

## Special Issue

# Fractional Differential Operators with Classical and New Memory Kernels, Second Edition

### Message from the Guest Editors

Fractional calculus has a rich history in the modelling of nonlinear problems in physics and engineering. Formally, the apparatus of fractional calculus includes a variety of fractional-order differintegral operators, such as those named after Riemann, Liouville, Weyl, Caputo, Riesz, Erdelyi, Kober, etc., which give rise to a variety of special functions. Beyond this, some new trends in modelling involve integral operators with nonsingular kernels, as well as operators defined on fractal sets. These were proposed to model dissipative phenomena that cannot be adequately modelled by classical operators. This Special Issue addresses contemporary modeling problems in science and engineering involving fractional differential operators with classical and new memory kernels. This is a call to authors involved in modeling with new and classical fractional differential operators to share their results in fractional modelling theory and applications. We will cover a broad range of applied topics and multidisciplinary applications of fractional-order differential operators with classical and new kernels in science and engineering.

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### Guest Editors

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### Deadline for manuscript submissions

30 June 2026



## Fractal and Fractional

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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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