# **Special Issue**

# New Trends on the Mathematical Models and Solitons Arising in Real-World Problems, 3rd Edition

## Message from the Guest Editors

The essence of mathematical tools for exemplifying practical problems in daily life is as old humanity itself. Mathematical models in science and technology have recently attracted increasing research attention, with the aim of understanding, describing, and predicting the future behavior of natural phenomena. Recent studies on fractional calculus have been particularly popular among researchers due to their favorable properties when analyzing real-world models associated with properties such as anomalous diffusion, non-Markovian processes, random walk, long range, and, most importantly, heterogeneous behaviors. The development of local differential operators, along with power law settings and non-local differential operators, has been suggested to more accurately replicate these processes. The complexities of nature have driven mathematicians and physicists to derive increasingly sophisticated and scientific mathematical operators to accurately replicate and capture pragmatic realities...

### **Guest Editors**

Prof. Dr. Haci Mehmet Baskonus

Prof. Dr. Shuli Mei

Dr. Md Nurul Raihen

## Deadline for manuscript submissions

30 April 2026



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Impact Factor 2.2 CiteScore 5.3



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### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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