

## Special Issue

# Implementations and Applications of Algorithms Based on Fractional Calculus to Engineering Problems

### Message from the Guest Editors

In recent years, the scientific community has focused its attention on using fractional calculus and differential equations as tools to develop various algorithms for signal processing and their corresponding applications, such as the development and implementation of complex algorithms associated with chaotic systems in embedded systems, which allows for the use of diverse applications and practical solutions in engineering problems.

This Special Issue provides a forum for presenting **new and improved algorithms or techniques based on fractional calculus for applications in current engineering problems**. We invite authors to contribute original research articles exploring the latest developments of fractional-order systems. Topics may include, but are not limited to, the following:

- Embedded systems;
- Robot control;
- Biomedical applications;
- Autonomous vehicles;
- Neural networks;
- Chaotic systems;
- Image processing;
- Nonlinear observers;
- Power systems;
- Signal processing.

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### Guest Editors

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### Deadline for manuscript submissions

31 July 2026



## Fractal and Fractional

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CiteScore 6.0



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## About the Journal

### Message from the Editor-in-Chief

*Fractal and Fractional* (*Fractal Fract.*) is a scholarly online journal which provides a forum for discussion on new original models and methods in fractals and fractional calculus both from theory and applications. It is a peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

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### Editor-in-Chief

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### Author Benefits

#### High Visibility:

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

#### Journal Rank:

JCR - Q1 (Mathematics, Interdisciplinary Applications) /  
CiteScore - Q1 (Analysis)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).