

Special Issue

Application of Mathematical Modeling and Simulation to Transportation

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.

Guest Editor

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About the Journal

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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).