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# Advanced Applications of Mathematical Modeling and Optimization in Logistics and Manufacturing

Guest Editor:

## Prof. Dr. Jose Antonio Marmolejo-Saucedo

Facultad de Ingenieria, Universidad Nacional Autonoma de Mexico, Ciudad de Mexico, Mexico

Deadline for manuscript submissions:

28 December 2024

## **Message from the Guest Editor**

Dear Colleagues,

Mathematical modeling and optimization are essential tools for logistics and manufacturing in today's global economy. These techniques can be used to solve a wide range of problems, including routing, scheduling, inventory management, and production planning. By using mathematical modeling and optimization, businesses can become more efficient, reduce costs, and improve customer satisfaction. Mathematical modeling and optimization are powerful tools that can improve the efficiency and effectiveness of logistics and manufacturing operations. In addition, machine learning, artificial intelligence, and digital twins are all playing increasingly important roles in logistics and manufacturing. These technologies are used to automate tasks, improve decision-making, and optimize operations. Digital twins are virtual representations of physical systems.

As the Guest Editor of this Special Issue, I invite practitioners, professionals, and researchers to submit studies of the application of optimization, simulation, and digital twin techniques to improve organizations' logistics and manufacturing processes.











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## **Editor-in-Chief**

#### Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

# Message from the Editor-in-Chief

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