Journal of Intelligent Manufacturing

Call for a Special Issue

Intelligent Manufacturing Systems towards Industry 4.0 Era

Guest Editors and Contact Information

Yuval Cohen        Israel        yuvalc@afeka.ac.il
Marco Macchi       Italy         marco.macchi@polimi.it
Marcos Tsuzuki     Brazil        mtsuzuki@usp.br
Ahmad Barari       Canada        ahmad.barari@uoit.ca

Aim and Scopes

Parallel to organizing the 13th IFAC Workshop on Intelligent Manufacturing Systems (IMS 2019), and the Asian Pacific Conference of Prognostics and Health Management 2019 (PHM AP 2019), this call aims at developing a Special Issue of the Journal of Intelligent Manufacturing, focused on Intelligent Manufacturing Systems in Industry 4.0. The list of topics includes but is not limited to:

• Intelligent support systems for manufacturing decision making
• Smart quality assurance and intelligent inspection
• Smart maintenance with predictive and prescriptive capabilities
• Data-driven and Model-based prognostics
• Prognostics and Health Management in Smart manufacturing systems
• Artificial intelligence for manufacturing processes
• Big data analytics for manufacturing systems & processes
• Fusion of sensor information for manufacturing processes
• Digital twins for decision making in Industry 4.0 era
• Virtualization and simulation techniques for manufacturing decision making
• Self-configuration and self-diagnosis IoT methods for manufacturing shop floors
• Self optimization models for scheduling and sequencing manufacturing shop floor
• Blockchain technology, resource efficiency and circular economy tracking
• Autonomy, autonomous vehicles, and drones
The guest editors will invite the selected papers from IMS 2019 and PHM AP 2019 in coordination with the scientific program committees of the two targeted events. In addition, this is an Open Call for high quality research papers contributing to the topics of interest of this Special Issue. The guest editors responsible to coordinate with the targeted events are:

IMS 2019  
Ahmad Barari

PHM AP 2019  
Marco Macchi

Papers applying directly to this Open Call and the invited papers will have to follow the submission procedure and timeline below presented. In case of selected papers from IMS 2019 and PHM AP 2019, the papers submitted to this Special Issue should be an extended version of their work presented in the scope of the targeted events.

**Submission Procedure and timeline**

1- Authors are requested to email an extended abstract (in pdf format) of a maximum of 1000 words to Ahmad Barari at ahmad.barari@uoit.ca before **31th of October, 2019**.

*Important note: This abstract should contain the tentative title of the paper, the authors list (with the corresponding author identified). The main contribution, the results and the methodology must be pointed out.*

2- Authors will be informed by email if an extended version of their paper can be reviewed for this special issue by **30th of November, 2019**.

3- Accepted authors are required to submit their full papers via the journal’s submission system by indicating this special issue from the menu. The submission system is available at [http://www.editorialmanager.com/jims/default.aspx](http://www.editorialmanager.com/jims/default.aspx). The deadline for full paper submission is **21st of March, 2020**.

*Important note: submissions via email or any other means are not allowed.*

4- Authors will be informed of the results of the first round of review by the **end of June 2020**.

5- Selected authors may have to re-submit a revised version of their articles by the **end of September, 2020**.

6- Authors will be informed of the final decisions by the **end of November, 2020**.

Expected on-line publication date: **early 2021**.

For more information or any question please contact ahmad.barari@uoit.ca or marco.macchi@polimi.it