



an Open Access Journal by MDPI

## Fractal and Fractional Analysis in Biomedical Sciences and Engineering

Guest Editor:

## Dr. Andjelija Ž. Ilić

Institute of Physics Belgrade, University of Belgrade, Pregrevica 118, Zemun-Belgrade 11080, Serbia

Deadline for manuscript submissions: **25 December 2024** 

## Message from the Guest Editor

This Special Issue aims to offer an overview of state-of-theart developments in the field of fractal and fractionalbased methodologies as applied to the analysis and modeling of biomedical entities and processes, as well as developments in biomedical engineering.

The vision of this Special Issue encompasses the most relevant developments in using novel approaches in life sciences, including conceptual and theoretical approaches, as well as numerical methods that can be applied in biomedicine. The topics of interest include, but are not limited to, the following:

- Fractal and multifractal processes in living organisms/in vitro models;
- Fractal and fractional approaches in disease development and treatment modeling;
- Fractal operators and fractional dynamics as applied to life sciences;
- Numerical schemes for computational biology;
- Imaging technologies and medical image analysis and interpretation;
- Machine learning and artificial intelligence applied to biomedical problems;
- Fractional-order or integer-order neural networks and graph theory approaches;
- Neuronal models and brain networks in health and disease.



