Priority Research Area 5 (PRA5) – Automation and Industry 4.0
III Thematic Conference – Digitalization – Simulation
19.05.2022
Agenda

Topics:
- T3 Digitization and applications of information technologies
- T4 Simulation and modeling of processes

15.00 Introduction

dr hab. inż. Anna Timofiejczuk prof. PŚ, coordinator PRA5
dr hab. inż. Piotr Gaj prof. PŚ, coordinator PRA5.3
dr hab. inż. Damian Krenczyk prof. PŚ, coordinator PRA5.4

15.05 – 16:15 – Keynote session and discussion

- Virtual SmartFactory OWL Tour
Lukasz Wisniewski, Institute industrial IT-inIT at the Technical University OWL, Lemgo, Germany

Lukasz Wisniewski works at the Institute Industrial IT of the Technical University OWL, Lemgo since 2008. In 2014 he became a research group manager of the group computer networks and since 2019 he is an executive board member of inIT. During his work at inIT, he completed his doctorate in a cooperation with the Otto von Guericke University Magdeburg. He is co-author of more than 60 papers including two Best Paper Awards (IEEE ETFA 2012 and IEEE WFCS 2017). His research activities are around industrial real-time communication and Industry 4.0 systems.

16.15 – 17:15 – thematic session – Digitalization – Simulation

- Monitoring and predictive maintenance of the Yadong Overland Conveyor
Przemysław Rumin, SUT

- QBASS – cryptographic protocol with One-Time-Keys
Szymon Sarna, Digital Core Design Sp. z o.o. Sp. k. & SUT, WAEiI

- Digital transformation of a batch manufacturing plant. Industrial Internet of Things, big data storage and processing using Microsoft Azure cloud – case study on a real-world installation
Paweł Fic, SUT, WAEiI

17.15 – 17.30 Summary of the Conference

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III Thematic Conference – Digitalization – Simulation
26.05.2022
Agenda

Topics:
- T3 Digitization and applications of information technologies
- T4 Simulation and modeling of processes

16.00 Introduction
dr hab. inż. Anna Timofiejczuk prof. PŚ, coordinator PRA5
dr hab. inż. Piotr Gaj prof. PŚ, coordinator PRA5.3
dr hab. inż. Damian Krenczyk prof. PŚ, coordinator PRA5.4

16.05 – 17:20 – thematic session – Digitalization – Simulation

- Hazards of the internet
  Marcin Gajdzik, SUT, WMT

- Challenges in digitalization process in engineering organization of automotive components supplier
  Artur Król, SUT, WMT

- Software applications for content publication and distribution. Review of the content management systems (CMS) market
  Bartosz Kordecki, SUT, WOiZ

- Application of Blockchain Technology in Production Scheduling and Management of Human Resources Competencies
  Barbara Balon SUT, WMT

- Modeling of industrial processes with the use of FlexSim – introduction and assumptions
  Damian Twarowski, SUT, WMT

- Different approaches to wireless communication between AGV and standalone machine
  Ireneusz Smołka, SUT, WAEiI

17.20 – 17.30 Summary of the Conference