Special Issue Announcement - Call for Papers

Journal of Innovation Sciences and Sustainable Technologies (JISST)

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Focus Theme: Advances in Fractional Calculus: Theory, Models and Applications

Guest Editors

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About the Journal

This journal is created to disseminate innovative research under the *Make in India* initiative. One of the main objectives of this journal is to promote innovation in Science & Technology in the younger generation of researchers and students by fostering greater unification among several disciplines of Science, Engineering and Technology, Medicine, Social Sciences, and Finance. This activity relates to the encouragement of scientific research that focuses on problems of contemporary societal concerns and their solutions, leading to the development of sustainable technologies to better the lives of mankind across the globe. This journal has been registered with several indexing, reviewing, and abstracting agencies. JISST is completely peer-reviewed, multidisciplinary, and unique in nature and supports open-access research. This Journal has published a few special issues on contemporary societal challenges.

Subjects of Interest

Fractional calculus is a subject of numerous investigations in the last few decades. It has been realized that fractional calculus stands out in the modelling problems involving nonlocality and memory effect more accurately than the integer-order calculus. Especially fractional derivatives play an important role in the study of real-world problems arising from several areas of science and engineering, and to name a few viscoelastic systems, stochastic systems, signal and image processing, control problems and problems with diffusion processes.

This special issue aims to publish the latest and high-quality research in all application domains. Since the fractional operators are nonlocal in nature, finding analytical solutions for fractional order systems is always a challenge, hence studies on development of effective numerical methods for solving such problems will also be considered for publication in this special issue.

We invite original and novel multidisciplinary work in the following areas:

- Analytical and numerical methods for fractional differential equations
- · Analytical and numerical methods for fractional integral equations
- Stability, existence, and multiplicity of fractional partial differential equation
- Fractional calculus in signal and image processing
- Fluid dynamics, model, and numerical simulation
- Fractional variational problem

The Editorial Board will consider the following types of submissions:

- → Full-length original research papers covering theory, practice, and implementations.
- → Short tutorials and expository articles of an educational nature; and
- → Brief presentations of interesting and timely problems in all related domains and their proposed solutions using known or new innovative techniques.

The main goal of the submitted articles is to bring a privileged level of understanding to both academia and industry on issues and topics that have deep societal concerns and may not usually be readily and easily accessible either to academia or practitioners of interdisciplinary research.

