Special Issue on
Advancement in Mathematics with Applications in
Differential Equations and Control Problems

Call for Paper:

Differential equations are a powerful mathematical tool for describing and modelling the dynamics of various physical phenomena in the diverse fields of applied science. Control theory is an interdisciplinary branch of engineering and mathematics that deals with the influence behaviour of dynamical systems. The objective of control theory is to control the behaviour of a dynamical system by means of a control parameter plugging into the system. The modelling and control of dynamical systems have wide relevance in many fields, including physics, mathematics, biology, chemistry, medicine, and finance. Despite significant progress in studying dynamical systems, there are still many challenging open issues in the modelling and control of such systems.

This special issue on Advancement in Mathematics with Applications in Differential Equations and Control Problems will focus on recent developments, findings, and progress on fundamental theories and principles, analytical and computational techniques of differential equations and control theory. Potential topics include but are not limited to the following:

- Controllability, optimal controls, and inverse problems for differential equations
- Stability analysis of differential equations
- ODEs and PDEs with applications
- Fractional, stochastic, delay and impulsive differential equations
- Fuzzy differential equations and its applications
- Fixed point theory and applications to differential equations
- Mathematical modelling and bifurcation analysis
- Hybrid systems with applications

Journal: JMCSA

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Beginning of the manuscript submission: 25th October 2023

Deadline of Manuscript Submission: 31st December 2023
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