



## Advances in Mathematical Modeling and Related Topics

Guest Editor:

**Prof. Dr. En-Bing Lin**

Department of Mathematics,  
Central Michigan University, Mt.  
Pleasant, MI 48859, USA

Deadline for manuscript  
submissions:

**closed (31 March 2026)**

### 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.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Humberto Bustince**

Department of Statistics,  
Computer Science and  
Mathematics, Public University of  
Navarra, 31006 Pamplona, Spain

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High visibility:** indexed within SCIE (Web of Science), dblp, and other databases.

**Journal Rank:** JCR - Q2 (Mathematics, Applied)

## Contact Us

---

*Axioms* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/axioms](http://mdpi.com/journal/axioms)  
[axioms@mdpi.com](mailto:axioms@mdpi.com)  
[X@Axioms\\_MDPI](https://twitter.com/Axioms_MDPI)