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## Advances in Mathematical Modeling and Related Topics

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### Message from the Guest Editor

Dear Colleagues,

Mathematical modeling is a powerful tool for understanding systems across engineering, biology, economics, environmental science, and more. We are excited to announce this Special Issue, entitled "Advances in Mathematical Modeling and Related Topics", showcasing the latest developments in this field. This Special Issue will provide a platform for researchers to present innovative models addressing complex real-world problems. It also offers opportunities to review themes, explore unaddressed aspects, propose new approaches, exchange perspectives, and inspire new research directions.

Topics of interest include, but are not limited to, the following: numerical methods for PDEs; dynamical systems; mathematical models of tumor growth; symmetry in nonlinear dynamics; AI and machine learning models; biomechanical systems modeling; stochastic processes in finance; optimization in industry applications; population dynamics in mathematical biology; topological data analysis; simulation in computational fluid dynamics; epidemiological models for public health; quantum mechanics models; rough set theory, etc.



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## Message from the Editor-in-Chief

*Axioms* is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

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