

**Invited Session on “Sustainable Manufacturing Systems Design and Operation”
For IFAC MIM 2019**

Invited session identification code

IFAC MIM 2019, August 28-30, 2019, Berlin, Germany

Session Chairs:

- *Arkadiusz Gola, Lublin University of Technology, POLAND*
- *Grzegorz Bocewicz, Koszalin University of Technology, POLAND*

Session Committee Members:

- *Zbigniew Banaszak, Koszalin University of Technology, POLAND*
- *Jose Dinis-Carvalho, University of Minho, PORTUGAL*
- *Gokhan Egilmez, University of New Haven, USA*
- *Martin Krajčovič, University of Zilina, SLOVAKIA*
- *Izabela Nielsen, Aalborg University, DENMARK*
- *Chandima Ratnayake, University of Stavanger, NORWAY*
- *Czesław Smutnicki, Wrocław University of Science and Technology, POLAND*
- *Walter Terkaj, National Research Council, ITALY*
- *Ali Turkyilmaz, Nazarbayev University, KAZAKHSTAN*
- *Jarosław Wikarek, Kielce University of Technology, POLAND*

Abstract:

Given the growing globalization and contemporary market demands, the problem of sustainability in manufacturing system design and operation is becoming more significant. Manufacturing efficiency is more and more often defined not only as the capacity for low-cost production of specified quality products, but also as the capacity for quick execution of variable and low-volume orders at reduced manufacturing costs. In this context, new problems, ideas and approaches as well as the question of progress in achieving new practical and scientific results may be of great interest and importance for production engineering. Special attention is paid to the problems of reducing manufacturing costs by sustainable manufacturing systems design and production process planning, organization and control.

Sustainability in Manufacturing Systems Design and Operation will be a new conference special session, providing an excellent forum for scientists, researchers, engineers and industrial practitioners to meet and share experiences, theoretical knowledge or application examples based on the latest trends in manufacturing systems design as well as future directions and trends aimed to deal with the problem of sustainable development in manufacturing.

The list of topics:

- focused flexibility manufacturing systems design
- reconfigurable manufacturing systems design
- supply chain management

- sustaining continuous improvements in production units
- manufacturing systems capacity balancing
- sustainable production planning
- robust cyclic scheduling
- multi-skill resource-constrained project scheduling
- multicriteria optimization in operations management
- sustainable material handling systems design
- AI driven production planning and control

Submission

For author guidelines, please refer to www.ifac-control.org. All papers must be submitted electronically using Symposium Manuscript Management System (CMMS). All papers must be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper and submit it online by December 15, 2018. Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members. The corresponding author submits the paper online (pdf format) as **an invited session paper**. Submission as an invited paper requires the **invited session code** Several international journals are associated with the MIM 2019 for publication of special issues.

Important dates:

December 15, 2018	Deadline for the submission
February 20, 2019	Notification of acceptance/rejection
March 15, 2019	Deadline for the final submission