

# Special Issue

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

### Message from the Guest Editor

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 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.

### Guest Editor

Prof. Dr. Jose Antonio Marmolejo-Saucedo

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### Deadline for manuscript submissions

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### Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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### Editor-in-Chief

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