# Special Issue

# Advances in Smart Manufacturing: Integrating AI, Digital Twins, and Edge Computing

## Message from the Guest Editors

This Special Issue explores the latest advancements in key technologies of smart manufacturing and their impact on the evolution of future smart factories, as well as principles of transforming the existing factories towards smart factories. The central focus of the Special Issue is the integration of AI and digital twins to enhance the modelling, real-time simulation, and optimization of industrial systems and processes including production logistics. Applications of edge computing and 5G networks in distributed production networks, which enable decentralized and rapid data processing, and their role in ensuring high responsiveness and flexibility in manufacturing will also be addressed. The Special Issue emphasizes interdisciplinary research on theoretical and practical challenges. It also includes case studies showcasing the application of these technologies in real-world industrial environments and discussions on future research directions and innovations.

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## Deadline for manuscript submissions

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## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Editor-in-Chief

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