

# Curriculum Vitae

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## Andrew Kusiak

Academic Rank and Date of Appointment: Professor August 1988  
Department: Mechanical and Industrial Engineering  
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<http://user.engineering.uiowa.edu/~ankusiak/>  
[Google Scholar](#)  
[Research Gate](#)

Highest Academic Degree: Ph.D.

Special Fields of Knowledge: Data mining, big data, data analytics  
Evolutionary computation  
Manufacturing  
Engineering design  
Operations research

Present Research Interests: Wind energy  
Energy conservation  
Wastewater processing  
Manufacturing  
Product complexity management  
Innovation science  
Healthcare systems  
Process modeling

## Academic Background

<u>Institution</u>	<u>Major</u>	<u>Degree</u>	<u>Study Period</u>	<u>Degree Awarded</u>
Polish Academy of Sciences	Operations Research	Ph.D.	1975 – 78	1979
Warsaw University of Technology	Mechanical Engineering	M.S.	1972 – 74	1974
Warsaw University of Technology	Precision Engineering	B.S.	1968 – 72	1972

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## Professional Experience

### Academic

<u>University</u>	<u>Position</u>	<u>Dates</u>
University of Iowa Department Mechanical and Industrial Engineering	Professor	1988 – present
University of Iowa Department Mechanical and Industrial Engineering	Professor and Chairman	2010 – 2015
University of Iowa Department Mechanical and Industrial Engineering Industrial Engineering Program	Program Director	2009 – 2010

Secondary appointments:

University of Iowa Interdisciplinary Graduate Degree Program Degree in Bioinformatics, Geoinformatics, and Health Informatics		2010 – 2018
Quality and Productivity Management Program College of Graduate Studies	Professor	1994 – 2001
College of Nursing	Adjunct Professor	1998 – present
Center for Aging	Associate Faculty	2000 – present
University of Iowa Department of Industrial Engineering	Professor and Chairman	1988 – 1995
University of Manitoba Department of Mechanical Engineering Industrial Engineering Program	Associate Professor	1985 – 1988
Technical University of Nova Scotia Department of Industrial Engineering	Assistant Professor	1982 – 1985
Systems Research Institute Polish Academy of Sciences Department of Applied Cybernetics	Ph.D. Student	1975 – 1978

**Industrial**

<u>Company</u>	<u>Position</u>	<u>Dates</u>
Automation Corporation, Warsaw, Poland Department of Computing	Manager	1978 – 1979
Institute of Applied Automation, Warsaw, Poland Department of Robotics	Project Engineer	1974 – 1975

**Other**

<u>Company, Firm, Agency</u>	<u>Position</u>	<u>Dates</u>
Institute of Management and Organization Department of Automation	Assistant Professor and Project Manager	1979 – 1981

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**Professional Activities**

**Scientific and Professional Societies**

American Association of Artificial Intelligence, Member, 1987–present  
American Society of Mechanical Engineers, Member, 1994–present  
Association of Professional Engineers of Manitoba, 1985–93  
Association of Professional Engineers of Nova Scotia, 1984–85  
Canadian Operational Research Society, Member, 1982–1992  
Drug Information Association, Member, 2002–2005  
Institute for Operations Research and Management Sciences INFORMS,  
Member and holder of six elected offices, 1995–present  
Institute of Electrical and Electronics Engineers, Member, 1990–present  
Institute of Management Sciences, Member, 1984–86

Institute of Industrial Engineers, Senior Member, 1988–2005; Fellow, 2005–present  
International Federation of Automation and Control, Member, 1985–present  
International Federation of Information Processing, Member, 1984–present  
International Flexible Manufacturing System Club, Member, 1984–90  
Machine Vision Association of SME, Member, 1984–87  
Operations Research Society of America, Member, 1985–94  
Society of Manufacturing Engineers, Senior Member, 1984–present  
Society for Design and Process Science, Founding Member, 1995–96

### **Student Service Activities**

- External Examiner, Ph.D. Thesis, N. Wang, "Innovation Systems: Theory and Practice: Evidence from Australian SMEs", Monash University, Melbourne, Australia (2015)
- External examiner, Ph.D. Thesis, A. Ramaa, "Design and Development of Performance Measurement System for Supply Chain", Avinashilingam University for Women, Coimbatore, India (2014).
- External examiner, Ph.D. Thesis, Yue Xiang, "A Correlation Handling Strategy for Consumer-Oriented Emotional Design of New Products", Nanyang Technological University, Singapore (2012).
- External examiner, Ph.D. Thesis, Roni Romano, "Cascade Method for Sequence Analysis", Tel Aviv University, Israel (2012).
- External examiner, Ph.D. Thesis, Chong Yih Tng, "Management and Forecast of Dynamic Customer Needs", Nanyang Technological University, Singapore (2010).
- External examiner, Ph.D. Thesis, Zai Lianyin, "A Decision Support System for Front-end Product Development", Nanyang Technological University, Singapore (2009).
- External Examiner, Ph.D. Thesis, Robert Catral, "Automatic Rule Discovery and Generalization in Supervised and Unsupervised Learning Tasks", Carleton University, Ottawa, Canada (2008).
- External examiner, Ph.D. Thesis, Rao Zhiming, "Design Evolution and Knowledge Handling for Product Conceptualization in New Product Development", Nanyang Technological University, Singapore (2007).
- External examiner, Ph.D. Thesis He Cong, "Automatic TRIZ-Based Patent Classification", National University of Singapore, Singapore (2007).
- Co-Advisor, PhD Thesis, Maik Maurer, "Structural Awareness in Complex Product Design", Technical University of Munich, Germany (2006).
- External examiner, Ph.D. Thesis, Chen Gang, "On Unified Feature Model for the Integration of CAD and CAx", Nanyang Technological University, Singapore (2006).
- External examiner, Ph.D. Thesis, Barack Baruch Chizi, "On Dimensionality Reduction of High Dimensional Data Sets", Tel Aviv University, Tel Aviv, Israel (2006).
- External examiner, Ph.D. Thesis, Chi-Wu Chou, "Evolutionary Cluster Costing for Weapon System Early Costing", Australian Defense Academy, Canberra, NSW, Australia (2004).
- External examiner, Ph.D. Thesis, Kamran Ahmadi Lari, "Sparse Data Estimation for Knowledge Processes", McGill University, Montreal, Canada (2004).
- External examiner, MS. Thesis, Mariano Arriaga Marin, "Dynamic Multi-Objective Non-Linear Optimization Via Parameterization and Inverse Function Approximation", University of Regina, Regina, Saskatchewan, Canada (2003).
- Committee Chair, Ph.D. Thesis, Bruno Agard, "Data Mining in Manufacturing", University of Grenoble, Grenoble, France (2002).
- External examiner, Ph.D. Thesis, Farina Bhuian, "Dynamic Models of Concurrent Engineering Processes and Performance", McGill University, Montreal, Canada (2001).
- External examiner, Ph.D. Thesis, Hamdi A. Bashir, "Models for Estimating Design Effort", McGill University, Montreal, Canada (2000).
- External examiner, Ph.D. Thesis, Sani Susanto, "Fuzzy c-Means and Assignment-Based Cell Formation Algorithms: Development and Comparative Studies", Monash University, Melbourne, Australia (1998).

External examiner, Ph.D. Thesis, Md. Kutub Uddin, "Generalized Grouping: Some Models and Methodologies", Indian Institute of Technology, Kanpur, India (1996).

External examiner, Ph.D. Thesis, L. Ming, "Development of a Knowledge-Based Manufacturing Modeling System Based on IDEF0", Nanyang Technological University, Singapore (1996).

External examiner, Ph.D. Thesis, R. Venkatasamy, "Total System Design and Analysis of Automobile Vehicles", Indian Institute of Technology, Delhi, India (1996).

External examiner, Ph.D. Thesis, P.K. Jain, "Computer Aided Process Planning System for Turned Parts: A Knowledge-Based System Approach", University of Roorkee, Roorkee, India (1995).

Habilitation Committee Member, A. Artiba, Claude Bernard University of Lyon I, Villeurbanne, France (1995).

External examiner, Ph.D. Thesis, Avinash Kumar Chincholkar, "Modeling, Scheduling and Analysis of Automated Storage and Retrieval Based Flexible Manufacturing Systems Using Stochastic Colored Petri Nets", Indian Institute of Technology, Madras, India (1994).

External examiner, Ph.D. Thesis, David M. Mates, "A Projection Method for the Floor Planning Problem", University of Waterloo, Waterloo, Ontario, Canada (1993).

External examiner, Ph.D. Thesis, A. Kumar Agrawal, "Generalized Grouping and Loading Problems in FMS: Models and Methodologies", Indian Institute of Technology, Kanpur, India (1990).

External examiner, Ph.D. Thesis, K.R. Gunasingh, "Group Technology", Department of Industrial Engineering, University of Windsor, Canada (1989).

External examiner, Ph.D. Thesis, Paul Freedman, "Optimal Sequencing of Workcell Operations with Deterministic Outcomes" Department of Electrical Engineering, McGill University, Canada (1988).

External examiner, Ph.D. Thesis, Prevendra Kumar, "Some Studies in Multiobjective Optimization of Flexible Manufacturing Systems", Indian Institute of Technology, India (1988).

External examiner, Ph.D. Thesis, Ya-Juei Jeffrey Tzen, "Storage and Retrieval Policies for Automated Warehousing", Asian Institute of Technology, Thailand (1987).

External examiner, Ph.D. Thesis, Shri V. Raju, "The Impact of Technology on Manufacturing Organization: A Study of Computer Integrated Manufacturing, South Gujarat University, India (1987).

## Other Services

### MEMBERSHIP OF REVIEW PANELS AND EDITORIAL BOARDS

#### Panel Membership

- ❑ Advanced Manufacturing Tax Credit, Department of Energy (2009)
- ❑ Proposal Reviewer and Panelist, NASA (2006)
- ❑ Proposal Reviewer and Panelist, Department of Energy (2005)
- ❑ Member of Advisory and Review Panels across different directorates and programs, National Science Foundation (1992–present)
- ❑ Member of the Review Panel, National Institutes of Health (2004, 2006)
- ❑ Member, EPSRC Peer Review College, Research Council, United Kingdom (2006–10)
- ❑ Member of the Medical Imaging Research Infrastructure Panel, Canada Foundation for Innovation, Ottawa, Ontario, Canada (1999)
- ❑ Member of the Intelligent Manufacturing Panel, Natural Sciences and Engineering Research Council of Canada (1995–95)

#### Book Editorial Boards

- ❑ Member of the Editorial Board the *Springer Energy Series* (Books and Journals, 2010–present)

- ❑ Member of the Editorial Board the *Technology Management Handbook*, R.C. Dorf, Editor-in-Chief, CRC Press and IEEE Press, Boca Raton, FL (1999)
- ❑ Editor of the Book Series *Intelligent Manufacturing*, Chapman and Hall, London, UK (1989–present)
- ❑ Editor of the Book Series *Manufacturing and Mechanical Engineering*, John Wiley, New York, NY (1992–96)
- ❑ Editor of the Book Series *Artificial Intelligence in Industry*, Springer, New York, NY (1987–present)
- ❑ Editor of the Book Series *Applied Artificial Intelligence*, Taylor & Francis, New York, NY (1988–present)

#### Journal Editorial Boards

- ❑ Editor-in-Chief of the *Journal of Intelligent Manufacturing* (1989–present)
- ❑ Editor of the *IEEE Transactions on Sustainable Energy* (2009–present)
- ❑ Editor, Section D: IT Managements and Services, *Journal of Convergence* (2010–present)
- ❑ Section Editor (Editor-in-Chief of Sustainable Energy), *Sustainability* (2015–present)
- ❑ Member of the Editorial Board, *European Journal of Sustainability* (2016–present)
- ❑ Member of the Editorial Board, *Journal of Industrial Information Integration* (2015–present)
- ❑ Member of the Editorial Board, *International Journal of Electronics and Information Engineering* (2015–present)
- ❑ Member of the Editorial Board, *Advances in Computational Design* (2015–present)
- ❑ Member of the Editorial Board, *Science, Technology and Development* (2015–present)
- ❑ Member of the Editorial Board, *Journal of Bioinformatics and Comparative Genomics* (2015–present)
- ❑ Member of the Editorial Board, *Industrial Engineering & Management* (2014–present)
- ❑ Member of the Editorial Board, *Austin Journal of Computational Biology and Bioinformatics* (2014–present)
- ❑ Member of the Editorial Board, *Journal of Intelligent Systems: Theory and Applications* (2013–present)
- ❑ Member of the Editorial Board, *Journal of Industrial Engineering & Management* (2013–present)
- ❑ Member of the Editorial Board, *Journal of Biophysical Chemistry* (2013–present)
- ❑ Member of the Editorial Board, *Journal of Data Mining and Digital Humanities* (2013–present)
- ❑ Member of the Editorial Board, *ASCE Journal of Energy Engineering* (2012–present)
- ❑ Member of the Editorial Board, *Journal of Energy Conservation* (2012–present)
- ❑ Member of the Editorial Board, *LogForum*, www.logforum.net (2011–present)
- ❑ Member of the Editorial Board, *Wind Energy Equipment Magazine* (2010–present)
- ❑ Member of the Editorial Board, *International Journal of Energy Optimization and Engineering* (2010–present)
- ❑ Member of the Editorial Board, *Turkish Journal of Fuzzy Systems* (2010–present)
- ❑ Member of the Editorial Board, *Chinese Journal of Clinicians* (2010–present)
- ❑ Member of the Editorial Board, *Integrated Computer-Aided Engineering* (2009–present)
- ❑ Member of the Editorial Board, *International Journal of Computer Aided Engineering and Technology* (2008–present)
- ❑ Associate Editor, *IEEE Transactions on Systems, Man, and Cybernetics: Part A* (2008–present)
- ❑ Associate Editor, *IEEE Transactions on Industrial Electronics* (2007–present)
- ❑ Member of the Editorial Board, *International Journal of Hybrid Information Technology* (2007–present)
- ❑ Member of the Editorial Board, *International Journal of Applied Management Science*, IJAMS (2007–present)
- ❑ Member of the Editorial Board, *International Journal on Advances in Life Sciences* (2008–present)
- ❑ Member of the Editorial Board, *International Journal on Advances in Internet Technology* (2008–present)
- ❑ Member of the Editorial Board of the *International Journal on Advances in Systems and Measurements* (2011–present)
- ❑ Member of the Editorial Board, *International Journal of Data Analysis Techniques and Strategies*, IJDATS (2007–present)
- ❑ Member of the Editorial Board, *International Journal of Data Mining, Modelling and Management*, IJDMMM (2008–present)

- ❑ Member of the Editorial Board, *Open Current Process Chemistry Journal* (2007–present)
- ❑ Member of the Editorial Board, *Open Nanoscience Journal* (2007–present)
- ❑ Member of the Editorial Board, *Open Biomedical Engineering Journal* (2007–present)
- ❑ Member of the Editorial Board, *Open Industrial and Manufacturing Engineering Journal*, OIMEJ (2007–present)
- ❑ Member of the Editorial Board, *Journal of Automation and Mobile Robotics* (2007–present)
- ❑ Member of the Editorial Board, *Open Chemical Engineering Journal*, OCE (2007–present)
- ❑ Member of the Editorial Board, *International Journal of Information Quality*, IJIQ (2006–present)
- ❑ Associate Editor, *International Journal of Electronic Customer Relationship Management*, IJECRM (2005–present)
- ❑ Member of the Advisory Board, *Recent Patents on Engineering* (2006–present)
- ❑ Member of the Editorial Board, *Sustainability* (2015–present)
- ❑ Member of the Editorial Board, *International Journal of Renewable Energy Research and Development* (2009–present)
- ❑ Member of the Editorial Board, *Enterprise Information Systems* (2006–present)
- ❑ Member of the Editorial Board, *International Journal of Logistics Economics and Globalisation*, IJLEG (2006–present)
- ❑ Member of the Editorial Board, *International Journal of Internet Manufacturing and Services* (2006–present)
- ❑ Member of the Editorial Board, *International Journal of Computational and Numerical Analysis and Applications* (2001–present)
- ❑ Member of the Editorial Board, *International Journal for Innovation, Industrial Engineering and Entrepreneurship* (2004–present)
- ❑ Member of the Editorial Board, *International Journal of Data Analysis Techniques and Strategies*, IJDATS (2008–present)
- ❑ Member of the Editorial Board, *International Journal of Data Mining, Modelling and Management*, IJDDMM (2009–present)
- ❑ Associate Editor of the *International Journal of Operations Research*, Operations Research Society of Taiwan (2004–present)
- ❑ Associate Editor, *Electronic Commerce Research and Applications* (2001–present)
- ❑ Department Editor of *IIE Transactions: Operations Engineering* (1997–2000)
- ❑ Associate Editor of *IEEE Transactions on Robotics and Automation* (1994–1999)
- ❑ Associate Editor of *IIE Transactions: Design and Manufacturing* (1989–1998)
- ❑ Member of the Editorial Board, *International Journal for Rapid Publications in Mathematics* (2004–present)
- ❑ Member of the Editorial Board, *Machine Engineering* (1999–present)
- ❑ Member of the Editorial Board, *Robotics and Computer Integrated Manufacturing* (1999–2003)
- ❑ Member of the Editorial Board, *International Journal of Agile Management Systems* (1999–present)
- ❑ Member of the Editorial Board, *International Journal of Manufacturing Research*, IJMR (2006–present)
- ❑ Member of the Editorial Board, *International Journal of Mechanical Production Systems Engineering* (1998–present)
- ❑ Member of the Editorial Board, *International Journal of Intelligent Control and Systems* (1995–present)
- ❑ Member of the Editorial Board, *Control and Cybernetics* (1993–present)
- ❑ North American Editor, *Production Planning and Control* (1988–1992), Editorial Board (1992–2006)
- ❑ Member of the Editorial Board, *Production Planning and Control* (1992–2007)
- ❑ Member of the Editorial Board, *Computers in Industrial Engineering* (1992–99), Area Editor (1999–2006)
- ❑ Member of the Editorial Board, *International Journal of Manufacturing System Design* (1992–present)
- ❑ Member of the Editorial Advisory Board, *International Journal of Environmentally Conscious Manufacturing* (1991–present)
- ❑ Member of the Editorial Board, *Studies in Informatics and Control* (1991–present)
- ❑ Member of the Editorial Board, *Journal of Design and Manufacturing* (1990–1997)

- ❑ Member of the Editorial Board, *International Journal of Systems Automation: Research and Applications* (1990–present)
- ❑ Member of the Editorial Board, *International Journal of Advanced Manufacturing Technology* (1985–present)
- ❑ Member of the Editorial Board, *Computer Integrated Manufacturing* (1988–present)
- ❑ Member of the Editorial Board, *International Journal of Production Research* (1987–1995)
- ❑ Member of the Editorial Board, *Robotica* (1985–1997)
- ❑ Member of the Editorial Board, *Canadian Journal of Administrative Sciences* (1988–present)
- ❑ Member of the Editorial Board, Association of Professional Engineers of Manitoba Bulletin *Professional Engineer* (1986–1988)
- ❑ Associate Editor, Special Issue of *Annals of Operations Research* (1988–1990), J.B. Mazzola (Ed.), Automated Manufacturing Systems, J.C. Baltzer A.G., Basel, Switzerland, 1990.
- ❑ Member of the Editorial Board, B. Prasad (Ed.), *CAD/CAM, Robotics and Factories of the Future*, Springer, 1989.

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**Chairman of committee for 55 MS degree students on thesis program**

Student	Title of MS Thesis	Year
S. Tripp	Non-Thesis	2015
A. Smith	Non-Thesis	2015
H. Francis	Non-Thesis	2015
X. He	Optimization of HVAC Systems with a Data-driven Approach	2014
Y. Deng	Non-Thesis	2013
Y.H. Zeng	Modeling and Optimization of Industrial Systems: Data Mining and Computational Intelligence Approach	2012
G.-L Xu	Energy Study of HVAC Systems: A Data-Driven Approach	2012
R. Hosseini	Wastewater's Total Influent Estimation and Performance Modeling: A Data-Driven Approach	2011
H. Uribe	Multiobjective Optimization of Occupied Office Building Using Simulation and Optimization	2011
P. McAveny	Non-Thesis	2011
E. Roz	Data Driven Modeling in Water Quality and Hydrology	2011
R. Hamel	Non-Thesis	2011
F. Tang	HVAC System Modeling and Optimization	2010
M. Li	Application of Computational Intelligence in Modeling and Optimization of HVAC Systems	2009
Z. Zhang	Wind Turbine Vibration Study: A Data-Driven Methodology	2009
W. Li	Predictive Engineering in Wind Energy: A Data-Mining Approach	2009
J. Engler	Innovation as a Complex Adaptive System	2009
H.Y. Zheng	Predictive Engineering in Wind Energy Industry: A Data Mining Approach	2008
K. Gilroy	Non-Thesis	2008
O. Kilnic	Modeling of Wind Farm Prediction - A Data-Mining Exploration	2008
M.F. Bries	Modeling of Hemodialysis Patient Hemoglobin: A Data Mining Exploration	2007
C.Y. Tang	Non-thesis, Innovation	2006
M. Smith	Product Modularity and Complexity Reduction	2006
S. Tigrek	Non-thesis, Wavelets	2004
S. Udupa	Non-thesis, Optimal Sampling	2004
A. Burns	Non-thesis, Data Mining in Power Industry	2004
T. Persoon	Design and Development of a Data Mining-Based Decision Support System for the Pediatrics Intensive Care Unit	2002
M. Herrera	Non-thesis	2002
C.F. Yu	Incorporating Learning Classifier Systems to Improve Dispatching-Rule Selection	2001
W. Wang	Accuracy Analysis of Decision Processes	1999

J. Hwang	A Methodology for Restructuring of Clinical Laboratories	1998
D.W. Schneider	A Raw Material Inventory Reordering Methodology for Make-to-Order Manufacturing Facilities with High Demand Uncertainty	1998
D.L. Harringa	Non-thesis	1998
J. S. Steele	A Concurrent Engineering Evaluation and Optimization Process	1997
M. Aktan	Dependency Analysis in Constraint-Based Design	1997
J. Lambert	Non-thesis	1994
S. Gogineni	Non-thesis	1994
S. J. Slininger	Data Acquisition and Acceptance Using the Artillery Weapons Firing Test Simulator	1993
N. Larson	Optimization of Material Flow: Industrial Case Studies	1993
C.-X. Feng	The Impact of Machining Form Features and Constraints on Design	1993
S.B. Koh	An Interactive Facilities Layout Design Using a Fuzzy Set Approach	1992
H.H. Yang	A Knowledge-Based Approach to the MRP "Nervousness" Problem	1991
J. Wang	A Knowledge-Based System for Building of Models (Faculty at Feng Chia University, Taichung, Taiwan)	1990
J.A. Lauer	Use of Knowledge-Based Development Tools to Support a Process Planning System	1990
M. Cho	The Group Technology Problem	1990
G. Vidyashankar	A Knowledge-Based System for Design of Molds	1990
C. S. Yang	Scheduling in a Non-structured and Structured Manufacturing Environment (Faculty at Shih Chien College, Taiwan)	1989
J. Wacker	Evaluation of Iowa's Potential Hydroelectric Resources Using Simulation	1989
R. Kandimalla	A Hypertext Based Expert System for Student Advising	1989
I.M. Wadood	KBGT: A Knowledge-Based System Group Technology	1988
G. Cormier	Order-Picking Problems in Automated Storage and Retrieval Systems (Faculty at University of Moncton, Canada)	1985
H.H. Miller	Production Lot Size Planning Model for a Flexible Manufacturing Cell (Faculty at Saint Mary's University, Canada)	1984
S. Anand	Loading and Scheduling Flexible Manufacturing Systems	1984
J.P. Cyrus	Scheduling Problems in Automated Guided Vehicle Systems (Faculty at the Technical University of Nova Scotia, Canada)	1984

**Chairman of committee for 22 Ph.D. degree students**

<u>Student</u>	<u>Title of Ph.D. Thesis</u>	<u>Year</u>
X. Wei	Modeling and Optimization of Wastewater Treatment Process with a Data-driven Approach (Data Analyst-Solar Energy, NextEra, Juno Beach, FL)	2013



A. Verma	Performance Monitoring of Wind Turbines: A Data-Mining Approach ((Data Analyst-Wind Energy, NextEra, Juno Beach, FL)	2012
Z. Zhang	Optimization of Wind Farms (Assistant Professor, Chinese University of Hong Kong, Hong Kong, China)	2012
J. Engler	Characterization of Normality of Chaotic Systems Including Prediction and Detection of Anomalies (Manager, Rockwell Collins)	2011
Z. Song	Meta-Control of Combustion Performance with a Data-Mining Approach (Associate Professor, Nanjing University, PR China)	2008
T. Letsche	Mining Wavelet Transformed Data Sets (Associate Professor, Wartburg College, IA)	2008
S.C. Shah	Data Mining in Bladder Cancer Therapy Selection (Associate Professor, Rush University Medical Center, Chicago, IL)	2005
Y. Gan	Clustering Algorithms for Data and Knowledge Exploration (Manager, Actown Transformers, Chicago, IL)	2003
T.L. Tseng	Quantitative Approaches for Information Modeling (Department Chair, University of Texas at ElPaso)	1999
C.C. Huang	Modularity in Design of Products and Testing (Department Chair, National Chi-Nan University, Taiwan)	1997
A. Zakarian	Quantitative Analysis of Manufacturing, Product Development and Business Processes (Department Chair, University of Michigan-Dearborn)	1997
G.H. Lee	Design of Products and Manufacturing Systems for Agility (Professor, Soongsil University, Korea)	1996
C.X. Feng	Design of Tolerances in Agile Manufacturing (Manager, Caterpillar, Peoria, IL)	1995
U.D. Belhe	Resource Constrained Scheduling of Design Activities (Director, Allianz Life Insurance Company, Novato, CA)	1995
D.W. He	Design for Agile Manufacturing (Professor, University of Illinois, Chicago)	1994
M.C. Jothishankar	Just-in-Time Manufacturing - A Metamodeling Approach (Co-Advisor with W. Boe) (Sr. Production Engineer, Rockwell Collins Corporation)	1994
J.R. Wang	Analysis of Processes and Constraints in Engineering Design (Professor, National Chung Hsing University, Taichung, Taiwan)	1994

S.K. Hargrove	An Empirical Study of Fixture Planning and Design in a Manufacturing Environment (Dean, Tuskegee University, Alabama)	1993
R.M. Vujosevic	Methodology and Framework for Computer-Aided Concurrent Design of Products, Processes, and Manufacturing Systems (President, Optimal Electronics Corporation, Austin, TX)	1992
J. Ahn	A Knowledge-Based System for Scheduling in Automated Manufacturing (Professor, Seoul National Polytechnic University, Korea)	1991
S. Dowlatshahi	Multiattribute Product Design in a Concurrent Engineering Environment (Professor, University of Wisconsin)	1990
S.S. Heragu	Machine Layout: An Optimization and Knowledge Based Approach (Department Head, Oklahoma State University)	1988

**MS Thesis and/or examining committee memberships: 50 (excluding chairmanship)**

<u>Student</u>	<u>Title of Study</u>	<u>Tentative Year of Degree Award</u>
J. C. McClurg	Reduction of Reserve Margin with Increasing Wind Penetration (ECE Department)	2012
R. Diker	Non-Thesis	2011
D. Richmann	Non Thesis	2011
N.L. Becklinger	Design and Test of Multi-Camera Based Orthorecified Airborne Imaging System	2010
G.M. Neiswander	Improving Rotorcraft Deceleration Guidance for Brownout Landing	2010
S. Govindaraj	Calculation of Sensor Redundancy Degree for Linear Sensor Systems	2010
J. Cannon	Statistical Analysis and Algorithms for Online Change Detection in Real-Time Psychophysiological Data	2009
Z.H. Yu	Optimization Techniques in Data Mining ...	2009
M.A. Mitchell	Antenna Quality Assurance for Mars Express	2008
E.B. Hahn	Healthcare Analysis of Six Sigma Methodologies ...	2006
D. Lotz	Supply Chain Management	2006
A.K. Paul	Quantifying the Cognitive Abilities and Performance of Drivers with Sleep Disorders	2005
N.J. Novotny	Inventory Assessment and Control in a Supply Network Characterized by Irregular and Intermittent Demand	2005
C. Li	Non-thesis	2004
Greg Brucker	Non-thesis	2003
J.R. Schenk	Application of Stochastic Discrete Event simulation in the Emergency Department	2002
B. Singu	Non-thesis	2002
C. Freeze	Non-thesis	2002
P. Kunert	Usability Testing of a Blood Transfusion Teaching Module (College of Nursing)	2001
K. Vananuvat	Non-thesis	2001

A. Ma	Non-thesis	2001
N. Chintan	Non-thesis (Mechanical Engineering)	2001
J.S. Mohror	Evaluation of Traffic Flow Analysis Tools	2000
D. Wang	Non-thesis	1999
T.-J. Tsai	Non-thesis	1998
S.C. Vergas	An Application of DEA to Assess the Performance of the Dominican Republic Public School Districts	1998
D. Wahjudi	Back-Propagation Neural Network for Machining Process Planning and Control	1997
P. Ngaosuphanvongs	Non-thesis	1997
S. Reinach	Alzheimer Disease Driving Simulator Study	1996
L. F. Yeh	Non-thesis	1996
C. Carney	The Effects of Sensor Range and Timing on Drivers Ability to Use Collision Warning Systems	1996
M. Mollenhauer	The Potential for Advanced Vehicle Systems to Increase the Mobility of Elderly Drivers	1995
C.G. Feng	A Lagrangean Heuristic Algorithm for the Process Plan Selection Problem in Manufacturing	1995
J. P. Hockett	Non-thesis	1994
R.L. Jang	Non-thesis	1994
A.K. Tikoo	Using Minimum Variance Approach to Optimal Scheduling	1994
M. Lane	A Development Methodology for Automated Concurrent Engineering Frameworks	1994
F.Y. Yu	Optimization of Welding Sequence for Robotics Welding	1994
J.K. Spoerre	Performance Monitoring of Vibration Signals and Fault Diagnostics...	1993
S.A. Hafeez	Hierarchical Petri Net Modeling of FMSs	1992
J. P. Massa	Evaluation of the AMATROL AS/RS ...	1992
C.C. Chan	Using High Level Petri Nets for Performance Evaluation of FMSs	1992
K. Chandrasekhararao	Automated Process Planning Using an Expert Database System	1990
M.L. Yu	Process Variables for Gas Metal Arc Welding	1990
R. Martens	Solving the Pallet Loading Problem	1990
W. R. Meltzer	Project Management Software for the Microcomputer	1990
Y. Wei	A Design Oriented Method for Generative Process Planning Using Knowledge-Based Decisions	1989
T.T. Dimyati	Optimal Scheduling of Production	1989
I. K. Hwang	A Lagrangean Relaxation of the Traveling Salesman Problem	1989
T. Izukawa	Linear Programming for the Rest of Us: A HyperCard Implementation	1989
B. Kumar	Development of a Feature-based Approach to Process Planning	1989
D.L. Walter	Off-line Robot Programming with Graphic Robot Simulation	1989

**Ph.D. thesis and/or examining committee memberships (excluding chairmanships): 65**

Student	Title of Study	Tentative Year of Degree Award
A. Akusok	Extreme Learning Machines: Novel Extensions to Application in Big Data	2016
B. Sun	Risk-averse Design and Operation of Renewable Energy	2015

	Power Grids	
A. Vinel	Mathematical Programming Techniques for Solving Stochastic Programming Problems with Certainly Equivalent Risk Measures	2015
J. Hoke	A Wavelet-based Framework for Efficient Processing of Digital Imagery with an Application to Helmet-mounted Vision Systems	2015
Y. Zhang	3D Bioprinting of Vasculature Network for Tissue Engineering	2014
Y. Li	Coupled Computational Fluid Dynamics/Multibody Dynamics Method with Application to Wind Turbine Simulation	2014
K. Ellis	Flight Deck Crew coordination Indices of Workload and Situation Awareness in Terminal Operations	2014
M. Mirghorbani	Graph-theoretical Studies of Combinatorial Optimization Problems	2013
A. Kiekhaefer	Simulation Ranking and Selection Procedures and Applications in Network Reliability Design	2011
S. Openshaw	Sitting Comfort Prediction Models	2011
L. Yekhshtyan	Detecting Distraction and Degraded Driver Performance with Visual Behavior Metrics	2010
I. Donaldson Soberanis	An Extended Bayesian Network Approach for Analyzing Supply Chain Disruptions	2010
P. Soberanis	Risk Optimization with p-Order Conic Constraints	2009
Y. Liang	Detecting Driver Destruction	2009
S. Li	Monitoring and Diagnosis of Process and Sensor Faults in Manufacturing Processes	2008
W.W. Tang	Geographically-Aware Intelligent Agents (Department of Geography)	2008
Q.Y. Yang	Reliability modeling for linear sensor systems	2007
T.R. Clancey	Predicting the Impact of Electronic Health Record On Practice Patterns Using Computational Modeling and Simulation (College of Nursing)	2006
M.-C. Lai	A Hybrid Genetic/Benders' Algorithm with Applications To Vehicle Routing and Scheduling Problems	2004
T. Phohom	Determining and Assessing Level of Fun and Workload of Drivers Based on Physiological Patterns	2004
H.-S. Sohn	Cross Decomposition for Constrained Spanning Tree Problems	2004
J.L. Wagner	Erroneous or Accurate: Assessing Decisions and Behavior Decision-Making Human-Directed During a Robotic Geology Field Test	2004
G.-Y. Ryu	Localization of Feature Space in SVM	2004
C.L. Chuang	Supplier Selection and Order Allocation in Supply Chain Management	2003
A. Wong	A Dynamic Programming Model for Fixed Income Portfolio Optimization with Multiple Scenarios	2003
S.C. Vergas	An Application of DEA to Assess Performance of School Districts	2002
J. Blackhurst	A Network Based Methodology to Model Supply Chain Systems	2002
J. Byers-Gonzalez	Modeling Approaches to Study College Application Behavior Artificial Neural Networks: A Comparison of Three Modeling Approaches to Study College Application Behavior (College of Education)	2002
W. C. Chuang	Remote Collaborative Product Development in a Product Development Chain	2001

T. Wu	A Formalism for Product Development and Deployment System Management	2001
L. Adu	A Data Envelopment Analysis-based Framework for Strategic Group Analysis	2001
Y. Kwon	Robust Control of Surface Roughness in a Turning Operation	2000
M.E. Opar	A Hierarchical Approach to Problem Identification in Complex Systems	2000
W.-C. Chuang	Distributed product Design in a Product Deployment Chain	2000
D.H. Jensen	A Genetic Algorithm for Optimizing Mold Orientation and Parting Sand Cast Metal Parts	1998
T.C. Chen	A Hybrid Intelligent System for Process Modeling and Control Using a Neural Network and a Genetic Algorithm	1997
S.F. Chiang	Neural Networks for Diagnosis of Low Back Pain	1997
M. Mollenhauer	Evaluation of an Automated Traveler Information Proactive Driving Safety Evaluation:	1997
K.B. Oh	An Evaluation of an Automated Traveler Information Freeway Incidence Detection Using Artificial Neural Networks	1997
H. J. Yeah	Singularity and Workspace Analyses of Serial Robot Manipulators	1996
H. Kim	Generation Expansion Planning Using Benders' Decomposition and Generalized Networks	1996
S.K. Jans	Information Content and Format Recommendations for Automotive Head-up Displays	1996
Y.-C. Liu	Human Factors Evaluation of the Effectiveness of Multi-Modality Displays in Advanced TISs	1996
J.M. Hankey	Unalerted Emergency Avoidance at an Intersection and Possible Implications for ABS Implementation	1996
S.-H. Roosta	Districting with Parallel Processing	1996
W.-P. Chun	Two Models for Workshop Scheduling Problems	1995
C.-C. Chan	Step-Based Manufacturing Feature Recognition Using a Neural Network Technique	1994
N. V. Yetukuri	Intelligent Manufacturing Process Design	1994
P. Lolonis	Knowledge-based Spatial Decision Support Systems for Solving Service Provisions Problems (Department of Geography)	1994
R.-H. Lin	Intelligent GMAW Process Control System ...	1994
J. Wang	Change Propagation Metrology for a Parameterized and Constrained Assembly (Department of Mechanical Engineering)	1994
E. Bayraktar	Capacitated Production Scheduling of Multi-Level Production Systems	1993
H.H. Huang	Transputer-Based Machine Fault Diagnosis	1993
C. Zhang	Tolerance Analysis and Synthesis for Design and Manufacturing	1993
A.C. Chiang	Automated Failure Mode Effects and Criticality Analyses for Reliability Prediction ...	1992
Y. Chung	New Generation Approaches for Solving GT Problems: Artificial Neural Networks	1992
G.M. Knapp	Hierarchical Integrated Maintenance Planning For Automated Manufacturing Systems	1992
C.-J. Lin	An Analytical Approach for Production ...	1992
T. H. Liu	An Object-Oriented Assembly ...	1992
S. Lee	Robotic Assemblability Evaluation	1992
C. Zhan	Concurrent Optimization of Design Tolerance Synthesis	1992

H. Wang	An Analytical Approach for Planning and Control of Kanban Systems for Just-in-Time Manufacturing	1991
T.A. Kratzer	Scheduling the Job Shop with Alternative Process Plans	1991
A. Lee	A Knowledge-based System for Scheduling in a Flexible Manufacturing System	1990
C.H. Cheng	An Investigation of Algorithms for Solving the Group Technology Problem	1990
N. A. Botten	Qualitative Methods for Knowledge Base Design	1989
L. Wang	Scheduling of Inspection Operations	1989

#### 5.2.2.4 Post doctoral fellows supervised: 19

Student	Title of Study	Tentative Year of Study Completion
Hugo Da Cunha Cabral (Summer intern)		2015-15
Anthony Alonso (Summer intern)		2015-15
Guillaume Defour (Summer intern)		2015-15
Chi Ma	Condition monitoring	2014-15
Unal A Kahraman	Intelligent systems	2013-13
Serkan Altunas	Innovation science	2013-13
Ting Wang	Intelligent manufacturing	2011-12
Yolande Ekra Devalere (French student)	System reliability	2011-12
N. Khilwani	Text Mining	2009-10
Z. Song	Data Mining in Combustion	2008-09
L.E. Gravdal	Manufacturing	1996-97
J.E. Doblung	Manufacturing	1996-97
S. Killich	Human Factors	1996-96
R. Bruniaux	Process Reengineering	1995-96
P.G. Li	Engineering Design	1995-95
S. Lingayat	Concurrent Engineering	1993-94
Y. T. Chen	Concurrent Engineering	1993-94
H. Lee	Concurrent Engineering	1993-94
H. Artiba	Manufacturing Logistics	1992-92
E. Szczerbicki	Engineering Design	1989-91
C. Y. Kim	Manufacturing	1989-90
H. Lixin	Intelligent Design	1989-89
A. ElMahmedi	Data Mining	2000-00

#### Other Important Facts or Information

##### INDUSTRIAL SEMINARS OFFERED

- ❑ "Wind Energy Research", Aliant Energy, Cedar Rapids, IA, May 2015.
- ❑ "Advanced Energy Optimization", AWWA-IAWEA Fall Short Course Program, Ankeny, IA, September 2012.
- ❑ "Developments in Wind Energy", Korean Wind Power and Renewable Energy Conference, Changwon, Korea, November 2010.
- ❑ "Anticipatory Control of Wind Turbines", NREL, Bolder, CO, May 2010.
- ❑ "Performance Optimization of Wind Farms", Korea Institute of Energy Research, Daejeon, Korea, July 2009.
- ❑ "Performance Optimization of Wind Turbines", AES Wind Generation, Inc, Merkel, TX, October 2008.

- ❑ "Applying Innovations in Knowledge Management", Bio/Pharmaceutical Forum on Knowledge Management, Philadelphia, PA, March 2008.
- ❑ "Innovation Toolkit", Interphex, New York, April 2007.
- ❑ "Knowledge Management: The Past, Present, and Future", Drug Information Association, 18<sup>th</sup> Annual Medical Communications Workshop, San Diego, CA, March 2007.
- ❑ "Data Flow Modeling, Data Mining, and Knowledge Management", Drug Information Association, Annual Meeting, Philadelphia, PA, June 2006.
- ❑ "Data Flow Modeling, Data Mining, and Knowledge Management", Drug Information Association, Annual Meeting, Washington, DC, June 2005.
- ❑ "Data Flow Modeling, Knowledge Management, and Data Mining", Interphex, New York, April 2005.
- ❑ "Data Mining, Data Flow Modeling, and Data Warehousing", Drug Information Association, Annual Meeting, Washington, DC, June 2004.
- ❑ "Data Mining Techniques for Classifying and Evaluating Signals", Signaling Conference, Barnett International, Philadelphia, PA, November 2003.
- ❑ "Industrial Applications of Data Mining", Joint Eastern Iowa IIE Meeting, Iowa City, IA, May 2003.
- ❑ "Data Mining and Data Warehousing ", SPIE Conference, Orlando, FL, April 2003.
- ❑ "Data Mining, Data Warehousing, and Data Flow Modeling", Drug Information Association, Clinical Data Management Symposium, Philadelphia, PA, March 2003.
- ❑ "Data Mining and Data Warehousing for Biomedical Applications", SPIE Photonics West Meeting, San Jose, CA, January 2003.
- ❑ "Data Mining: Automotive Applications", Ford Motor Company, Dearborn, MI, October 2002.
- ❑ "Data Mining in Electrical Power Industry", Alliant Energy Ottumwa Generation Station, Ottumwa, IA, October 2002.
- ❑ "Industrial Applications of Data Mining", Maytag Corporation, Amana, IA, September 2002.
- ❑ "Data Mining and Data Warehousing: A Pharmaceutical Industry Perspective", Drug Information Association Workshop, Baltimore, MD, July 2002.
- ❑ "Information Technology in Manufacturing", Japan-US Symposium on Flexible Automation, Hiroshima, Japan, July 2002.
- ❑ "Data Mining: Drug Development Applications ", Drug Information Association Meeting, Chicago, IL, June 2002.
- ❑ "Data Mining: Applications in Pharmaceutical Industry", Roche Laboratories, Nutley, NJ, February 2002.
- ❑ "Data Mining and Data Farming", Eighth Annual Biopharmaceutical Applied Statistics Symposium, Savannah, GA, December 2001.
- ❑ "Data Mining: Medical and Industrial Applications", DNA Technologies, Iowa City, IA, September 2001.
- ❑ "Data Mining in Drug Discovery", Drug Information Association, Denver, CO, July 2001.
- ❑ "Data Mining", LG Electronics Corporation, Seoul, Korea, September 2000.
- ❑ "Data Mining in E-Commerce", Seoul, Korea, August 2000.
- ❑ "Data Mining in Process Industries", ALCOA, Davenport, IA, February 2000.
- ❑ "Data Mining and Industrial Applications", INCOSE Meeting, Rockwell Collins, Cedar Rapids, IA, January 2000.
- ❑ "Data Mining", MEMC Electronic Materials Corporation, St Peters, MO, November 1999.
- ❑ "Modeling Unstructured Processes", Pella Corporation, Pella, IA, April 1998.
- ❑ "Simulation in Virtual Organizations", ICEC, Seoul, Korea, April 1998.
- ❑ "Enterprise Modeling", Rockwell International Corporation, Cedar Rapids, IA, February 1998.
- ❑ "Reengineering Business, Design, and Manufacturing Processes", Intelligent Manufacturing Systems Workshop, Seoul, Korea, July 1997.
- ❑ "Reengineering Design and Manufacturing Processes for Agility", ESPRIT Conference, Toulouse, France, June 1996.
- ❑ "Reengineering Enterprises for Agility", IEEE Robotics and Automation Conference, Minneapolis, MN, April 1996.
- ❑ "Managing the Product Development Process", INFORMS Meeting, New Orleans, LA, October 1995.
- ❑ "Enterprise Modeling", Roundtable Meeting, INFORMS Meeting, Los Angeles, CA, April 1995.
- ❑ "Application of Engineering Analysis Tools to Business Process Reengineering (BPR)", Japan Productivity Center, Tokyo, Japan, November 1994.

- ❑ "Concurrent Engineering: A Process Perspective", Advanced Software Technology and Mechatronics Research Institute of Kyoto, Kyoto, Japan, July 1994.
- ❑ "Reengineering of Design and Manufacturing Processes", Case Western Reserve University, Cleveland, Ohio, April 1994.
- ❑ "Concurrent Engineering: A Process Perspective", Integrated Logistics & Concurrent Engineering Conference, Montpellier, France, February 1994.
- ❑ "Concurrent Engineering: Recent Developments", University of Trieste, Trieste, Italy, September 1993.
- ❑ "Concurrent Engineering and Innovation", University of Rome, Rome, Italy, September 1993.
- ❑ "Artificial Intelligence in Manufacturing and Engineering Applications", Monterrey Institute of Technology, Monterrey, Mexico, September 1993.
- ❑ "Concurrent Engineering", FUCAM, Mons, Belgium, June 1993.
- ❑ "Intelligent Design and Manufacturing", IFAC, Dearborn, MI, September 1992.
- ❑ "Concurrent Engineering: Issues, Technologies, and Tools", General Motors, Warren, MI, September 1992.
- ❑ "Expert Systems in Manufacturing and Engineering", World Trade Center, Melbourne, Australia, August 1992.
- ❑ "Integrated Manufacturing", Japanese Productivity Center, Iowa City, Iowa, February 1992 (with W. Boe and B. Wang).
- ❑ "Intelligent Manufacturing", Motorola, Arlington Heights, IL, January 1992.
- ❑ "Knowledge and Optimization Based Systems in Manufacturing", Motorola, Arlington Heights, IL, January 1992.
- ❑ "Design and Manufacturing: Issues, Tools, and Techniques", John Deere, Dubuque, IA, December 1991.
- ❑ "Artificial Intelligence in Design and Manufacturing", AUTOFACT'91, Chicago, IL, November 1991 (with G. Chryssolouris, MIT).
- ❑ "Concurrent Engineering: Issues, Models, and Tools", McDonnell Douglas Research Laboratories, St. Louis, MO, October 1991.
- ❑ "Intelligent Manufacturing Systems", Kyoto Advanced Research Laboratory, Kyoto, Japan, September 1991.
- ❑ "Intelligent Design and Manufacturing", CAPE'91, Bordeaux, France, September 1991.
- ❑ "Intelligent Design and Manufacturing", Computational Mechanics Institute, Oxford, UK, July 1991.
- ❑ "Design and Performance Evaluation of Manufacturing Cells", Caterpillar, Peoria, IL, November 1990 (with B. Wang, UI).
- ❑ "Intelligent Manufacturing", University of Rochester, Rochester, NY, November 1990.
- ❑ "Concurrent Design", Digital Equipment Corporation, Marlboro, Mass., April 1990.
- ❑ "Intelligent Manufacturing", SME Chapter, Cedar Rapids, Iowa, April 1990.
- ❑ "Intelligent Manufacturing Systems", The British Computer Society, London, England, March 1990.
- ❑ "Decomposition and Scheduling of Design Activities in a Concurrent Engineering Environment", Center for Concurrent Engineering, Morgantown, WV, February 1990.
- ❑ "Intelligent Manufacturing", John Deere, Waterloo, Iowa, October 1989.
- ❑ "Intelligent Manufacturing in the USA", Politecnico di Torino, Italy, September 1989.
- ❑ "Knowledge Based Systems in Automated Manufacturing", Rockwell International, Cedar Rapids, Iowa, September 1988.
- ❑ "Expert Systems and Optimization in Automated Manufacturing Systems", Research Management Workshop, Saskatoon, Saskatchewan, June 1987.
- ❑ "Design and Operation of Flexible Manufacturing Systems", Canadian Association for Production and Inventory Control, Ottawa, Ontario, December 1986.
- ❑ "Planning and Design Flexible Manufacturing Systems", Bristol Aerospace, Ltd., Winnipeg, Manitoba, March 1986.
- ❑ "Integer Programming Approach to Process Planning", School of Combinatorial Optimization, Rio de Janeiro, Brazil, July 1985.
- ❑ "Clustering Analysis: Models and Algorithms", School of Combinatorial Optimization, Rio de Janeiro, Brazil, July 1985.



## Research Activities

### Active Research Fields at Present (major fields only)

- Data mining
- Evolutionary computation
- Product complexity management and mass customization
- Energy systems
- Innovation
- Healthcare systems
- Engineering design and manufacturing

### Patents

US Patent No. 8,577,822 *Data Driven Approach to Modeling Sensors Wherein Optimal Time Delays are Determined for a First Set of Predictors and Stored as a Second Set of Predictors* (Issued November 15, 2013) UIRF 2009-018.

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## Publications

### Books and Monographs

#### BOOKS

L.-F. Wang, C. Singh, and A. Kusiak (Eds), *Wind Power Systems: Applications of Computational Intelligence*, Springer, Berlin, Germany, 2010, 437 pages (Published also in China, 2011)

J. Wang and A. Kusiak (Eds), *Computational Intelligence in Manufacturing Handbook*, CRC Press, Boca Raton, FL, 2001, 512 pages.

A. Kusiak, *Computational Intelligence in Design and Manufacturing*, John Wiley, New York, NY, 2000, 535 pages.

A. Kusiak, *Engineering Design: Products, Processes, and Systems*, Academic Press, San Diego, CA, 1999, 427 pages.

A. Molina, J.M. Sanchez, and A. Kusiak (Eds), *Handbook of Life Cycle Engineering*, Kluwer Academic Publishers, Boston, MA, 1998, 618 pages.

A. Kusiak and M. Bielli (Eds), *Designing Innovations in Industrial Logistics Modeling*, CRC Press, New York, NY, 1997, 268 pages.

R. C. Dorf and A. Kusiak (Eds), *Handbook of Design, Manufacturing and Automation*, John Wiley, New York, NY, 1994, 1042 pages.

C. Dagli and A. Kusiak (Eds), *Intelligent Systems in Design and Manufacturing*, ASME Press, New York, NY, 1994, 487 pages.

P. Gu and A. Kusiak (Eds), *Concurrent Engineering: Methodology and Applications*, Elsevier, New York, NY, 1993, 330 pages.

A. Kusiak (Ed.), *Concurrent Engineering: Automation, Tools and Techniques*, John Wiley, New York, NY, 1993, 589 pages.

- A. Kusiak (Ed.), *Intelligent Design and Manufacturing*, John Wiley, New York, NY, 1992, 753 pages.
- A. Kusiak, *Intelligent Manufacturing Systems*, Prentice Hall, Englewood Cliffs, N. J., 1990, 443 pages. (Published also in Chinese by Tsinghua University Publishing House, P.R. of China, 1993).
- A. Kusiak and W. E. Wilhelm (Eds), *Analysis, Modeling and Design of Modern Production Systems*, J.C. Baltzer AG, Basel, Switzerland, 1989, 380 pages.
- A. Kusiak, (Ed.), *Knowledge-Based Systems in Manufacturing*, Taylor and Francis, New York, NY, 1989, 387 pages.
- A. Kusiak, (Ed.), *Expert Systems: Strategies and Solutions in Manufacturing Design and Planning*, Society of Manufacturing Engineers, Dearborn, MI, 1988, 402 pages.
- A. Kusiak (Ed.) *Artificial Intelligence: Implications for Computer Integrated Manufacturing*, Springer-Verlag, New York, NY, 1988, 527 pages (Published also in Russian by Mashinostroenie, Moscow 1991, ISBN 17445-1).
- A. Kusiak (Ed.) *Modern Production Management Systems*, North Holland and Elsevier, New York, NY, 1987, 746 pages.
- A. Kusiak (Ed.) *Flexible Manufacturing Systems: Methods and Studies*, North-Holland and Elsevier, New York, 1986, 408 pages.
- A. Kusiak (Ed.), *Modeling and Design of Flexible Manufacturing Systems*, Elsevier, New York, NY, 1986, 431 pages.  
(Published also in Chinese by Shanghai Scientific and Technological Literature Publishing House, Shanghai, P.R. of China, 1988).

**Articles in Technical Journals with Rigorous Review Procedures (Published or accepted for publication)**

**JOURNAL PAPERS**

- A. Kusiak, Share Wind Energy Data, *Nature*, Vol. 529, No. 7584 (January 7), 2016, pp. 19-21 [WIND ENERGY].
- Z. Zhang, A. Kusiak, Y. Zeng, and X. Wei, Modeling and Optimization of a Wastewater Pumping System with Data-mining Methods, *Applied Energy*, Vol. 164, No. 1, 2016, 303-311 [WASTEWATER PROCESS ENERGY].
- M. Taghi Sattari, A. Rezazadeh Joudi, and A. Kusiak, Estimation of water quality parameters with data-driven models, *Journal of American Water Works Association* (accepted for publication August 27, 2015), (to be published April 2016) [SUSTAINABILITY].
- Y. Zeng, Z. Zhang, A. Kusiak, F. Tang, and X. Wei, Optimizing Wastewater Pumping system with Data-Driven Models and a Greedy Electromagnetism-like Algorithm, *Stochastic Environmental Research and Risk Assessment* (Accepted for publication, June 2015, <http://link.springer.com/article/10.1007/s00477-015-1115-4>) [WASTEWATER PROCESS ENERGY].
- Y. Zeng, Z. Zhang, and A. Kusiak, Predictive Modeling and Optimization of a Multi-zone HVAC system with Data Mining and Firefly Algorithms, *Energy*, Vol. 86, No. 1, 2015, pp. 393-402 [HVAC ENERGY].
- S. Altunas, T. Dereli, and A. Kusiak, Forecasting Technology Success Based on Patent Data, *Technological Forecasting and Social Change*, Vol. 96, No. 1, 2015, pp. 202-214 [INNOVATION].

- S. Altunas, T. Dereli, and A. Kusiak, Analysis of Patent Documents with Weighted Association Rules, *Technological Forecasting and Social Change*, Vol. 92, No. 1, 2015, pp. 249-262 [INNOVATION].
- X. Wei, A. Kusiak, M. Li, F. Tang, and Y. Zeng, Multi-objective Optimization of the HVAC (Heating, Ventilation, and Air Conditioning) System Performance, *Energy*, Vol. 83, No. 1, 2015, pp. 294-306 [HVAC ENERGY].
- Z. Zhang, X. Wei, and A. Kusiak, Data-driven Cost Minimization of Pump Operations and Maintenance, *Engineering Applications of Artificial Intelligence*, Vol. 40, No. 1, 2015, pp 37-46 [WASTEWATER PROCESS ENERGY].
- X. Wei and A. Kusiak, Short-term Prediction of Influent Flow in Wastewater Treatment Plant, *Stochastic Environmental Research and Risk Assessment*, Vol. 29, No. 1, 2015, pp 241-249 [WASTEWATER PROCESS ENERGY].
- X. Wei, G. Xu, A. Kusiak, Modeling and Optimization of a Chiller Plant, *Energy*, Vol. 73, No. 1, 2014, 898-907 [HVAC ENERGY].
- F. Tang, A. Kusiak, X. Wei, Modeling and Short-term Prediction of HVAC System with a Clustering Algorithm, *Energy and Buildings*, Vol. 82, No. 1, 2014, pp. 310-321 [HVAC ENERGY].
- A. Kusiak, G.L. Xu, and Z. Zhang, Minimization of Energy Consumption in HVAC Systems with Data-driven Models and an Interior-point Method, *Energy Conversion and Management*, Vol. 85, No. 1, 2014 pp. 146-153 [HVAC ENERGY].
- X. He, Z. Zhang, and A. Kusiak, Performance Optimization of HVAC Systems with Computational Intelligence Algorithms, *Energy and Buildings*, Vol. 81, No. 1, 2014, pp. 371-380 [HVAC ENERGY].
- Z. Zhang, Q. Zhou, and A. Kusiak, Optimization of Wind Power and its Variability with a Computational Intelligence Approach, *IEEE Transactions on Sustainable Energy*, Vol. 5, No. 1, 2014, pp. 228-236 [WIND ENERGY].
- A. Kusiak and X. Wei, Prediction of Methane Production in Wastewater Treatment Facility: A Data-Mining Approach, *Annals of Operations Research*, Vol. 216, No. 1, 2014, pp. 71-81 [WASTEWATER PROCESS ENERGY].
- A. Kusiak, Z. Zhang, and A. Verma, Prediction, Operations, and Condition Monitoring in Wind Energy, *Energy*, Vol. 60, No. 1, 2013, pp. 1-12 [WIND ENERGY].
- M.V. Muste, D.A. Bennett, S. Secchi, J.L. Schnoor, A. Kusiak, N.J. Arnold, S.K. Mishra, D. Ding, and U. Rapolu, End-to-End Cyberinfrastructure for Decision-Making Support in Watershed Management, *ASCE Journal of Water Resources Planning and Management*, Vol. 139, No. 5, 2013, pp. 565-573 [WATER QUALITY].
- A. Kusiak, Z. Zhang, and G. Xu, Minimization of Wind Farm Operational Cost based on Data-driven Models, *IEEE Transactions on Sustainable Energy*, Vol. 4, No. 3, 2013, pp. 756-764 [WIND ENERGY].
- X. Wei, A. Kusiak, and R. Sadat, Prediction of Influent Flow Rate: A Data-Mining Approach, *ASCE Journal of Energy Engineering*, Vol. 139, No. 2, 2013, pp. 118-123 [WASTEWATER PROCESS ENERGY].
- A. Kusiak, Y. Zeng, Z. Zhang, Modeling and Analysis of Pumps in a Wastewater Treatment Plant: A Data-mining Approach, *Engineering Applications of Artificial Intelligence*, Vol. 26, No. 7, 2013, pp. 1643-1651 [WASTEWATER PROCESS ENERGY].

- A. Kusiak, X. Wei, A. Verma, and E. Roz, Modeling and Prediction of Rainfall Using Radar Reflectivity Data: A Data-Mining Approach, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 51, No. 4, 2013, pp. 2337-2342 [WATER QUALITY].
- A. Verma, Z. Zhang, and A. Kusiak, Modeling and Prediction of Gearbox Faults with Data-Mining Algorithms, *ASME Journal of Solar Energy Engineering*, Vol. 135, No. 3, 2013, pp. 031007-1 - 031007-11 [WIND ENERGY].
- A. Verma, X. Wei, and A. Kusiak, Predicting the Total Suspended Solids in Wastewater: A Data-Mining Approach, *Engineering Applications of Artificial Intelligence*, Vol. 26, No. 4, 2013, pp. 1366-1372 [WASTEWATER PROCESS ENERGY].
- A. Kusiak and X. Wei, Optimization of the Activated Sludge Process, *ASCE Journal of Energy Engineering*, Vol. 139, No. 1, 2013, pp. 12-17 [WASTEWATER PROCESS ENERGY].
- A. Kusiak, Y. Zeng, and G. Xu, Minimizing Energy Consumption of an Air Handling Unit with a Computational Intelligence Approach, *Energy and Buildings*, Vol. 60, No. 1, 2013, pp. 355-363 [HVAC ENERGY].
- A. Kusiak, A. Verma, and X. Wei, A Data-Mining Approach to Predict Influent Quality, *Environmental Monitoring and Assessment*, Vol. 185, No. 3, 2013, pp. 2197-2210 [WASTEWATER PROCESS ENERGY].
- A. Kusiak and A. Verma, Monitoring Wind Farms with Performance Curves, *IEEE Transactions on Energy Conversion*, Vol. 4, No. 1, 2013, pp. 192-199 [WIND ENERGY].
- Y. Jiang, Z. Song, and A. Kusiak, Very Short-term Wind Speed Forecasting with Bayesian Structural Break Model, *Renewable Energy*, Vol. 50, 2013, pp. 637-647 [WIND ENERGY].
- Z. Zhang, A. Kusiak, and Z. Song, Scheduling Electric Power Production at a Wind Farm, *European Journal of Operational Research*, Vol. 224, No. 1, 2013, pp. 227-238 [WIND ENERGY].
- Z. Zhang, Y. Zeng, and A. Kusiak, Minimizing Pump Energy in a Wastewater Processing Plant, *Energy*, Vol. 47, No. 1, 2012, pp. 505-514 [WASTEWATER PROCESS ENERGY].
- A. Kusiak and A. Verma, Analyzing Bearing Faults in Wind Turbines: A Data-Mining Approach, *Renewable Energy*, Vol. 48, No. 1, 2012, pp. 110-116 [WIND ENERGY].
- Z. Zhang, A. Verma, and A. Kusiak, Fault Analysis of the Wind Turbine Gearbox, *IEEE Transactions on Energy Conversion*, Vol. 27, No. 2, 2012, pp. 526-535 [WIND ENERGY].
- A. Kusiak and G.L. Xu, Modeling and Optimization of HVAC Systems Using a Dynamic Neural Network, *Energy*, Vol. 42, No. 1, 2012, pp. 241-250 [HVAC ENERGY].
- Z. Zhang, and A. Kusiak, Monitoring Wind Turbine Vibration Based on SCADA Data, *ASME Journal of Solar Energy Engineering*, Vol. 134, No. 2, 2012, pp. 021004-1-021004-12 [WIND ENERGY].
- A. Verma and A. Kusiak, Fault Monitoring Wind Turbine Generator Brushes: A Data Mining Approach, *ASME Journal of Solar Energy Engineering*, Vol. 134, No. 2, 2012, pp. 021001-1-021001-9 [WIND ENERGY].
- A. Kusiak and X. Wei, A Data-Driven Model for Maximization of Methane Production in a Wastewater Treatment Plant, *Water Science and Technology*, Vol. 65, No. 6, 2012, pp. 1116-1122 [WASTEWATER PROCESS ENERGY].
- A. Kusiak and Z. Zhang, Control of Wind Turbine Power and Vibration with a Data-Driven Approach, *Renewable Energy*, Vol. 43, Vol. 7, 2012, pp. 73-82 [WIND ENERGY].

- A. Kusiak and A. Verma, A Data-Mining Approach to Monitoring Wind Turbines, *IEEE Transactions on Sustainable Energy* Vol. 3, No.1, 2012, pp. 150-157 [WIND ENERGY].
- Z. Zhang and A. Kusiak, Optimization of Energy Consumption of Pumps in a Wastewater Processing Plant, *ASCE Journal of Energy Engineering*, Vol. 137, No. 4, 2011, pp. 159-168 [WASTEWATER PROCESS ENERGY].
- A. Kusiak, G.L. Xu, and F. Tang, Optimization of an HVAC System with a Strength Multi-objective Particle-Swarm Algorithm, *Energy*, Vol. 36, No. 10, 2011, pp. 5935-5943 [HVAC ENERGY].
- J. Engler and A. Kusiak, Modeling an Innovation Ecosystem with Adaptive Agents, *International Journal of Innovation Science*, Vol. 3, No. 2, 2011, pp. 55-68 [INNOVATION SCIENCE].
- A. Kusiak, H.Y. Zheng, and Z. Zhang, A Wind Speed Virtual Sensor for Wind Turbines, *ASCE Journal of Energy Engineering*, Vol. 137, No. 2, 2011, pp. 60-69 [WIND ENERGY].
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#### BOOK AND CONFERENCE PROCEEDINGS REVIEWS

- ❑ E. Triantaphyllou, *Data Mining and Knowledge Discovery via a Logic-Based Approach*, Kluwer, Boston 2005.
- ❑ T. Sawik, *Production Planning and Scheduling in Flexible Assembly Systems*, Springer-Verlag, Berlin 1999, published in *Production Planning and Control*, Vol. 12, 2001.
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- L.F. Wang, C. Singh, and A. Kusiak, Integration of Intermittent renewable Energy Resources into Power Grid, *IEEE Systems Journal*, Vol. 6, No. 1, 2012, pp. 2-3.
- H. Haibo and A. Kusiak, Computational Intelligence in Smart Grid, *IEEE Computational Intelligence Magazine*, Vol. 6, No. 3, 2011, p. 12.
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## **Journals Publishers and Research Agencies for whom you have Reviewed Papers, Books or Proposals**

### REVIEWER FOR THE FOLLOWING JOURNALS:

- ❑ Advanced Engineering Informatics Journal (2005@1)
- ❑ Annals of Operations Research (2011@1, 2012@1)
- ❑ Applied Bioinformatics (2006@1)
- ❑ Applied Energy (2010@5, 2011@2, 2012@1)
- ❑ Applied Stochastic Models and Data Systems
- ❑ Artificial Intelligence for Engineering Design, Analysis, and Manufacturing (2004@1)
- ❑ ASME Transactions: Journal of Computing & Information Science in Engineering (2003@1, 2004@1, 2005@5)
- ❑ ASME Transactions: Journal of Manufacturing Science and Engineering (2003@2, 2004@3, 2005@2, 2006@2, 2007@3, 2008@2)
- ❑ ASME Transactions: Journal of Mechanical Design (2003@1, 2005@5, 2006@3)

- ❑ AutoSoft Journal (2006@1)
- ❑ Automatica
- ❑ Automation in Construction (2010@1)
- ❑ Canadian Journal of Administrative Sciences
- ❑ Combustion Science and Technology (2008@1)
- ❑ Computational Optimization and Applications Journal (2005@1)
- ❑ Computer Aided Design (2003@2, 2004@1, 2005@2, 2006@2)
- ❑ Computer Integrated Manufacturing Systems (2003@4, 2004@1, 2005@1, 2006@1)
- ❑ Computers and Electrical Engineering (2003@1)
- ❑ Computers and Industrial Engineering (2008@2)
- ❑ Computers and Operations Research (2004@1)
- ❑ Computers in Biology and Medicine (2005@1, 2008@1)
- ❑ Computer Vision and Image Understanding
- ❑ CSME Transactions
- ❑ Data & Knowledge Engineering (2008@1)
- ❑ Data Mining and Knowledge Discovery (2007@1, 2008@1)
- ❑ Discrete Applied Mathematics
- ❑ Discrete Event Dynamic Systems
- ❑ Ecological Engineering
- ❑ Electronic Commerce Research and Applications (2003@1, 2004@1, 2005@1, 2008@1)
- ❑ Energy (2009@2, 2012@3, 2013@2)
- ❑ Energy and Buildings (2012@3)
- ❑ Engineering with Computers
- ❑ Engineering Design and Automation
- ❑ Engineering Optimization
- ❑ Engineering Sciences (Saudi Arabia) (2004@1)
- ❑ Environmental Science & Technology (2011@1, 2012@1)
- ❑ European Journal of Operational Research (2003@1, 2004@2, 2005@1, 2008@3, 2009@1, 2011@1, 2012@1)
- ❑ Expert Systems with Applications
- ❑ Fuzzy Sets and Systems (2002@2)
- ❑ IEEE Computer (2003@1, 2006@1)
- ❑ IEEE Engineering in Medicine and Biology Magazine (2006@2)
- ❑ IEEE Transactions on Automation Science and Engineering (2003@1, 2008@1, 2011@1, 2012@1)
- ❑ IEEE Transactions on Biomedical Engineering (2005@1, 2006@5)
- ❑ IEEE Transactions on Electronics Packaging Manufacturing (2004@3, 2005@3, 2006@2)
- ❑ IEEE Transactions on Energy Conversion (2008@1, 2010@2)
- ❑ IEEE Transactions on Engineering Management (2003@2, 2004@2, 2005@4, 2006@2)
- ❑ IEEE Transactions on Evolutionary Computation (2005@1, 2006@2, 2007@1)
- ❑ IEEE Transactions on Fuzzy Systems
- ❑ IEEE Transactions on Industrial Electronics (2008@2)
- ❑ IEEE Transactions on Industrial Informatics (2006@1, 2007@4, 2007@1)
- ❑ IEEE Transactions on Instrumentation & Measurement (2008@1, 2009@3)
- ❑ IEEE Transactions on Robotics and Automation (2003@1, 2004@1)
- ❑ IEEE Transactions on Sustainable Energy (2010@2)
- ❑ IEEE Transactions on Transactions on Sustainable Energy (2010@1)
- ❑ IEEE Software (2001@1, 2004@1, 2005@1, 2009@1)
- ❑ IEEE Transactions on Systems, Man, and Cybernetics (2003@2, 2004@1, 2005@4, 2006@2, 2007@3, 2008@6, 2009@2)
- ❑ IIE Transactions (2003@2, 2004@3, 2005@1)
- ❑ Information Fusion Journal (2003@1)
- ❑ Information and Systems Engineering (2003@1)
- ❑ Information Systems and Operations Research (INFOR)
- ❑ Integrated Computer-Aided Engineering
- ❑ Intelligent Systems in Accounting, Finance and Management
- ❑ Intelligent Systems Engineering



- ❑ Interfaces (2004@1)
- ❑ International Journal of Advanced Manufacturing Technology (2003@1, 2004@1, 2005@1, 2006@2, 2007@1)
- ❑ International Journal of Advanced Manufacturing Technology and Management (2006@1)
- ❑ International Journal of Computer-Aided Engineering
- ❑ International Journal of Computer Aided VLSI Design
- ❑ International Journal of Computational Intelligence Research (2008@1)
- ❑ International Journal of Computer Integrated Manufacturing (2003@3, 2004@3, 2005@2, 2006@1, 2007@2, 2008@2)
- ❑ International Journal of Computers and Mathematics with Applications
- ❑ International Journal of Flexible Manufacturing Systems (2003@1)
- ❑ International Journal of Human Factors in Manufacturing
- ❑ International Journal of Information Quality (2006@1)
- ❑ International Journal of Information Technology & Decision Making (2004@1, 2005@1)
- ❑ International Journal of Intelligent Automation and Soft Computing
- ❑ International Journal of Logistics Economics and Globalization (2007@1)
- ❑ International Journal of Manufacturing Systems Design
- ❑ International Journal of Operations Research (2006@1)
- ❑ International Journal of Operations and Quantitative Management
- ❑ International Journal of Production Planning and Control (2003@1, 2006@1)
- ❑ International Journal of Production Economics (2003@3, 2004@1, 2005@1, 2007@2)
- ❑ International Journal of Production Research (2003@2, 2004@2, 2005@1, 2006@2, 2007@1, 2008@1)
- ❑ International Journal of Systems Automation: Research and Applications
- ❑ International Journal of Systems Science (2006@1)
- ❑ International Journal of Value Chain Management (2006@1)
- ❑ Journal of Wind Engineering & Industrial Aerodynamics (2010@2)
- ❑ Journal of Design and Manufacturing
- ❑ Journal of Engineering Manufacture (2007@2)
- ❑ Journal of Engineering Design (2012@1)
- ❑ Journal of the Franklin Institute (2005@1)
- ❑ Journal of Information and Decision Technologies
- ❑ Journal of Intelligent and Robotic Systems
- ❑ Journal of Manufacturing Engineering Management (2007@1)
- ❑ Journal of Manufacturing Systems
- ❑ Journal of Operations Management
- ❑ Journal of Renewable and Sustainable Energy (2011@1)
- ❑ Knowledge and Information Systems (2008@1)
- ❑ Operations Research
- ❑ Journal of Scientific Research
- ❑ Machine Engineering (2004@1, 2005@1)
- ❑ Management Science
- ❑ Material Flow
- ❑ Mathematics of Industrial Systems
- ❑ Mechatronics (2010@1)
- ❑ Naval Research Logistics
- ❑ Neurocomputing (2007@1, 2008@3)
- ❑ Networks
- ❑ OMEGA (2003@1, 2004@1, 2005@1)
- ❑ The Open Industrial and Manufacturing Engineering Journal (2008@1)
- ❑ OPSERCH
- ❑ Production and Operations Management
- ❑ R&D Management Journal (2005@1, 2007@1)
- ❑ Renewable Energy (2010@3, 2011@5, 2012@11, 2012@1, 2013@3, 2014@2, 2015@2, 2016@1)
- ❑ Research in Engineering Design (2005@1, 2006@1, 2007@1)
- ❑ Robotics and Computer Integrated Manufacturing

- ❑ SME Transactions on Robotics Research
- ❑ Sustainability (2015@1)
- ❑ West Indian Journal of Engineering
- ❑ Wind Energy (2009@1, 2010@2, 2013@1)

#### REVIEWER OF BOOKS FOR THE FOLLOWING PUBLISHERS:

- ❑ Addison-Wesley, New York
- ❑ Cambridge University Press, New York (1@2006)
- ❑ Chapman and Hall, UK
- ❑ CRC Press (1@2003, 1@2004, 1@2005, 1@2008)
- ❑ IEEE Press, Piscataway, NJ
- ❑ John Wiley, New York and London, UK (1@2002, 1@2006, 1@2007, 1@2008, 1@2012, 1@2013, 1@2014)
- ❑ R. D. Irwin, Homewood, IL
- ❑ Elsevier, New York (1@2003, 1@2004, 1@2016)
- ❑ Kluwer Academic Publishers (1@2003)
- ❑ McGraw Hill, New York (1@2003)
- ❑ Oxford University Press, New York (1@2003, 1@2004)
- ❑ Prentice Hall, Englewood Cliffs, NJ (1@2003)
- ❑ PWS KENT, Boston, MA
- ❑ Springer-Verlag, London, UK and New York (2@2004, 2@2005, 2@2006, 3@2007, 4@2008, 1@2010, 1@2102, 2@2012, 1@2013, 2@2015)
- ❑ Taylor and Francis (1@2008)

#### REVIEWER OF PAPERS FOR THE FOLLOWING CONFERENCES:

- ❑ Sixth Annual IEEE Green Technologies Conference, Corpus Christi, TX, April 2014.
- ❑ International Conference on Sensor Networks, SENSORNETS 2014, Lisbon, Portugal, January 2014.
- ❑ The Fourth International Conference on Internet Monitoring and Protection, ICIMP 2009, Venice, Italy, May 2009.
- ❑ 13<sup>th</sup> IFAC Symposium on Information Control in Manufacturing, INCOM '09, Moscow, Russia, June 2009.
- ❑ The 3<sup>rd</sup> International Workshop on Enterprise Integration, Interoperability and Networking, Monterrey, Mexico, November 2008.
- ❑ The International Conference IDMME – Virtual Concept 2008, Beijing, China, October 2008.
- ❑ 9<sup>th</sup> IFIP Working Conference on Virtual Enterprises, PRO-VE, Poznan, Poland, September 2008.
- ❑ 2008 International Symposium on Flexible Automation, Georgia Tech, Atlanta, GA, August 2008.
- ❑ IFIP International Conference on Advances in Production Management Systems, APMS 2007, Espoo, Finland, September 2008.
- ❑ The 17<sup>th</sup> IFAC World Congress, Seoul, Korea, July 2008.
- ❑ The 2<sup>nd</sup> International Workshop on Web and Pervasive Security, WPS'08 (in conjunction with IEEE PerCom 2008), Hong Kong, March 2008.
- ❑ 2007 International Conference on Hybrid Information Technology, ICHIT 2007, Cheju Island, Korea, November 2007.
- ❑ International Workshop on Service, Security and its Data Management for Ubiquitous Computing, SSDU-07, Nanjing, China, May 2007.
- ❑ International Conference on Industrial Engineering and Systems Management, Beijing, China, June 2007.
- ❑ 3<sup>rd</sup> International Conference Interoperability for Enterprise Software and Applications, I-ESA 2007, Funchal, Portugal, March 2007.
- ❑ KES Conference, Bournemouth, UK, October 2006.
- ❑ ASME IDETC/CIE 2006 Conferences, Philadelphia, PA, September 2006.
- ❑ APMS'2006 Working Conference on Lean Manufacturing, Wroclaw, Poland, September 2006.

- ❑ TMCE 2006 Symposium, Ljubljana, Slovenia, April 2006.
- ❑ ASME IDETC/CIE 2005 Conference, Long Beach, CA, September 2005.
- ❑ XVI<sup>th</sup> Workshop on Supervising and Diagnostics of Machining Systems, Karpacz, Poland, March 2005.
- ❑ The Eighth International Conference on Control, Automation, Robotics and Vision, ICARCV 2004, Kunming, P.R. China, December 2004.
- ❑ KES 2004, 8<sup>th</sup> International Conference on Knowledge-Based Intelligent Information & Engineering Systems, Wellington, New Zealand, September 2004.
- ❑ CE2004: The 11<sup>th</sup> ISPE International Conference on Concurrent Engineering: Research and Applications, Beijing, P.R. China, July 2004.
- ❑ 11<sup>th</sup> IFAC Symposium on Information Control Problems in Manufacturing, INCOM 2004, Salvador, Brazil, April 2004.
- ❑ International Information Systems Conference, Seattle, WA, September 2003.
- ❑ ASME Design Engineering Technical Conference, Chicago, IL, September 2003.
- ❑ IEEE R&A, Taipei, Taiwan, May 2003.
- ❑ International Conference on Production Systems Design, Supply Chain Management and Logistics, Szczecin, Poland, October 2002.
- ❑ SPIE Data Mining Conference, Orlando, FL, 2002.
- ❑ The Fourteenth International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems, International Society of Applied Intelligence (ISAI), Budapest, Hungary, June 2001.
- ❑ ASME Design Theory and Methodology Conference, 2001.
- ❑ IEEE CDC Conference, 2001.
- ❑ IEEE Robotics and Automation Conference, April 2001, Seoul, Korea.
- ❑ IEEE CDC Conference, 2000.
- ❑ ASME Computers in Engineering Conference, Nashville, TN, November 1999.
- ❑ ASME Design Theory and Methodology Conference, Nashville, TN, November 1999.
- ❑ 15<sup>th</sup> International Conference on CAD/CAM, Robotics and Factories of the Future, Aguas de Lindoia, Brazil, August 1999.
- ❑ International Conference on Industrial Engineering and Production Management, Glasgow, Scotland, July 1999.
- ❑ IEEE International Symposium on Assembly and Task Planning, ITSAP'99, Porto, Portugal, July 1999.
- ❑ SME Design Theory and Methodology Conference, Atlanta, GA, September 1998.
- ❑ Intelligent Manufacturing Systems Symposium, Sakarya University, Turkey, August 1998.
- ❑ 3<sup>rd</sup> IEEE/IFIP International Conference on Information Technology for Balanced Automation Systems in Manufacturing, Prague, Czech Republic, August 1998.
- ❑ INCOM'98 Symposium on Information Control in Manufacturing, Metz, France, June 1998.
- ❑ IEEE International Conference on Robotics and Automation, Leuven, Belgium, May 1998.
- ❑ International Conference on Industrial Engineering and Production Management, Lyon, France, November 1997.
- ❑ IFAC/IFIP Conference on Management and Control of Production and Logistics, Campinas, Brazil, August 1997.
- ❑ ASME Design Theory and Methodology Conference, Sacramento, CA, September 1997.
- ❑ ASME Computers in Engineering Conference, Sacramento, CA, September 1997.
- ❑ 4<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, IMS'97, Seoul, Korea, July 1997.
- ❑ Portland International Conference on Management of Engineering Technology, Portland, OR, July 1997.
- ❑ IEEE International Symposium on Assembly and Task Planning, Monterey, CA, July 1997.
- ❑ IEEE Conference on Robotics and Automation, Albuquerque, NM, May 1997.
- ❑ Sixth Industrial Engineering Research Engineering Conference, Miami Beach, FL, May 1997.
- ❑ ASME International Mechanical Engineering Conference, Atlanta, GA, November 1996.
- ❑ IFIP Advanced Production Management Conference, APMS'96, Kyoto, Japan, November 1996.
- ❑ IFAC Triennial World Congress, San Francisco, CA, November 1996.
- ❑ Workshop on Production Planning and Control, Mons, Belgium, September 1996.

- ❑ 2<sup>nd</sup> IFIP International Conference on the Design of Information and Command Infrastructure Systems, Eindhoven, The Netherlands, September 1996.
- ❑ ASME Design Theory and Methodology Conference, Irvine, CA, August 1996.
- ❑ IEEE Industrial Electronics Society Annual Conference, Taipei, Taiwan, July 1996.
- ❑ Fifth Industrial Engineering Research Engineering Conference, Minneapolis, MN, May 1996.
- ❑ IEEE Conference on Robotics and Automation, Minneapolis, MN, April 1996.
- ❑ ASME International Mechanical Engineering Congress and Conference, San Francisco, CA, November 1995.
- ❑ INRIA/IEEE Conference on Emerging Technologies and Factory Automation, Paris, France, October 1995.
- ❑ IEEE International Symposium on Assembly and Task Planning, Pittsburgh, PA, August 1995.
- ❑ 1995 ASME Computers in Engineering Conference, Boston, MA, September 1995.
- ❑ IEEE/ELCA/IFIP International Conference on Architecture and Design Methods for Balanced Automation Systems BASYS'95, Vitoria, Brazil, July 1995.
- ❑ Industrial Engineering and Production Management Conference IEPM'95, Marrakesh, Morocco, April 1995.
- ❑ IFIP Workshop on Reengineering the Enterprise, Galway, Ireland, March 1995.
- ❑ ASME Winter Annual Meeting, Chicago, IL, November 1994.
- ❑ ASME Computers in Engineering Conference, Minneapolis, MN, September 1994.
- ❑ ASME Design Automation Conference, Minneapolis, MN, September 1994.
- ❑ 10<sup>th</sup> ISPE/IFAC International Conference on CAD/CAM, Robotics, and Factories of the Future, CARs & FOF'94, Ottawa, Ontario, Canada, August 1994.
- ❑ 2<sup>nd</sup> IFAC/IFIP/IFORS Workshop on Intelligent Manufacturing Systems (IMS'94), Vienna, Austria, June 1994.
- ❑ IFIP WG-5.7 Workshop on Benchmarking Theory and Practice, Trondheim, Norway, June 1994.
- ❑ 1994 Industrial Engineering Research Conference, Atlanta, GA, May 1994.
- ❑ 1993 International Conference on Data and Knowledge Systems for Manufacturing and Engineering, Hong Kong, May 1994.
- ❑ 1993 ASME Winter Annual Meeting, New Orleans, LA, November 1993.
- ❑ 1993 ASME Design Automation Conference, Albuquerque, NM, September 1993.
- ❑ APMS'93, Athens, Greece, September 1993.
- ❑ IEEE Conference on Robotics and Automation, Atlanta, GA, May 1993.
- ❑ AIENG 92 Conference, University of Waterloo, Waterloo, Canada, July 1992.
- ❑ First IE Research Conference, Chicago, IL, May 1992.
- ❑ IEEE Computer Integrated Manufacturing Conference, Rensselaer Polytechnic Institute, Troy, NY, May 1992.
- ❑ ISRAM'92 International Symposium on Robotics and Manufacturing, Santa Fe, NM, November 1992.
- ❑ IMS'92 IFAC International Workshop on Intelligent Manufacturing Systems, Dearborn, MI, October 1992.
- ❑ CARs & FOF, 8th International Conference on CAD/CAM, Robotics and Factories of the Future, Metz, France, August 1992.
- ❑ ICOOMS'92 International Conference on Object Oriented Manufacturing Systems, Calgary, Alberta, Canada, May 1992.
- ❑ ASME/WAM Symposium on Design, Analysis, and Control of Manufacturing Cells, Atlanta, GA, December 1991.
- ❑ 2<sup>nd</sup> Annual Meeting of the Resources Management Association, Memphis, TN, May 1991.
- ❑ ASME Winter Annual Meeting, Dallas, TX, November 1990.
- ❑ IEEE CDC, 1990.
- ❑ IFIP/IFAC Conference on Production Management, Helsinki, Finland, August 1990.
- ❑ Artificial Intelligence in Engineering, Boston, Mass., August 1990.
- ❑ IFIP International Conference on Modeling the Innovation, Rome, Italy, March 1990.
- ❑ IEEE Conference on Robotics and Automation, 1990.

#### REVIEWER OF PROPOSALS FOR THE FOLLOWING FUNDING AGENCIES:

- ❑ American Association for the Advancement of Science (1@2011)

- ❑ Australian Research Council
- ❑ Belgian Research Council
- ❑ Brunei Science and Technology Research Fund, Brunei (1@2008)
- ❑ Carver Foundation
- ❑ Foundation for Research Development, South Africa
- ❑ Foundation for Polish Science, Poland (1@2008)
- ❑ German-Israeli Foundation
- ❑ Hong Kong Research Council, Hong Kong (1@2006, 4@2007, 4@2008, 3@2009, 7@2010, 5@2011, 4@2012, 5@2013, 10@2104)
- ❑ Hong Kong University of Science and Technology, Hong Kong (1@2003, 2@2007, 1@2008, 1@2010)
- ❑ Innovative Design and Manufacturing Research Centre, University of Bath, UK (1@2007)
- ❑ International Science Foundation, Washington, DC
- ❑ Irish Research Foundation(1@2012, 7@2014)
- ❑ Israel Science Foundation (1@2007, 1@2010)
- ❑ Israeli Ministry of Science, Technology and Space (1@2015)
- ❑ Kentucky Science and Engineering Foundation (2@2004, 1@2005)
- ❑ Louisiana Board of Regents (1@2005)
- ❑ Material Handling Research Center (Georgia Institute of Technology)
- ❑ National Board of Science and Technology, Ireland
- ❑ National Institutes of Health (1@2004)
- ❑ National Research Foundation, Singapore (1@2008)
- ❑ National Science Foundation (5 panels @2003, 5 panels@2004, 1 panel@2005, 6 panels @2006, 2 panels@2007, 2 panels@2008, 2 panels@2009, 1 panel@2010, 2 panels@2011, 2 panels@2012, 2 panels@2013, 2 panels@2014)
- ❑ Natural Sciences and Engineering Research Council of Canada (2@2004, 1@2005, 1@2006)
- ❑ Netherlands Research Council for Applied and Technical Sciences (1@2014)
- ❑ Polish Science Foundation (2@2008, 2@20011, 3@2012)
- ❑ Portugese Research Foundation (1@2012)
- ❑ Singapore Science Foundation (1@2008)
- ❑ State of Kansas (1@2012)
- ❑ State of Kentucky (1@2007)
- ❑ State of Maryland (1@2010, 1@20011, 1@2012)
- ❑ Swiss Federal Institute of Technology, Zurich, Switzerland (1@2003)
- ❑ Technology Foundation, Utrecht, Netherlands (1@2015)
- ❑ U.S. Civilian Research & Development Foundation (1@2009))

#### GUEST EDITOR FOR THE FOLLOWING JOURNALS:

- ❑ Computers in Electrical Engineering
- ❑ European Journal of Operational Research
- ❑ IEEE Computational Intelligence Magazine, Vol. 6, No. 3, 2011 (with H. Haibo); Computational Intelligence in Smart Grid
- ❑ IEEE Systems Journal, Vol. 6, No. 2, 2012 (with L.-F. Wang and C. Singh); Integration of Intermittent Renewable Energy resources into Power Grid
- ❑ IEEE Transactions on Components, Hybrids, and Manufacturing Technology (with H. Li, Texas Tech University and K. Young, AT&T)
- ❑ International Journal of Material Flow
- ❑ Information Processing and Operations Research
- ❑ International Journal of Production Research, 2006 (with J. Feng)

#### MEMBERSHIP OF CONFERENCE PROGRAM AND ORGANIZING COMMITTEES

- ❑ Member of the International Program Committee, The 12<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, IMS 2016, Austin, Texas, December 2016.

- ❑ Member of the Program Committee, The 8<sup>th</sup> Conference on ENTERprise Information Systems: Aligning Business, Technology and People, CENTERIS 2016, Portugal, October, 2016.
- ❑ Member of the Program Committee, The 2016 International Conference on Decision Making and Optimization in Engineering, Economics and Social Sciences, DMO 2016, Ohio University, Athens, Ohio, September 2016.
- ❑ Member of the Program Committee, The 2016 International Conference on Modeling, Optimization & Simulation, MOSIM, Montreal, Canada, August 2016.
- ❑ Member of the Technical Program Committee, The 2016 International Conference on Computer Science and Artificial Intelligence, CSAI 2016, Guilin, China, August 2016.
- ❑ Member of the Program Committee, 3<sup>rd</sup> International Workshop on Computational Energy Management in Smart Grids, CEMiSG2016, Vancouver, Canada, July 2016.
- ❑ Member of the Program Committee, The International Conference on Artificial Intelligence and Computer Engineering, AICE2016, Wuhan, China, June 2016.
- ❑ Member of the Program Committee, The 2016 International Symposium on Flexible Automation, ISFA 2016, Cleveland, Ohio, June 2016.
- ❑ Member of the Program Committee, 8<sup>th</sup> IFAC Conference on Manufacturing Modelling, Management and Control, MIM 2016, Troyes, France, June 2016.
- ❑ Member of the Program Committee, The International Conference on Information, Management Science and Applications 2016, ICIMSA 2016, Jeju Island, Korea, May 2016.
- ❑ Member of the Program Committee, The Eleventh International Conference on Internet Monitoring and Protection, ICIMP 2016, Valencia, Spain, May 2016.
- ❑ Member of the Program Committee, The Eighth International Conference on Information, Process, and Knowledge Management, eKNOW 2016, Venice, Italy, April 2016.
- ❑ Member of the Program Committee, The Ninth International Conference on Advances in Computer-Human Interactions, ACHI 2016, Venice, Italy, April 2016.
- ❑ Member of the Program Committee, International Conference on Internet of Things and Cloud Computing, Cambridge, United Kingdom, March 2016.
- ❑ Member of the Program Committee, 5<sup>th</sup> International Conference on Sensor Networks, SENSORNETS 2016, Lisbon, Portugal, February 2016.
- ❑ Member of the Advisory Committee, International Conference on Innovations in Computational Intelligence and Its Applications, ICICI 2016, R. L. Jalappa Institute of Technology, Doddaballapur, Bengaluru, Karnataka, India, January 2016.
- ❑ Member of the Technical Program Committee, 2015 International Conference on Applied Science and Technology, ICAST 2015, Sanya, China, December 2015.
- ❑ Member of the Technical Program Committee, 2<sup>nd</sup> Asia-Pacific World Congress on Computer Science and Engineering 2015, APWConCSE 2015, Fiji, December 2015.
- ❑ Member of the Program Committee, International Conference on Optimization in Electrical Engineering, OEE2015, Tehran, Iran, December 2015.
- ❑ Member of the Program Committee, World Conference on Industrial Automation, Beijing, China, November 2015.
- ❑ Member of the Program Committee, The 17<sup>th</sup> International DSM Conference, Fort Worth, Texas, USA, November 2015.
- ❑ Member of the International Program Committee, International Conference on Knowledge Discovery and Information Retrieval, KDIR 2015, Lisbon, Portugal, November 2015.
- ❑ Member of the Program Committee, The 11th International Conference on Artificial Intelligence Applications and Innovations, AIAI 2015, Bayonne/Biarritz, France, September 2015.
- ❑ Member of the Program Committee, IFIP Working Conference on Advances in Production Management Systems, APMS 2015, Tokyo, Japan, September 2015.
- ❑ Member of the Program Committee, International Conference in Intelligent Information Processing, Security and Advanced Communication, IPAC 2015, Algeria, August 2015.
- ❑ Member of the Program Committee, The 9<sup>th</sup> European Conference on Data Mining, ECDM'15, Gran Canaria, Spain, July 2015.
- ❑ Member of the Technical Program Committee, 2<sup>nd</sup> International Workshop on Computational Energy Management in Smart Grids, CEMiSG2015, Killarney, Ireland, July 2015.
- ❑ Member of the Program Committee, The Third International Conference Graph Modelling in Engineering, GME'2015, Bielsko-Biala, Poland, June 2015.

- ❑ Member of the International Program Committee, 15th IFAC/IEEE/IFIP/IFORS Symposium on Information Control Problems in Manufacturing, INCOM 2015, Ottawa, Canada, May 2015.
- ❑ Member of the Program Committee, International Conference on Information Visualization Theory and Applications, IVAPP 2015, Berlin, Germany, March 2015.
- ❑ Member of the Program Committee, 4<sup>th</sup> International Conference on Sensor Networks, SENSORNETS 2015, Angers, France, February 2015.
- ❑ Member of the Program Committee, The 2015 International Conference on Advanced Computing and Services, ACS-15, Jeju, Korea, February 2015.
- ❑ Member of the Organizing Committee, The 6th FTRA International Conference on Computer Science and its Applications, CSA-14, Guam, December 2014.
- ❑ Member of the Program Committee, The Asia-Pacific World Congress on Computer Science and Engineering, APWC on CSE, Plantation Island, Fuji, November 2014.
- ❑ Member of the Program Committee, 10<sup>th</sup> International Conference on Modeling, Optimization, and Simulation, MOSIM'14, Nancy, France, November 2014.
- ❑ Member of the Program Committee, International Conference on Knowledge Discovery and Information Retrieval, KDIR 2014, Rome, Italy, October 2014.
- ❑ Member of the Program Committee, The International Workshop on Social Network Analysis and Mining using Digital Technology, SNAM-DT 2013 in conjunction with the 9<sup>th</sup> International Conference on Future Networks and Communications, FNC 2014, Niagara Falls, Ontario, Canada, August 2014.
- ❑ Member of the Program Committee, 1<sup>st</sup> International Workshop on Computational Energy Management in Smart Grids, CEMiSG 2014, The 2014 IEEE World Congress on Computational Intelligence, WCCI 2014, Beijing, China, July 2014.
- ❑ Member of the Program Committee, 16<sup>th</sup> International DSM Conference, Paris, France, July 2014.
- ❑ Member of the Program Committee, The 2014 International Symposium on Flexible Automation, ISFA 2014, Awaji-Island, Hyogo, Japan, July 2014.
- ❑ Member of the Technical Committee, The 2014 International Joint Conference on Neural Networks, IJCNN 2014, Beijing, China, July 2014.
- ❑ Member of the Program Committee, 2014 Sixth Annual IEEE Green Technologies Conference, Corpus Christi, TX, April 2014.
- ❑ Member of the Program Committee, International Conference on Operations Research and Enterprise Systems, ICORES, Angres, France, March 2014.
- ❑ Member of the Organizing Committee, 25<sup>th</sup> Jubilee CIRP Sponsored Conference on Supervising and Diagnosing Machining of Systems, Real and Virtual Manufacturing, Karpacz, Poland, March 2014.
- ❑ Member of the International Program Committee, International Conference on Sensor Networks - SENSORNETS 2014, Lisbon, Portugal, January 2014.
- ❑ Member of the International Program Committee, International Conference on Information Visualization Theory and Applications, IVAPP 2014, Lisbon, Portugal, January 2014.
- ❑ Member of the Program Committee, IFIP International Conference on Advances in Production Management Systems, APMS 2013, State College, PA, September 2013.
- ❑ Member of the Scientific Committee, The 15<sup>th</sup> International Dependency and Structure Modeling (DSM) Conference, Melbourne, Australia, August 2013.
- ❑ Member of the Program Committee, The International Conference on Green Energy and Technology, ICGET, University of Kitakyushu, Fukuoka, Japan, August 2013.
- ❑ Member of the Technical Program Committee, The 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2013, Niagara Falls, Ontario, Canada August 2013.
- ❑ Member of the Program Committee, 2013 IEEE International Conference on Computational Intelligence and Virtual Environment for Measurement Systems and Applications, IEEE CIVEMSA 2013, Milan, Italy, July 2013.
- ❑ Member of the International Program Committee, IFAC Conference on Manufacturing Modelling, Management, and Control, MIM'2013, Saint-Petersburg, Russia, June 2013.
- ❑ Member of the Program Committee, New PROLAMAT 2013 Conference, Project Research On Leading-edge Applications and Methods for Applied Information and Technology, Dresden, Germany Dresden, Germany, June 2013.

- ❑ Member of the Program Committee, The Eighth International Conference on Internet Monitoring and Protection, ICIMP 2013, Rome, Italy, June 2013.
- ❑ Member of the International Advisory Committee, International Conference on Sustainable Manufacturing and Operations Management, ISOM 2013, University of Mauritius, Mauritius, June 2013.
- ❑ Member of the International Program Committee, The 11<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, IMS'13, São Paulo, Brazil, May 2013.
- ❑ Member of the Program Committee, The Eighth International Conference on Digital Telecommunications, ICDT 2013, Venice, Italy, March 2013.
- ❑ Member of the International Advisory Committee, 3rd International Conference on Production and Industrial Engineering, CPIE 2013, Jalandhar, India, March 2013.
- ❑ Member of the Program Committee, MASAUM International Conference on Management Sciences 2012, MICMS '12, Dubai, UAE, December 2012.
- ❑ Member of the Program Committee, International Conference on Advances in Mechanical Engineering and Its Interdisciplinary Areas, Jadavpur University, Kolkata, India, December 2012.
- ❑ Member of the Technical Program Committee, 2012 International Power and Energy Engineering Conference, IPEEC 2012, Wuhan, China, December 2012.
- ❑ Member of the Technical Committee, First International Online Conference on Management Sciences 2012, IOC-MS '12, Dubai, UAE, November 2012.
- ❑ Member of the Program Committee, 13th IFIP Working Conference on Virtual Enterprises, PRO-VE'12, Bournemouth, UK, October 2012.
- ❑ Member of the Program Committee, IFIP Working Group 5.7 on Advances in Production Management Systems on Competitive Manufacturing for Innovative Products and Services, Rhodes Island, Greece, September 2012.
- ❑ Member of the Scientific Committee, The 14<sup>th</sup> International Dependency and Structure Modeling (DSM) Conference, Kyoto, Japan, September 2012.
- ❑ Member of the Program Committee, International Symposium on Service Sciences, Leipzig, Germany, September 2012.
- ❑ Member of the Program Committee, 23<sup>rd</sup> International Computer-Aided Production Engineering Conference, CAPE23, Hong Kong, August 2012.
- ❑ Member of the Program Committee, The 2012 International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2012, Istanbul, Turkey, August 2012.
- ❑ Member of the International Program Committee of the 9<sup>th</sup> International Conference of Modeling, Optimization and Simulation, MOSIM 2012, Bordeaux, France, June 2012.
- ❑ Member of the Scientific Committee, International Conference Management of Technology – Step to Sustainable Production, MOTSP 2012, Zadar, Croatia, June 2012.
- ❑ Member of Program Committee, The 2012 International Symposium on Flexible Automation, ISFA 2012, St. Louis, Missouri, June 2012.
- ❑ Member of the Program Committee, The Seventh International Conference on Internet Monitoring and Protection, ICIMP 2012, Stuttgart, Germany, May 2012.
- ❑ Member of the International Advisory Committee, the 14th IFAC Symposium on Information Control Problems in Manufacturing, INCOM'12, Bucharest, Romania, May 2012.
- ❑ Member of the Program Committee, The Fourth International Conference on Information, Process, and Knowledge Management, eKNOW 2012, Valencia, Spain, February 2012.
- ❑ Member of the Advisory Committee, International Multi-Disciplinary Conference on Solar Energy, India, February 2012.
- ❑ Member of the Program Committee, The Fifth International Conference on Advances in Computer-Human Interactions, ACHI 2012, Valencia, Spain, February 2012.
- ❑ Member of the Program Committee, The Sixth International Conference on Digital Society, ICDS 2012, Valencia, Spain, February 2012.
- ❑ Member of the International Advisory Committee, International Conference on Supply Chain and Manufacturing Management, Indian Institute of Technology, Kharagpur, India, December 2011.
- ❑ Member of the Program Committee, The International Workshop on Knowledge Acquisition, Reuse and Evaluation, KARE 2011, Dijon, France, December 2011.



- ❑ Member of the Advisory Conference Committee, 2011 FTRA International Symposium on Advances in Cryptography, Security and Applications for Future Computing, ACSA-11, December 2011, Jeju, Korea.
- ❑ Member of the Program Committee, 12<sup>th</sup> IFIP Working Conference on Virtual Enterprises, PRO-VEE'11, October 2011, São Paulo, Brazil.
- ❑ Member of the Technical Program Committee, PRO-VE'11, São Paulo, Brazil, October 2011.
- ❑ Member of the Scientific Committee, 13<sup>th</sup> International Dependency and Structure Modeling (DSM) Conference, Kyoto, Japan, September 2011.
- ❑ Member of the Track Program Committee, Automated Manufacturing Systems, The 16<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation, ETFA'2011, Toulouse, France, September 2011.
- ❑ Member of the Technical Program Committee, The 3<sup>rd</sup> International Symposium on Services Science, ISSS 2011, Szczecin, Poland, September 2011.
- ❑ Member of the Technical Program Committee, The Third International Conference on Information, Process, and Knowledge Management, eKNOW 2011, Gosier, Guadeloupe, France, February 2011.
- ❑ Member of the Technical Program Committee, The Fourth International Conference on Advances in Computer-Human Interactions, ACHI 2011, Gosier, Guadeloupe, France, February 2011.
- ❑ Member of the Technical Program Committee, Annual International Conference on Web Technologies and Internet Applications, WebTech, January 2011, Singapore.
- ❑ Member of the Program Committee, The Sixth International Conference on Internet Monitoring and Protection, ICIMP 2011, St. Maarten, The Netherlands Antilles Committee, March 2011.
- ❑ Member of the Program Committee, The Third International Conference on Information, Process, and Knowledge Management, eKNOW 2011, Gosier, Guadeloupe, France, February 2011.
- ❑ Member of the Program Committee, The Fourth International Conference on Advances in Computer-Human Interactions, ACHI 2011, Gosier, Guadeloupe, France, February 2011.
- ❑ Member of the Program Committee, International Symposium on Advances in Cryptography, Security and Applications for Future Computing, ACSA-10, Seoul, Korea, December 2010.
- ❑ Member of the Technical Committee, The 5<sup>th</sup> International Conference for Internet Technology and Secured Transactions, ICITST-2010, London, UK, November 2010.
- ❑ Member of the Program Committee, Sixth International Conference on Advanced Data Mining and Applications, ADMA 2010, November 2010, Chongqing, China.
- ❑ Member of the Program Committee, The 2<sup>nd</sup> International Conference on Intelligent Networking and Collaborative Systems, INCoS 2010, Thessaloniki, Greece, November 2010.
- ❑ Member of the Program Committee, The 11<sup>th</sup> IFIP Working Conference on Virtual Enterprises, PRO-VE, PRO-VE, St Etienne, France, October 2010.
- ❑ Member of the International Program Committee, IFIP International Conference on Advances in Production Management Systems, APMS 2010, Cernobbio, Italy, October 2010.
- ❑ Member of the Scientific Committee, International Conference on Integrated Design and Manufacturing in Mechanical Engineering, IDMME, Bordeaux, France, October 2010.
- ❑ Member of the Program Committee, 7<sup>th</sup> International Symposium on Intelligent Manufacturing Systems, IMS 2010: Progress in Intelligent Technologies for Society, Sarajevo, Bosnia Herzegovina, September 2010.
- ❑ Member of the International Program Committee, Conference on Advances in Social Networks Analysis and Mining, ASONAM 2010, Odense, Denmark, August 2010.
- ❑ Member of the Program Committee, The 2<sup>nd</sup> International Conference on Information Technology Convergence and Services, ITCS-10, Cebu, Philippines, August 2010.
- ❑ Member of the Scientific Committee, 12<sup>th</sup> International Dependency and Structure Modeling (DSM) Conference, Cambridge, UK, July 2010.
- ❑ Member of the International Program Committee, The 10<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, IMS'10 - When Biology Meets Manufacturing, Lisbon, Portugal, July 2010.
- ❑ Member of the International Advisory Committee, The 5<sup>th</sup> International Conference on Green Energy Technology & Management, Changhua, Taiwan, June 2010.
- ❑ Member of the Program Committee, The 9<sup>th</sup> IFIP International Conference on Information Technology for Balanced Automation Systems, BASYS, Valencia, Spain, June 2010.
- ❑ Member of the Scientific Committee, The 8<sup>th</sup> International Conference on Modeling, Optimization, and systems Simulation, MOSIM, Hammamet, Tunisia, May 2010.

- ❑ Member of the Program Committee, The Fifth International Conference on Internet Monitoring and Protection, ICIMP 2010, Spain, May 2010.
- ❑ Member of the International Program Committee, The Fourth International Conference on Digital Society, ICDS 2010, St. Maarten, Netherlands Antilles, February 2010.
- ❑ Member of the International Program Committee, The Second International Conference on Information, Process, and Knowledge Management, eKNOW 2010, St. Maarten, Netherlands Antilles, February 2010.
- ❑ Member of the Program Committee, The 1<sup>st</sup> International Conference on Multimedia, Computer Graphics and Broadcasting, MulGraB 2009, Jeju, Korea, December 2009.
- ❑ Member of the Steering Committee, The 2<sup>nd</sup> International Conference on Computer Science and its Applications, CSA-09, Jeju, Korea, December 2009.
- ❑ Member of the International Advisory Committee, The International Conference on Cooperation and Promotion of Information Resources in Science and Technology, COINFO, Beijing, China, November 2009.
- ❑ The International Conference on Intelligent Networking and Collaborative Systems, INCoS 2009, Barcelona, Spain, November 2009.
- ❑ Member of the Technical Program Committee, International Conference on Research and Practical Issues of EIS, CONFENIS-09, Szechenyi Istvan University, Győr, Hungary, October 2009.
- ❑ Member of the International Program Committee, The 10<sup>th</sup> IFIP Working Conference on Virtual Enterprises, PRO-VE, Thessaloniki, Greece, October 2009.
- ❑ Member of the International Program Committee, 13<sup>th</sup> International Conference on Knowledge-Based and Intelligent Information & Engineering Systems, KES2009, University of Chile, Santiago, Chile, September 2009.
- ❑ Member of the International Program Committee, IFIP International Conference on Advances in Production Management Systems: Production Management Systems: New Challenges, New Approaches, APMS 2009, Bordeaux, France, September 2009.
- ❑ Member of the Program Committee of the Automated Manufacturing Systems Track, The 14<sup>th</sup> IEEE International Conference on Emerging Technologies and Factory Automation, ETFA 2009, Palma de Mallorca, Spain, September 2009.
- ❑ Member of the Program Committee of the 2009 International Conference on Advanced Data Mining and Applications, ADMA 2009, Beijing, August 2009.
- ❑ Member of the Scientific Committee, The 13<sup>th</sup> International Conference on Engineering Design, ICED'09, Stanford University, Stanford, CA, August 2009.
- ❑ Member of the Technical Program Committee, The International Conference on Advances in Social Networks Analysis and Mining, ASONAM09, Athens, Greece, July 2009.
- ❑ Member of the International Program Committee, 13<sup>th</sup> IFAC Symposium on Information Control Problems in Manufacturing, INCOM'09, Moscow, Russia, June 2009.
- ❑ Member of the International Program Committee, 5<sup>th</sup> International Working Conference on Total Quality Management – Advanced and Intelligent Approaches, Belgrade, Serbia, June 2009.
- ❑ Member of the Program Committee, The Fourth International Conference on Internet Monitoring and Protection, ICIMP 2009, Venice, Italy, May 2009.
- ❑ Member of the Technical Committee of the 13<sup>th</sup> Pacific-Asia Conference on Knowledge Discovery and Data Mining, PAKDD-09, Bangkok, Thailand, April 2009.
- ❑ Member of the Technical Program Committee, The 2<sup>nd</sup> International Conference on Industrial Informatics and Systems Engineering, IISE 2009, Leipzig, Germany, March 2009.
- ❑ Member of the Program Committee, First International Symposium on Services Science, ISSS'09, Leipzig, Germany, March 2009.
- ❑ Member of the Technical Program Committee of the 3<sup>rd</sup> IEEE International Workshop on Web and Pervasive Security, WPS 2009, Dallas, TX, March 2009.
- ❑ Member of the Program Committee, The International Conference on Information, Process, and Knowledge Management, eKNOW 2009, Cancun, Mexico, February 2009.
- ❑ Member of the International Advisory Committee, Symposium on Group Technology and Cellular Manufacturing, GT/CM 2009, February 2009, Kitakyushu, Japan.
- ❑ Member of the Program Committee, The Third International Conference on Digital Society, ICDS 2009, Cancun, Mexico, February 2009.

- ❑ Member of the Program Committee, The Second International Conferences on Advances in Computer-Human Interactions, ACHI 2009, Cancun, Mexico, February 2009.
- ❑ Member of the Program Advisory Committee of TRUST-08 Symposium held in conjunction with EUC2008, Sanghai, China, December 2008.
- ❑ Member of the International Program Committee, Intelligent Manufacturing Systems Symposium - Features, Strategies, and Innovation, Ankara, Turkey, October 2008.
- ❑ Member of the International Program Committee, The International Conference IDMME – Virtual Concept 2008, Beijing, China, October 2008.
- ❑ Member of the International Program Committee, 9<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, IMS 2008, Szczecin, Poland, October 2008.
- ❑ Member of the International Program Committee, The Iberoamerican Conference on Artificial Intelligence, Iberamia-08, Lisbon, Portugal, October 2008.
- ❑ Member of the International Program Committee, IFIP Workshop on Advances in Production Management Systems, APMS 2008, Helsinki University of Technology (TKK), Espoo, Finland, September 2008.
- ❑ Member of the International Program Committee, 8<sup>th</sup> IFIP Working Conference on Virtual Manufacturing Enterprises, PRO-VE, Poznan, Poland, September 2008.
- ❑ Member of the International Program Committee, The Fifth International Conference of Applied Mathematics and Computing, Plovdiv, Bulgaria, August 2008.
- ❑ Member of the International Program Committee, 2008 International Conference on Convergence & Hybrid Information Technology, ICHIT'08, Daejeon, Korea, August 2008.
- ❑ Member of the International Scientific Committee of the International Conference on Digital Factory, ICDF 2008, Coimbatore, India, August 2008.
- ❑ Member of the Program Committee, The 4<sup>th</sup> International Conference on Advanced Data Mining and Applications, ADMA 08, July 2008, Chengdu, China.
- ❑ Member of the International Program Committee, The First International Conference on Power Control and Optimization, Chiang Mai, Thailand, July 2008.
- ❑ Member of the International Program Committee, The 2008 Conference of Systemics and Informatics World Congress, SIWN 2008, Glasgow, UK, July 2008.
- ❑ Member of the International Scientific Committee, The 14<sup>th</sup> International Conference on Concurrent Enterprising, Lisbon, Portugal, June 2008.
- ❑ Member of the Program Committee, The 2008 International Symposium on Flexible Automation, ISFA (formerly Japan-USA Symposium on Flexible Automation), Atlanta, GA, June 2008.
- ❑ Member of the Program Committee, The Third International Conference on Digital Telecommunications, ICDT 2008, Bucharest, Romania, July 5 2008
- ❑ Member of the Program the 2<sup>nd</sup> International Workshop on Web and Pervasive Security, WPS2008, Hong Kong, March 2008.
- ❑ Member of the International Program Committee, The Second International Conference on the Digital Society, ICDS 2008, St. Luce, Martinique, February 2008.
- ❑ Member of the Program Committee, The International Conference on Advances in Computer-Human Interactions, ACHI 2008, St. Luce, Martinique, February 2008.
- ❑ Member of the International Program Committee, 3<sup>rd</sup> Indian International Conference on Artificial Intelligence, IICAI-07, Pune, India, December 2007.
- ❑ Member of the Program Committee, 2<sup>nd</sup> International Workshop on Trustworthiness, Reliability and Services in Ubiquitous and Sensor Networks, TRUST 2007, Taiwan, December 2007.
- ❑ International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering, CIS2E 07, University of Bridgeport, Bridgeport, CT, December 2007.
- ❑ Member of the Program Committee, IFAC Workshop on Manufacturing Modeling, Management and Control, MIM 2007, Budapest, Hungary, November 2007.
- ❑ Member of the Technical Program Committee, 2007 International Conference on Hybrid Information Technology, ICHIT 2007, Cheju Island, Korea, November 2007.
- ❑ Member of the International Program Committee, 2<sup>nd</sup> IFIP TC8 International Conference on Enterprise Information Systems, CONFENIS 2007, Beijing, China, October 2007.
- ❑ International Liaison, The 2007 International Conference on Intelligent Pervasive Computing, IPC-07, Jeju Island, Korea, October 2007.

- ❑ Member of the International Program Committee, 4<sup>th</sup> IFAC Conference on Management and Control of Production and Logistics, MCPL'2007, Sibiu, Romania, September 2007.
- ❑ Member of the Technical Program Committee, Third International Conference on Advanced Data Mining and Applications, ADMA07, Harbin, China, August 2007.
- ❑ Member of the Technical Program Committee, International Conference on Advances in Manufacturing Engineering, ICAME – 2007, Manipal, Karnataka, India, August 2007.
- ❑ Member of the International Program Committee, Special Session on Hybrid Intelligent Computing and its Applications, ICNC '07, Hainan University, China, August 2007.
- ❑ Member of the International Program Committee, The First International Conference on Global Defense and Business Continuity, ICGD&BC 2007, San Jose, CA, July 2007.
- ❑ Member of the International Program Committee, Industrial Engineering and Systems Management Conference, IESM'07, Beijing, China, June 2007.
- ❑ Member of the International Program Committee, 4<sup>th</sup> International Conference on Total Quality Management – Advanced and Intelligent Approaches, Belgrade, Serbia, May 2007.
- ❑ The 2007 International Workshop on Service, Security and its Data Management Technologies in Ubi-Com, SSDU-07, Nanjing, China, May 2007.
- ❑ Member of the Program Committee, 2007 International Conference on Multimedia and Ubiquitous Engineering, MUE 2007, Seoul, Korea, April 2007.
- ❑ Member of the International Program Committee, Third International Conference on Interoperability of Enterprise Systems and Applications, I-ESA'07, Funchal, Madeira, March 2007.
- ❑ Member of the Technical Program Committee, XVIII Workshop on Supervising and Diagnostics of Machining Systems, Karpacz, Poland, March 2007.
- ❑ Member of the International Program Committee, International Workshop on Information and Knowledge Management, EKNOW 2007, Guadeloupe, French Caribbean, January 2007.
- ❑ Member of the Program Committee, IEEE International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering, CIS2E 06, Bridgeport, CT, December 2006.
- ❑ Member of the Technical Program Committee, 2006 International Conference on Hybrid Information Technology, Cheju Island, Korea, November 2006.
- ❑ Member of the International Program Committee, The 10<sup>th</sup> International Conference on Knowledge Based and Intelligent Information & Engineering Systems, KES2006, Bournemouth, United Kingdom, October 2006.
- ❑ Member of the Technical Advisory Committee, International Manufacturing Leaders Forum, IMLF 2005, Taipei, Taiwan, October 2006.
- ❑ Member of the Technical Program Committee, APMS'2006: Lean Business System and Beyond, Wroclaw, Poland, October 2006.
- ❑ Member of the Program Committee, 13<sup>th</sup> ISPE International Conference on Concurrent Engineering: Research and Applications, Sophia Antipolis, France, September 2006.
- ❑ Member of the Program Committee, The 6<sup>th</sup> WSEAS International Conference on Distance Learning and Web Engineering, DIWEB '06, Lisbon, Portugal, September 2006.
- ❑ Member of the International Program Committee, 5<sup>th</sup> International Symposium on Robotics and Automation, ISRA-2006, Hgo, Mexico, August 2006.
- ❑ Member of the Program Committee, the Second International Conference on Advanced Data Mining and Applications, ADMA06, Xi'an, China, August 2006.
- ❑ Member of the International Program Committee of the International Symposium on Flexible Automation, ISFA, Osaka, Japan, July 2006.
- ❑ Member of the International Scientific Committee, International Conference in Global Manufacturing and Innovation: An Advanced Optimization Technology Approach, Coimbatore, India, July 2006.
- ❑ Member of the International Program Committee, International Conference Computes in Industrial Engineering, Taipei, Taiwan, June 2006.
- ❑ Member of International Advisory Board, 5<sup>th</sup> International Conference on Computational Intelligence and Manufacturing Systems, Sakarya, Turkey, May 2006.
- ❑ Member of the International Program Committee, 12<sup>th</sup> IFAC Symposium on Information Control Problems in Manufacturing, INCOM'06, Saint Etienne, France, May 2006.
- ❑ Member of the International Program Committee, The TC8 IFIP International Conference on Research and Practical Issues of Enterprise Information Systems, CONFENIS 2006, Vienna, Austria, April 2006.

- ❑ Member of the International Program Committee of the Symposium on Tools and Methods of Competitive Engineering, Ljubljana, Slovenia, April 2006.
- ❑ Member of the International Program Committee of I-ESA'2006, The 2<sup>nd</sup> International Conference on Interoperability of Enterprise Software and Applications, Bordeaux, France, March 2006.
- ❑ Member of the Technical Program Committee, XVII Workshop on Supervising and Diagnostics of Machining Systems, Karpacz, Poland, March 2006.
- ❑ Member of the Technical Program Committee, IEEE International Conference on Industrial Electronics, Technology & Automation (IETA 05) (a part of CISSE 05), December 2005.
- ❑ Associate Editor, Web-based Information Systems and E-Commerce Track, ICIS2005, Las Vegas, NV, December 2005.
- ❑ Member of the Program Committee, KES 2005, 9<sup>th</sup> International Conference on Knowledge-Based Intelligent Information & Engineering Systems, Melbourne, Australia, September 2005.
- ❑ Member of the Program Committee, International Conference on Manufacturing Systems Development: Industry Expectations, Wroclaw University of Technology, Wroclaw, Poland, September 2005.
- ❑ Member of the Program Committee, International Conference on Engineering Education, Crete, Greece, September 2005.
- ❑ Member of the Program Committee, International Conference on Logistics and Supply Chain Management 2005, LSCM2005, Hong Kong, August 2005.
- ❑ Member of the International Program Committee, International Conference of Advanced Data Mining and Applications 2005, ADMA2005, Wuhan, China, July 2005.
- ❑ Member of the Program Committee, 12<sup>th</sup> ISPE International Conference on Concurrent Engineering: Research and Applications, Ft Worth, TX, July 2005.
- ❑ Member of the Program Committee, International CAD Conference, CAD'05, Bangkok, Thailand, June 2005.
- ❑ Member of the Program Committee, International Conference on Industrial Engineering and Systems Management - IESM'05, Marrakech, May 2005.
- ❑ Member of the International Program Committee, 11<sup>th</sup> International Conference on Industrial Engineering and Engineering Management, Shenyang, China, April, 2005.
- ❑ Member of the International Technical Advisory Committee, International Manufacturing Leaders Forum 2004, IMLF-2004, Kangaroo Island, South Australia, Australia, March 2005.
- ❑ Member of the International Program Committee, XVI<sup>th</sup> Workshop on Supervising and Diagnostics of Machining Systems, Karpacz, Poland, March 2005.
- ❑ Member of the Program Committee, International Conference on Interoperability Research for Networked Enterprises Applications and Software, INTEROP-ESA'2005, Geneva Switzerland, February 2005.
- ❑ Member of the International Program Committee, DAAAM Symposium on Intelligent Manufacturing and Automation: Globalization, Technology, Man, and Nature, Vienna, Austria, November 2004.
- ❑ Member of the Program Committee, SPIE Intelligent Systems in Design and Manufacturing VI, Philadelphia, PA, October 2004.
- ❑ Member of the Program Committee, International Symposium on Robotics and Automation, ISRA'2004, Queretaro, Mexico, August 2004.
- ❑ Member of the International Program Committee, IFAC Workshop on Discrete Event Systems, WODES'04, Reims, France, September 2004.
- ❑ Member of the Program Committee, KES 2004, 8<sup>th</sup> International Conference on Knowledge-Based Intelligent Information & Engineering Systems, Wellington, New Zealand, September 2004.
- ❑ Member of the Program Committee, The2 004 Japan-USA Symposium on Flexible Automation, Denver, CO, July 2004.
- ❑ Member of the International Program Committee, International Conference on Concurrent Engineering: Research and Applications, Beijing, China, July 2004.
- ❑ Member of the Scientific Committee of the MML 2004 – Mathematical Methods for Learning: Advances in Data Mining and Knowledge Discovery Conference, Lake Como, Italy, June 2004.
- ❑ Member of the International Organizing Committee, 5<sup>th</sup> International Conference on Integrated Design and Manufacturing in Mechanical Engineering, Bath, UK, April 2004.
- ❑ Member of the International Program Committee, Fifth International Symposium on Tools and Methods of Competitive Engineering, TMCE 2004, Lausanne, Switzerland, April 2004.

- ❑ Member of the International Program Committee, 11<sup>th</sup> IFAC Symposium on Information Control Problems in Manufacturing, INCOM 2004, Salvador, Brazil, April 2004.
- ❑ Member of the International Program Committee, XV<sup>th</sup> Workshop on Supervising and Diagnostics of Machining Systems, Karpacz, Poland, March 2004.
- ❑ Member of the Scientific Committee, IADIS WWW/Internet 2003 International Conference, Algarve, Portugal, November 2003.
- ❑ Member of the Program Committee, WG 5.7 Working Conference, Karlsruhe, Germany, October 2003.
- ❑ Member of the Program Committee, 14<sup>th</sup> International DAAAM Symposium on Intelligent Manufacturing and Automation, Sarajevo, Bosnia and Herzegovina, October 2003.
- ❑ Member of the International Program Committee, IFAC Workshop on Intelligent Assembly and Disassembly - IAD'03, Bucharest, Romania, October 2003.
- ❑ Member of the Program Committee, SPIE Symposium on Sensors and Controls for Intelligent Manufacturing, Rb02, Photonics East, Providence, RI, October 2003.
- ❑ Member of the Program Committee, SPIE Symposium on Intelligent Systems in Design and Manufacturing V, Rb04, Photonics East, Providence, RI, October 2003.
- ❑ Member of the International Program Committee, International Conference in Manufacturing Excellence 2003, Manufacturing Society of Australia, Melbourne, Australia, October 2003.
- ❑ Member of the Program Committee, Second International Working Conference on Total Quality Management - Advanced and Intelligent Approaches, Sunotnica - Palic Elite, Yugoslavia, August 2003.
- ❑ Member of the Scientific Committee, Twelfth International Colloquium on Numerical Analysis and Computer Science with Applications, Plovdiv, Bulgaria, August 2003.
- ❑ Member of the Program Organizing Committee, Group Technology/Cellular Manufacturing World Symposium, Columbus, OH, July 2003.
- ❑ Member of the International Scientific Committee (ISC) of the First International Conference on Performance Measures, Benchmarking and Best Practices, Guimaraes, Portugal, June 2003.
- ❑ Member of the Program Committee, Modeling and Simulation of Business Systems, Kaunas, Lithuania, May 2003.
- ❑ Member of the Program Committee of the 6<sup>th</sup> International Conference on Computer Integrated Manufacturing, CIM 2003, Wisla, Poland, May 2003.
- ❑ Member of the Program Committee of the Conference on Data Mining and Knowledge Discovery: Theory, Tools, and Technology V, SPIE Society, Orlando, FL, April 2003.
- ❑ Member of the Program Committee of the 2003 IEEE International Conference on Robotics and Automation, ICRA 2003, Taipei, Taiwan, May 2003.
- ❑ Member of the International Program Committee of the 7<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, Budapest, Hungary, April 2003.
- ❑ Member of the Program Committee, International Conference on Manufacturing Automation, ICMA 2002, Hong Kong, December 2002.
- ❑ Member of the International Program Committee, Intelligent Manufacturing: Learning from Nature, 13<sup>th</sup> International DAAAM Symposium on Intelligent Manufacturing and Automation, Vienna, Austria, October 2002.
- ❑ Member of the International Program Committee, International Conference on Production Systems Design, Supply Chain Management and Logistics, Szczecin, Poland, October 2002.
- ❑ Member of the Program Committee, Third International Symposium on Robotics and Automation, ISRA'2002, Toluca, Mexico, September, 2002.
- ❑ Member of the International Advisory Committee of the 1<sup>st</sup> CIRP International Seminar on Digital Enterprise Technology, Durham, UK, September 2002.
- ❑ Member of the Program Committee, 2002 Japan - USA Symposium on Flexible Automation, International Conference Center, Hiroshima, Hiroshima, Japan, July 2002.
- ❑ Member of the Program Committee, 2<sup>nd</sup> International Conference on Responsive Manufacturing, Gaziantep, Turkey, July 2002.
- ❑ Member of the Program Committee, WAC 2002 - ISOMA 2002 8<sup>th</sup> International Symposium on Manufacturing and Applications, Orlando, FL, June 2002.
- ❑ Member of the International Program Committee, 4<sup>th</sup> International Conference on Integrated Design and Manufacturing and Mechanical Engineering, Clermont Ferrand, France, May 2002.

- ❑ Member of the Program Committee, Fourth International Symposium on Tools and Methods of Competitive Engineering, TMCE 2002, Wuhan, Hubei, China, April 2002.
- ❑ Member of the Program Committee of the Conference on Data Mining and Knowledge Discovery: Theory, Tools, and Technology IV, SPIE Society, Orlando, FL, April 2002.
- ❑ Member of the International Program Committee, IEEE Conference on Industrial Technology, Cairo, Egypt, December 2001.
- ❑ Member of the International Program Committee, International Conference on Electronic Commerce, ICEC'2001, Vienna, Austria, November 2001.
- ❑ Member of the Program Committee of the Internet-based Enterprise Integration and Management Conference, SPIE, Boston, October 2001.
- ❑ Member of the International Program Committee, 12<sup>th</sup> International DAAAM Symposium on Intelligent Manufacturing and Automation, Jena, Germany, October 2001.
- ❑ Member of the International Program Committee, IMS'2001: Vision for the Future, 3<sup>rd</sup> International Symposium on Intelligent Manufacturing Systems, Sakarya, Turkey, September 2001.
- ❑ Member of the International program Committee of the IFIP WG-5.7 Conference in on Strategic Manufacturing, Aalborg, Denmark, August 2001.
- ❑ Member of the International Program Committee, IFAC Symposium on Large Scale Systems, Bucharest, Romania, July 2001.
- ❑ Member of the International Program Committee (IPC) of the IFAC Symposium on Manufacturing, Modeling, Management and Control, MIM 2001, Patras, Greece, July 2001.
- ❑ Member of the International Program Committee, The Fourteenth International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems, International Society of Applied Intelligence (ISAI), Budapest, Hungary, June 2001.
- ❑ Member of the International Program Committee, IEEE Robotics and Automation Conference, Seoul, Korea, May 2001.
- ❑ Member of the International Program Committee, 6<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, Poznan, Poland, April 2001.
- ❑ Member of the International Program Committee, International NAISO Congress on Information Science Innovations, ISI'2000, American University in Dubai, UAE, March 2001.
- ❑ Member of the International Program Committee, XII<sup>th</sup> Workshop on Supervising and Diagnostics Machining Systems, Karpacz, Poland, March 2001.
- ❑ Member of the Program Committee, International DAAAM Symposium on Intelligent Manufacturing and Automation: Man-Machine-Nature, Opatija, Croatia, October 2000.
- ❑ Member of the Technical Conference Committee, International Conference on Information Technology for Balanced Automation Systems in Production and Transportation, Berlin, Germany, September 2000.
- ❑ Member of the International Program Committee, 4<sup>th</sup> International Conference on Design of Information Infrastructure Systems for Manufacturing, Melbourne, Australia, November 2000.
- ❑ Member of the International Program Committee, Third International Symposium on Tools and Methods of Competitive Engineering, Delft, Netherlands, August 2000.
- ❑ Member of the International Program Committee, International Center for Electronic Commerce Conference, Seoul, Korea, August 2000.
- ❑ Member of the International Program Committee (IPC) of the IFAC Symposium on Manufacturing, Modeling, Management and Control, MIM 2000, Patras, Greece, July 2000.
- ❑ Member of the International Program Committee, Second IFAC/IFIP/IRORS Conference on Management and Control of Production Logistics, MCPL'2000, Grenoble, France, July 2000.
- ❑ Member of the International Program Committee, International Conference on Advanced Manufacturing Systems and Manufacturing Automation, AMAMA, Guangzhou, P.R. of China, June 2000.
- ❑ Member of the Organizing Committee, GT/CM Symposium - Year 2000, San Juan, Puerto Rico, March 2000.
- ❑ Member of the Program Committee, International DAAAM Symposium on Intelligent Manufacturing and Automation: Past-Present-Future, Vienna, Austria, September 1999.
- ❑ Member of the International Program Committee, International Conference on Advances in Production Management Systems APMS'99, Berlin, Germany, September 1999.

- ❑ Member of the International Program Committee, 15<sup>th</sup> ISPE/IEE International Conference on CAD/CAM, Robotics and Factories of the Future, Campinas, Brazil, August 1999.
- ❑ Member of the International Program Committee, International Conference on Industrial Engineering and Production Management, IEPM'99, Glasgow, UK, July 1999.
- ❑ Member of the Program Committee, IEEE International Symposium on Assembly and Task Planning (ISATP'99), Porto, Portugal, July 1999.
- ❑ Member of the Program Committee, Intelligent Processing of Manufacturing Materials Conference, Hawaii, July 1999.
- ❑ Member of the International Program Committee, International Symposium on Robotics and Automation – ISRA'98, Saltillo, Mexico, December 1998.
- ❑ Member of the Program Committee, 5<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, Gramado, Brazil, November 1998.
- ❑ Member of the Program Committee, 2<sup>nd</sup> International Symposium on Intelligent Manufacturing Systems (IMS'98), Sakarya, Turkey, August 1998.
- ❑ Member of the Program Committee, International Conference on Architectures and Design Methods for Balanced Automation Systems BASYS'98 (CEC, IEEE), Prague, Czech Republic, August 1998.
- ❑ Member of the Program Committee, IFIP Working Conference on Strategic Management of the Manufacturing Value Chain, Troon, Scotland, UK, August 1998.
- ❑ Member of the Program Committee, 1998 Japan - USA Symposium on Flexible Automation, Ohtsu, Japan, July 1998.
- ❑ Member of the Program Committee, Fifth International Conference on Automation Technology, Taipei, Taiwan, July 1998.
- ❑ Member of the Program Committee, ISOMA 98, 3<sup>rd</sup> World Automation Congress, WAC 98, Anchorage, Alaska, June 1998.
- ❑ Member of the Program Committee, International Symposium on Automotive Technology and Automation - ISATA, Düsseldorf, Germany, June 1998.
- ❑ Member of the Program Committee, IEEE Conference on Robotics and Automation, Leuven, Belgium, May 1998.
- ❑ Member of the Program Committee, 3<sup>rd</sup> International Conference on Design of Information Infrastructure Systems for Manufacturing, Fort Worth, TX, May 1998.
- ❑ Member of the Program Committee, Second International Symposium on the Tools and Methods for Concurrent Engineering, Manchester, UK, April 1998.
- ❑ Member of the International Program Committee, International Conference on Electronic Commerce, Seoul, Korea, April 1998.
- ❑ Member of the International Program Committee, 4<sup>th</sup> International Seminar on Intelligent Manufacturing Systems: Theory and Practice, Belgrade, Yugoslavia, April 1998.
- ❑ Member of the Program Committee of the 2<sup>nd</sup> Annual International Conference on Industrial Engineering Applications and Practice, San Diego, CA, November 1997.
- ❑ Member of the International Steering Committee, World Manufacturing Congress, WMC'97, Auckland, New Zealand, November 1997.
- ❑ Member of the International Program Committee, 8<sup>th</sup> International DAAAM Symposium on Intelligent Manufacturing and Automation, Dubrovnik, Croatia, October 1996.
- ❑ Member of the Technical Committee, International Conference on Enterprise Modeling Technology, ICEIMT'97, Torino, Italy, October 1997.
- ❑ Member of the International Program Committee, IFAC/IFIP International Conference on Management and Control of Production and Logistics, MCPL'97, Campinas, Sao Paulo, Brazil, September 1997.
- ❑ Member of the International Advisory Committee, CIRP International Symposium on Advanced Design and Manufacture in the Global Manufacturing Era, Hong Kong, August 1997.
- ❑ Member of the IEEE International Symposium on assembly and Task Planning, ISATP'97, Marina del Rey, CA, August 1997.
- ❑ Member of the Program Committee, 4<sup>th</sup> IFAC Workshop on Intelligent Manufacturing Systems, IMS'97, Seoul, Korea, July 1997.
- ❑ Member of the Program Committee, 30<sup>th</sup> International Symposium on Automotive Technology and Automation, ISATA, Florence, Italy, June 1997.



- ❑ Member of the International Program Committee, Second World Congress on Intelligent Manufacturing Processes and Systems, IMP&S'97, Budapest, Hungary, June 1997.
- ❑ Member of the Program Committee, 12<sup>th</sup> International Conference on the Application of AI in Engineering, Capri, Italy, June 1997.
- ❑ Member of the International Program Committee, International Conference on Integrated and Sustainable Industrial Production Systems, ISIP'97, Lisbon, Portugal, May 1997.
- ❑ Member of the International Program Committee, IEEE Robotics and Automation Conference, Albuquerque, NM, April 1997.
- ❑ Member of the International Program Committee, 6<sup>th</sup> International Conference on Advances in Production Management Systems, APMS'96, Kyoto, Japan, November 1996.
- ❑ Member of the Advisory Committee, 9<sup>th</sup> International Symposium on Artificial Intelligence, Cancun, Mexico, November 1996.
- ❑ Member of the International Program Committee, 7<sup>th</sup> International DAAAM Symposium on Product and Manufacturing Intelligence, Vienna, Austria, October 1996.
- ❑ Member of the Program Committee, 11<sup>th</sup> International Conference on Applications of Artificial Intelligence in Engineering AIENG'96, Clearwater, Florida, September 1996.
- ❑ Member of the Program Committee, 2<sup>nd</sup> International Conference on Design of Information Infrastructure Systems for Manufacturing, DIISM'96, Eindhoven, The Netherlands, September 1996.
- ❑ Member of the Program Committee, Workshop on Production Planning and Control, FUCAM, Mons, Belgium, September 1996.
- ❑ Member of the Program Committee, Factory Automation Track, The 22<sup>nd</sup> Annual International Conference of the IEEE Industrial Electronics Society IECON'96, Taipei, Taiwan, August 1996.
- ❑ Member of the Program Committee, International Conference on Architectures and Design Methods for Balanced Automation Systems BASYS'96 (CEC, IEEE), Lisbon, Portugal, June 1996.
- ❑ Member of the Program Committee, INFORMS Conference on Information Systems and Technology, Washington, DC, May 1996.
- ❑ Member of the Program Committee, International Symposium on Tools and Methods for Concurrent Engineering, Budapest, Hungary, May 1996.
- ❑ Member of the Program Committee, 1996 IEEE International Conference on Robotics and Automation, Minneapolis, MN, April 1996.
- ❑ Member of the Advisory Committee of the 8<sup>th</sup> International Symposium on Artificial Intelligence, Monterrey, Mexico, October 1995.
- ❑ Member of the International Committee of the 6<sup>th</sup> DAAAM Symposium on Intelligent Manufacturing Systems, Krakow, Poland, October 1995.
- ❑ Member of the International Program Committee of the 3<sup>rd</sup> IFAC Workshop on Intelligent Manufacturing Systems (IMS'95), Bucharest, Romania, October 1995.
- ❑ Member of the Program Committee of the IFIP WG 5.7 Working Conference on Managing Concurrent Engineering to Improve Industrial Performance, Seattle, WA, September 1995.
- ❑ Member of the Program Committee of the 1995 IEEE International Symposium on Assembly and Task Planning (ISATP'95), Pittsburgh, PA, August 1995.
- ❑ Member of the Program Committee of the Second International Conference on Concurrent Engineering, Research and Applications (CE95), Washington, DC, August 1995.
- ❑ Member of the Scientific Committee, 1995 International Conference on Emerging Technologies and Factory Automation (ETFA'95), Paris, France, August 1995.
- ❑ Member of the International Advisory Board, 13<sup>th</sup> International Conference on Production Research, Jerusalem, Israel, August 1995.
- ❑ Member of the Program Committee, International Conference on Architectures and Design Methods for Balanced Automation Systems BASYS'95 (CEC, IEEE), Vitoria, Brazil, July 1995.
- ❑ Member of the Program Committee, 10<sup>th</sup> International Conference on the Application of Artificial Intelligence in Engineering AIENG'95, Udine, Italy, July 1995.
- ❑ Member of the International Program Committee, IFIP WG 5.7 Working Conference on Reengineering the Enterprise, Galway, Ireland, April 1995.
- ❑ Member of the International Program Committee, Second International Workshop on Learning in Intelligent Manufacturing Systems, Budapest, Hungary, April 1995.
- ❑ Member of the International Program Committee, International Conference on Industrial Engineering and Production Management, Marrakech, Morocco, April 1995.

- ❑ Member of the International Program Committee, International Conference on Intelligent Processes and Systems, Mayaguez, Puerto Rico, February 1995.
- ❑ Member of the Organizing Committee, Conference on Artificial Neural Networks in Engineering ANNIE'94, St. Louis, MO, November 1994.
- ❑ Member of the Program Committee of the Fourth International Conference on Computer Integrated Manufacturing and Automation Technology, Rensselaer, Troy, NY, November 1994.
- ❑ Member of the International Advisory Committee of the International Workshop on Simulation in Manufacturing Systems, Bangkok, Thailand, November 1994.
- ❑ Member of the International Program Committee, 5<sup>th</sup> International DAAAM Symposium on Automation and Metrology, Maribor, Slovenia, October 1994.
- ❑ Member of the Program Committee of the 27<sup>th</sup> ISATA Lean/Agile Manufacturing Conference, Aachen, Germany, September 1994.
- ❑ Member of the Program Committee of the First Conference on Concurrent Engineering, Research and Applications (CERA), Pittsburgh, PA, August 1994.
- ❑ Member of the Program Committee of the International Symposium on Robotics and Manufacturing, Maui, Hawaii, August 1994.
- ❑ Member of the Program Committee, Conference on the Application of Artificial Intelligence in Engineering AIENG'94, Penn State University, University Park, PA, July 1994.
- ❑ Member of the Scientific Committee, Third International Conference on Automation Technology Automation'92, Taipei, Taiwan, July 1994.
- ❑ Member of the International Program Committee, 2<sup>nd</sup> IFAC/IFIP/IFORS Workshop on Intelligent Manufacturing Systems (IMS'94), Vienna, Austria, July 1994.
- ❑ Member of the Program Committee of IFIP WG-5.7 Workshop on Benchmarking Theory and Practice, Trondheim, Norway, June 1994.
- ❑ Member of the Program Committee of the Fourth International Conference on Data and Knowledge Systems for Manufacturing and Engineering, Hong Kong, May 1994.
- ❑ Member of the International Advisory Committee, 16<sup>th</sup> International Conference on Computers and Industrial Engineering, Ashikaga, Japan, March 1994.
- ❑ Member of the International Program Committee of the IFIP 5.7 Working Conference on Evaluation of Production Management Methods, Porto Alegre/Gramado, Brazil, March 1994.
- ❑ Member of the Organizing Committee, Conference on Artificial Neural Networks in Engineering ANNIE'93, St. Louis, MO, November 1993.
- ❑ Member of the Program Committee, International Workshop: The Design of Information Infrastructure Systems for Manufacturing, Tokyo, Japan, November 1993.
- ❑ Member of the International Program Committee, 4<sup>th</sup> International DAAAM Symposium on Automation and Metrology, Brno, Czech Republic, October 1993.
- ❑ Member of the Program Committee of the 4<sup>th</sup> Artificial Intelligence, Simulation, and Planning in High Autonomy Systems Conference, Tucson, AZ, September 1993.
- ❑ Member of the Program Committee of the 2<sup>nd</sup> IEEE International Workshop on Emerging Technologies for Factory Automation, Design and Operation of Intelligent Factories, Palm Cove-Cairns, Australia, September 1993.
- ❑ Member of the International Program Committee, International Conference Advances in Production Management Systems, APMS'93, Athens, Greece, September 1993.
- ❑ Member of the Program Committee of the 26<sup>th</sup> International Symposium of Automotive Technology and Automation, Aachen, Germany, September 1993.
- ❑ Member of the International Committee of the 4<sup>th</sup> DAAAM Symposium on Automation and Metrology: Man, Technology, Environment, Brno, Czech Rep., September 1993.
- ❑ Member of the Program Committee of the Second International Congress on Environmentally Conscious Manufacturing, Arlington, Virginia, August 1993.
- ❑ Member of the Program Committee, IEEE International Conference on Robotics and Automation, Atlanta, GA, May 1993.
- ❑ Member of the International Program Committee, Conference on Applications of Artificial Intelligence in Engineering, Toulouse, France, June 1992.
- ❑ Member of the Organizing Committee, 12<sup>th</sup> International Conference on Automation in Warehousing, New Orleans, November 1992.

- ❑ Member of the Program Committee of the Fourth International Symposium on Robotics and Manufacturing (ISRAM '92), Santa Fe, NM, November 1992.
- ❑ Member of the Organizing Committee, Conference on Artificial Neural Networks in Engineering ANNIE'92, St. Louis, MO, November 1992.
- ❑ Member of the International Program Committee, International Symposium on Intelligent and Flexible Automation, Budapest, Hungary, November 1992.
- ❑ Member of the International Program Committee, 3<sup>rd</sup> International DAAAM Symposium on Flexible and Intelligent Automation, Budapest, Hungary, October 1992.
- ❑ Member of the International Program Committee of the 1992 IFAC Workshop on Intelligent Manufacturing Systems, Oakland University, Rochester, MI, October 1992.
- ❑ Member of the Program Committee of the World Congress on Intelligent Manufacturing Technology and Systems, CIRP, Beograd, Yugoslavia, September 1992.
- ❑ Member of the International Program Committee, IFIP WG-5.7 Conference on Integration Production Management Systems, Eindhoven, The Netherlands, August 1992.
- ❑ Member of the Scientific Committee, Second International Conference on Automation Technology Automation'92, Taipei, Taiwan, July 1992.
- ❑ Member of the International Program Committee, Third International Conference on Computer Integrated Manufacturing, Rensselaer Polytechnic Institute, Troy, NY, May 1992.
- ❑ Member of the International Program Committee, Conference on Applications of Artificial Intelligence in Engineering, Waterloo, Ontario, Canada, July 1992.
- ❑ Member of the Program Committee of the International Conference on Object-Oriented Manufacturing Systems, Calgary, Alberta, Canada, May 1992.
- ❑ Member of the Program Committee of the 1991 Production and Operations Management Society Conference, New York, NY, November 1991.
- ❑ Member of the Program Committee of the International Working Conference on New Approaches to 'One-of-a-Kind' Production, Bremen, Germany, November 1991.
- ❑ Member of the International Program Committee, 2<sup>nd</sup> International DAAAM Symposium on Flexible Automation, Stroske Plesno, Czechoslovakia, October 1991.
- ❑ Member of the Program Committee of the First Congress on Environmentally Conscious Manufacturing, Santa Fe, NM, September 1991.
- ❑ Member of the Organizing Committee, Conference on Neural Networks in Engineering, St. Louis, MO, November 1991.
- ❑ Member of the Program Committee, Conference on the Application of Artificial Intelligence in Engineering, Oxford, UK, July 1991.
- ❑ Member of the Program Committee, Conference on Knowledge-Based Systems in Manufacturing, IFIP, Genoa, Italy, 1991.
- ❑ Member of the Program Committee, Conference on AI in Engineering, Boston, MA, August 1990.
- ❑ Member of the Program Committee, IFIP/IFAC International Conference on Production Management Systems, Helsinki, Finland, August 1990.
- ❑ Member of the Program Committee, IFIP International Conference on Modeling the Innovation: Communications, Automation and Information Systems, Rome, Italy, March 1990.
- ❑ Member of the Advisory Panel on Artificial Intelligence in Manufacturing, International Conference on AI in Engineering, Cambridge, UK, July 1989.
- ❑ Member of the Program Committee, IFIP Working Conference on Design, Implementation and Operation of Databases for Production Management, Barcelona, Spain, May 1989.
- ❑ Member of the Program Committee, 10<sup>th</sup> International Conference on Automation in Warehousing, Houston, TX, November 1989.
- ❑ Member of the Program Committee, IFAC/CIRP/IFIP/IFORS International Workshop on Decision Structuring in Automated Manufacturing, Genoa, Italy, September 1989.
- ❑ Member of the Program Committee, IFIP Working Conference on Expert Systems in Production Management, Galway, Ireland, August 1988.
- ❑ Member of the Program Committee, Second International Symposium on Robotics and Manufacturing, Albuquerque, NM, November 1988.
- ❑ Member of the Program Committee, 9<sup>th</sup> International Conference on Automation in Warehousing, Brussels, Belgium, October 1988.

- ❑ Member of the Program Committee, 6<sup>th</sup> International Conference on Automated Guided Vehicle Systems, Brussels, Belgium, October 1988.
- ❑ Member of the Program Committee, NATO Research Workshop on the Impact of Information Technology and Robotics on Material Flow Systems, Paris, France, June 1988.
- ❑ Member of the Program Committee, International Conference on Ergonomics of Advanced and Hybrid Automated Systems, Louisville, KY, August 1988.
- ❑ Member of the Program Committee, 6<sup>th</sup> International Conference on Flexible Manufacturing Systems, Turin, Italy, November 1987.
- ❑ Member of the Program Committee, 3<sup>rd</sup> International Conference on Simulation in Manufacturing, Turin, Italy, November 1987.
- ❑ Member of the Program Committee, 8<sup>th</sup> International Conference on Assembly Automation, Copenhagen, Denmark, April 1987.
- ❑ Member of the Program Committee, 8<sup>th</sup> International Conference on Automation in Warehousing, Tokyo, Japan, October 1987.
- ❑ Member of the Program Committee, 5<sup>th</sup> International Conference on Automated Guided Vehicle Systems, Tokyo, Japan, October 1987.
- ❑ Member of the Program Committee, 3<sup>rd</sup> International Conference on Systems Research, Informatics and Cybernetics, Baden-Baden, Germany, August 1986.
- ❑ Member of the Program Committee, 5<sup>th</sup> International Conference on Flexible Manufacturing Systems, Stratford-upon-Avon, England, November 1986.
- ❑ Member of the Program Committee, 4<sup>th</sup> International Conference on Automation in Warehousing, San Francisco, CA, September 1986.
- ❑ Member of the Program Committee, 4<sup>th</sup> International Conference on Automated Guided Vehicle Systems, Chicago, IL, June 1986.
- ❑ Member of the Program Committee, 2<sup>nd</sup> International Conference on Simulation in Manufacturing, Chicago, IL, June 1986.
- ❑ IFIP WG-5.7 Conference on New Technologies for Production Management Systems, Tokyo, Japan, October 1986.
- ❑ Member of the Program Committee, 4<sup>th</sup> International Conference on Flexible Manufacturing Systems, Stockholm, Sweden, October 1985.
- ❑ Member of the Program Committee, 6<sup>th</sup> International Conference on Automation in Warehousing, Stockholm, Sweden, October 1985.
- ❑ Member of the Program Committee, 3<sup>rd</sup> International Conference on Automated Guided Vehicle Systems, Stockholm, Sweden, October 1985.
- ❑ Member of the Program Committee, 3<sup>rd</sup> International Conference on Flexible Manufacturing Systems, Boebligen, Germany, September 1984.
- ❑ Member of the Program Committee, 1<sup>st</sup> International Conference on Simulation in Manufacturing, United Kingdom, October 1984.
- ❑ Member of the Program Committee, 1<sup>st</sup> International Conference on Advances in Manufacturing, Singapore, October 1984.