New Advancements in Pure and Applied Mathematics via Fractals and Fractional Calculus

Guest Editors:

Dr. Asifa Tassaddiq

Department of Basic Sciences and Humanities, College of Computer and Information Sciences Majmaah University, Al-Majmaah 11952, Saudi Arabia

Dr. Muhammad Yaseen

Department of Mathematics, University of Sargodha, Punjab 40100, Pakistan

Deadline for manuscript submissions:
closed (5 April 2022)

Message from the Guest Editors

Dear Colleagues,

Important scientific phenomena, for instance, the growth of bacteria, snowflakes (freezing water), and brain waves have been accurately addressed recently using the notions of fractals. Their mathematical formulation has achieved major scientific insights. Different phenomena with a pulse, rhythm, or pattern have an opportunity to be a fractal. For example, wireless cell phone antennas are used to enhance the quality and the range of signals in a fractal pattern.

This Special Issue cordially invites and welcomes review, expository, and original research articles comprising new advancements in pure and applied mathematics via fractals and fractional calculus, along with their applications across widely dispersed disciplines in the physical, natural, computational, environmental, engineering, and statistical sciences. This Special Issue also welcomes articles providing new trends in the mathematical theory of Bifurcation and Chaos control, which are insightful for significant applications, particularly in complex systems. Numerical calculations may also support the established results.

Dr. Asifa Tassaddiq
Dr. Muhammad Yaseen
Guest Editors

Special Issue