Special Issue

Recent Advances in Fractional Differential Equations, Delay Differential Equations and Their Applications

Message from the Guest Editor

Differential equations both partial (PDE) and ordinary (ODE) give key tools in understanding the mechanisms of physical systems, and solving various problems of nonlinear phenomena. Differential equations enable mathematics to be associated with other disciplines such as science, medicine, and engineering, since real-life problems in these fields give rise to differential equations which can only be solved using mathematics. Topics related to the theoretical and numerical aspects of differential equations have been undergoing tremendous development for decades. Numerical investigations in particular have played a decisive role in dynamical systems, control theory, and optimization, to name but a few areas. Indeed, the qualitative study of differential equations provide the appropriate framework setting to develop new inequalities and to consider different types of equations. On the other hand, these inequalities and equations are used to obtain useful estimates and bounds of terms in specific differential equations, but also in characterizing the solutions' set.

Guest Editor

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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 peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

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