



## Mathematical Modeling in Chaotic and Bio-Inspired Systems

Guest Editor:

**Prof. Dr. Ruben Vazquez-Medina**

Instituto Politécnico Nacional,  
Centro de Investigación en  
Ciencia Aplicada y Tecnología  
Avanzada Unidad Querétaro, Av.  
Cerro Blanco 141, Colinas del  
Cimatario, Querétaro 76090,  
Mexico

Deadline for manuscript  
submissions:

**31 May 2024**

### Message from the Guest Editor

Dear Colleagues,

Mathematical modeling allows us to analyze and describe the nonlinear behavior of nature's systems and phenomena, which can be synthesized using soft- and hard-processors, electronic devices, and computational systems. Moreover, with the support offered by neural processing and deep learning systems, it is possible to simulate or emulate the behavior of systems applicable in communications, computing, big data, aeronautics, transportation, electrification, electromobility, medicine, and industrial fields, among others. This Special Issue provides a platform for researchers from academia and industry to present novel and unpublished work related to the mathematical modeling of chaotic and bio-inspired systems with the idea of promoting new research in emerging fields for the analysis and synthesis of nonlinear systems in nature.





## Editor-in-Chief

### **Prof. Dr. Francisco Chiclana**

School of Computer Science and  
Informatics, De Montfort  
University, The Gateway,  
Leicester LE1 9BH, UK

## 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.

## Author Benefits

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

**High Visibility:** indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

**Journal Rank:** JCR - Q1 (*Mathematics*) / CiteScore - Q1 (*General Mathematics*)

## Contact Us

---

*Mathematics* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

[mdpi.com/journal/mathematics](http://mdpi.com/journal/mathematics)  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)  
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)