



Fractional Calculus and Mathematical Applications

Guest Editors:

Prof. Dr. Juan Eduardo Nápoles Valdés

Facultad de Ciencias Exactas y Naturales y Agrimensura, Universidad Nacional del Nordeste, Av. Libertad 5450, Corrientes 3400, Argentina

Dr. Miguel Vivas-Cortez

Faculty of Exact and Natural Sciences, School of Physical Sciences and Mathematics, Pontificia Universidad Católica del Ecuador, Av. 12 de octubre 1076 y Roca, Apartado Postal 17-01-2184, Sede Quito, Ecuador

Deadline for manuscript submissions:

closed (31 May 2023)

Message from the Guest Editors

Fractional calculus has a very particular two-sided characteristic; on the one hand it is as old as ordinary (integer) calculus and on the other, in the last 40 years it has multiplied its applications in a wide range of areas and dissimilar themes. As a result, the number of researchers and publications is constantly increasing year after year, from biological models to integral inequalities, passing through systems with delay, neutrals, hybrids, etc. The applications have multiplied in this interaction between specialists from different areas and the mathematicians themselves who use these tools in their theoretical investigations.

All of the above means that we can work not only with integral operators of the Riemann–Liouville type, but also with differential operators of Caputo or Riemann–Liouville type and their generalizations, which can consider a great variety of mathematical tools whose effectiveness has been proven in a wide variety of problems.

Consequently, new results are continually being produced which involve more generalized integral operators and fractional differentials of a new type, which broaden the horizons of this area to unsuspected limits.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

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

Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)