



Special Issue on Application of differential equations to the biological systems

GUEST EDITORS

Dr. Prashant K. Srivastava (Lead), Indian Institute of Technology Patna, India, pksri@iitp.ac.in

Dr. Surabhi Pandey, Indian Institute of Public Health, India, surabhi.pandey@phfi.org

Dr. Nutan K. Tomar, Indian Institute of Technology Patna, India, nktomar@iitp.ac.in

Dr. Amit K. Verma, Indian Institute of Technology Patna, India, akverma@iitp.ac.in

DESCRIPTION

Mathematical modeling has become an indispensable tool in analyzing the real world systems, especially biological systems. In particular, differential equations are most commonly used mathematical formulations for modeling and analysis of biological systems. After the wide spread of COVID-19 infection, there has been a significant increase in mathematical modeling, prediction and control of diseases. However, the applications are not limited to the disease modeling only. The application of differential equations to the biological systems include infectious disease models, ecological models, bio-fluid models, bio-mechanical models and computational models among many others.

To document the latest developments reported in the conference on differential equations, which will be held at the **Department of Mathematics, IIT Patna during 17-19, March, 2023**, the journal *Computational and Mathematical Biophysics (CMB)*, www.degruyter.com/view/i/cmb, will publish a special issue on “[Application of differential equations to the biological systems](#)”. However, the excellent research articles matching to the scope of the special issue which are not presented in the conference are also welcomed. All research articles are subject to peer review as per policy of the journal.

Original and high quality research articles are welcome from researchers for this special issue, on the topics close to, but not limited to, one of the following:

- Infectious disease modeling and analysis
- Within host dynamical models
- Public health or public health policy related models
- Ecological models
- Bio-fluid dynamical models
- Bio-mechanical models
- Any other modeling and analysis of biological system using differential equations.

HOW TO SUBMIT

Before submission authors should carefully read over the author guidelines, which are located at www.degruyter.com/journal/key/cmb/html. All manuscripts are subject to the standard peer review process before publication. The authors are encouraged to pay an **Article Processing Charge** ([APC policy](#)) after the acceptance of a manuscript, but the APC is not mandatory for open-access. For this special issue, we are offering full waivers or discounts for authors with limited access to funds.

Prospective authors should submit their manuscript online at www.editorialmanager.com/mlbmb, and select the Article Type as this special issue.

IMPORTANT DATES

Manuscript submission due date: August 31, 2023

Anticipated publication date of special issue: November 30, 2023