Wednesday 30 April 2014

14:00 - 17:00  Early Bird Registration (CEI Foyer)

14:15 - 15:30  Educational Games Event (I) - (CEI 2102, 2103 and 2104)
   - Indication of interest in participation is needed a priori.
   Three (3) Game Themes will be played in parallel (total 42 participants):
      1. Edutainment for Designing Integrated Product-Service Systems (EDIPS)
         Two teams of 10 players each, Prof. Y. Shimomura (CEI 2104)
      2. Manufacturing Systems & Variety Games
         two teams of 6 players each, Prof. H. ElMaraghy (CEI 2103)
      3. Cost Effective Games for Large Classes
         Two teams of 5 players each, Prof. Z. Pasek (CEI 2102)

15:30 - 16:00  AFTERNOON BREAK (CEI Foyer)

16:00 - 17:20  Educational Games Event (II): Panel on Use of Educational Games in Education and Business (CEI 1101); Chair: Prof. Waguih ElMaraghy, University of Windsor, Canada
   Panel Members: Business Game “Holistic”, Mr. M. Schönemann, Germany, Edutainment Games, Prof. Y. Shimomura, Japan; Games for Large Classes, Prof. Z. Pasek, Canada; Manufacturing Systems Games, Prof. H. ElMaraghy, Canada
   Open Discussion, All are welcome.

17:30 - 19:30  REGISTRATION & RECEPTION (CEI 3000 & Roof Garden)
### Thursday 1 May 2014

**08:00 - 8:30**  
REGISTRATION (CEI Main Foyer)

**08:30 - 10:30**  
OPENING PLENARY SESSION (CEI 1100 Auditorium)  
Chair: Prof. Waguih ElMaraghy, Director Intelligent Manufacturing Systems Centre (IMSC)

- **08:30 - 09:00** Introduction - IPSS 2014 Conference Chairs  
  Prof. Hoda ElMaraghy, Canada Research Chair in Manufacturing Systems  
  Prof. Jay Lee, L.W. Scott Alter Chair Professor, and Distinguished Univ. Professor at the Univ. of Cincinnati,

- **09:00 - 09:30** Keynote Speaker: Prof. Jay Lee, L.W. Scott Alter Chair Professor, and Distinguished Univ. Professor at the Univ. of Cincinnati, “Service Innovation and Smart Analytics for Industry 4.0 and Big Data Environment”

- **09:30 - 10:00** Keynote Speaker: Prof. Rajkumar Roy, Head of Manufacturing & Materials Department, Cranfield University, “Service Knowledge Capture and Reuse”


**10:30 - 11:00**  
GROUP PICTURE & MORNING BREAK (CEI Main Foyer)

**11:00 - 12:40**  
PARALLEL SESSIONS

<table>
<thead>
<tr>
<th>Session 1:</th>
<th>Session 2:</th>
<th>Session 3:</th>
</tr>
</thead>
</table>
| Chair: Daniel Battaglia  
Room: CEI 1101 | Chair: Horst Meier  
Room: CEI 1102 | Chair: Rainer Stark  
Room: CEI 2104 |
| **Value Creation** | **Performance Indicators and Assessment** | **Knowledge Generation, Training and Education** |
|  
**Creating Value through Services and Relationships: The Perception of Purchasing Companies**  
Daniel Battaglia*, Cristiano D. Schimit, Marcelo A. Marciano, Sandro A. M. Bittencourt, Leticia Diesel, Miriam Borchardt, Giancarlo M. Pereira |  
**Balancing Product-Service Provider’s Performance and Customer’s Value: the Service Engineering Methodology (SEEM)**  
Giuditta Pezzotta*, Roberto Pinto, Fabiana Pirola, Mohamed-Zied Ouertani |  
**Research on how to Introduce the PSS Engineering into Industry**  
Hoai Nam Nguyen*, Christian Schnürmacher, Rainer Stark |
| **11:00 - 11:25** | **11:25 – 11:50** | **11:25 – 11:50** |
|  
**A Framework for Value Co-Creation through Customization and Personalization in the Context of Machine** |  
**Concept for a Performance Measurement Method for the Organization of the IPS² Delivery** |  
**Cutting Manufacturing Failure Costs in the Tool and Die Industry by Implementing a Knowledge Transfer System to Avoid and** |

---

*Note: Details for Session 3 are not fully visible in the provided image.*
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair</th>
</tr>
</thead>
</table>
| 11:50 – 12:15 | Knowledge Management in Value Creation Networks: Establishing a New Business Model through the Role of a Knowledge-Intermediary  
**Pascal Krenz**, **Sissy-Ve Basmer**, **Sonja Buxbaum-Conradi**, **Tobias Redlich**, **Jens Wulfsberg** | **Knowledge Evaluation for PSS Providers**  
**Sebastian A. Schenkl**, **Danilo M. Schmidt**, **Damian Schockenhoff**, **Maik Maurer** |
| 12:15 – 12:40 | The Impact of Openness on Value Co-Creation in Production Networks  
**Tobias Redlich**, **Pascal Krenz**, **Sissy-Ve Basmer**, **Sonja Buxbaum-Conradi**, **Stefanie Wulf**, **Jens P. Wulfsberg** | **Validation of Product-Service Systems - A Prototyping Approach**  
**Konrad Exner**, **Kai Lindow**, **Christian Buchholz**, **Rainer Stark**  
**Strategic Thinking in EDIPS: Edutainment for Designing Integrated Product-Service System**  
**Yutaro Nemoto**, **Kentaro Uei**, **Takashi Fujiwara**, **Satoshi Mizoguchi**, **Yoshiki Shimomur** |

**12:40 - 13:50**  
**LUNCH (CEI 1100 Auditorium)**

**13:50 - 15:30**  
**PARALLEl SESSIONS**

| Session 4: Chair: Nariaki Nishino  
Room: CEI 1101 | Session 5: Chair: Peggy Zwolinski  
Room: CEI 1102 | Session 6: Chair: Michael Abramovici  
Room: CEI 2104 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Marketing</td>
<td>Sustainability</td>
<td>Lifecycle Product-Service Management</td>
</tr>
</tbody>
</table>
| 13:50 - 14:15 | Literature Study on Factors Influencing the Market Acceptance of PSS  
**Sebastian A. Schenkl**, **Christian Rösch**, **Markus Mörtl** | Scenarios as a Tool for Transition towards Sustainable PSS  
**Alan Lelah**, **Xavier Boucher**, **Valentine Moreau**, **Peggy Zwolinski** | Interaction within Dynamic IPS² Networks - A Proposal of an IPS² Lifecycle Management and IPS² Delivery Management Architecture  
**Thomas M. Dorka**, **Hoang Bao Dang**, **Horst Meier**, **Michael Abramovici** |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair / Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:15 - 14:40</td>
<td>Product Families and Platforms Diversification: Customer Expectations, Product Variations, or Self-Competition?</td>
<td>Kalid Ramadan*, Dr. Waguih ElMaraghy</td>
</tr>
<tr>
<td></td>
<td>Design for Mobility - A Customer Value Creation Approach</td>
<td>Tarek AlGeddawy*, Mohamed Abbas, Hoda ElMaraghy</td>
</tr>
<tr>
<td></td>
<td>Impact of Electric Mobility on the After Sales Service in the Automotive Industry</td>
<td>Uwe Dombrowski, Christian Engel*</td>
</tr>
<tr>
<td>14:40 - 15:05</td>
<td>Extended Product Business Model Development in Four Manufacturing Case Studies</td>
<td>Stefan Wiesner*, Philippe Padrock, Klaus-Dieter Thoben</td>
</tr>
<tr>
<td></td>
<td>Scenarios for Resource Efficient Rail Infrastructure- Applying Integrated Product Service Offerings</td>
<td>Sofia Lingegård* and Niclas Svensson</td>
</tr>
<tr>
<td></td>
<td>Overview of Remaining Useful Life Prediction Techniques in Through-Life Engineering Services</td>
<td>Caxton Okoh*, Rajkumar Roy, Jörn Mehnen, Louis Redding</td>
</tr>
<tr>
<td>15:05 - 15:30</td>
<td>Product Differentiation and Consumer’s Purchase Decision-making under Carbon Footprint Scheme</td>
<td>Nariaki Nishino*, Kenju Akai, Haruaki Tamura</td>
</tr>
<tr>
<td></td>
<td>PSS Sustainability Assessment and Monitoring framework (PSS-SAM) - Case study of a multi-module PSS Solution</td>
<td>Michael Abramovic, Youssef Aidi, Akamitl Quezada*, Thomas Schindler</td>
</tr>
<tr>
<td></td>
<td>Procurement of Reconfigurable Assembly System A Justification For Effective Production Ramp Up Planning</td>
<td>Zulfiqar Ali-Qureshi*, Waguih H. El Maraghy</td>
</tr>
<tr>
<td>15:30 - 16:00</td>
<td><strong>AFTERNOON BREAK (CEI Main Foyer)</strong></td>
<td></td>
</tr>
<tr>
<td>16:00 - 17:40</td>
<td><strong>PARALLEL SESSIONS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Session 7:</strong> Chair: Vinit Parida Room: CEI 1101</td>
<td><strong>Session 8:</strong> Chair: Koji Kimita Room: CEI 1102</td>
</tr>
<tr>
<td>16:00 - 16:25</td>
<td>New Business Models and Innovation I</td>
<td>Risk and Quality Management I</td>
</tr>
<tr>
<td></td>
<td><strong>A Survey Study of the Transitioning towards High-Value Industrial Product-Services</strong></td>
<td>Vinit Parida*, David Rönberg Sjödin, Joakim Wincent, Marko Kohtamäki</td>
</tr>
<tr>
<td></td>
<td>The nature of risk management in the early phase of IPS² design</td>
<td>Michael Herzog*, Daniel Meuris, Beate Bender, Tim Sadek</td>
</tr>
<tr>
<td></td>
<td>Preparing Individuals for the Demands of PSS Work Environments through a Game-Based Community Approach - Design and Evaluation of a Learning Scenario</td>
<td>Thomas Süße*, Uta Wilkens</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>16:50 – 17:15</td>
<td>Evaluation of an IPS² Delivery Planning Approach in Industry - Limitations and Necessary Adaptations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A Method for Analyzing Service Failure Factors based on Multiple Perspectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal Wellness: Complex and Elusive Product and Distributed Self-Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Farzaneh Salamati, Zbigniew J. Pasek*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Dark Side of Providing Industrial Product-Service Systems - Perceived Risk as a Key Challenge from a Customer-Centric Point of View</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Impact of Servitization on Corporate Culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nadine Dubruc*, Sophie Peillon, Abdallah Farah</td>
<td></td>
</tr>
</tbody>
</table>

17:40 - 18:00 Announce 7th IPSS 2015 (CEI 1100)

18:00 Return from CEI to Hotels

19:00 - 22:00 CONFERENCE BANQUET & BEST PAPER AWARD (Waterfront Hotel)

Friday 2 May 2014

08:00 - 8:30 REGISTRATION (CEI Main Foyer)

08:30 - 10:30 PLENARY SESSION (CEI 1100 Auditorium)
Chair: Prof. Hoda ElMaraghy, Canada Research Chair in Manufacturing Systems
08:30 - 09:00 Keynote Speaker: Prof. Alain Bernard, Ecole Centrale de Nantes, France, Chairman of CIRP STC Design “Multi-Physical Simulation for Product-Service Performance Assessment”
09:00 - 09:30 Panel: “Trends in IPSS”; Prof. Hoda ElMaraghy, Prof. Horst Meier, Prof. Rainer Stark, Prof. Y. Shimomura
**09:30 - 10:30**  
Guided Tour of the iFactory, Intelligent Manufacturing Systems Centre (IMSC) (CEI 1212)

**10:30 - 11:00**  
MORNING BREAK (CEI Main Foyer)

**11:00 - 12:40**  
PARALLEL SESSIONS

<table>
<thead>
<tr>
<th>Session 10:</th>
<th>Session 11:</th>
<th>Session 12:</th>
</tr>
</thead>
</table>
| **Chair:** Marion Steven  
Room: CEI 1101 | **Chair:** Mattias Lindahl  
Room: CEI 1102 | **Chair:** Xavier Boucher  
Room: CEI 2104 |

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair(s)</th>
<th>Room</th>
</tr>
</thead>
</table>
| 11:00 - 11:25 | IPSS Strategies | A Technology-centered Framework for Product-Service Systems  
Sebastian A. Schenkl*, Roman M. Sauer, Markus Mörtl | CEI 1101 |
| 11:25 - 11:50 | Industrial Applications | Actor's and System Maps for Integrated Product Service Offerings - Practical Experience from Two Companies  
Mattias Lindahl*, Tomohiko Sakao, Emma Carlsson | CEI 1102 |
| 11:50 - 12:15 | Risk and Quality Management II | Asset-based Service Production under Uncertainty  
Shigeru Hosono*, Yoshiki Shimomura | CEI 2104 |
| 12:15 - 12:40 | | Quality Assessment of Technical Product-Service Systems in the Machine Tool Industry  
Gülsüm Mert*, Sebastian Waltemode, Jan C. Aurich |

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Chair(s)</th>
<th>Room</th>
</tr>
</thead>
</table>
| 11:00 - 11:25 |  | Intellectual Capital Statement in IPS²  
Jakub Wewior*, Solmaz Alevifard, Holger Kohl, Marion Steven, Günther Seliger | Jakub Wewior*, Solmaz Alevifard, Holger Kohl, Marion Steven, Günther Seliger | CEI 1101 |
| 11:25 - 11:50 |  | At a Crossroads: Case Study Analysis of the Organizational Challenges within the Transformation Path to an IPS²  
Gülsüm Mert*, Sebastian Waltemode, Jan C. Aurich | Gülsüm Mert*, Sebastian Waltemode, Jan C. Aurich | CEI 2104 |
| 12:15 - 12:40 |  | Towards a Reliability Diagnosis for Servitization Decision-Making Process  
Sarra Dahmani, Xavier Boucher, Didier Gourc, François Marmier, Sophie Peillon | Sarra Dahmani, Xavier Boucher, Didier Gourc, François Marmier, Sophie Peillon | |

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Chair(s)</th>
<th>Room</th>
</tr>
</thead>
</table>
| 11:00 - 11:25 |  | Identifying and Analyzing the Customer Situation: Drivers for Purchasing Industrial Product Service Systems  
Julian Everhartz, Kira Maiwald*, Jan Wieseke | Julian Everhartz, Kira Maiwald*, Jan Wieseke | CEI 1101 |
Eckart Uhlmann, Franz Otto* | Eckart Uhlmann, Franz Otto* | CEI 1102 |
| 11:50 - 12:15 |  | Towards a Reliability Diagnosis for Servitization Decision-Making Process  
Sarra Dahmani, Xavier Boucher, Didier Gourc, François Marmier, Sophie Peillon | Sarra Dahmani, Xavier Boucher, Didier Gourc, François Marmier, Sophie Peillon | CEI 2104 |
| 12:15 - 12:40 |  | Strategic Adaptability of Industrial Product-Service-Systems - Dynamic Effective IPS²  
Lisa Grandjean*, Solmaz Alevifard, Marion Steven | Lisa Grandjean*, Solmaz Alevifard, Marion Steven | CEI 1101 |
| 12:15 - 12:40 |  | Managing Integrated Information Flow for Industrial Service Partnerships: A Case Study of Aerospace Firms  
Christopher Durugbo*, John A. Erkoyuncu | Christopher Durugbo*, John A. Erkoyuncu | CEI 1102 |
| 12:15 - 12:40 |  | Are IPS² always a Solution? Obstacles towards Buying Industrial Product Service Systems  
Judith Gesing*, Kira Maiwald, Jan Wieseke, Ramona Sturm | Judith Gesing*, Kira Maiwald, Jan Wieseke, Ramona Sturm | CEI 1102 |
**12:40 - 13:50**  
**LUNCH (CEI 1100 Auditorium)**

**13:50 - 15:30**  
**PARALLEL SESSIONS**

| Session 13:  
Chair: Tomohiko Sakao  
Room: CEI 1101 | Session 14:  
Chair: Henrique Rozenfeld  
Room: CEI 1102 | Session 15:  
Chair: John Lindström  
Room: CEI 2104 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Tools and Methodologies</strong></td>
<td><strong>New Business Models and Innovation II</strong></td>
<td><strong>IT and Cyber Technology</strong></td>
</tr>
</tbody>
</table>
| **13:50 - 14:15**  
Development of the Design Guideline for Product-Service Systems  
**Koji Kimita***, Yoshiki Shimomura | Developing of Customized Innovative Business Models for Shape Memory Technology  
Christian Rathmann***, André Coelho Nunes, **Mario Boßlau**, Horst Meier | Use of Cloud Services in Functional Products: Availability Implications  
**John Lindström***, Magnus Löfstrand, Sean Reed, Ahmad Alzghoul |
| **14:15 - 14:40**  
Application of Prospect Theory on Car Sharing Product Service System  
**Ang Liu***, **Thorsten Wuest**, and Stephen Lu | A Method for Impact Analysis of Cyclic Changes within Innovation Processes of PSS  
Daniel Kasperek***, **Nepomuk Chucholowski**, Sebastian Maisenbacher, Udo Lindemann, Maik Maurer | Data Interfaces of IPS²-Execution Systems - Connecting Virtual Organization Units for the Delivery Management of IPS²  
**Thomas Dorka***, Friedrich Morlock, Horst Meier |
| **14:40 - 15:05**  
Applicability of Agent-Based Modeling for Supporting Product-Service System Development  
**Sebastian Maisenbacher***, Dominik Weidmann, Daniel Kasperek, Mayada Omer | A Proposal to Support the Value Proposition in Product Oriented Service Business Model of Product Service Systems  
Kênia Fernandes de Castro Rodrigues***, Vanessa Nappi, **Henrique Rozenfeld** | IT Support in the Fuzzy Front End of Industrial Product Service Design  
**Daniel Meuris***, Michael Herzog, Beate Bender, Tim Sadek |
| **15:05 - 15:30**  
PCP (Provider - Customer - Product) Triangle: How Can Manufacturing Intelligence be Maintained?  
**Tomohiko Sakao***, Mattias Lindahl | Operationalizing IPS² Development Process: A Method for Realizing IPS² Developments Based on Process-Based Project Planning  
**Hoai Nam Nguyen***, Konrad Exner, Christian Schnürmacher, Rainer Stark | Towards an Understanding of Cyber-Physical Systems as Industrial Software-Product-Service Systems  
**Martin Mikusz** |

**15:30 - 15:40**  
**CLOSING SESSION (CEI 1100 Auditorium)**
15:40 Return from CEI to Hotels
Meeting Rooms in the Venue – CEI (Centre for Engineering Innovation)