



## Modeling and Simulation in Engineering, 3rd Edition

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### Message from the Guest Editors

Advances in Information Technology and Computer Science in the last few decades have simplified the work of engineers in the design of new devices and systems, making modeling and simulation (M&S) a mandatory stage prior to the experimental setup. Thus, M&S has become part of the engineering culture.

This Special Issue is focused on presenting original research concerning mathematical models and simulation results based on advanced computer software.

The topics include, but are not limited to, the following:

- Modeling in mathematical physics;
- Behavioral analogies between different branches of physics;
- Simulation software;
- Numerical methods for partial differential equations;
- Optimization methods;
- Coupled problems;
- Modeling, simulation and optimization of electromagnetic devices;
- Simulation and optimization of electrical circuits;
- Decision support systems;
- Defining synthetic environments for engineering problems;
- Design of experiments;
- Models of measurement techniques;
- Computational processes in modeling and simulation.





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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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