



## Mathematical Approaches Applied in Operations Research, Logistics, and Inventory

Guest Editors:

**Dr. Pei-Fang Tsai**

Department of Industrial  
Engineering and Management,  
National Taipei University of  
Technology, Taipei 10608,  
Taiwan

**Prof. Dr. Ming-Feng Yang**

Department of Transportation  
Science, National Taiwan Ocean  
University, Keelung 20224,  
Taiwan

Deadline for manuscript  
submissions:

**closed (10 April 2025)**

### Message from the Guest Editors

With the advances in sensors and automation technologies, data collection has become cheaper and ubiquitous. The availability of huge data opens up opportunities in efficient design in possible operation strategies by correcting prediction in system behaviors with uncertainty. To deal with practical difficulties in digital transformation and intelligent data analytics, innovative mathematical approaches are required to help manufacturers as well as service providers make better decisions. Another drive in utilizing mathematical models also lies in how to operate business functions to fulfil the competing needs in customer satisfaction, cost, and quality requirement while considering corporate resilience and various goals related to environmental, social, and governance (*ESG*) factors.

This Special Issue aims to demonstrate the latest research findings and scientific articles of the latest mathematical applications in operations research, logistics, and inventory. High-quality research in the innovative adoption or mix use of mathematical approaches with potential in real-world applications are particularly welcome.





an Open Access Journal by MDPI

## 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

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.

## 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), RePEc, and other databases.

**Journal Rank:** JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

## Contact Us

---

*Mathematics* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/mathematics](http://mdpi.com/journal/mathematics)  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)  
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)