Final Program

Saturday, July 5

14:00-18:30 SDM, Keio University Doctoral Workshop

Sunday, July 6

8:50-12:40 SDM, Keio University Doctoral Workshop

18:30-20:30
Welcome Dinner
Toh-Ten-Koh, 10F, Conference Venue

Day 1 Monday, July 7

Plenary Session

Main Hall, 9F, Yokohama Symposia

9:00-9:10

Opening

9:10-9:40

Welcome Address and IFIP WG 5.1

WG Chair Prof. Abdelaziz Bouras

9:40-10:00

Coffee Break

10:00-10:40

Plenary Keynote Prof. Balan Gurumoorthy, Indian Institute of Science, India Integrating Data with Knowledge in PLM

10:40-11:20

Plenary Keynote Prof. Yoshiaki Ohkami, Keio University, Japan Breakthrough by Extensive Application of Lifecycle Management and Systems Design Approaches beyond Boundaries

Parallel Sessions

The number in parenthesis corresponds to the number of a paper in a USB stick.

Main Hall, 9F

13:00-14:00

Special Session 1 BIM Usage, Impact and Growth across Regions (50) *Preliminary Study Impact of Building Information Modeling in Malaysia*

Enegbuma, W.I., Ologbo, A.C., Aliagha, U.G. and Ali, K.N. (Universiti Teknologi Malaysia)

- (39) The Turning Point: Subcontractors as Key to Achieving Lifecycle BIM Sumit Oberoi (AMCA, Australia), Dominik Holzer (Univ of Melbourne, Australia)
- (46) BIM and PLM: Comparing and Learning from Changes to Professional Practice across Sectors

Jupp, J.R. (Univ of Technology, Sydney, Australia), Nepal, M. (Queensland Univ of Technology, Australia)

14:05-15:05

Special Session 2 BIM Operations, Maintenance and Renovation (27) Building Information Modeling for Facilities Management: Literature Review and Future Trends

Mehmet Yalcinkaya, Vishal Singh (Aalto Univ, Finland)

(55) Maintenance of Facilities and Aircrafts: A Comparison of IT-driven Solutions

Karoliina Parhiala, Mehmed Yalcinkaya and Vishal Singh (Aalto Univ, Finland)

- (21) Towards a BIM Approach for a High Performance Renovation of Apartment Buildings
 - M. Aldanondo, A. Barco-Santa, E. Vareilles (Toulouse Univ, France)
 - M. Falcon (TBC, Generateur d'Innovation, France),
- P. Gaboit (Toulouse Univ, France), L. Zhang (IESEG Business School, France)

15:15-16:00

Special Session 3 BIM Concepts and Lifecycle Management (35) BIM for FM: A Case Support for Business Life Cycle Ricardo (Univ of Salford, UK), Arto Kivinicmi (Univ of Liverpool, UK)

(6) Fostering the Link from PLM to ERP via BIM: The AEC Industry in Transition

Dominik Holzer (Univ of Melbourne, Australia)

16:05-17:00

Special Session 4 BIM Panel Discussion

Integrated Business Approaches in Construction: Role of BIM and PLM

Room 901 9F

13:00-14:20

Session 5 PLM in Asia

(13) A Socio-technical Systems Approach to Managing Material Flow in the Indonesian Fertilizer Industry

Issa D.Utami (Univ of Leeds, UK and Universitas Trunojoyo, Indonesia) Raymond J. Holt, Alison McKay (Univ of Leeds, UK) (7) A Proposal of Muda Indicator Agent to Estimate Lean Manufacturing Verification

Effendi Bin Mohamad (Univ Teknikal Malaysia Melaka), Teruaki Ito (Univ of Tokushima, Japan), Dani Yuniawan (Universiti Teknikal Malaysia Melaka)

(41) Enhancing Efficiency of Die Exchange ProcessUniver trhough SMED at SMEs in Malaysia

Teruaki Ito (Univ of Tokushima, Japan), Mohd Rizal Salleh, Effendi Bin Mohamad (Univ Tek Malaysia Melaka)

(1) Study for Building a Comprehensive PLM System Based Upon Utilizing the Japanese Strength of Industry

Akio Kamoshita (Digital Process, Japan), Hiroyuki Kumagai (Fujitsu, Japan)

14:20-15:00

Session 6 Design

- (26) Upgradable Design for Various User Demands
 Masato Inoue, Shuho Yamada (Meiji Univ, Japan), Tetsuo Yamada (Univ of Electro-Com, Japan), Stefan Bracke (Univ of Wuppertal, Germany)
- (28) Integration of Design Intent during the Product Lifecycle Management

Min-Jung Yoo, Jumyung Um, Ian Stroud, Soumaya El Kadiri, Dimistris Kiritssis (EPFL, Switzerland)

15:00-15:10

Coffee Break

15:10-15:50

Session 7 Education

(15) A Short Portable PLM Course

Joel Sauza Bedolla (Politecnico di Torino, Italy), Javier Martinez Gomez (Politecnico di Torino, Italy and Universidad Industrial de Santander, Columbia), Paolo Chiabert (Politecnico di Torino, Italy)

(32) Product Lifecycle Management in Education: key to Innovation in Engineering and Technology

Priyanka Gandhi (Sr. Product Lifecycle Management Consultant, USA)

Room 803 8F

13:00-14:20

Session 8 Naval Engineering and Shipbuilding

(8) Knowledge Management: A Cross Sectional Comparison of Wind Generation and Naval Engineering

Gary Ford, Joel Igba, Chris McMahon, Kazem Alemzadeh (Univ of Bristol, UK), Chris Rowledy (Babcok International, UK), Keld Hennigsen (Vestas, Sweden)

- (9) Information Resources for the Identification of Complex Asset Condition: A Naval Engineering Case Study
 Gary Ford, Chris McMahon (Univ of Bristol, UK), Chris Rowley (Babcock International, UK)
- (18) A Requirement Evaluation Method for Ships to Maximize Operational

Value under Uncertainty

Kazuo Hiekata (Univ of Tokyo, Japan) Bryan Moser (MIT and Global Project Design, USA)

(19) Cross-Domain Collaboration in Shipbuilding
Kazuo Hiekata (Univ of Tokyo, Japan), Matthias Grau, Josip
Stjepandic (Prostep, AG, Germany)

14:20-14:30

Coffee Break

14:30-15:50

Session 9 Aeronautical and Automotive Engineering

(2) Using the Product Lifecycle Management Systems to Improve Maintenance, Repair and Overhaul Practices: The Case of Aeronautical Industry

Alejandro Romeo and Rodrigues Vieira (UQTR, Canada)

(30) Integrating Eco-design and PLM in the Aviation Completion Industry: A Case Study

Natalia Moreira (Univ of Manchester, UK), Daoud Ait-Kdi (Univ Laval, Canada), Darii Rodrigues Veira, Alejandro Romero (UQTR, Canada), Yi Wang (Univ of Manchester, UK)

(37) Decomposition Analysis Resolution Process (DAR) of Systems Engineering Applied to Development of Countermeasure on Leakage of Engine Head-Gasket

Satoshi Ohkawa, Hidekazu Nishimura, Yoshiaki Ohkami (Keio Univ, Japan)

(54) Systems Modeling of Access and Protection System in Automotive E/E Architecture

Hidekazu Nishimura, Kinichi Azuma (Keio Univ, Japan), Takayuki Nakamoto, Masaaki Miyashita (Nissan Motor Co., Ltd., Japan)

15:50-17:30

Session 10 Industry and Consumer Products

(4) Introduction to a Model for Life Cycle Optimization of Industrial Equipment

Daniele Cerri, Valerio Contaldo, Marco Taisch (Politecnico di Milano, Italy), Sergio Terzi (Universita degli Studi di Bergamo, Italy)

- (5) Integration of Environmental Assessment in a PLM context: A Case Study in Luxury Industry Djamel Yousnadj (AM ParisTech, France), Guillaume Jouanne (EVEA, France), Nicollas Maranzana, Frederic Segonds, Carole Bouchard, Ameziane Aoussat (AM ParisTech, France)
- (12) Escalation of Outsourcing Software Project: a Multiple Case Study Hsin-Hui Lin (National Sun Yat-sen Univ, Taiwan), Wen-Liang Wang (Kaohsing Chung-Cheng Industrial High School, Taiwan)
- (17) Design Information Management for Consumer Electronics: Requirement Definition

Kazuko Yamagishi, Koichi Ohtomi, Kenichi Seki, Hidekazu Nishimura (Keio Univ, Japan)

(45) Thermal Management of Software Changes in Product Lifecycle of Consumer Electronics

Yoshio Muraoka, Kenichi Seki, Hidekazu Nishimura (Keio Univ, Japan)

Room 805 8F

13:00-14:20

Session 11 Interoperability, Integration, Configuration, Systems Engineering

(22) PLM Reference Model for Integrated Idea and Innovation Management

Manuel Lower, Jan Erik Heller (RWTH Aachen Univ, Germany)

- (31) Unification of Multiple Models for Complex System Development Lionel Rouchoules, Francois Malburet (AM ParisTech, France), Tomasz Krysinski, Pierre Cauthier (PSA Peugeot Citrone, France)
- (40) Performance Indicators for Configuration Management Tanja Minzenmay, Maximilian Zeiss, Masoud Nikman, Jivka Ovtcharova (Karlsruhe Inst of Tech, Germany)

(42) System Lifecycle Management: Initial Approach for a Sustainable Product Development Process Based on Methods of Model Based Systems Engineering

Martin Eigner, Thomas Dickopf, Hriso Apostolov, Patrick Schaefer, Karl-Gerhard Faisst, Alexander Kessler (Univ of Kaiserslautern, Germany)

14:20-15:00

Session 12 Change Management

(51) A Framework for Knowledge-based Goal-oriented Change Management

Michael Abramovici, Youssef Aidi (Ruhr University Bochum, Germany)

(53) PLM Serious Game Approach Available Both for Change Management (10(and Knowledge Assssment

P. Permelle, T. Carron, S. Elkadiri, A. Bissay (Univ of Lyon1, Univ of Savoie, France)

15:00-15:10

Coffee Break

15:10-16:10

Special Session 13 Maturity

(10) PLM Maturity Evaluation and Prediction Based on a Maturity Assessment and Fuzzy Set Theory

Haiqing Zhang, Aicha Sekhari, Yacine Ouzrot, Abdelaziz Bouras (Univ Lumiere Lyon2, France)

(24) Towards an Enhancement of Relationships Browsing in Mature PLM Systems

Marianne Allanic (Univ de Tech de Compiegne, Univ de Bordeaux, CADeSIS, France), Thierry Brial (CADeSIS, France), Alexandre Durupt (Univ de Tech de Compiegne, France), Marc Joliot (Univ de Bordeaux, France), Philippe Boutinand (CADeSIS, France), Benoit Eynard (Univ de Tech de Compiegne, France)

(43) Comparison Framework for PLM Maturity Models

Tom Stentzel, Masoud Nicknam, Jivka Ovtcharova (Karlsruhe Ins ot Tech, Germany)

Day 2 Tuesday, July 8

Plenary Session

Main Hall 9F

9:00-9:10

Welcome Address

Dean and Prof. Takashi Maeno

SDM, Keio University

9:10-9:50

Plenary Industry Keynote Prof. Takashi Iwamoto, Keio University Business Government Relations for New Industry Creation

9:50-10:00

Coffee Break

Parallel Sessions

Main Hall 9F

Industry Session 14

10:00-10:40

New Trends on Automotive Technology-Electrification and Vehicle Intelligence-

Norimasa Kishi (Nissan Motor)

10:40-11:20

PLM in Aero-Engine Development

Kuniyoshi Imanari (IHI)

11:20-12:00

Industries 4.0- A Vision on the Way to Reality

Tatsuo Engo (Siemens PLM Software)

12:00-13:00 Lunch

Industry Session 15

13:00-13:40

The Great East Japan Earthquake and Revitalization of Japanese Economy-Technology Management for Japanese Economic Revitalization-Isao Tanimoto (Alps Electric)

13:40-14:20

Potential of Pattern Recognition Technique for a Better Management of Product Design and Marketing

Kishio Tamura (Konica Minolta)

14:20-14:50

Coffee Break

14:50-15:30

TBA

Hiroyuki Itoh (Daikin)

15:30-16:10

Product Lifecycle Management in Sustainable Building/Construction Products

Yusuke Yamazaki (Shimizu)

Room 803 8F

10:00-11:00

Session 16 Knowledge Engineering

(3) How to Improve PLM Approach Efficiency Based on Knowledge Engineering, Knowledge Management and Semantic Web Technologies Domains?

Bernard Chabot, Philippe Gautreau, Brice Sommacal (PCO Innovation, France)

(14) Future Product Development Cost Prediction Model for Integrated Lifecycle Assessment

Jan Erik Heller, Manual Lower, Jorg Feldhusen (RWTH Aachen Univ, Germany)

(25) Product Data Management-Defining the Used Terms

Merja Huhtala, Mike Lohtander, Juha Varis (Lappenranta Univ of Tech,
Finland)

11:0012:00

Session 17 Knowledge Management

(36) Assessing the Role of Knowledge Management in the New Product Development Process: An Empirical Study

Romeo Bandinelli, Elisa d'Avolio (Univ of Florence, Italy)

Monica Rossi (Politenico di Milano, Italy)

Sergio Terzi (Univ of Bergamo, Italy)

Rinaldo Rinaldi (Univ of Florence, Italy)

(38) A Study on Developing a Decision Support Agent for Project Management

Shinji Mochida (Univ of Marketing and Distribution Science, Japan)

(52) Segregating Discourse Segments from Engineering Documents for Knowledge Acquisition

Madhusudanan, N., Gurumoorthy, B., Amaresh Charkarbarti (Indian Ins of Science)

12:00-13:00

Lunch

13:00—14:00

Session 18 Manufacturing

(11) Study on Improving Accuracy for Edge Measurement Using 3D Laser Scanner

Kazuo Hiekata, Hiroyuki Yamato, Jingyu Sun, Hiroya Matsubara (Univ of Tokyo, Japan), Naoji Toki (Ehime Univ, Japan)

(16) Lifecycle –based Requirements of Product-Sevice System in Customer-centric Manufacturing

JorHma Papinniemi (Lappeenranta Univ of Tech, Finland), Johannes Fritz (Virtual Vehicle Research Center, Austria), Lea Hannola (Lappeenranta Univ of Tech, Finland), Andrea Denger (Virtual Vehicle Research Center, Austria) Hannele Lampela (Lappeenrata Univ of Tech, Finland)

(23) Product-service Lifecycle Management in Manufacturing: An Industrial Case Study

Margherita Peruzzini, Michele Germani, Eugenia Marilungo (Polytechnic Univ of Marche, Italy)

14:00-15:00

Session 19 Production

(29) Interoperability Framework for Supporting Information-based Assistance in the Factory

Mohamed Anis Dhuieb, Farouk Belkadi, Florent Laroche, Alain Bernard (Ecole Centrale de Nantes, France)

- (34) Process Information Model for Sheet Metal Operations
 Ravi Kumar Gupta, Pothala Streenu, Alain Bernard, Florent Laroche
 (Ecole Centrale de Nantes, France)
- (49) Skill-based Asset Management: A PLM-approach for Reconfigurable Production System

Kiril Aleksandrov, Viktor Schubert (FZ Research Center for Information Technology, Germany), Jivka Ovtcharnova (Karlsruhe Inst of Tech, Germany)

15:00-15:10

Coffee Break

15:10-16:30

Session 20 New PLM

(20) Sustainable Product Lifecycle Management and Territoriality: New Structure for PLM

Kiyan Vadoudi, Romain Allais, Tatiana Reyes, Nadege Troussier (Universite de Troyes, France)

- (33) Intelligent Information Technologies to Enable Next Generation PLM Rainer Stark (Fraunhofer Institute, Tech Univ Berlin, Germany)
 Thomas Damerau, Haygazu Hayka, Sebastian Neumeyer, Robert Woll (Fraunhofer Institute, Germany)
- (47) Reframing of Product Position Rescus the Strategy at the Lifecycle Management

Makoto Takayama (Niigata Univ, Japan and UCLA, USA) Tadashi Takayama (Kobe Univ, Japan)

(48) How Developers Explore and Exploit Instant Innovation, From Experiment to Implementing New Product Development Masayoshi Fukushima (Niigata Univ, Japan) Tadashi Takayama (Kobe Univ, Japan) Makoto Takayama (Niigata Univ., Japan)

Day 3 Wednesday, July 9

Plenary Session Main Hall 9F

9:00-9:40

Plenary Keynote Prof. Lincoln Wood, University of Adelaide, Australia Service Thinking: Social Servicescapes of Complex Engineering Systems

9:40-10:20
Session 21 Discussion
Where is PLM Heading for?

10:20-10:50
Closing
Award Conferral

10:50-11:50 Brunch

Tours

Nissan Tour

11:50 Leave Yokohama Symposia.

Take a train from Nihon Odori Station, Minato Mirai Line to Oppama. Due to traffic conditions, we cannot use a bus.

14:30-16:00

Nissan Oppama Factory Tour

18:00 Break up at Nihon Odori Station, Minato Mirai Line

Design and Manufacture Center, Faculty of Science and Technology, Keio University

13:00- Details will be announced at the conference site.

The Center is on Yagami campus, next door to Hiyoshi campus, Keio University. It is 10 minute walk from Hiyoshi campus to Yagami campus.

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