



## SIMS 2021

### Special Session on Smart Industry and Management Systems

at the 13th International Conference on Computational Collective Intelligence (ICCCI 2021)

Rhodes, Greece, 29 September – 1 October 2021

Conference website: <http://www.iccci.pwr.edu.pl/>

### Special Session Organizers

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### Objectives and topics

The special session on Smart Industry and Management Systems focuses on various processes and activities occurring in the new generation of manufacturing systems. The process requires defining both technological activities with the use of production support techniques, complex internal logistics solutions as well as intelligent monitoring and autonomous decision-making processes. It is necessary to effectively control and optimize the industrial enterprise through, for example, ontology-based M2M (Machine to Machine Communication), enterprise resource planning (ERP), and manufacturing execution systems (MES). It becomes necessary to make decisions based not only on the state of the process/system but also on prediction, planning, and experience. ICT performs a more and more important role in areas previously reserved for humans on all levels of production.

A modern production system should take into account Industry 4.0 architecture, energy and resource efficiency through optimization of the production process based on Data Mining methods and Virtual Factory models as well as using Business Intelligence (BI) services supporting planning and optimization. The session aims to present possibilities and solutions in this area. The session scope includes, but is not limited to the following topics:

- Business processes modeling and simulations,
- Cyber Security Management,
- Data Mining for Predictive Maintenance,
- Flexible manufacturing systems,
- Industry 4.0 solutions,
- Intelligent decision-supporting,
- Machine Learning and cognitive technologies,

- Ontology-based communication,
- Quality of Service in communication,
- Retail information systems
- Sensor and Actuator Networks in the Internet of Things,

## Important dates

Submission of papers: **15 May 2021 (Hard deadline)**  
 Notification of acceptance: **15 June 2021**  
 Camera-ready papers: **30 June 2021**  
 Registration & payment: **30 June 2021**  
 Conference date: **29 September – 1 October 2021**

## Program Committee (to be invited)

Adam Ziębiński, Silesian University of Technology, Poland  
 Anne-Lena Kampen, Western Norway University of Applied Sciences, Norway  
 Artur Rot, Wrocław University of Economics and Business, Poland  
 Bogdan Franczyk, University of Leipzig, Germany  
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 Rafał Cupek, Silesian University of Technology, Poland  
 Maciej Huk, Wrocław University of Science and Technology, Poland  
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## Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: **SIMS 2021: Special Session on Smart Industry and Management Systems.**

<https://easychair.org/conferences/?conf=iccci20210>

Authors are invited to submit original previously unpublished research papers written in English, of up to 13 pages, strictly following the LNCS/LNAI format guidelines. Authors can download the Latex (recommended) or Word templates available at [Springer's web site](#). Submissions not following the format guidelines will be rejected without review. To ensure high quality, all papers will be thoroughly reviewed by the SIMS 2021 Program Committee. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. The conference proceedings will be published by Springer in the prestigious series LNCS/LNAI (indexed by ISI CPCI-S, included in ISI Web of Science, EI, ACM Digital Library, dblp, Google Scholar, Scopus, etc.).