### Date: Monday, 09/Sep/2013

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<tr>
<th>Time</th>
<th>Event</th>
<th>Session Chair</th>
<th>Sponsor</th>
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<tbody>
<tr>
<td>9:00am - 5:15pm</td>
<td>Mon1: APMS Doctoral Workshop (Sponsor: Electro-Optics Center). By Invitation Only</td>
<td>Sergio Cavalieri</td>
<td>Electro-Optics Center</td>
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<tr>
<td></td>
<td>Opening Remarks by Karl Harris, Director, Electro-Optics Center, Penn State</td>
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<tr>
<td>5:30pm - 7:00pm</td>
<td>WG5.7-Assoc.: IFIP Working Group 5.7 Associates Meeting</td>
<td>Bojan Stahl, Gökhan May</td>
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<tr>
<td>7:00pm - 8:30pm</td>
<td>Welcome Reception (Sponsor: NABCO, Inc.)</td>
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### Date: Tuesday, 10/Sep/2013

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<th>Time</th>
<th>Event</th>
<th>Session Chair</th>
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<tbody>
<tr>
<td>7:00am - 9:00am</td>
<td>Continental Breakfast</td>
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<tr>
<td>8:00am - 9:30am</td>
<td>Tue-Plenary: Plenary Session - Key Note Address</td>
<td>Vittal Prabhu, Marco Taisch</td>
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<tr>
<td>9:30am - 10:00am</td>
<td>Break (Sponsor: Enterprise Integration Consortium)</td>
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<tr>
<td>10:00am - 12:00pm</td>
<td>Tue1-C1: Sustainable Manufacturing and Supply Chain Management for Renewable Energy (Special Session)</td>
<td>Guiping Hu, Evelyn Thomchick</td>
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<tr>
<td>10:00am - 12:00pm</td>
<td>Tue1-S5: The Art of Balancing Innovation and Efficiency in Service Systems - The Challenge in Ambidexterity (Special Session)</td>
<td>Gerhard Gudergan, Volker Stich</td>
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<tr>
<td>10:00am - 12:00pm</td>
<td>Tue1-S1: Service Manufacturing Systems (Special Session)</td>
<td>Toshiya Kihara, Takeshi Shimmura</td>
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<tr>
<td>10:00am - 12:00pm</td>
<td>Tue1-H1: ICT-Enabled Integrated Operations (Special Session)</td>
<td>Daryl John Powell, Bernard Grabot</td>
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<tr>
<td>12:00pm - 1:00pm</td>
<td>Lunch Break (Sponsor: Center for Supply Chain Research &amp; Master of Professional Studies in Supply Chain Management)</td>
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<tr>
<td>1:00pm - 3:00pm</td>
<td>Tue2-M2: Energy Efficient Manufacturing</td>
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<td>Time</td>
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<tr>
<td>10:00am - 11:00am</td>
<td>Tue2-C2: Interoperability in the Manufacturing and Supply Chain Services (Special Session)</td>
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<tr>
<td>11:00am - 12:00pm</td>
<td>Tue2-S2: Modeling of Business and Operational Processes</td>
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<tr>
<td>12:00pm</td>
<td>Tue2-I2: Emerging and Innovative Technologies-1</td>
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<tr>
<td>1:00pm - 2:00pm</td>
<td>Break (Sponsor: Enterprise Integration Consortium)</td>
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<tr>
<td>2:00pm - 3:00pm</td>
<td>Sustainability Tour of Penn State Campus</td>
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<tr>
<td>3:00pm - 4:00pm</td>
<td>Networking Reception and Networking Dinner (Sponsor: Kimberly-Clark Corporation)</td>
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<tr>
<td>4:00pm - 5:00pm</td>
<td>Continental Breakfast</td>
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<tr>
<td>5:00pm - 6:00pm</td>
<td>Wed1-M3: Manufacturing Networks for Mass Customization</td>
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<tr>
<td>6:00pm - 7:00pm</td>
<td>Wed1-I9: Emerging and Innovative Technologies-2</td>
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<tr>
<td>7:00pm - 8:00pm</td>
<td>Wed1-M4: Enablers for Smart Manufacturing-Panel (Special Session)</td>
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<tr>
<td>8:00pm - 9:00pm</td>
<td>Wed1-S4: Simulation Based Training in Production and Operations Management (Special Session)</td>
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<tr>
<td>9:00am - 10:00am</td>
<td>Wed1-I3: ICT for Manufacturing and Supply Chain Management-1</td>
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<tr>
<td>10:00am - 11:00am</td>
<td>Lunch Break (Sponsor: Intelligent Manufacturing Systems &amp; World Manufacturing Forum)</td>
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<tr>
<td>11:00am - 12:00pm</td>
<td>Wed2-M6: Intelligent Production Systems and Planning Solutions for Sustainability -1 (Special Session)</td>
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<tr>
<td>12:00pm - 1:00pm</td>
<td>Wed2-M5: Enablers for Smart Manufacturing</td>
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A guided tour of Penn State's campus highlighting education, research and service in the areas of power generation using natural gas, solar power, recycling, and the Factory for Advanced Manufacturing Education (FAME Lab). Board buses outside of President’s Hall (conference wing). After tour, buses will return participants to The Penn Stater and Days Inn.

Featured Speaker: Dr. David Wormaly, The Harold and Inge Marcus Dean of Engineering, Penn State University

Buses will pick up at The Penn Stater (outside of President’s Hall, conference wing) and Days Inn (parking lot) at 6:30 pm to travel to dinner location and return by 10:00 pm.

Date: Wednesday, 11/Sep/2013

President's Hall 3 and 4

Session Chair: Frederic Demoly
Session Chair: Gökkan May

Session Chair: Serm Kulvatunyou
Session Chair: Christopher Peters

Session Chair: Harvey Millar
Session Chair: Sergio Cavalieri

Session Chair: Kenn Steger-Jensen
Session Chair: Damien Trentesaux

Session Chair: Bojan Stahl

Chair: Bojan Stahl
Chair: Ralph Riedel
Chair: David Jentsch
Chair: Pietro Cavallini
Chair: Rhythm Suren Wadhwa
Chair: Frank H Riddick
Chair: Avraham Shtub
Chair: Alexander Sproedt
Chair: Jeans Mizuyama
Chair: Stefanos Emmanouilidis
Chair: Ingo Riedel
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<tr>
<th>Time</th>
<th>Session</th>
<th>Chair(s)</th>
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<tbody>
<tr>
<td>1:00pm - 3:00pm</td>
<td><strong>Wed2-S3: Servicization</strong></td>
<td><strong>Session Chair: Bruno Vallespir</strong></td>
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<td><strong>Session Chair: Samuel Gomes</strong></td>
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<tr>
<td>1:00pm - 3:00pm</td>
<td><strong>Wed2-I4: Sustainable Initiatives in Developing Countries-I (Special Session)</strong></td>
<td><strong>Session Chair: Irenilza de Alencar Nâáis</strong></td>
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<td><strong>Session Chair: Renato Perrotta</strong></td>
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<tr>
<td>3:00pm - 3:15pm</td>
<td>Break</td>
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<tr>
<td>3:15pm - 5:15pm</td>
<td><strong>Wed3-M7: Intelligent Production Systems and Planning Solutions for Sustainability-2 (Special Session)</strong></td>
<td><strong>Session Chair: Ralph Riedel</strong></td>
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<td><strong>Session Chair: Hendrik Hopf</strong></td>
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<tr>
<td>3:15pm - 5:15pm</td>
<td><strong>Wed3-C5: Supply Chain Management</strong></td>
<td><strong>Session Chair: Ming Lim</strong></td>
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<td><strong>Session Chair: Jinwoo Park</strong></td>
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<tr>
<td>3:15pm - 5:15pm</td>
<td><strong>Wed3-M1: Social Sustainability in Manufacturing (Special Session)</strong></td>
<td><strong>Session Chair: Paola Fantini</strong></td>
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<td><strong>Session Chair: Marco Taisch</strong></td>
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<tr>
<td>3:15pm - 5:15pm</td>
<td><strong>Wed3-I6: LCA Methods and Tools</strong></td>
<td><strong>Session Chair: El Kadri Soumaya</strong></td>
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<td><strong>Session Chair: Barbara Resta</strong></td>
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<td>3:15pm - 5:15pm</td>
<td><strong>Wed3-I5: Sustainable Initiatives in Developing Countries-2 (Special Session)</strong></td>
<td><strong>Session Chair: Robert Ari Waker</strong></td>
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<td><strong>Session Chair: JOAO GILBERTO MENDES DOS REIS</strong></td>
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<tr>
<td>5:00pm - 6:30pm</td>
<td><strong>3D-Printing: CIMP-3D Tour and Demonstrations</strong></td>
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<td>6:30pm - 10:00pm</td>
<td><strong>Gala Dinner</strong></td>
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<td><strong>Date: Thursday, 12/Sep/2013</strong></td>
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<tr>
<td>7:30am - 9:00am</td>
<td><strong>Continental Breakfast</strong></td>
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<tr>
<td>8:30am - 9:30am</td>
<td><strong>Thu-Plenary: Plenary Session - Key Note Address</strong></td>
<td><strong>Session Chair: Marco Taisch</strong></td>
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<td><strong>Session Chair: Vijay Srinivasan</strong></td>
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<td>&quot;Global Collaborative Research Network and Services Through IMS&quot; by Dan Nagy, Managing Director, Inter-Regional Secretariat of IMS</td>
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<tr>
<td>9:30am - 10:00am</td>
<td>Break</td>
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<tr>
<td>10:00am - 12:00pm</td>
<td><strong>Thu1-C4: Closed Loop Design</strong></td>
<td><strong>Session Chair: A. Ravi Ravindran</strong></td>
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<td><strong>Session Chair: Klaus-Dieter Thoben</strong></td>
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<tr>
<td>10:00am - 12:00pm</td>
<td><strong>Thu1-C3: Sustainability Characterization for Product Assembly and Supply Chain (Special Session)</strong></td>
<td><strong>Session Chair: Shaw C. Feng</strong></td>
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<td><strong>Session Chair: Kincho H Law</strong></td>
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<tr>
<td>10:00am - 12:00pm</td>
<td><strong>Thu1-I7: ICT for Manufacturing and Supply Chain Management - 2</strong></td>
<td><strong>Session Chair: Dimitris Kiritsis</strong></td>
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<td><strong>Session Chair: Thorsten Wuest</strong></td>
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<tr>
<td>10:00am - 12:00pm</td>
<td><strong>Thu1-I8: Product Design for Sustainable Supply Chains (Special Session)</strong></td>
<td><strong>Session Chair: Gui Kremer</strong></td>
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<td><strong>Session Chair: Mahnoosh Zebardast</strong></td>
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<tr>
<td>12:00pm - 12:30pm</td>
<td><strong>CLOSE: Closing Session</strong></td>
<td><strong>Session Chair: Vital Prabhu</strong></td>
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</tbody>
</table>
1:00pm - 3:00pm Nanofab: Post Conference - Nanofab Tour (Pre-paid registration)
Pick up from Penn Stater @ 1:00 p.m. (outside of President’s Hall, conference wing) and return approximately 3:00 p.m.

Presentations

Mon1: APMS Doctoral Workshop (Sponsor: Electro-Optics Center). By Invitation Only

Time: Monday, 09/Sep/2013: 9:00am - 5:15pm · Location: 203
Session Chair: Sergio Cavalieri

A Mathematical Programming Model for Sustainable Supply Chains
Bojan Stahl
Politecnico di Milano, Italy; bojan.stahl@polimi.it

Visual language for user-centred service design
Eunji Lee
SINTEF ICT; eunji.lee@sintef.no

Supply Chain Microfinance with Defaults: Game Theoretical Approach
Jaehun Sim
PSU, United States of America; jus238@psu.edu

Smart energy demand management – A collaborative framework for consumers’ active participation
Zaheer Tariq
University of Bergamo, Italy; zaheer.tariq@unibg.it

Management of Sustainability Performance in Manufacturing Providing After-Sales Services: A comparison between B2B and B2C, Large Enterprise and SMEs
Mahnoosh Zebardast
Politecnico di Milano, Italy; mahnoosh.zebardast@mail.polimi.it

Determination of Interdependencies between Energy Efficiency and Production Logistics Using Design-of-Experiments (DoE)
Ulrich Brandenburg
Institute for Industrial Management at RWTH Aachen University, Germany; bb@fir.rwth-aachen.de

A search for sustainability dimensions in manufacturing strategy
Naghmeh Taghavi
Chalmers University of Technology, Sweden; naghmeh.taghavi@chalmers.se

Energy Model of Manufacturing System based on Queueing Network
Hyun Woo Jeon
Pennsylvania State University, United States of America; albert.jeon@psu.edu

Distributed Information Rich Transshipments: Analytical and Simulative Approaches
Avinoam Tzimerman
Technion, Israel; AvinoamT@Technion.ac.il
**Tue1-C1: Sustainable Manufacturing and Supply Chain Management for Renewable Energy (Special Session)**

*Time*: Tuesday, 10/Sep/2013: 10:00am - 12:00pm  
*Location*: 203  
*Session Chair*: Guiping Hu  
*Session Chair*: Evelyn Thomchick

**Governing and Managing Customer-initiated Engineering Change – An in-depth case study of a global industrial supplier**

_Anita Friis Sommer, Simon Haahr Storbjerg, Iskra Dukovska-Popovska, Kenn Steger-Jensen_

Aalborg University, Denmark; [sommer@m-tech.aau.dk](mailto:sommer@m-tech.aau.dk)

**Supplier Value of Customer-initiated Collaborative Product Development – An in-depth case study of a European industrial mass-producer**

_Anita Friis Sommer, Iskra Dukovska-Popovska, Kenn Steger-Jensen_

Aalborg University, Denmark; [sommer@m-tech.aau.dk](mailto:sommer@m-tech.aau.dk)

**An Optimization Model for Advanced Biofuel production Based on Bio-Oil Gasification**

_Qi Li, Guiping Hu_

Iowa State University, United States of America; [gphu@iastate.edu](mailto:gphu@iastate.edu)

**A sequential fast pyrolysis facility location-allocation model**

_Yihua Li, Guiping Hu_

Iowa State University, United States of America; [gphu@iastate.edu](mailto:gphu@iastate.edu)

**Potential Woody Biomass Supply Chain Scenarios: A Conceptual Study**

_Evelyn Thomchick, Kusumal Ruamsook_

Penn State University, United States of America; [ethomchick@psu.edu](mailto:ethomchick@psu.edu)

**Long term analysis of Energy Payback Time for PV Systems**

_Simone Zanoni, Laura Mazzoldi_

Università di Brescia, Italy; [zanoni@ing.unibs.it](mailto:zanoni@ing.unibs.it)
**Tue1-S5: The Art of Balancing Innovation and Efficiency in Service Systems - The Challenge in Ambidexterity (Special Session)**

*Time:* Tuesday, 10/Sep/2013: 10:00am - 12:00pm  
*Location:* 206  
*Session Chair:* Gerhard Gudergan  
*Session Chair:* Volker Stich

**Finding the optimal Operating Point for Service Production Processes via Simulation**  
Günther Schuh, Philipp Jussen, Christian Fabry, Gerhard Gudergan  
Institute for Industrial Management (FIR), Germany; philipp.jussen@fir.rwth-aachen.de

**Information – The Hidden Value of Servitization**  
David Opresnik¹, Manuel Hirsch², Christian Zanetti¹, Marco Taisch¹  
¹Politecnico di Milano, Italy; ²Centre for Management Research, DITF Denkendorf, Germany; cristiano.zanetti@polimi.it

**How advances of ICT will impact on service systems and on the delivering of product-related services**  
Mario Rapaccini, Isabella Porcelli  
University of Florence, Italy; mario.rapaccini@unifi.it

**Requirements for Servitization in Manufacturing Service Ecosystems**  
Stefan Wiesner¹, Michele Sesana², Sergio Gusmeroli², Klaus-Dieter Thoben¹  
¹BIBA - Bremer Institut für Produktion und Logistik GmbH, Germany; ²TXT e-Solutions S.p.A., Italy; wie@biba.uni-bremen.de

**Service supply chain planning for industrial services – design and application of a decision support tool**  
Philipp Hertz, Alexander Sproedt  
BWI, ETH Zurich, Switzerland; phertz@ethz.ch

**Mass Customization in Supply Chain Level: Development of a Conceptual Framework to Manage and Assess Performance**  
Mahnoosh Zebardast, Silvia Malpezi, Marco Taisch  
Politecnico di Milano, Italy; mahnoosh.zebardast@mail.polimi.it
Tue1-S1: Service Manufacturing Systems (Special Session)

Time: Tuesday, 10/Sep/2013: 10:00am - 12:00pm  ·  Location: 211
Session Chair: Toshiya Kaihara
Session Chair: Takeshi Shimmura

Optimum Allocation Method of Standby Taxi Vehicles at Taxi Stands
Takashi Tanizaki
Kinki University, Japan; tanizaki@hiro.kindai.ac.jp

Improving Labor Productivity and Labor Elasticity at Multiproduct Japanese Cuisine Restaurant Introducing Cell-Production System
Takeshi Shimmura1,2, Takeshi Takenaka2, Syuichi Ohura1
1Ganko Food Service co. ltd, Japan; 2Center for Service Research, National Institute of Advanced Industrial Science and Technology; t-shinmura@gankofood.co.jp

Does the carbon footprint enhance the sustainability food production and transportation service system?
Real buying experiment in Japan
Keiko AOKI1, Kenju AKAI2
1Osaka University, Japan; 2the University of Tokyo, Japan; fuizu43@gmail.com

Does an information service provider improve the market?
Kenju Akai1, Keiko Aoki2, Nariaki Nishino1
1The university of Tokyo, Japan; 2Niigata University, Japan; akai@css.t.u-tokyo.ac.jp

Facility Layout Planning of Central Kitchen in Food Service Industry - Application to the real-scale problem
Nobutada Fujii, Toshiya Kaihara, Minami Uemura, Tomomi Nonaka, Takeshi Shimmura
Kobe University, Japan; nonaka@phoenix.kobe-u.ac.jp
Tue1-I1: ICT-Enabled Integrated Operations (Special Session)

Time: Tuesday, 10/Sep/2013: 10:00am - 12:00pm
Location: 218
Session Chair: Daryl John Powell
Session Chair: Bernard Grabot

ICT-enabled integrated operations: Towards a framework for the integration of manufacturing- and maintenance planning and control
Daryl John Powell, Harald Rødseth
Norwegian University of Science and Technology, Norway; daryl.j.powell@ntnu.no

Functional Requirements for a Collaborative Order Management Tool for Use in an Engineering Setting
Berge Sjøbakk, Ottar Bakås
SINTEF, Norway; borge.sjobakk@sintef.no

Supporting Rapid Product Development with Sketch-Based Modeling
Nathavika Chansri¹, Pisut Koomsap²
¹Industrial Engineering, Faculty of Engineering at Si Racha, Kasetsart University, Thailand; ²Industrial and Manufacturing Engineering, School of Engineering and Technology, Asian Institute of Technology, Thailand; pisut@ait.ac.th

Lean and Automate Manufacturing and Logistics
Bernardo Nicoletti
Università di Roma Tor Vergata, Italy; info@bernardonicoletti.com

Proposal of an interoperability standard supporting PLM and knowledge sharing
Simone Parrotta¹, Jacopo Cassina¹, Marco Taisch³, Sergio Terzi³, David Potter³, Kary Framling⁴
¹Holonix, Italy; ²Politecnico di Milano, Italy; ³University of Bergamo, Italy; ⁴Aalto University, Finland; simone.parrotta@holonix.it
A production-state based approach for energy flow simulation in manufacturing systems

Bojan Stahl\textsuperscript{1}, Marco Taisch\textsuperscript{1}, Federica Vaccari\textsuperscript{1}, Andrea Cataldo\textsuperscript{2}
\textsuperscript{1}Politecnico di Milano, Italy; \textsuperscript{2}Institute of Industrial Technology and Automation National Research Council, Italy; 
bojan.stahl@polimi.it

Sustainability Enhancement through Environmental Impacts Evaluation

Matteo Mario Savino, Antonio Mazza
University of Sannio, Department of Engineering, Italy; matteo.savino@unisannio.it

Efficient Energy Performance Indicators for Different Level of Production Organizations in Manufacturing Companies

Hendro Wicaksono\textsuperscript{1}, Tim Belzner\textsuperscript{2}, Jivka Ovtcharova\textsuperscript{3}
\textsuperscript{1}Institute for Information Management in Engineering (IMI), Karlsruhe Institute of Technology, Germany; \textsuperscript{2}Institute for Information Management in Engineering (IMI), Karlsruhe Institute of Technology, Germany; \textsuperscript{3}Institute for Information Management in Engineering (IMI), Karlsruhe Institute of Technology, Germany; hendro.wicaksono@kit.edu

Energy related Key Performance Indicators – State of the art, gaps and industrial needs

GOKAN MAY\textsuperscript{1,2}, MARCO TAI SCH\textsuperscript{1}, VITTAL PRABHU\textsuperscript{2}, ILARIA BARLETTA\textsuperscript{1}
\textsuperscript{1}Politecnico di Milano, Italy; \textsuperscript{2}Pennsylvania State University, USA; goekan.may@mail.polimi.it

A Queuing Approach for Energy supply in manufacturing facilities

Lucio Zavanella, Ivan Ferretti, Simone Zanoni, Laura Bettoni
Università di Brescia, Italy; zanoni@ing.unibs.it
Tue2-C2: Interoperability in the Manufacturing and Supply Chain Services
(Special Session)

Time: Tuesday, 10/Sep/2013: 1:00pm - 3:00pm · Location: 206
Session Chair: Serm Kulvatunyou
Session Chair: Christopher Peters

Supply Chain Interoperability Efforts Missing Key Data
Christopher Peters
The Lucrum Group, United States of America; cpeters@thelucrumgroup.com

A Framework for Developing Manufacturing Service Capability Information Model
Yunsu Lee, Yun Peng
University of Maryland, Baltimore County, United States of America; kx78971@umbc.edu

Semantic Web-based Supplier Discovery Framework
Jaehun Lee¹, Kiwook Jung¹, Bo Hyun Kim², Hyunbo Cho³
¹POSTECH(Pohang University of Science and Technology), Korea, Republic of (South Korea); ²KITECH(Korea Institute of Industrial Technology), Korea, Republic of (South Korea); jaehun.lee@postech.ac.kr

A Consilience-based Approach to Engineering Services in Global Supply Chains
Albert Jones
NIST, United States of America; albert.jones@nist.gov

Manufacturing Capability Inference and Supplier Classification Based on a Formal Thesaurus
Farhad Ameri, Stan Thornhill
Texas State University, United States of America; ameri@txstate.edu

Excellent Manufacturer Scouting System (EMSS) for Korean Mold Industry
Moonsoo Shin¹, Sangil Lee², Kwangyeol Ryu², Hyunbo Cho³
¹Hanbat National University, Daejeon, Republic of (South Korea); ²Pusan National University, Korea, Republic of (South Korea); ³Pohang University of Science and Technology, Pohang, Gyeongbuk, Republic of (South Korea); hcho@postech.ac.kr

Use Case Analysis for Standard Manufacturing Service Capability Model
Yunsu Lee, Boonserm Kulvatunyou, Marko Vujasinovic, Nenad Ivezic
National Institute of Standards and Technology, United States of America; kx78971@umbc.edu
Empirical Evidence of an Efficient Formulation for the Multi-Period Setup Carryover Lot Sizing Problem

Harvey Millar¹, Suzana Russell²
¹Saint Mary's University, Canada; ²University of Trinidad and Tobago; harvey.h.millar@gmail.com

Multi-level service approach for flexible support of design processes

Safa Hachani¹, Lilia Gzara¹, Herve Verjus²
¹Grenoble Institute of Technology, G-SCOP Lab; ²University of Savoie, LISTIC Lab; lilia.gzara@g-scop.inpg.fr

Simulated annealing for a vehicle routing problem with simultaneous pickup-delivery and time windows

Chao Wang¹², Fu Zhao³, Dong Mu¹, John W Sutherland³
¹School of Economics and Management, Beijing Jiaotong University, China; ²College of Engineering, Purdue University, United State; chaowang.hn@gmail.com

Development of a decision support system to facilitate multi-criteria decision making during humanitarian operations within a project life cycle

Krittiya Saksrisathaporn, Aurelie Charles
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Interactive Business Models to deliver Product-Services to Global Markets

Sergio Cavalieri¹, David Romero⁰, Paul Schoensleben⁵, Jan Ola Strandhagen⁴
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Tue2-I2: Emerging and Innovative Technologies-1

Time: Tuesday, 10/Sep/2013: 1:00pm - 3:00pm · Location: 218
Session Chair: Kenn Steger-Jensen
Session Chair: Damien Trentesaux

Research on Recognition Algorithm of Track Substructure Defects Based on Vehicle Dynamic Responses
Hongmei Shi
Beijing Jiaotong University, China, People's Republic of; shihongmei7308@163.com

Critical analysis of management system of hazardous solid waste generated in the city of Santos in the state of São Paulo
Ulysses Martins Moreira Filho¹, Pedro Luiz de Oliveira Costa Neto²
¹Paulista University - UNIP, Brazil; ²Paulista University - UNIP, Brazil; moreiraf@uol.com.br

Relevance of Kotter’s Model for Change in successfully implementing Lean
Shovan Mishra
Auburn University, United States of America; shovanmishra@auburnalum.org

Determinants of Smart Energy Demand Management: An Exploratory Analysis
Zaheer Tariq¹, Sergio Cavalieri², Roberto Pinto²
¹University of Bergamo, Department of Management, Economics and Quantitative Methods, Bergamo, Italy; ²University of Bergamo, Department of Engineering, CELS – Research Group on Industrial Engineering, Logistics and Service Operations, Bergamo, Italy; zaheer.tariq@unibg.it

A Model Based Continuous Improvement Methodology for Sustainable Manufacturing
Sanjay Jain¹, Gordon Shao², Alexander Brodsky³, Frank Riddick²
¹George Washington University, United States of America; ²National Institute of Standards and Technology, Gaithersburg, MD, USA; ³George Mason University, Fairfax, VA, USA; jain@gwu.edu
**Wed1-M3: Manufacturing Networks for Mass Customization**

*Time: Wednesday, 11/Sep/2013: 10:00am - 12:00pm · Location: 202*

Session Chair: Pisut Koomsap

Session Chair: Stig Brink Taps

**Sustainability Evaluation of Mass Customization**

Thomas Dittev Brunoe, Kjeld Nielsen, Stig B. Taps, Kaj A. Joergensen

Aalborg University, Denmark; taps@m-tech.aau.dk

**Assessment of Process Robustness for Mass Customization**

Kjeld Nielsen, Thomas Dittev Brunoe

Aalborg University, Denmark; kni@m-tech.aau.dk

**Conception of technology chains in battery production**

Achim Kampker¹, Heiner Hans Heimes², Christian Sesterheim³, Marc Schmidt⁴

¹RWTH Aachen University, Germany; ²RWTH Aachen University, Germany; ³RWTH Aachen University, Germany; ⁴RWTH Aachen University, Germany; h.heimes@wzl.rwth-aachen.de

**Application of Design by Customer in Tile Decoration Business**

Supimmas Thienhirun, Pisut Koomsap

Industrial and Manufacturing Engineering, School of Engineering and Technology, Asian Institute of Technology, Thailand; pisut@ait.ac.th

**A novel framework for technological evolution within product architecture**

Yannick CHAPUIS, Frédéric DEMOLY, Samuel GOMES

UTBM, France; yannick.chapuis@utbm.fr
Wed1-I9: Emerging and Innovative Technologies-2

**Time:** Wednesday, 11/Sep/2013: 10:00am - 12:00pm · **Location:** 203
**Session Chair:** Jan Frick
**Session Chair:** Rhythm Suren Wadhwa

**Engineering product-service solutions: an application in the power and automation industry**
Giuditta Pezzotta, Roberto Pinto, Fabiana Pirola, Sergio Cavalieri, Fumiya Akasaka, Yoshiki Shimomura
Università degli Studi di Bergamo, Italy; sergio.cavalieri@unibg.it

**Business Model Canvas as tool for SME**
Jan Frick, Murshid Mikael Ali
University of Stavanger, Norway; jan.frick@uis.no

**Methodology for internal traceability support in foundry manufacturing**
Rhythm Suren Wadhwa
NTNU Valgrinda, Norway; rhythm.s.wadhwa@ntnu.no

**Reverse Logistics: network design based on life cycle assessment**
Joanna Daaboul, Julien Le Duigou, Diana Penciuc, Benoît Eynard
Université de Technologie de Compiègne, France; joanna.daaboul@utc.fr

**Is healthy eating, healthy for the environment? Barilla Center for Food and Nutrition Double Food Pyramid**
Luca Ruini¹, Roberto Ciati¹, Carlo Alberto Pratesi², Ludovica Principato², Massimo Marino³, Sonia Pignatelli³
¹Barilla G.e R. Fratelli S.p.A., Italy; ²Roma Tre University, Italy; ³StudioLCE, Italy; luca.ruini@barilla.com
Wed1-S4: Simulation Based Training in Production and Operations Management
(Special Session)

Time: Wednesday, 11/Sep/2013: 10:00am - 12:00pm · Location: 211
Session Chair: Avraham Shtub
Session Chair: Alexander Sproedt

Development of a Training System for Lathe Operation using a Simulator
Tatsuya Yamaguchi1, Takashi Kawashimo1, Toshiyuki Matsumoto1, Daisuke Doyo2
1Aoyama Gakuin University, Japan; 2Kanagawa University, Japan; c5612135@aoyama.jp

Using Serious Game in Sustainable Global Manufacturing Education
Borzoo Pourabdollahian Tehran, Marco Taisch, Manuel Fradinho
Politecnico di Milano, Italy; borzoo.pourabdollahian@mail.polimi.it

Simulator Based Training to Improve Tradeoffs Analysis and Decision Making in Lean Development Environment
Michal Iluz, Avraham Shtub
Technion - Institute of Technology in Israel, Israel; shtub@ie.technion.ac.il

A Simulation Enabled Procedure for Eco-Efficiency Optimization in Production Systems
Alexander Sproedt, Johannes Plehn, Philipp Hertz
ETH Zurich, Switzerland; asproedt@ethz.ch

Teaching Supply Chain Management: Mixed vs. Pure Strategies in Simulation Based Training
Avinoam Tzimerman, Yale Herer, Avraham Shtub
Technion, Israel; AvinoamT@Technion.ac.il

Performance analysis of reverse supply chain systems by using simulation
Shigeki Umeda
Musashi University, Japan; shigeki@cc.musashi.ac.jp
A Prototype Crowdsourcing Approach for Document Summarization Service

Hajime Mizuyama, Keishi Yamashita, Kenji Hitomi, Michiko Anse
Aoyama Gakuin University, Japan; mizuyama@ise.aoyama.ac.jp

Intelligent products: a spinal column to handle information exchanges in supply chains

Damien Trentesaux\textsuperscript{1}, Bernard Grabort\textsuperscript{2}, Yves Sallez\textsuperscript{1}
\textsuperscript{1}UVHC, France; \textsuperscript{2}ENIT, France; damien.trentesaux@univ-valenciennes.fr

Integrating Lean and MRP: A Taxonomy of the Literature

Daryl John Powell, Ilker Bas, Erlend Alfnes
Norwegian University of Science and Technology, Norway; daryl.j.powell@ntnu.no

Supply chain integration for sustainability faces sustaining ICT problems

Johan Wortmann, Alex Alblas, Paul Buijs, Kristian Peters
University of Groningen, Netherlands, The; k.peters@rug.nl

Physical Asset Management Practices in Industry: Comparisons between Greece and other EU Countries

Christos Emmanouilidis\textsuperscript{1}, Kari Komonen\textsuperscript{2}
\textsuperscript{1}ATHENA Research & Innovation Centre, Greece; \textsuperscript{2}Promaint, Finland; christosem@ieee.org
Wed2-M6: Intelligent Production Systems and Planning Solutions for Sustainability -1 (Special Session)

Time: Wednesday, 11/Sep/2013: 1:00pm - 3:00pm · Location: 202
Session Chair: Ralph Riedel
Session Chair: David Jentsch

Modeling Energy Performance of Manufacturing Systems using Gi/M/1 Queues
Hyun Woo Jeon, Vittal Prabhu
Pennsylvania State University, United States of America; albert.jeon@psu.edu

Energy-Efficiency Concept for the Manufacturing Industry
Volker Stich, Niklas Hering, Christian Paul Starick, Ulrich Brandenburg
Institute for Industrial Management at RWTH Aachen University, Germany; bb@fir.rwth-aachen.de

Attacking the Critical Parts in Product Development. Marin Platform - Building Flexible Structural Elements for Boats
Bjørnar Henriksen, Carl Christian Røstad
SINTEF, Norway; bjornar.henriksen@sintef.no

Chance Constrained Programming Model for Stochastic Profit-Oriented Disassembly Line Balancing in the Presence of Hazardous Parts
Mohand Lounes Bentaha, Olga Battaia, Alexandre Dolgui
Ecole des Mines de Saint-Etienne, France; bentaha@emse.fr

From EcoDesign to Industrial Metabolism. Redefinition of Sustainable Innovation and Competitive Sustainability.
Stig Brink Taps, Thomas D. Brunoe, Kjeld Nielsen
Aalborg University, Denmark; taps@m-tech.aau.dk

Resource-Efficient Production Planning through Flexibility Measurements in Value Creation Systems
Sven Rogalski¹, Hendro Wicaksono¹, Konstantin Krahtov²
¹Karlsruhe Institute of Technology (KIT), Germany; ²Open Experience GmbH; Hendro.wicaksono@kit.edu
Wed2-M5: Enablers for Smart Manufacturing

Time: Wednesday, 11/Sep/2013: 1:00pm - 3:00pm · Location: 206
Session Chair: Johan Stahre
Session Chair: Bojan Stahl

Towards an approach to identify the optimal instant of time for information capturing in supply chains
Thorsten Wuest, Dirk Werthmann, Klaus-Dieter Thoben
BIBA - Bremer Institut für Produktion und Logistik GmbH, Germany; wue@biba.uni-bremen.de

Exploring Different Faces of Mass Customization in Manufacturing
Golboo Pourabdollahian, Marco Taisch, Gamze Tepe
Politecnico di Milano, Italy; golboo.pourabdollahian@mail.polimi.it

State-oriented productivity analysis in one-of-a-kind-production
Florian Tietze, Hermann Lödding
Hamburg University of Technology, Germany; florian.tietze@tuhh.de

A Study on the Effect of Inspection Time on Defect Detection Rate in Visual Inspection
Ryosuke Nakajima¹, Keisuke Shida², Toshiyuki Matsumoto¹
¹Aoyama Gakuin University, Japan; ²Nagaoka University of Technology, Japan; ryosh.12.3@gmail.com

Toward Automated Design for Manufacturing Feedback
Wonmo Kim, Timothy William Simpson
The Pennsylvania State University, United States of America; wzk106@psu.edu
Wed2-S3: Servicization

Time: Wednesday, 11/Sep/2013: 1:00pm - 3:00pm  ·  Location: 211
Session Chair: Bruno Vallespir
Session Chair: Samuel Gomes

Word of Mouth in Hospitality Management: The Case of Luxury Hotels in China
Maria Jose Alvarez Gil, Wei Yan
Universidad Carlos III de Madrid, Spain; wei.yan@uc3m.es

Service delivery process based on service composition mechanisms
Thecle Alix, Bruno Vallespir
IMS University of Bordeaux, France; thecle.alix@ims-bordeaux.fr

Towards a knowledge-intensive framework for top-down design context definition
Nicolas Petrazoller, Frédéric Demoly, Samuel Deniaud, Samuel Gomes
UTBM, France; n.petrazoller@laposte.net

Servitization of the Manufacturer’s Value Chain
David Opresnik, Christian Zanetti, Marco Taisch
Politecnico di Milano, Italy; david.opresnik@polimi.it

Monitoring & Controlling in an Industrial Service Ecosystem
Marco Taisch, Mohammadreza Heydari Alamdari, Christian Zanetti
POLITECNICO DI MILANO, Italy; mohammadreza.heydari@polimi.it
**Wed2-I4: Sustainable Initiatives in Developing Countries-I (Special Session)**

**Time:** Wednesday, 11/Sep/2013: 1:00pm - 3:00pm  
**Location:** 218

**Session Chair:** Irenilza de Alencar Nääs

**Session Chair:** Renato Perrotta

Sustainable initiatives in developing countries  
Antonio René Camargo Aranha Paula Leite, Jayme de Aranha Machado, José Benedito Sacomano  
1Paulista University - UNIP, Brazil; 2Paulista University - UNIP, Brazil; 3Paulista University - UNIP, Brazil; arcapale@unip.br

Prioritization of Research Proposals using the Analytic Hierachy Process  
Deise Rocha Martins dos Santos Oliveira, Irenilza de Alencar Nääs, Flávio Margarito Martins Barros  
1Embrapa Informática Agropecuária, Brazil; 2Paulista University - Unip, Brazil; 3State University of Campinas - Unicamp, Brazil; deise.oliveira@gmail.com

Sustainability issues in Brazilian housing construction industry: the role of workers' education  
Carla Caprara Parizi, Irenilza de Alencar Nääs, Solimar Garcia, Eder Moreno Ferragi, Denise Simões Dupont Bernini  
Paulista University, Brazil; irenilza@gmail.com

An innovative way to add value to organizations: people relationship modeling  
Robert Ari Waker, Mario Mollo Neto, Antonio Henrique Queiroz Conceição  
UNIP - Universidade Paulista, Brazil; bobwaker@gmail.com

Reaching Energetic Sustainability through a Self-Oriented Battery Charger, based on Paraconsistent Annotated Evidential Logic Er.  
Álvaro André Colombero Prado, Cristina Corrêa de Oliveira, Lilam S. Sakamoto, Jair Minoro Abe, Marcelo Nogueira  
Universidade Paulista - UNIP, Brazil; py2alv@gmail.com

Program Inovar-Auto, Initiatives toward Innovation and Competitiveness in the Automotive Sector in Brazil  
Renato Perrotta, Oduvaldo Vendrametto, Rodrigo Franco Gonçalves, Adilson Rocha, Jorge Monteiro Junior  
UNIP - Paulista University, Brazil; renato.perrotta@uol.com.br
Wed3-M7: Intelligent Production Systems and Planning Solutions for Sustainability-2 (Special Session)

*Time*: Wednesday, 11/Sep/2013: 3:15pm - 5:15pm  
*Location*: 202

**Session Chair**: Ralph Riedel  
**Session Chair**: Hendrik Hopf

**Modeling of Energy-Efficient Factories with Flow System Theory**

*Hendrik Hopf, Egon Müller*

Chemnitz University of Technology, Germany; hendrik.hopf@mb.tu-chemnitz.de

**Agile Planning Processes**

*Ralph Riedel, David Jentsch, Sebastian Horbach, Joerg Ackermann, Egon Mueller*

Chemnitz University of Technology, Germany; david.jentsch@mb.tu-chemnitz.de

**Multi-stage parallel machines and lot-streaming scheduling problems – A case study for solar cell industry**

*Chen-Yang Cheng*

Tunghai University, Taiwan, Republic of China; chengcy@thu.edu.tw

**An exact method for the assembly line re-balancing problem**

*Fatme Makssoud, Olga Battaia, Alexandre Dolgui*

Ecole des Mines de Saint-Etienne, France; makssoud@emse.fr

**Green Factory Planning: Framework and modules for a flexible approach**

*Florian Mueller¹, Alessandro Cannata¹, Sebastian Thiede², Christoph Herrmann³, Marco Taisch⁴, Bojan Stahl⁵*

¹Siemens AG Corporate Technology, Germany; ²Institute of Machine Tools and Production Technology, Technische Universität Braunschweig; ³Politecnico di Milano; bojan.stahl@polimi.it
Wed3-C5: Supply Chain Management

Time: Wednesday, 11/Sep/2013: 3:15pm - 5:15pm  ·  Location: 203
Session Chair: Ming Lim
Session Chair: Jinwoo Park

Development of a Strategic Model for Freight Transportation with a Case Study of the Far East
Louis Coulet¹, Sungbum Jun², Jinwoo Park³
¹Thales Services, Sophia-Antipolis, France; ²Dept. of Industrial Engineering at Seoul National University, Seoul, Republic of Korea;
³Dept. of Industrial Engineering at Seoul National University, Seoul, Republic of Korea; autofact@snu.ac.kr

Simulating the Dominant Effect of a Few Critical Sites on Supply Chains Using the Inter-industry Relations Table
Sadao Suganuma, Masaru Nakano
The Graduate School of System Design and Management, Keio University, Japan; suganuma235@a6.keio.jp

Dependability a Key Element for Achieving Sustainable Competitive Advantage: A Study of Information Service Firms
Vikas Kumar², Archana Kumari³, Jose Arturo Garza-Reyes¹, Ming Lim¹
¹University of Derby, United Kingdom; ²Dublin City University, Dublin; ³University of Delhi, New Delhi, India; m.lim@derby.ac.uk

Selection and Ranking of Low Cost Countries for Outsourcing and Offshoring in the Manufacturing Sector
Rahul Ulhas Pai², Sujit Banerji³, Jose Arturo Garza-Reyes¹, Ming Lim¹, Vikas Kumar⁴
¹University of Derby, United Kingdom; ²Cummins Ltd, Darlington, UK; ³Warwick Manufacturing Group, The University of Warwick, Coventry, UK; ⁴Dublin City University Business School, Dublin City University, Dublin; m.lim@derby.ac.uk
Wed3-M1: Social Sustainability in Manufacturing (Special Session)

Time: Wednesday, 11/Sep/2013: 3:15pm - 5:15pm  ·  Location: 206
Session Chair: Paola Fantini
Session Chair: Marco Taisch

Game Theoretical Approach to Supply Chain Microfinance
Jaehun Sim, Prabhu Vittal
PSU, United States of America; jus238@psu.edu

Surplus Product Donation and Sustainability Strategy: Channels and Challenges for Corporate Product Donations
Md. M. Islam, John Vande Vate
School of Industrial and Systems Engineering, Georgia Tech, USA; mislam6@gatech.edu

Social sustainability: perspectives on the role of manufacturing
Paola Fantini¹, Marco Taisch², Claudio Palasciano²
¹Fondazione Politecnico di Milano; ²Politecnico di Milano, Italy; marco.taisch@polimi.it

Information Flows in Future Advanced Manufacturing Ecosystems
Minna Lanz, Matti Majuri, Reijo Tuokko
Tampere University of Technology, Finland; minna.lanz@tut.fi

Social Sustainability Challenges for European Manufacturing Industry: Attract, Recruit and Sustain
Cecilia Berlin, Caroline Dedering, Guðbjörg Rist Jónsdóttir, Johan Stahre
Chalmers University of Technology, Sweden; gubjorg@student.chalmers.se
Wed3-I6: LCA Methods and Tools

**Time:** Wednesday, 11/Sep/2013: 3:15pm - 5:15pm  
**Location:** 211

**Session Chair:** El Kadiri Soumaya

**Linked Data exploration in Product life-cycle management**

Ana Milicic, Soumaya El Kadiri, Dimitris Kiritsis
Ecole Polytechnique Federale da Lausanne, Switzerland; ana.milicic@epfl.ch

Towards a fast evaluation of environmental impacts.

Daniele Cerri¹, Marco Taisch¹, Sergio Terzi², Simone Parrotta³
¹Politecnico di Milano, Italy; ²Universita degli Studi di Bergamo, Italy; ³Holonix S.R.L., Italy; daniele.cerri@polimi.it

A DECISION MAKING PROCESS FOR SUSTAINABILITY IN THE TEXTILE SECTOR

Barbara Resta, Stefano Dotti, Roberto Pinto, Paolo Gaiardelli
CELS – Research Group on Industrial Engineering, Logistics and Service Operations, Department of Engineering, University of Bergamo, Italy; barbara.resta@unibg.it

Sustainability Assessment Tools – State of Research and Gap analysis

MARCO TAI SCH, VAHID SADR, GOKAN MAY, BOJAN STAHL
Politecnico di Milano, Italy; gokan.may@polimi.it

Increasing the sustainability of pasta production through a life cycle assessment approach

Luca Ruini¹, Emilio Ferrari¹, Pierluigi Meriggi², Massimo Marino³, Filippo Sessa³
¹Barilla G.e R. Fratelli S.p.A, Italy; ²Horta Srl, Italy; ³StudioLCE, Italy; luca.ruini@barilla.com
Wed3-I5: Sustainable Initiatives in Developing Countries-2 (Special Session)

**Time:** Wednesday, 11/Sep/2013: 3:15pm - 5:15pm  
**Location:** 218

**Session Chair:** JOAO GILBERTO MENDES DOS REIS

**Is environmental innovation worth it? The case of civil aviation industry in emerging markets**

Maria Jose Alvarez Gil, Wei Yan  
Universidad Carlos III de Madrid, Spain; wei.yan@uc3m.es

**Technological innovation ethics and legislation as factors for quality of life**

ALINE RODRIGUES SACOMANO, ODUVALDO VENDRAMETTO, PEDRO LUIZ OLIVEIRA COSTA NETO  
UNIVERSIDADE PAULISTA - UNIP, Brazil; aline.sacomano@uol.com.br

**Sustainability Impacts in the IT Strategic Alignment**

Antônio Palmeira Araujo Neto, Ivanir Costa, Andréa Martins Cristóvão, Nilo Serpa  
Universidade Paulista, Brazil; niloserpa@gmail.com

**Development of Agile Supply Chains in Brazil**

JOAO GILBERTO MENDES DOS REIS 1,2, PEDRO LUIZ DE OLIVEIRA COSTA NETO2, JOSÉ PAULO ALVES FUSCO3, SIVANILZA TEIXEIRA MACHADO4  
1Federal University of Grande Dourados, School of Engineering and Graduate Studies Program in Agrobusiness; 2Paulista University, Graduate Studies Program in Production Engineering; 3Paulista State University, School of Engineering, Bauru, Brazil; 4Federal University of Grande Dourados, Graduate Studies Program in Agricultural Engineering; betomendesreis@msn.com

**A Technical Noncompliance Evaluation Criteria for Sustainable Production in IT Support Services**

Nilo Costa Serpa, Ivanir Costa, Antônio Palmeira Araújo Neto  
UNIP - Universidade Paulista, Brazil; niloserpa@gmail.com

**Education mediated by technology: strategy to spread high school learning in Piauí State, Brazil**

Reinaldo Araujo Lopes, Dalton Oswaldo Buccelli, Herbert Gonçalves Espuny, Jean Carlos Cavaleiro, Pedro Luiz de Oliveira Costa Neto, Simone Maria Viana Romano  
Universidade Paulista, Brazil; mestradoua@bol.com.br
Thu1-C4: Closed Loop Design

Time: Thursday, 12/Sep/2013: 10:00am - 12:00pm  ·  Location: 203
Session Chair: A. Ravi Ravindran
Session Chair: Klaus-Dieter Thoben

Closed Loop Supply Chains for Sustainable Mass Customization
Kjeld Nielsen, Thomas Ditlev Brunoe
Aalborg University, Denmark; kni@m-tech.aau.dk

An Effective Policy for Recycling Parts for the Production Management of Consumable Supplies
Satoshi Ito, Tatsuya Komuro, Tomoaki Yamazaki, Toshiyuki Matsumoto
Aoyama Gakuin University, Japan; c5612120@aoyama.jp

Modeling and Simulation of Closed-Loop Supply Chains Considering Economic Efficiency
Yoshitaka Tanimizu, Yusuke Shimizu, Koji Iwamura, Nobuhiro Sugimura
Osaka Prefecture University, Japan; tanimizu@me.osakafu-u.ac.jp

Determination of the Spare Parts Demand for Maintenance, Repair and Overhaul Service Providers
Uwe Dombrowski, Sebastian Weckenborg
Technische Universität Braunschweig, Germany; s.weckenborg@tu-bs.de

Using Cloud, Modularity, and Make-to-Upgrade Strategy for Integrating Customized-Oriented Supply Networks
Afshin Mehrsai¹, Hamid-Reza Karimi², Klaus-Dieter Thoben¹
¹BIBA – Bremer Institut für Produktion und Logistik GmbH, Germany; ²University of Agder, Norway; afshin.mehrsai@gmail.com
Thu1-C3: Sustainability Characterization for Product Assembly and Supply Chain (Special Session)

Time: Thursday, 12/Sep/2013: 10:00am - 12:00pm · Location: 206
Session Chair: Shaw C. Feng
Session Chair: Kincho H Law

An Information Reporting Web Service Framework for Integration of Gate-to-Gate Process-to-Energy Metrics

Lewis John McGibney, Mark Peng, Kincho Law
Stanford University, United States of America; lewis2@stanford.edu

The reverse logistics technology and development trend of retired home appliances

Xin Zhao, Yonggao Fu, Jiaqi Hu, Ling Wang
China National Electric Apparatus Research Institute Co. Ltd, China, People's Republic of; zhx075@126.com

Warehousing Sustainability Standards Development

Richard Bank¹, Richard Murphy²
¹Sustainable Supply Chain Foundation, United States of America; ²Murphy Warehouse Company, United States of America; rbank@sustainable-scf.org

Energy Savings Opportunities and Energy Efficiency Performance Indicators for a Serial Production Line

Michael Brundage¹, Qing Chang¹, Shiyao Wang¹, Shaw Feng⁴, Guoxian Xiao³, Jorge Arinez³
¹Stony Brook University, United States of America; ²NIST; ³GM R&D; michael.brundage@stonybrook.edu

Modeling Energy Information for Integrated Product Assembly Processes and Supply Chains

Shaw C. Feng¹, Senthilkumaran Kumaraguru¹, Kincho Law⁴, Kyeongrim Ahn¹, Nenad Ivezic⁵, Boonserm Kulvantunyou¹
¹NIST, United States of America; ²Stanford University, USA; shaw.feng@nist.gov
Thu1-I7: ICT for Manufacturing and Supply Chain Management - 2

Time: Thursday, 12/Sep/2013: 10:00am - 12:00pm · Location: 211
Session Chair: Dimitris Kiritsis
Session Chair: Thorsten Wuest

Ontology-Based Dynamic Forms for Manufacturing Capability Information Collection

Yan Kang, Yun Peng
University of Maryland Baltimore County, United States of America; kangyan2003@gmail.com

On the development of a reference framework for ICT for manufacturing skills

Ahmed Bufardi, Dimitris Kiritsis
EPFL, Switzerland; dimitris.kiritsis@epfl.ch

A Concept for Graph-based LCA Analysis Tool

Drazen Nadoveza, Andreas Koukias, Fatih Karakoyun, Dimitris Kiritsis
EPFL, Switzerland; dimitris.kiritsis@epfl.ch

Cyber-physical Production Management

Günther Schuh, Till Potente, Christina Thomas, Annika Hauptvogel
Laboratory for Machine Tools and Production Engineering (WZL) of RWTH Aachen University, Germany; A.Hauptvogel@wzl.rwth-aachen.de

Parameter management in configuration for the design of products families

Coraline DEFFRENNE, Mathieu BETTWY, Aurélie ROBERT, Samuel GOMES
IRTES-M3M, France; mathieu.bettwy@gmail.com
Thu1-I8: Product Design for Sustainable Supply Chains (Special Session)

Time: Thursday, 12/Sep/2013: 10:00am - 12:00pm · Location: 218
Session Chair: Gul Kremer
Session Chair: Mahnoosh Zebardast

Process alignment for Sustainable Product Development: The essential role of supplier and customer involvement processes
Alex Alblas, Kristian Peters, Hans Wortmann
University of Groningen, Netherlands, The; a.a.alblas@rug.nl

Global Product Development: Organization and Links with the Supply Chain
Francesca Faggioni¹, Riccardo Franzini¹, Margherita Pero¹, Monica Rossi¹, Sergio Terzi²
¹Politecnico di Milano, Italy; ²Università degli Studi di Bergamo, Italy; monica.rossi@polimi.it

A Study of Sustainability Adoption Trends in the Transportation Market
Carlos Parra, Christine Toh, Marta Jaen Ventura
Penn State University, United States of America; mxv176@psu.edu

Sustainability Adoption Trend Analysis
Simon W Miller, Paolo Pecorario, Lisa M Ulan
The Pennsylvania State University, United States of America; swm154@psu.edu

Eliciting a Mode of Transportation to Improve Product Life Cycle Performance
Paolo Pecorario
Pennsylvania State University, United States of America; pwp5155@psu.edu

SET BASED CONCURRENT ENGINEERING INNOVATION ROADMAP
Endris Temam Kerga¹, Marco Taisch¹, Sergio Terzi²
¹Politecnico di Milano, Italy; ²Università degli studi di Bergamo, Italy; endris.kerga@mail.polimi.it