



an Open Access Journal by MDPI

## **Caputo Fractional Difference Equations and Its Applications**

Guest Editors:

## Dr. Churong Chen

 School of Mathematics and Systems Science, Guangdong Polytechnic Normal University, Guangzhou 510665, China
Department of Mathematics, Center for Dynamics, Technische Universität Dresden, 01069 Dresden, Germany

## Dr. Dorota Mozyrska

Faculty of Computer Science, Bialystok University of Technology, Wiejska 45A, 15-351 Bialystok, Poland

Deadline for manuscript submissions: **30 July 2024** 



mdpi.com/si/194242

## **Message from the Guest Editors**

Dear Colleagues,

This Special Issue aims to highlight the latest developments in the theory and applications of Caputo fractional difference equations. We invite researchers to contribute original research articles, reviews, and case studies on topics including, but not limited to, the following:

- Theoretical aspects of Caputo fractional difference equations.
- Numerical methods and computational techniques for solving fractional difference equations.
- Caputo Fractional difference equations in mathematical modeling.
- Caputo Fractional difference equations in physics, biology, and engineering.
- Caputo Fractional difference equations in finance and economics.
- Caputo Fractional difference equations in signal processing and control.
- Existence and uniqueness results for solutions of Caputo fractional difference equations.
- Stability analysis and bifurcation theory for Caputo fractional difference equations.
- Caputo Fractional difference equations with applications in image processing and data analysis.
- Caputo Fractional difference equations in optimization and machine learning.

