



## Digital Twin-Driven Smart Production, Logistics, and Supply Chains

Guest Editors:

**Prof. Dr. Sang Do Noh**

Department of Systems  
Management Engineering,  
Sungkyunkwan University,  
Suwon-si 16417, Republic of  
Korea

**Dr. Kyu-Tae Park**

Department of Industrial  
Engineering, Seoul National  
University of Science &  
Technology, Seoul 01811,  
Republic of Korea

Deadline for manuscript  
submissions:

**30 November 2024**

### Message from the Guest Editors

Dear Colleagues,

This Special Issue aims to present novel models, frameworks, methods, and supportive algorithms related to DTs as the core operational technology in areas of production, logistics, and supply chains.

We invite papers that address, but which are not limited to, the following topics:

- Advanced and event-driven simulations using digital twins.
- Asset descriptions for the synchronization of digital twins.
- Conceptual models and architectural frameworks to support digital twins in production, logistics, and supply chains.
- The coordination of new emerging technologies for the implementation of digital twins.
- Digital twins for human–robot collaborations, ergonomic analyses, and human-centric operations.
- Digital twins for material handling devices (e.g., autonomous mobile robots, delivery drones, industrial robots, etc.)
- Digital twins for sustainable operations in industrial systems (e.g., manufacturing systems, warehouses, distribution centers, etc.)
- Industrial applications the digital twins as real-world case studies.



[mdpi.com/si/184997](https://mdpi.com/si/184997)

Prof. Sang Do Noh  
Dr. Kyu-Tae Park

# Special Issue



an Open Access Journal by MDPI

## **Editor-in-Chief**

**Prof. Dr. Antonio J. Marques  
Cardoso**

CISE—Electromechatronic  
Systems Research Centre,  
University of Beira Interior,  
Calçada Fonte do Lameiro, P -  
6201-001 Covilhã, Portugal

## **Message from the Editor-in-Chief**

*Machines* is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within *Scopus*, *SCIE (Web of Science)*, *Inspec*, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Mechanical*)

## **Contact Us**

---

*Machines* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/machines](http://mdpi.com/journal/machines)  
[machines@mdpi.com](mailto:machines@mdpi.com)  
✉@Machines\_MDPI