Editorial

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Computational modeling & simulation use computers to study and simulate complex systems with the help of mathematics and computer science. A mathematical or numerical model contains several factors that describe the framework being examined. Simulation is executed by changing the factors alone or in combination and observing the results. Computer modeling permits researchers to conduct a huge number of simulated experiments without experimental barriers. A large number of *computer* experiments distinguish the bunch of research experiments that are well on the way to take care of the issue being contemplated. Modeling the real-life phenomena with the help of differential equations is more precise and meets the expectation. Nonlinear and inhomogeneous behaviours of variables make the differential system challenging to analyse theoretically. As a result, it is essential to treat them computationally.

This special issue on Computational Modeling & Simulations is devoted to the latest trend on the development, design, and analysis of various models based on differential equations. The present volume is an outcome of the International Conference on Computational Modeling & Simulation, 17–19 May 2017, conducted jointly by the South Asian University, New Delhi, and University of Colombo, Sri Lanka. Many submissions were received, and after a thorough review process, 14 research manuscripts were accepted for publication in this issue.

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