



Application of Mathematical Modeling and Simulation to Transportation

Guest Editor:

Dr. Nouredine Lakouari

Computer Science Department,
National Institute of
Astrophysics, Optics and
Electronics, Luis Enrique Erro # 1,
Tonantzintla, Puebla 72840,
Mexico

Deadline for manuscript
submissions:

31 January 2025

Message from the Guest Editor

Transportation is a crucial sector that significantly boosts countries' development. This Special Issue aims to explore innovative applications of mathematical modeling and simulation in transportation. Its focus will be on the latest research, methodologies, and practical implementations that use mathematical tools to address the complex challenges facing the transportation sector.

We invite original research articles, reviews, and case studies that cover a wide range of topics, including, but not limited to, the following:

- Environmental impact assessments of transportation systems;
- Freight and logistics modeling;
- Intelligent transportation systems (ITSs);
- The modeling of traffic behavior and patterns;
- The optimization of transportation networks;
- Policy modeling and evaluation in transportation;
- Public transportation planning and management;
- Traffic flow theory and its applications;
- The simulation of transportation systems and infrastructures.





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

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