# **Special Issue**

# Fractional Order Controllers for Non-linear Systems

# Message from the Guest Editors

The study of fractional control theory provides a valuable framework for modeling, understanding, and controlling complex systems that exhibit memory-dependent behaviors. In comparison to traditional integer-order control approaches, fractional calculus offers increased flexibility, robustness, and improved performance. The focus of this Special Issue is to continue to advance research on topics relating to the fractional order systems and their multi-faceted applications. You could find more keywords below:

- fractional deterministic and stochastic systems of orders (0,1) and (1,2)
- existence and controllability analysis for fractional order system
- mathematical modeling and simulation of fractional order systems
- dynamics and stability analysis of fractional order controllers
- fractional-order neural networks and fuzzy control systems
- fractal and fractional analysis in engineering problems
- control engineering problems in wind turbines
- fractional order controllers and its applications in wind energy systems

# **Guest Editors**

#### Dr. Chendrayan Dineshkumar

Research Center for Wind Energy Systems, Kunsan National University, Kunsan National University, 558 Daehak-ro, Gunsan-si, Jeonbuk 54150, Republic of Korea

#### Dr. Velusamy Vijayakumar

Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore 632 014, India

# Deadline for manuscript submissions

closed (10 February 2024)



an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.0



mdpi.com/si/178619

Fractal and Fractional Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 fractalfract@mdpi.com

mdpi.com/journal/ fractalfract



# Fractal and Fractional

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.0





# 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 peerreviewed, open access journal that publishes high quality original research articles, review papers and short communications.

# Editor-in-Chief

Prof. Dr. Carlo Cattani Engineering School (DEIM), University of Tuscia, Largo dell'Università, 01100 Viterbo, Italy

# **Author Benefits**

# **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

# Journal Rank:

JCR - Q1 (Mathematics, Interdisciplinary Applications) / CiteScore - Q1 (Analysis)

# **Rapid Publication:**

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).