Special Issue

Novel and Innovative Methods for Fractional-Order Epidemic Model

Message from the Guest Editors

Fractional calculus, has seen a resurgence in interest due to its wide-ranging applications across diverse areas, particularly in modeling epidemic diseases. The use of fractional-order epidemic models offers a novel approach to understanding the complex dynamics of disease spread. In this Special Issue, we look forward to your contributions in pushing the boundaries of our understanding of epidemic dynamics using fractional calculus. Topics of interest include, but are not limited to:

- development and analysis of fractional-order epidemic models
- utilization of fractional integral and differential operators in modeling disease spread
- the application of fractional optimal control theory
- theoretical, computational, and realistic nature of infectious disease models
- review of effect of new fractal differential and integral operators for modeling infectious diseases
- modeling diseases with fuzzy differential equations
- stochastic fractional-order epidemic models.

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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 19.9 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).

