

Special Issue

New Advancements in Pure and Applied Mathematics via Fractals and Fractional Calculus

Message from the Guest Editors

Important scientific phenomena, for instance, the growth of bacteria, snowflakes (freezing water), and brain waves have been accurately addressed recently using the notions of fractals. Their mathematical formulation has achieved major scientific insights. Different phenomena with a pulse, rhythm, or pattern have an opportunity to be a fractal. For example, wireless cell phone antennas are used to enhance the quality and the range of signals in a fractal pattern. This Special Issue cordially invites and welcomes review, expository, and original research articles comprising new advancements in pure and applied mathematics via fractals and fractional calculus, along with their applications across widely dispersed disciplines in the physical, natural, computational, environmental, engineering, and statistical sciences. This Special Issue also welcomes articles providing new trends in the mathematical theory of Bifurcation and Chaos control, which are insightful for significant applications, particularly in complex systems. Numerical calculations may also support the established results.

Guest Editors

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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).