CONFERENCE PROGRAM ISPEM 2018

Day I (17.09.2018)  B-4

8:00  9:00 Registration of participants

Opening of the conference (Room: 2.41):
- Prof. C. Madryas - Rector of Wroclaw University of Science and Technology,
- Prof. T. Nowakowski - Dean of Faculty of Mechanical Engineering

Plenary speaking (Room: 2.41):
- Prof. E. Chlebus, Wroclaw University of Science and Technology, Poland – “Priorities in Industry 4.0”;
- A. Holewa, Technical Managing Director at SITECH Sp. z o.o., Managing Director of Technical Affairs / Plant Director / Proxy, Poland – “Industry 4.0 in industrial use”;
- Prof. A. Bernard, Ecole Centrale de Nantes, France – “Knowledge-based engineering for simulation and performance evaluation of product service systems”;
- Prof. T. Nowakowski, Wroclaw University of Science and Technology, Poland – “Maintenance 4.0 – challenges and constraints”;
- Prof. B. Dybala, Wroclaw University of Science and Technology, Poland – “Knowledge and Innovation Community for Manufacturing”

11:00  11:30 Coffee break

Session: ISPEM 2018  Room: 2.41  Chairman: E. CHLEBUS

11:30  11:50 S. Bracke, M. Radetzky
Aperiodic surface topographies based on high precision grinding processes: Analysis of cutting fluid and cleaning process influences using non-parametric statistics

11:50  12:10 M. Neges, S. Adwernat, M. Wolf, M. Abramovici
3D Geometry Recognition for a PMI-based Mixed Reality Assistant System in Prototype Construction

12:10  12:30 M. Rosienkiewicz, J. Helman, M. Cholewa, M. Molasy
SYNERGY project: Open Innovation platform for Advanced Manufacturing in Central Europe

12:30  12:50 G. Krause-Juettler
Cooperation between science and small enterprises in cross-border perspective: status quo, actors and strategic recommendations for Saxon-Czech borderland and beyond

12:50  13:10 T. Werbelinska-Wojciajchowska, A. Fabia, T. Nowakowski
Evolution of technical systems maintenance approaches – review and a case study

13:10  14:10 Lunch

Session: Session 1a  ISPEM 2018  Room: 2.41  Chairman: T. NOWAKOWSKI

14:10  14:30 B. Klisz, J. Patalas Maliszewska
An analysis of the efficiency of a parallel-serial manufacturing system using simulation

14:30  14:50 J. Brüher, U. Buscher
Pricing and ordering decisions in a JELS-model for items with imperfect quality

14:50  15:10 E. Kozłowski, D. Mazurkiewicz, B. Koszalka, D. Kowalski
Application of a multidimensional scaling method to identify the factors influencing on-reliability of deep wells

15:10  15:30 E. Sokołowska, V. Popov
Concept of Power Grid Resiliency to Severe Space Weather

15:30  15:50 M. Cholewa, J. Helman, M. Rosienkiewicz, M. Molasy
Identification of challenges to be overcome in the process of enhancing innovativeness based on implementation of Central European projects funded from Interreg Programmes

15:50  16:20 Coffee break

Session: Session 3  Room: Machine Hall  Chairman: G. Krause-Juettler

16:20  17:30 Poster Session (Ground Floor, CAMT Machine Hall)

From 18:00 Banquet (Restaurant and Mini-Brewery “Spiz”, Rynek Ratusz 2)
Day II (18.09.2018) B-4

8:00 9:00  Registration of participants and welcome coffee

Plenary speaking (Room: 2.41):
- Prof. A. Hamrol, Poznan University of Technology, Poland - "Product design as a critical factor in Industry 4.0",
- A. Soldaty, Project Leader "Platform of Industry of the Future", Ministry of Entrepreneurship and Technology, "Stimulation of industry transformation - measures and activities", Poland,
- Prof. I. Kurc, University of Žilina, Slovakia - "Technical Diagnostics at the Department of Automation and Production Systems",
- Prof. K. Kozak, Image Processing and Data Management, Fraunhofer-Institut für Werkstoff- und Strahletechnik, Germany - "Increase Digital Twin Value: "Must Industry 4.0" database infrastructure to prepare MachineData for analytics. Use case based on Fraunhofer Model,
- P. Nossol, Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik IWU, Germany "Technology Fusion in Series Production of Lightweight Structures"

10:30  11:00 Coffee break

Session 3a: Room: 2.37  Chairman: I. KURIC

11:00 11:20  I. Kudelska, A. Stachowiak, M. Pawłowska  The framework of IT tool supporting layout redesign in a selected industrial company
11:20 11:40  P. Cyplik, M. Adamczak, K. Malinowska, J. Piontek  The concept of an integrated company management system combining the results in favour of sustainable development with the company indicator system
11:40 12:00  R. Jabel, J. Duda  Manufacturing activities modeling for the purpose of machining process plan generation
12:00 12:20  E. Grabarczyk, R. Stegmairer, A. Sierra, M. Lopez, G. Nikulin, P. Kristjanpoller  Design of performance indicators based on effective time and throughput variability. Case study in Mining Industry
12:20 12:40  A. Schiersz, H. Schlegel, M. Puts  Definition of characteristic values for the efficient and safe implementation of electronic cam gears
11:00 11:20  P. Pawlewski  Interactive layout in the redesign of intralogistics systems
11:20 11:40  L. Dulina, M. Kramarz, I. Cechova, D. Wieczik  Using modern ergonomics tools to measure changes in the levels of stress placed on the psychophysiological functions of a human during lead manipulations
11:40 12:00  M. Bulikovski, M. Krajcowicz, D. Plinta  Use of Dynamic Simulation in Warehouse Designing
12:00 12:20  V. Bulej, J. Urcik, J. Starlik, I. Kurc, D. Wieczik  Development of Simulation Platform for Robots with Serial and Parallel Kinematic Structure
12:20 12:40  G. Booracz, P. Nienke, Z. Banaszak, A. Thibbotuwawa  A Declarative Modelling Framework for Routing of Multiple UAVs in a System with Mobile Battery Swapping Stations
11:00 11:20  M. Kramarz  Flexibility Strategy in Delayed Differentiation Model of Steel Products Collaborative network planning using auction parallel to pool-based energy market with shifting bids
11:20 11:40  R. Błocisz, L. Hadasi  Risk assessment for potential failures during process implementation using Production Process Preparation (3P)
11:40 12:00  J. Zlotowska  Collaborative network planning using auction parallel to pool-based energy market with shifting bids
12:00 12:20  J. Oleksik-Schapija, A. Stachowiak  The framework of Logistics 4.0 Maturity Model
12:20 12:40  J. Knop, W. Grzesikiewicz, M. Makowski  A new approach to design of a cyber-physical system exemplified by its use in the electro-hydraulic hybrid drive

12:40  13:00 Coffee break

Session 4a: Room: 2.37  Chairman: A. GWIAZDA

13:00 13:20  A. Gawińska, K. Herbuś, P. Ociepka, M. Sokół  Computer aiding simulation of the mechatronics function of an intelligent building
13:20 13:40  K. Herbuś, P. Ociepka, A. Gawińska  Virtual activating of a robotized production cell with use of the Mechatronics Concept Designer module of the PLC Siemens NK system
13:40 14:00  M. Olender, K. Kalinowski, G. Grabowik  Flexible job shop scheduling using costs and finishing times of operations
14:00 14:20  W. Banasi, M. Olender  The evolution of the robot cell, cobot
14:20 14:40  K. Fast  The Petri Nets in modelling and simulation of hierarchical structure of manufacturing systems
13:00 13:20  T. Tarnawski  Envisioning Spread Page applications: network-based computing documents for decision support in operations management
13:20 13:40  R. Kasprzyk  The essence of reflexive control and diffusion of information in the context of information environment security
13:40 14:00  R. Wszawski, G. Złotowicz  Spread page challenges for accessibility in business modeling
14:00 14:20  M. Szlągowski  BPMN Update Proposal for Non-Expert Users
14:20 14:40  J. Starlik, R. Wszawski, M. Kiedrowicz  Security and risk as a primary feature of the production process

14:40 15:40 Lunch
15:40 16:10 Conference closing
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