



Simulation Modeling and Risk Assessment in Critical Infrastructure Systems

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Message from the Guest Editors

Dear Colleagues,

The current effects of emergencies on humans have been amplified by increasing extreme weather events and outbreaks of epidemic disease. The critical infrastructure system is crucial for daily life and is threatened heavily by these emergencies.

This Special Issue aims to collect research on simulation modeling for critical infrastructure systems, risk assessments in critical infrastructure systems under emergencies, and recovery strategies after critical infrastructure systems have been disrupted. The potential research topics include but are not limited to:

- Simulation models and techniques for critical infrastructure systems (eg. transportation and energy) under disruption.
- Risk and impact assessment modeling under emergencies including extreme weather and outbreaks of epidemic disease.
- Design and optimization for logistics-related strategies for critical infrastructure systems under uncertainty.
- Supply chain dynamic decision-making and scheduling under emergencies.
- Models and simulations in disaster relief/humanitarian logistics.
- Hazard–infrastructure network interactions.
- Occurrence and impact of multiple hazards.





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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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