseling from Taiwan government.
- 1999 Medal of Scholarship, Second Class from Taiwan government.
- 1994 Order of Loyalty and Diligence from Taiwan government.
- 1993 Medal of Excellent Efficiency: for excellent researchers from Taiwan government.
- 1992 Gold Hand Medal: for excellent voluntary counseling from Taiwan government

PROFESSIONAL MEMBERSHIPS AND SERVICES

Illuminating Engineering Society (IES)
American Society Engineering Management (ASEM)
American Society for Quality (ASQ)
Institute of Industrial Engineers (IIE)
Project Management Institute (PMI)
Toastmaster International, CTM, CL.
Institute for Operations Research and the Management Science (INFORMS)
Chinese Society for Quality (CSQ), Taiwan, Life member
Chinese Society for Management of Technology, Taiwan

Session Chair for "Sustainability for Business Intelligence on Technology Management and New Product Development" of Institute of Operation Management and the Management Science (INFORMS), USA, 2011

Division President for “Engineering Economy” of Industrial Engineering Research Conference (IERC), 2011-2012

Session Chair for “Innovation Management for Sustainability” of Institute of Operation Management and the Management Science (INFORMS), USA, 2010

Committee of Sustainability Action Board, University of Alaska Anchorage, 2010 -2011

Editor of Practice Periodical, American Society Engineering Management (ASEM), 2009-2010

Board member, American Society Engineering Management (ASEM), 2009-2010

Track Chair for “Engineering Economy” of Industrial Engineering Research Conference (IERC), 2011

Communications Director, Engineering Economy Division Board, Institute of Industrial Engineers, 2009-2010

Session Chair for “Technology Change Management for Sustainability” of Institute of Operation Management and the Management Science (INFORMS), USA, 2009

Member of National Coalition Building Institute (NCBI) of University of Alaska Anchorage (Since 2009)

International Organizing Committee Chair, The 4th International Project Management Conference (PROMAC 2008), Anchorage, September, 2008

Section chair of the 2006 International Conference of Management of Healthcare and Biotechnology Industry, Taipei, July 2006

Voluntary Supervisor for psychological counselors of Taipei Counseling Center; 2003 to 2007

Chairperson of the publish affair committee in CSQ, Taiwan; 2003 to 2007.

Member of the international affair committee in CSQ, Taiwan; 2002 to 2007

Observer, board meeting of Asian Network for Quality in Tokyo, Japan; 2005

Volunteer, psychological counselors of Taipei Counseling Center; 2000 to 2003 and 1990 to 1995.

VP of student chapter, Lehigh University for Society of Manufacturing Engineering; 1999.

President, Chinese Student Association of Lehigh University; 1998.