Preface

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Accepted: 15 January 2021 / Published online: 27 January 2021

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Scientists and Engineers in various fields have been immensely dependent on theory and numeric of differential equations to solve or understood diverse problems originating in various physical processes. Differential equations not only improve understanding of physical processes in engineering and technology but also touch various branches of Mathematics. These physical processes can arise in wide range of field like Biological systems, finance, fluid dynamics, industrial production etc.

This special issue on **Nonlinear Differential Equations—Theory, Modeling and Computations** of the journal has a balanced approach and focuses on recent theoretical and computational as well modeling developments in the field of differential equations. Some of articles make use of known theoretical and computational techniques to establish new results concerning the solutions of considered problems, whereas other propose new model and numerical schemes for them. More precisely, on one hand it covers some new results on existence, stability and controllability of differential equations in abstract spaces, on the other hand new numerical methods are presented for singularly perturbed problems, PDE's like Burgers equations and Poisson equations. This issue also includes study of dynamical models arising in biological systems to represent predator pray model, infectious disease etc.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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