

# Special Issue

## Modeling and Numerical Analysis with Neural Networks

### Message from the Guest Editors

We invite researchers and scholars to contribute to this Special Issue of *Mathematics* on "Modeling and Numerical Analysis with Neural Networks". This Issue aims to promote the application of contemporary neural networks to solving real-world challenges across various scientific disciplines, including engineering, social sciences, chemistry, medicine, business, life sciences, and others. The emergence of artificial neural networks has provided an alternative mathematical and computational framework for numerical analysis, and modeling in the field of mathematics. We encourage researchers to submit studies that propose innovative methods and applications of neural networks in numerical analysis and modeling. We are particularly interested in publishing manuscripts that address complex real-world problems in science and engineering; moreover, whether you have developed new neural network architectures or have conducted comprehensive surveys in this field, we welcome your contributions. Join us in exploring the potential of neural networks as a powerful tool for solving numerical problems and advancing scientific research.

### Guest Editors

Prof. Dr. Roberto Alejo Eleuterio

Prof. Dr. Vicente García

Prof. Dr. Rosa María Valdovinos-Rosas

### Deadline for manuscript submissions

closed (31 December 2024)



## Mathematics

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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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### Editor-in-Chief

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#### High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).