

16<sup>th</sup> ISPE International Conference on Concurrent Engineering (CE2009 Taiwan)

	<b>Monday, July 20,2009</b>	<b>Tuesday, July 21,2009</b>		<b>Wednesday, July 22,2009</b>		<b>Thursday, July 23,2009</b>		<b>Friday, July 24,2009</b>	
9:00-10:10	<b>Tutorial 1-1</b> Expectation Management <i>Prof. Shuichi Fukuda</i> Stanford University <b>Room IB202</b>	<b>Opening Ceremony</b>		<b>Keynote Speech 2</b> <i>Dr. Ming Ji Wu</i> Technical Director of the Ministry of Economic Affairs Taiwan <b>Room IB202</b>		<b>Keynote Speech 3</b> <i>Dr. Nel Wognum</i> Wageningen University The Netherlands <b>Room IB202</b>		<b>Technical Session 8</b>	
		<b>Keynote Speech 1</b> <i>Prof. Mitchell M. Tseng</i> Hong Kong University of Science and Technology <b>Room IB202</b>						Design Knowledge Utilization (Special Session) <b>Room IB201</b>	Knowledge Engineering <b>Room IB202</b>
10:10-10:30	Coffee Break								
10:30-12:00	<b>Tutorial 1-2</b> 3rd Generation Concurrent Engineering <i>Prof. Shuichi Fukuda</i> Stanford University <b>Room IB202</b>	<b>Technical Session 1</b>		<b>Technical Session 3</b>		<b>Technical Session 6</b>		<b>Technical Session 9</b>	
		Competitive Design (Special Session) <b>Room IB201</b>	Competitive Supply Chain Performance (Special Session) <b>Room IB202</b>	Product Design <b>Room IB201</b>	Service Solutions <b>Room IB202</b>	Web Technologies <b>Room IB201</b>	Competitive Supply Chain Performance (Special Session) <b>Room IB202</b>	Advanced Manufacture <b>Room IB201</b>	Service Solutions <b>Room IB202</b>
12:00-12:50	Lunch								
12:50-14:00	<b>Tutorial 2-1</b> Cost of Product-Service Systems <i>Prof. Rajkumar Roy</i> Cranfield University <b>Room IB202</b>	<b>Technical Session 2</b>		<b>Technical Session 4</b>		<b>Technical Session 7</b>		Departure	
		Collaborative Engineering <b>Room IB201</b>	Multi-Disciplin ary Design and Optimization (Special Session) <b>Room IB202</b>	Design for Sustainability <b>Room IB201</b>	Collaborative Product Development (Special Session) <b>Room IB202</b>	Design for Sustainability <b>Room IB201</b>	Multi-Discipli nary Design and Optimization (Special Session) <b>Room IB202</b>		
14:00-14:20	Coffee Break								
14:20-16:20	<b>Tutorial 2-2</b> Cost of Product-Service Systems <i>Prof. Rajkumar Roy</i> Cranfield University <b>Room IB202</b>	<b>National Palace Museum                      Tour</b> (14:20 ~ 17:00) <b>Cocktail Party</b> (17:00 ~ 18:00) <b>Welcome Dinner</b> (18:00~21:00)		<b>Technical Session 5</b>		<b>Traditional Art Center                      Tour</b> (14:20 ~ 18:30) <b>Banquet</b> (18:30 ~ 21:00)		Departure	
16:30-18:00	<b>Reception</b>			RFID (Special Session) <b>Room IB201</b>	Value Engineer (Special Session) <b>Room IB202</b>				
				ISPE Annual General Meeting <b>Room IB202</b>					
18:00-	ISPE Board Meeting								

**Tuesday, July 21, 2009**

**10:30-12:00**

<b>Technical Session 1</b>	
<b>Session 1-1</b> <b>Competitive Design (Special Session)</b> <b>Location: Room IB201</b> <b>Chair(s): Roy, Rajkumar, Canfield University</b>	<b>Session 1-2</b> <b>Competitive Supply Chain Performance (Special Session)</b> <b>Location: Room IB202</b> <b>Chair(s): Nel Wognum, Wageningen University</b>
<b>Using DEA Approach to Develop the Evaluation and Priority Ranking Methodology of NPD Projects</b> <i>Ling-Chen Hung, Tzu-An Chiang, Z. H. Che and H. S. Wang</i> <b>An Exploration Study of Data-mining Driven PLM Implementation Approach</b> <i>Chia-Ping Huang</i> <b>Exploring the Links between Competitive Advantage and Enterprise Resource Planning (ERP) Upgrade Decision: A Case Study Approach</b> <i>Celeste See-Pui Ng and Pei-Chann Chang</i> <b>Development of a Cost Estimating Framework for Nanotechnology-Based Products</b> <i>Yuchun Xu, Rajkumar Roy, Gianluca Cassaro and Jeremy Ramsden</i> <b>An Analogy Based Estimation Framework for Design Rework Efforts</b> <i>Panumas Arundacahawat, Rajkumar Roy and Ahmed Al-Ashaab</i>	<b>Modeling and Solving the Collaborative Supply Chain Planning Problems</b> <i>Y. T. Chen, Z. H. Che, Tzu-An Chiang, C. J. Chiang and Zhen-Guo Che</i> <b>A Bi-objective Model for Concurrent Planning of Supplier Selection and Assembly Sequence Planning</b> <i>Y. Y. Lin, Z. H. Che, Tzu-An Chiang, Zhen-Guo Che and C. J. Chiang</i> <b>Automobile Manufacturing Logistic Service Management and Decision Support Using Classification and Clustering Methodologies</b> <i>Charles V. Trappey, Amy J.C. Trappey, Ashley Y.L. Huang, Gilbert Y.P. Lin</i> <b>Lead Time Reduction by Extended MPS System in the Supply Chain</b> <i>JrJung Lyu and Hwan-Yann Su</i> <b>Environmental Transparency of Food Supply Chains - Current Status and Challenges</b> <i>Nel Wognum, Harry Bremmers</i>

**Tuesday, July 21, 2009**

**12:50-2:00**

<b>Technical Session 2</b>	
<b>Session 2-1</b> <b>Collaborative Engineering</b> <b>Location: Room IB201</b> <b>Chair(s):</b> JrJung Lyu, National Cheng Kung University	<b>Session 2-2</b> <b>Multi-Disciplinary Design and Optimization (Special Session)</b> <b>Location: Room IB202</b> <b>Chair(s):</b> Liang Gao, Huazhong University of Science and Technology Dunbing Tang, Nanjing University of Aerospace and Aeronautics Weidong Li, Coventry University
<b>Organization and Interoperation of Engineering Design Services in Service-Oriented Architecture</b> <i>Nan Li, Jianzhong Cha and Wensheng Xu</i> <b>Taxonomy and Attributes of Business Collaborative Models: an Exploratory Study</b> <i>JrJung Lyu and Ping-Shun Chen</i> <b>Applying Petri Net to Analyze a Multi-Agent System Feasibility - a Process Mining Approach</b> <i>C. Ou-Yang, Yeh-Chun Juan, C.S. Li</i> <b>The Impact on Global Logistics Integration System to Concurrent Collaborative Process</b> <i>Yao Chin Lin and Ping Heng Tsai</i>	<b>An Approach Based on Rough Sets Theory to Design Space Exploration of Complex Systems</b> <i>Xue Zheng Chu, Liang Gao, Mi Xiao, Wei Dong Li, Hao Bo Qiu</i> <b>The Set-Based Multi-Objective Satisfactory Design for the Initial Design with Uncertainties in Collaborative Engineering</b> <i>Masato Inoue, Yoon-Eui Nahm and Haruo Ishikawa</i> <b>Minimizing Makespan for Server Testing with Limited Resource</b> <i>Ping-Yu Chang, Ya-Ting Hsu, and Chin-An Cheng</i> <b>Exchange of Heterogeneous Feature Data in Concurrent Engineering and Collaborative Design Environments</b> <i>Zhiyong Huang, Fazhi He, Xiaoxia Li, Xiantao Cai and Huajun Liu</i>

Wednesday, July 22, 2009

10:30-12:00

<b>Technical Session 3</b>	
<b>Session 3-1</b> <b>Product Design</b> <b>Location: Room IB201</b> <b>Chair(s): Yong Zeng, Concordia University</b>	<b>Session 3-2</b> <b>Service Solutions</b> <b>Location: Room IB202</b> <b>Chair(s): Shuichi Fukuda, Stanford University</b>
<p><b>A Study of Design by Customers: Areas of Application</b> <i>Risdiyono and Pisut Koomsap</i></p> <p><b>Dual Lines Extraction for Identifying Single Line Drawing from Paper-Based Over Traced Freehand Sketch</b> <i>Natthavika Chansri and Pisut Koomsap</i></p> <p><b>A Formal Representation of Technical Systems</b> <i>Baiquan Yan and Yong Zeng</i></p> <p><b>Design Knowledge Assets Management with Visual Design Progress and Evaluation</b> <i>Gundong Francis Pahng and Mathew Wall</i></p> <p><b>Product Redesign Using TRIZ and Contradictive Information from the Taguchi Method</b> <i>Ying-Ting Shen and Shana Smith</i></p>	<p><b>The Key Dimensions for Information Service Industry in Entering Global Market: a Fuzzy-Delphi &amp; AHP Approach</b> <i>M. K. Chen, Shih-Ching Wang</i></p> <p><b>Problem-Based Construction of Engineering Curricula for Multidisciplinary and Concurrent Engineering Practice</b> <i>Gloria Lucía Giraldo and German Urrego-Giraldo</i></p> <p><b>Competences Supported on Thematic Contents for Evaluation of Curricula Aiming to Concurrent Engineering</b> <i>Gloria Lucía Giraldo and German Urrego-Giraldo</i></p> <p><b>Predicting the Yield Rate of DRAM Modules by Support Vector Regression</b> <i>Shih-Wei Lin and Shih-Chieh Chen</i></p> <p><b>Reflective Concurrent Engineering – 3<sup>rd</sup> Generation CE</b> <i>Shuichi Fukuda</i></p> <p><b>Lean value-flow metrics to identify the leanness of aircraft integrators</b> <i>Wouter W.A. Beelaerts van Blokland, Gert-Jan van Silfhout, Wim J.C. Verhagen, and Richard Curran</i></p>

**Wednesday, July 22, 2009**

**12:50-2:00**

<b>Technical Session 4</b>	
<b>Session 4-1</b> <b>Design for Sustainability</b> <b>Location: Room IB201</b> <b>Chair(s): Eric Simmon, NIST</b>	<b>Session 4-2</b> <b>Collaborative Product Development (Special Session)</b> <b>Location: Room IB202</b> <b>Chair(s): Ghodous Parisa, University Lyon I</b>
<b>Greening Economy as a Key Solution to the Economic Crisis</b> <i>Peter Yang and Injazz Chen</i> <b>A Study on Evaluation of Environmental Effectiveness of Manufacturing Processes</b> <i>Nozomu Mishima, Shinsuke Kondoh, Keijiro Masui, Masayoshi Yasuoka, Yuji Hotta and Koji Watari</i> <b>Expanding Environmental Information Management: Meeting Future Requirements in the Electronics Industry</b> <i>Eric Simmon , John Messina</i> <b>Systematic Lean Techniques for Improving Honeycomb Bonding Process</b> <i>Chiun-Ming Liu and Min-Shu Chiang</i>	<b>Using DEA and GA Algorithm for Finding an Optimal Design Chain Partner Combination</b> <i>Chih-Ling Chuang, Tzu-An Chiang, Z. H. Che and H. S. Wang</i> <b>Adaptive Architecture for Collaborative Environment</b> <i>Youssef Roummieh and Parisa Ghodous</i> <b>Conceptual Modeling of Design Chain Management towards Product Lifecycle Management</b> <i>Wei Liu, Yong Zeng</i> <b>Data Persistence in P2P Backup Systems</b> <i>Rabih Naïm Tout, Parisa Ghodous, Aris Ouksel and Mihai Tanasoiu</i>

Wednesday, July 22, 2009

2:20-4:20

<b>Technical Session 5</b>	
<b>Session 5-1</b> <b>RFID (Special Session)</b> <b>Location: Room IB201</b> <b>Chair(s): Kai-Ying Chen, National Taipei University of Technology</b>	<b>Session 5-2</b> <b>Value Engineering (Special Session)</b> <b>Location: Room IB202</b> <b>Chair(s): Richard Curran, Delft University of Technology</b>
<b>Toward Full Coverage UHF RFID Services - An Implementation in Ubiquitous Exhibition Service</b> <i>Tung-Hung Lu, Li-Dien Fu</i>	<b>KBE and Manufacturing Constraints Management</b> <i>Richard Curran, Wim J.C. Verhagen, Ton H. van der Laan, MJT van Torren</i>
<b>Building a RFID Anti-Collision Environment for Conference and Exhibition Industry</b> <i>Min-Hsien Weng, Chih-Wei Chao, Kuo-Shu Luo, Li-Dien Fu, Tung-Hung Lu</i>	<b>Manufacturing Cost Contingency Management: Part a) Methodology Development</b> <i>Richard Curran, Marc Gilmour, C. McAlleenan, P. Kelly</i>
<b>Networking Dual-Pair-Tele-Paths for Logistic and Parking Structures with RFID Applications</b> <i>Li-Yen Hsu</i>	<b>Manufacturing Cost Contingency Management: Part b) Application and Validation</b> <i>Richard Curran, Marc Gilmour, C. McAlleenan, P. Kelly</i>
<b>Applying BPN to RFID Based Picking Operations in Warehouse</b> <i>Kai-Ying Chen, Yu-Feng Hwang and Mu-Chen Chen</i>	<b>Systems Engineering Methodology for Concurrent Engineering Education</b> <i>Richard Curran, Michel van Tooren and Liza van Dijk</i>
<b>POC of RFID Application in Forest Sample Zone Investigation</b> <i>Shiang-Shin Lin, Teh-Chang Wu, Jenn-Sheng Wu, Yi-Ping Huang, Ming-Hsiung Chang, Sheng-Wei Fan, Jiun-Jiue Liao</i>	<b>Creating Value by Measuring Collaboration Alignment of Strategic Business Processes</b> <i>Frank van der Zwan, Sicco Santema, Richard Curran</i>
<b>Cost Reduction of Public Transportation Systems with Information Visibility Enabled by RFID Technology</b> <i>Shuo-Yan Chou, Yulia Ekawati</i>	<b>Drivers of Customer Satisfaction in a Project-Oriented, Business-to-Business Market Environment: an Empirical Study</b> <i>Wim J.C. Verhagen, Wouter W.A. Beelaerts van Blokland, Richard Curran</i>

**Thursday, July 23, 2009**

**10:30-12:00**

<b>Technical Session 6</b>	
<b>Session 6-1</b> <b>Web Technologies</b> <b>Location: Room IB201</b> <b>Chair(s):</b> Wen-Ren Jong, Chung Yuan Christian University Wensheng Xu, Beijing Jiaotong University	<b>Session 6-2</b> <b>Competitive Supply Chain Performance (Special Session)</b> <b>Location: Room IB202</b> <b>Chair(s):</b> Nel Wognum, Wageningen University
<b>Development of a Web-Based Mass Customization Platform for Bicycle Customization Services</b> <i>Tung-Hung Lu, Amy J.C. Trappey</i> <b>A Manufacturing Grid Architecture Based on Jini and SORCER</b> <i>Wensheng Xu, Jianzhong Cha</i> <b>Minding the Gap Between First and Continued Usage: an Empirical Study of the Implementation of a Corporate e-Learning English-Language Program at a Financial Firm in Taiwan</b> <i>Tainyi (Ted) Luor, Hsi-Peng Lu, Robert E. Johanson, Ling-Ling Wu</i> <b>Web-Based Mechanism Design of 3C Plastic Parts with Knowledge Management</b> <i>Wen-Ren Jong, Chun-Cheng Lin, Yu-Hong Ting, Chun-Hsien Wu, Tai-Chih Li</i> <b>WIW - A Web-Based Information System for Profile of Wind</b> <i>Wu Xiao Bing, Adans Iraheta Marroquín, and Moacyr Fauth da Silva Jr.</i>	<b>A Case Study on Impact Factors of Retailing Implementing CPFR - A Fuzzy AHP analysis</b> <i>Hsin-Pin Fu, Sheng-Wei Lin, and Chi-Ren Chen</i> <b>Autonomous Capacity Planning by Negotiation against Demand Uncertainty</b> <i>Shih-Min Wang and Kung-Jeng Wang</i> <b>A Negotiation-Based Approach to Supply Chain Planning and Scheduling Problems in a Fully Distributed Environment</b> <i>K. Robert Lai and Bo-Ruei Kao</i> <b>A Multi-Product EPQ Model with Discrete Delivery Order: a Langrangean Solution Approach</b> <i>Gede Agus Widyadana, Hui Ming Wee</i> <b>Multi-Product Min-Cost Recycling Network Flow Problem</b> <i>Chiao-Lin Deng, Chun-Mao Shao</i>

Thursday, July 23, 2009

12:50-2:00

<b>Technical Session 7</b>	
<b>Session 7-1</b> <b>Design for Sustainability</b> <b>Location: Room IB201</b> <b>Chair(s):</b> Shana Smith, National Taiwan University	<b>Session 7-2</b> <b>Multi-Disciplinary Design and Optimization (Special Session)</b> <b>Location: Room IB202</b> <b>Chair(s):</b> Liang Gao, Huazhong University of Science and Technology Dunbing Tang, Nanjing University of Aerospace and Aeronautics Weidong Li, Coventry University
<b>Developing an ISO 14048-Based EuP Integrated Service Platform for Evaluating Environment Impacts and Supporting Eco-Design in Taiwan</b> <i>Tzu-An Chiang, Hsing Hsu, Ping-Yu Chang, Hung-Chia Wei</i> <b>The Green Product Eco-design Approach and System Complying with Energy Using Products (EuP) Directive</b> <i>Amy J.C. Trappey, Meng-Yu Chen, David W. Hsiao and Gilbert Y.P. Lin</i> <b>Understanding the Waste Net: A Method for Waste Elimination Prioritization in Product Development</b> <i>Marcus V. P. Pessôa , Warren Seering, Eric Rebentisch and Christoph Bauch</i> <b>Rule-Based Recursive Selective Disassembly Sequence Planning for Green Design</b> <i>Shana Smith and Wei-Hsiang Chen</i>	<b>An Ergonomic Assembly Workstation Design Using Axiomatic Design Theory</b> <i>Xiaoyong Wang, Dunbing Tang, Peihuang Lou</i> <b>Heterogeneous Material-based Biomedical Product Development</b> <i>W.D. Li, L. Gao, D.B. Tang and K. Popplewell</i> <b>Research on Variable Parameter Set in Complex Multi domain Physical System and Its Repeatedly Simulating Arithmetic</b> <i>Renwang Li, YiZhong Wu, Liang Gao, Zhansi Jiang, Zefei Zhu</i> <b>Two Stage Ant Coordination Mechanisms for Sequencing Problem in a Mixed Model Assembly Line</b> <i>Qiong Zhu, Jie Zhang</i>

**Friday, July 24, 2009**

**9:00:10:10**

<b>Technical Session 8</b>	
<b>Session 8-1</b> <b>Design Knowledge Utilization (Special Session)</b> <b>Location: Room IB201</b> <b>Chair(s): Kazuo Hiekata, The University of Tokyo</b>	<b>Session 8-2</b> <b>Knowledge Engineering</b> <b>Location: Room IB202</b> <b>Chair(s): Hsin-Hung Wu, National Changhua University of Education</b>
<b>Investigation on Evaluation of Design Decision for Door-Shaped Structure by Using Systematic Knowledge Analysis</b> <i>Zone-Ching Lin, Chen-Hsing Cheng</i> <b>Knowledge Extraction System from Reports in Fabrication Workshops</b> <i>Kazuo Hiekata, Hiroyuki Yamato and Sho Tsujimoto</i> <b>Knowledge based Sales Forecasting Model for Non-linear Trend Products</b> <i>Kenji Tanaka, Hideaki Miyata and Shoji Takechi</i> <b>Hybrid System Supporting Flexible Design of Flat Rolling Production Processes in Collaborative Environment</b> <i>Lukasz Rauch, Michal Front, Marek Bigaj, Lukasz Madej</i>	<b>A Negotiation Strategy of Collaborative Maintenance Chain and Its Multi-Agent System Design and Development</b> <i>Amy J.C. Trappey, Wei-Chun Ni and Chun-Yi Wu</i> <b>Develop Non-Exhaustive Overlapping Partitioning Clustering for Patent Analysis Based on the Key Phrases Extracted Using Ontology Schema and Fuzzy Adaptive Resonance Theory</b> <i>Amy J.C. Trappey, Charles V. Trappey and Chun-Yi Wu</i> <b>Performance Evaluation for an ERP System in Case of System Failures</b> <i>Shin-Guang Chen</i> <b>Applying RFM Model and K-Means Method in Customer Value Analysis of an Outfitter</b> <i>Hsin-Hung Wu, En-Chi Chang and Chiao-Fang Lo</i>

**Friday, July 24, 2009**

**10:30:12:00**

<b>Technical Session 9</b>	
<b>Session 9-1</b> <b>Advanced Manufacture</b> <b>Location: Room IB201</b> <b>Chair(s):</b> Pisut Koomsap, Asian Institute of Technology	<b>Session 9-2</b> <b>Service Solutions</b> <b>Location: Room IB202</b> <b>Chair(s):</b> Chui-Yu Troy Chiu, National Taipei University of Technology
<p><b>To Calculate the Sequence-Dependent Setup Time for a Single-Machine Problem with Uncertain Job Arriving Time</b> <i>Ming-Hsien Yang, Shu-Hsing Chung, and Ching-Kuei Kao</i></p> <p><b>A Two-Level Genetic Algorithm for Scheduling in Assembly Islands with Fixed-Position Layouts</b> <i>Wei Qin and George Q. Huang</i></p> <p><b>Exact Controllability for Dependent Siphons in S<sub>3</sub>PMR<sub>29</sub></b> <i>Yu-Ying Shih, Te-Chung Liu, Chui-Yu Chiu and D. Y. Chao</i></p> <p><b>A New MIP Test for S<sub>3</sub>PGR<sub>2</sub></b> <i>Yu-Ying Shih, D. Y. Chao and Chui-Yu Chiu</i></p> <p><b>Simplifying Abrasive Waterjet Cutting Process for Rapid Manufacturing</b> <i>Nguyen Van Ut, Pisut Koomsap, and Viboon Tangwarodomnukun</i></p>	<p><b>The Study of Autonomous Negotiation System Based on Auction Enabled Intelligent Agent – Using Parking Tower Asset Maintenance as Case Example</b> <i>Yu-Lin Liu, David W. Hsiao and Amy J.C. Trappey</i></p> <p><b>An Investigation of Community Response to Urban Traffic Noise</b> <i>Ghorbanali Mohammadi</i></p> <p><b>A Market Segmentation System for Consumer Electronics Industry Using Particle Swarm Optimization and Honey Bee Mating Optimization</b> <i>Chui-Yu Chiu, I-Ting Kuo and Po-Chia Chen</i></p> <p><b>Why the Big 3 Decline Despites Their Lean Management - A Study Based on the Theory of Constraints</b> <i>Simon Wu and H. M. Wee</i></p> <p><b>The Business Data Integrity Risk Management Model: A Benchmark Data Center Case of IT Service Firm</b> <i>M. K. Chen, Shih-Ching Wang</i></p>