

Track 1: Cyber physical systems

Session 1 Development of cyber-physical systems (DCS)

14.00 p.m. – 16.00 p.m., Tuesday, 20th May, 2014

Conceptual approach for multi-disciplinary cyber-physical systems design and engineering

Marco Grimm (DE), Reiner Anderl (DE), Yan Wang (US) (paper # 070)

A cyber-physical system for mass customization

Gregory C. Smith (TW), Shana S. Smith (TW) (paper # 009)

Approach to ubiquitous support for maintenance and repair jobs utilizing smart devices

Michael Abramovici (DE), Andreas Krebs (DE), Mario Wolf (DE) (paper # 047)

New features imply new principles? Deriving design principles for mass customization of cyber-physical consumer durables

Shahab Pourtalebi (NL), Imre Horváth (NL), Eliab Z. Opiyo (NL) (paper # 109)

Session 2 Informing in cyber physical systems (ICS)

16.20 p.m. – 18.20 p.m., Tuesday, 20th May, 2014

A systematic approach to addressing the influence of man-machine interaction on situation awareness

Ellemieke van Doorn (NL), Imre Horváth (NL), Zoltán Rusák (NL) (paper # 021)

Cyber-physical infomobility for tourism logistics support

Alexander Smirnov (SU), Nikolay Shilov (SU), Alexey Kashevnik (SU) (paper # 039)

Effective use of ‘underwater’ planning tricks in complicated engineering networks?

Jenny Coenen (NL) (paper # 132)

Intelligent multi-agent information system under uncertainty

Ben Khayut (IL), Lina Fabri (IL), Maya Abukhana (IL) (paper # 175)

Session 3 Enablers for cyber physical systems (ECS)

14.00 p.m. – 16.00 p.m., Wednesday, 21th May, 2014

An architecture description language for modelling dynamic cyber-physical architectures: A case study

Jade Anthony Venter (ZA), Elizabeth Marie Ehlers (ZA) (paper # 028)

Adapting Scrum development method for the development of cyber-physical systems

Fabian Mulder (NL), Jouke Verlinden (NL), Tsubasa Maruyama (JP) (paper # 075)

Enhancing security on the smart grid environment – A multi-agent approach

Sheu Menete Alexandre Mavee (ZA), Elizabeth M. Ehlers (ZA), Wai Sze Leung (ZA) (paper # 029)

Reference scheme for deriving aspects and criteria for forecasting functional performance and cost implications of cyber-physical products

Eliab Z. Opiyo (NL), Imre Horváth (NL) (paper # 010)

Session 4 Agent technologies and applications (ATA)

16.20 p.m. – 17.50 p.m., Wednesday, 21th May, 2014

KINDRED: Knowledge and intentions dimensionality reduction

Duncan Anthony Coulter (ZA), Elizabeth M. Ehlers (ZA) (paper # 027)

A holonic approach for multi-scale design using attractors

Homam Issa (FR), Egon Ostrosi (FR), Michel Lenczner (FR), Rabie Habib (SY) (paper # 210)

Optimising the management of water resources with multi-agents

Wai Sze Leung (ZA) (paper # 051)

Session 5 Model-driven system engineering (MSE)

14.00 p.m. – 16.00 p.m., Thursday, 22th May, 2014

Meta-model of sociotechnical systems: Derivation, structure and content

Thomas Naumann (DE), Nico Koehler (DE) (paper # 103)

Application of numerical inverse model to determine the characteristic of electric race car

Wojciech Skarka (PL) (paper # 176)

Design of free-form motions

Robert J. Cripps (UK), Glen Mullineux (UK) (paper # 186)

A part-affordance based approach for detailed design process planning in collaborative environment

Jian Huang (CN), Yong Chen (CN), Yuobai Xie (CN) (paper # 229)

Session 6 Service innovation and engineering (SIE)

16.20 p.m. – 18.20 p.m., Thursday, 22th May, 2014

Develop new services: A generic service innovation methodology

Tsu-Yi Hung (TW), Chun-Yu Hsieh (TW) (paper # 050)

International design of ubiquitous services medical monitoring information service

Sheu Menete Alexandre Mavee (ZA), Daniel Alberto Zuluaga-Holguin (ZA), Wai-Sze Leung (ZA), Duncan Coulter (ZA) (paper # 069)

Towards a propensity model for product-service transitions

Ivo Dewit (BE) (paper # 122)

Current status of robotic stroke rehabilitation and opportunities for a cyber-physically assisted upper limb stroke rehabilitation

Chong Li (NL), Zoltán Rusák (NL), Imre Horváth (NL), Linhong Ji (CN), Yuemin Hou (CN) (paper # 237)

Track 2: Product and system engineering

Session 1 Capturing product information (CPI)

14.00 p.m. – 16.00 p.m., Tuesday, 20th May, 2014

The role of information content, assumptions and iterations in product development processes

Alfred Sadlauer (AT), Klaus Zeman (AT), Peter Hehenberger (AT) (paper # 102)

Towards data model for PLM application in bio-medical imaging

*Marianne Allanic (FR), Alexandre Durupt (FR), Marc Joliot (FR), Benoit Eynard (FR),
Philippe Boutinaud (FR)* (paper # 174)

Intelligent information mining via PSO- and EA-driven techniques

Ludwig de Bruin (SA), Elizabeth M. Ehlers (SA), Jaco G. van Niekerk (SA) (paper # 187)

Simulation station network system for forecasting and broadcasting of local and global situations

Kazuhiro Sakita (JP) (paper # 234)

Session 2 Managing product/process knowledge (MPK)

16.20 p.m. – 18.20 p.m., Tuesday, 20th May, 2014

Connecting knowledge-management-systems to improve a continuous flow of knowledge in engineering design processes

Albert Albers (DE), Robert Lüdcke (DE), Nikola Bursac (DE), Nicolas Reiß (DE) (paper # 052)

A web-based system for reusing automotive engineering design knowledge

Wenqian Zhao (UK), Hao Qin (UK), Hongwei Wang (UK) (paper # 120)

Methodology to improve devices interoperability for energy efficiency in smart homes

Andrea Capitanelli (IT), Michele Germani (IT), Alessandra Papetti (IT), Margherita Peruzzini (IT) (paper # 182)

Reusing detailed design knowledge based on a structure-behavior-affordance model

Jiang Huang (CN), Yong Chen (CN), Zhinan Zhang (CN), Yubai Xie (CN) (paper # 230)

Session 3 Industrial product innovations (IPI)

14.00 p.m. – 16.00 p.m., Wednesday, 21th May, 2014

Novel method to substitute human creativity in the early phases of the design process

Attila Piros (HU), Balázs Vidovics (HU) (paper # 044)

An application of the iProd software-framework to support the product development process in the automotive and aerospace domain

*Maurice F.M. Hoogreef (NL), Reinier E.C. van Dijk (NL), Gianfranco La Rocca (NL),
Roberto d'Ippolito (IT)* (paper # 152)

Development of design competences for multi-x cooperation in designing cyber-physical systems to solve societal problems

Niels CCM Moes (NL), Alejandro Velasquez (CO), Wai Sze Leung (ZA), Anastasia-Evangelia Papadopoulou (NL) (paper # 217)

Integration of renewable energy sources into the energy supply flows of greenhouses: Development and validation of a forecasting model

Dávid Varga (NL), Imre Horváth (NL) (paper # 241)

Session 4 Strategic and agile product development (SAD)

16.20 p.m. – 17.50 p.m., Wednesday, 21th May, 2014

Factors affecting development of production technologies in a machining environment
Mats Ahlskog (SE), Jessica Bruch (SE), Mats Jackson (SE) (paper # 054)

Contract furniture design: an in-depth analysis to develop a competitive collaborative virtual environment
Maura Mengoni (IT), Margherita Peruzzini (IT), Roberto Raffaeli (IT), Damiano Raponi (IT) (paper # 067)

Car styling: Do cars reproduce a way of life of the country they represent?
Jean-Bernard Bluntzer (FR), Egon Ostrosi (FR), Jean-Claude Sagot (FR) (paper # 129)

Session 5 Sustainable product development (SPD)

14.00 p.m. – 16.00 p.m., Thursday, 22th May, 2014

Information processing options for sustainable product development
Anne Pförtner (DE), Rainer Stark (DE), Haygazun Hayka (DE) (paper # 078)

Value assessment of sustainability hotspots in conceptual design: An aerospace study
Marco Bertoni (SE), Sophie Hallstedt (SE), Ola Isaksson (SE) (paper # 140)

Balanced evaluation method for integrated green productivity with multiple parameters
SooCheol Yoon (KR), Seung-Jun Shin (KR), Suk-Hwan Suh (KR) (paper # 188)

A checklist for sustainable product development: Improving sustainability performance in early phases of product design
Josef-Peter Schöggel (AT), Rupert J. Baumgartner (AT), Dietmar Hofer (AT) (paper # 223)

Session 6 Engineering change management (ECM)

16.20 p.m. – 18.20 p.m., Thursday, 22th May, 2014

Linking development efficiency, effectiveness, and process improvements
Catarina Bojesson (SE), Mats Jackson (SE) (paper # 064)

Engineering change management - Verification, validation and testing planning tool development
Keith Phelan (US), Joshua D. Summers (US), Paolo Guarneri (IT) (paper # 073)

Management of intermediary objects in the context of multidisciplinary convergence: Towards CBR approach
Ahmad Al Khatib (FR), Morad Mahdjoub (FR), Jean-Bernard Bluntzer (FR), Jean-Claude Sagot (FR) (paper # 150)

A systematic framework of change propagation in product development project
Xin Zhang (FR), Marc Zolghadri (FR), Patrice Leclaire (FR) (paper # 203)

Track 3: Engineering methodologies and approaches

Session 1 Systematic product conceptualization (CPC)

14.00 p.m. – 16.00 p.m., Tuesday, 20th May, 2014

Assisted morphological analysis for iterative product conception

Jan Erik Heller (DE), Manuel Löwer (DE), Jörg Feldhusen (DE) (paper # 020)

A verification and validation planning method to address change propagation effects in engineering design

Prabhu Shankar (US), Joshua D. Summers (US), Keith Phelan (US) (paper # 074)

Case study in systematic design engineering - Life-boat davits

W. Ernst Eder (CA) (paper # 125)

A method for comparing concepts with respect to sustainability and other values

Rachael Gould (SE), Anthony Thompson (SE) (paper # 189)

Session 2 Shape modeling in applications (SMA)

16.20 p.m. – 18.20 p.m., Tuesday, 20th May, 2014

Generation of subdivision surface from network of curves

Zhihua Li (CN), Lou Ruding (FR) (paper # 060)

Geometric and numerical modeling for porous media wave propagation

David Uribe (CO), Maria C. Osorno (CO), Holger Steeb (DE), Eric H. Saenger (CH), Oscar Ruiz (CO) (paper # 142)

Dynamic clustering-based method for shape recognition and retrieval

Bilal Mokhtari (FR), Kamal Eddine Melkemi (AL), Dominique Michelucci (FR), Sebti Foufou (QA) (paper # 154)

Extending constructive solid geometry to projections and parametric objects

George Tzoumas (FR), Dominique Michelucci (FR), Sebti Foufou (QA) (paper # 155)

Session 3 Human and social aspects (HSA)

14.00 p.m. – 16.00 p.m., Wednesday, 21th May, 2014

Application of affect detection in the workplace

Laura Unterslak (ZA), Elizabeth M. Ehlers (ZA) (paper # 026)

Galvanic skin response as index of mental workload in design activities

Xu Xu (CA), Thanh An Nguyen (CA), Yong Zeng (CA) (paper # 046)

An integrated CAE solution for motorcycle rider comfort evaluation considering virtual user models

Hunor Erdélyi (BE), Simone Manzato (BE), Stijn Donders (BE), Herman Van der Auweraer (BE), Marco Pieve (IT) (paper # 146)

Monocular depth cues for augmented reality applications to enhance spatial perception tasks

Rafael Radkowski (US), James Oliver (US) (paper # 190)

Session 4 System engineering methodologies (SEM)

16.20 p.m. – 17.50 p.m., Wednesday, 21th May, 2014

Model-based development in the domain of mobile machines
*Ville Jouppila (FI), Taina Kaapu (FI), Carl-Johan Sjöstedt (SE), Asko Ellman (FI),
De-Jiu Chen (SE)* (paper # 036)

Issues in design systemics: The need for dynamic re-framing tools in design and design engineering
Vasilije Kokotovich (AU) (paper # 151)

A methodology for knowledge-based engineering systems implementation: Two case studies
Arturo Molina (MX), José Luis Acosta (MX), David Romero Diaz (MX) (paper # 194)

Session 5 Design optimization methods (DOM)

14.00 p.m. – 16.00 p.m., Thursday, 22th May, 2014

3D CAD integrated method for optimizing the design for non-destructive disassembly
Ile Mircheski (MK), Tatjana Kandikjan (MK), Remon Pop-Iliev (CA) (paper # 041)

Thermal model of a vacuum cleaner unit developed with application of regression method
Blaž Benedik (SI), Jože Tavcar (SI), Jože Duhovnik (SI) (paper # 101)

Redesigning the EFCOSS framework toward finding optimally located boreholes in geothermal engineering
*Ralf Seidler (DE), H. Martin Bücker (DE), Kateryna Padalkina (DE), Michael Herty (DE),
Jan Niederau (DE), Gabriele Marquart (DE), Arno Rasch (DE)* (paper # 209)

Design optimization of electrostatic chuck using case-based reasoning
Leila Zehtaban (DE), Dieter Roller (DE), Yuchun Sun (CN), Linhong Ji (CN) (paper # 240)

Session 6 Machinability and process scheduling (MPS)

16.20 p.m. – 18.20 p.m., Thursday, 22th May, 2014

Machinability analysis of a new internal combustion engine construction
László Dudás (HU) (paper # 084)

Recognition of thin features using heat diffusion
Ramy Harik (LB), Alexandre Durupt (FR), Joe Khalifeh (LB), Benoit Eynard (FR) (paper # 131)

Distributed integration of design and planning activities in manufacturing and assembly using intelligent agents
Dušan Šormaz (US), Arkopaul Sarkar (US) (paper # 161)

Integrated process planning and scheduling with sequence-dependent setup time consideration: An ACO-based approach
Si Cheng Zhang (HK), Tak Nam Wong (HK) (paper # 196)

Track 4: Enablers and resources of engineering

Session 1 Enhancement of creative capabilities (ECC)

14.00 p.m. – 16.00 p.m., Tuesday, 20th May, 2014

3D CAD modelling and related spatial ability of engineering students

Gordana Marunic (HR), Vladimir Glazar (HR), Jelena Snauc (HR) (paper # 006)

Collaboration between industry and university: The development of integral design

Wim Zeiler (NL) (paper # 014)

Teaching students to apply multiple physical modeling methods

Tjamme Wiegers (NL), Jouke Verlinden (NL), Joris Vergeest (NL) (paper # 022)

State of the art of using virtual reality technologies in built environment education

Garrett Keenaghan (IE), Imre Horváth (NL) (paper # 248)

Session 2 Virtual reality applications (VRA)

16.20 p.m. – 18.20 p.m., Tuesday, 20th May, 2014

Analyzing visual strategies in engineering design by eye tracking experiments

Quentin Lohmeyer (DE), Sven Matthiesen (DE), Moritz Mussnug (CH), Mirko Meboldt (CH) (paper # 013)

MOCAP and digital human model techniques to identify gait deviations in patients with lower limb prosthesis

Daniele Regazzoni (IT), Caterina Rizzi (IT), Giorgio Colombo (IT) (paper # 160)

Reality - virtuality phenomena model in virtual prototyping

Simo-Pekka Leino (FI), Asko Riitahuhta (FI) (paper # 197)

Intent understanding for virtual environment

Cheng Cheng (CN), Dongpo Zhao (CN), Alhazmi Marwah (CN), Xianjuan Cai (CN) (paper # 200)

Session 3 Geometric computation in engineering (GCE)

14.00 p.m. – 16.00 p.m., Wednesday, 21th May, 2014

Contradic-graph-search: A tool for discovering for physical contradictions

Eric Coatanéa (FI), Sarayut Nonsiri (FI), Faisal Mokammel (FI), Francois Christophe (FI), Olof Calonijs (FI), Leena Ryyänänen (FI) (paper # 008)

Aesthetic-oriented classification of 2D free-form curves

Aleksandar Petrov (FR), Jean-Philippe Pernot (FR), Philippe Véron (FR), Franca Giannini (IT), Bianca Falcidieno (IT) (paper # 138)

Towards a priori mesh quality estimation using machine learning techniques

Jean-Philippe Pernot (FR), Paul Tessier (FR) (paper # 139)

Automatic determination of the insertion axis of a dental crown that minimizes undercut area

Jeonghun Lim (KR), Seung-Yeob Baek (KR), Jusung Lee (KR), Kunwoo Lee (KR) (paper # 208)

Session 4 Modeling lifecycle processes (MLP)

16.20 p.m. – 17.50 p.m., Wednesday, 21th May, 2014

A linear-/constraint-programming model for embedding life cycle assessment in engineering problems

Richard J. Wallace (IE), Antonino Marvuglia (LU), Enrico Benetto (LU) (paper # 019)

Approach for an integrated reference structure in the product lifecycle

Alexander Stekolschik (DE), Stefan Schulte (DE) (paper # 033)

Integration of model-based design annotations in product lifecycle management systems to facilitate design intent communication

Jorge Dorribo-Camba (US), Manuel Contero (ES) (paper # 040)

Session 5 Research aspects in engineering (RAE)

14.00 p.m. – 16.00 p.m., Thursday, 22th May, 2014

The generic design knowledge that design research projects should produce

Pieter E. Vermaas (NL) (paper # 031)

Design process behind the magic: New design technology

Vladimir Sedenkov (BL) (paper # 053)

Mereotopology and product design: State of the art and research challenges

Elise Gruhier (FR), Frédéric Demoly (FR), Kyoung-Yun Kim (US), Samuel Gomes (FR) (paper # 055)

D-robots for partially autonomous design: Conceptualization and case study

Yuemin Hou (CN), Linhong Ji (CN) (paper # 168)

Session 6 Knowledge transformation in industry (KTI)

16.20 p.m. – 18.20 p.m., Thursday, 22th May, 2014

Office building as virtual power plants: Uncertainty of demand within the smart grid

Wim Zeiler (NL), Kennedy Aduda (NL) (paper # 015)

Development of an online innovation platform for SMEs

Reza Ziarati (UK), Martin Ziarati (UK), Lakhvir Singh (UK), Ljubisa Urosevic (DE), Philip Reimer (DE), Oliver Kotte (DE), Aitor Elorriaga (ES), Silvia Lopez (ES) (paper # 079)

Smart production planning for sustainable production based on federative factory data management

André Picard (DE), Reiner Anderl (DE) (paper # 191)

Added value of stakeholders' involvement in designing for informal caregivers

Yu Song (NL), Bob S. Groeneveld (NL), Stella U. Boess (NL), Adinda Freudenthal (NL) (paper # 239)

Track 5: Concerns of product realization

Session 1 Socially responsible development (SRD)

14.00 p.m. – 16.00 p.m., Tuesday, 20th May, 2014

Designing a sustainable smart home network for elderly people

Margherita Peruzzini (IT), Michele Germani (IT), Alessandra Papetti (IT), Matteo Iualè (IT)
(paper 181)

Integration of the computer-based design analysis activity in the engineering design process –
A literature survey

Damien Motte (SE), Martin Eriksson (SE), Håkan Petersson (SE), Robert Bjärnemo (SE) (paper # 195)

Product design for elderly – Visual design information inspired a new perspective in design education
Lau Langeveld (NL) (paper # 224)

Future living studio: Socio-technical experiments for sustainable capacity building in Vietnamese
furniture and handicraft design industries

Shauna Jin (NL), Marcel Crul (NL), Han Brezet (NL) (paper # 227)

Session 2 Information acquisition and utilization (IAU)

16.20 p.m. – 18.20 p.m., Tuesday, 20th May, 2014

Q board interviews - An effective method to research user opinions

Tjamme Wiegers (NL), Clemens de Lange (NL), Joris Vergeest (NL) (paper # 024)

Legibility assessment for functional vision of DHM using differential acuity

Nitesh Bhatia (IN), Dibakar Sen (IN), Anand V. Pathak (IN) (paper # 065)

Engineering simulations to improve stent design and behavior in abdominal aortic
aneurysm treatment

*Neri Alamanni (IT), Giorgio Colombo (IT), Emiliano Chisci (IT), Stefano Michelagnoli (IT),
Tiziana Procacci (IT)* (paper # 166)

Development of a framework for information acquisition and processing in
cyber-physical systems

*Yongzhe Li (NL), Yu Song (NL), Imre Horváth (NL), Eliab Z. Opiyo (NL), Guangjun Zhang (CN),
Jun Xiong (CN)* (paper # 207)

Session 3 Empowering engineering processes (EEP)

14.00 p.m. – 16.00 p.m., Wednesday, 21th May, 2014

Event graph simulation: A case study of task allocation under change

Lijun Lan (SG), Shilong Wang (CN), Ying Liu (UK), Wen Feng Lu (SG) (paper # 030)

Proposition of a new and complementary evaluation approach of collaborative tools in product
design process

Damien Fleche (FR), Jean-Bernard Bluntzer (FR), Morad Mahdjoub (FR), Jean-Claude Sagot (FR)
(paper # 090)

Enhancement of engineering design within product development

W. Ernst Eder (CA) (paper # 124)

A methodology of reverse engineering for large assemblies products from heterogeneous data

Marina Bruneau (FR), Alexandre Durupt (FR), Lionel Roucoules (FR), Jean-Philippe Pernot (FR), Harvey Rowson (FR) (paper # 213)

Session 4 Geometry induced methods (GIM)

16.20 p.m. – 17.50 p.m., Wednesday, 21th May, 2014

Virtual piece reconstruction in case of cylindrical geometry

Attila Piros (HU), Melinda Majoros (HU) (paper # 136)

An emptiness test and a star test for patches

Lincong Fang (FR), Jean-Marc Cane (FR), Dominique Michelucci (FR), Sebti Foufou (FR) (paper # 153)

A geometric re-creation process for the addendum surfaces in automotive draw dies

YunChan Chung (KR) (paper # 156)

Session 5 Planning production processes (PPP)

14.00 p.m. – 16.00 p.m., Thursday, 22th May, 2014

Embedded solutions for increasing safety in agricultural activities

Davide Gattamelata (IT), Leonardo Vita (IT), Fagnoli Mario (IT), Massimo Tronci (IT) (paper # 076)

Roadmap for addressing the automotive engineering challenges in composite development

László Farkas (BE), Christophe Liefooghe (BE), Michael Bruyneel (BE), Michael Hack (BE), Bert Van Genechten (BE), Stijn Donders (BE), Herman Van der Auweraer (BE) (paper # 158)

Using the 5-axes response surface model for optimal control of lathe spindle vibration

Rupal Vyasa (IN), Bernadetta Kwintiana Ane (DE), Raghu Echempati (US), Dieter Roller (DE) (paper # 167)

The role of CAPP-MES integration in the cyber-physical production systems paradigm

Tibor Tóth (HU), Gyula Kulcsár (HU), Ferenc Erdélyi (HU), Mónika Kulcsárné Forrai (HU), Péter Bikfalvi (HU) (paper # 246)

Session 6 Specific problems of engineering (SPE)

16.20 p.m. – 18.20 p.m., Thursday, 22th May, 2014

Post-optimization of freeform support structures

Leon Kos (SI), Simon Kulovec (SI), Jožef Duhovnik (SI) (paper # 062)

Thermal analysis of a railway wheel-rail connection in sliding/rolling motion

Péter T. Zwierczyk (HU), Károly Váradi (HU) (paper # 173)

Modelling the string-bed of a tennis racquet using energy

Zhengzhong Fu (UK), Rod M. Valentine (UK), Glen Mullineux (UK) (paper # 185)

FE-BE coupling for the simulation of machine tools taking into consideration soil foundation and changes

Thomas Floeck (DE), Louis Komzsik (US) (paper # 233)

Track 6: Issues of competitive engineering (ICE)

Session 1 Enabling product development (EPD)

14.00 p.m. – 16.00 p.m., Tuesday, 20th May, 2014

Product maintenance management by lifecycle assessment

Mario Fargnoli (IT), Giuseppe Palladino (IT), Massimo Tronci (IT) (paper # 077)

Fostering modular kits in an industrial brownfield environment

Matthias Kreimeyer (DE), Armin Förg (DE), Markus Lienkamp (DE) (paper # 082)

Integrated idea generation method using morphological and options matrices

Dani George (US), Blake Linnerud (US), Gregory Mocko (US) (paper # 97)

Dual-aspect model for failure forecasting in cyber-physical systems

Santiago Ruiz-Arenas (NL), Imre Horváth (NL), Eliab Z. Opiyo (NL), Ricardo Mejía Gutierrez (CO)
(paper # 249)

Session 2 Novel engineering solutions (NES)

16.20 p.m. – 18.20 p.m., Tuesday, 20th May, 2014

Advanced driver assistance systems for electric race car

Wojciech Skarka (PL), Małgorzata Otrębska (PL), Piotr Zamorski (PL), Karol Cichoński (PL)
(paper # 115)

How do new product development startups handle missing expertise?

Ozgur Eris (NL), Wouter van den Eijnde (NL), Marloes Röling (NL) (paper # 171)

Cyber-physical augmentation – An exploration

Regine W. Vroom (NL), Imre Horváth (NL) (paper # 211)

Optimization of large scale maintenance networks

László Kota (HU), Károly Jármay (HU) (paper # 220)

Session 3 Towards optimal workflows (TOW)

14.00 p.m. – 16.00 p.m., Wednesday, 21th May, 2014

Individual and organizational acceptance of systems engineering methods – Survey and recommendations for future methods

Quentin Lohmeyer (CH), Albert Albers (DE), Aline Radimersky (DE), Jan Breitschuh (DE)
(paper # 012)

Application of shape changing smart materials in household appliances: A fragmented and inconsistent uptake

Azrol Kassim (NL), Imre Horváth (NL), Bart Gerritsen (NL) (paper # 110)

Hybrid grid/battery and hybrid diesel generator/battery systems for powering music stages

Konstantinos Dimitropoulos (NL), Han Brezet (NL), Bas Flipsen (NL) (paper # 228)

Organic interfaces

Wim Poelman (NL), Erik Tempelman (NL) (paper # 232)

Session 4 Forum session A (FSA)

16.20 p.m. – 17.50 p.m., Wednesday, 21th May, 2014

Simplified on-site document revision checking using QR codes
Martinus H.K. van de Ruitenbeek (NL) (paper # 214)

Developing multicriteria decision-making in outsourcing management using linguistic computing approach
Wen-Pai Wang (TW), Mei-Ching Tang (TW) (paper # 201)

Surrogates-based prototyping
Els Du Bois (BE), Imre Horváth (NL) (paper # 016)

Session 5 Academic workshop or tutorial 1 (AWT1)
14.00 p.m. – 16.00 p.m., Thursday, 22th May, 2014

T.B.A.

Session 6 Academic workshop or tutorial 2 (AWT2)
16.20 p.m. – 18.20 p.m., Thursday, 22th May, 2014

T.B.A.

Track 7: Academic workshops and tutorials (AWT)

14.00 p.m. – 15.00 p.m., Tuesday, 20th May, 2014

Identifying, developing and managing European research proposals and projects

Petya Bozhkova (BG)

15.00 p.m. – 16.00 p.m., Tuesday, 20th May, 2014

Cyber-physical systems and uncertainty in design

Bernadetta Kwintiana Ane (DE)

16.20 p.m. – 17.20 p.m., Tuesday, 20th May, 2014

Cloud manufacturing: A new manufacturing paradigm

Xun W. Xu (NZ)

17.20 p.m. – 18.20 p.m., Tuesday, 20th May, 2014

Lifecycle modeling, analysis and management of cyber-physical products

Yongsheng Ma (CA)

14.00 p.m. – 15.00 p.m., Wednesday, 21st May, 2014

Virtual driving environment for vehicle intelligence: Tools and methods

Weiwen (Kevin) Deng (CN)

15.00 p.m. – 16.00 p.m., Wednesday, 21st May, 2014

Manufacturing in the additive industry

Zjenja L. Doubrovski (NL)

16.20 p.m. – 17.50 p.m., Wednesday, 21st May, 2014

Finite element analysis of rotating structures

Louis Komzsik (US)

14.00 p.m. – 15.00 p.m., Thursday, 22nd May, 2014

Ergonomic design and 3D printing: Progress and opportunities

Roger Ball (HK)

15.00 p.m. – 16.00 p.m., Thursday, 22nd May, 2014

Supporting design and engineering by physical concept ontologies

Masaharu Yoshioka (JP)

16.20 p.m. – 17.20 p.m., Thursday, 22nd May, 2014

Academic research: Focus group session

Garrett Keenaghham (IR)

17.20 p.m. – 18.20 p.m., Thursday, 22nd May, 2014

Academic research: Focus group session

Shahab Pourtalebi Hendekkhaleh (NL)