Special Issue

Mathematical Modelling, Simulation, and Optimal Control

Message from the Guest Editor

Mathematical modelling, simulation, and optimal control are three fields that play a crucial role in solving real-world problems. Mathematical modeling uses mathematical equations to elucidate various phenoma. Simulation, on the other hand, creates a virtual model of a real-world system to analyze its behavior under different conditions, which help to make and predict informed decisions. Finally, optimal control is an optimization technique ised to study the best control strategy to optimize the performance of the system. These fields are widely used in various industries, including finance, engineering, and healthcare, among others, to analyze and improve complex systems. The combination of these fields has proven to be an efficient tool for complex problems. This Special Issue aims to allow scientists and researchers to present their works that focus on mathematical modelling, simulation, and optimal control fields, using several applications such as management, engineering, and healthcare, among others, to help predict and make informed decisions.

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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