

# International Conference on Nonlinear Dynamics : Modeling and Computation (ICNDMC – 2025)

February 17<sup>th</sup> – 19<sup>th</sup>, 2025



Organized by  
**DEPARTMENT OF MATHEMATICS**  
**BHARATHIAR UNIVERSITY**  
Coimbatore, Tamilnadu, India

Sponsored by  
**Anusandhan National Research  
Foundation (ANRF)**



## About the conference

ICNDMC-2025 is organized by department of mathematics, Bharathiar University, Coimbatore. The conference aims to bring deep insights in nonlinear dynamics. It is an opportunity to bring mathematicians working in the areas of nonlinear dynamics to meet and discuss solutions, scientific results and methods in solving important nonlinear problems. The conference will be in hybrid mode providing opportunities for several participants across various countries. The conference programme includes paper presentations along with lectures from prominent speakers.

## Aim of the conference

- ❖ It aims to focus more recent developments in handling the nonlinear systems theoretically as well as computationally.
- ❖ The conference promotes and influence more understanding and collaboration among young scholars and eminent experts working on theoretical and computational aspects of dynamical systems.
- ❖ It will expose the fundamental theories of modeling, analysis and simulation of nonlinear science and complexity.
- ❖ It provides an opportunity for the researchers to know the new methodologies, novel mathematical techniques through interactions and discussions with the experts.
- ❖ Conference will significantly help the participants to acquire knowledge and can serve an orientation to refresh their own ideas.

## Expected participants

Research scholars, young faculty members working in Institutes, Universities and Research & Development laboratories in the relevant field of conference themes.

## Topics to be covered

The main objective of this conference is to provide an overview of research and recent development in the topics below (but not limited to)

- ❖ Mathematical Modeling
- ❖ Nonlinear Differential Equations
- ❖ System Modeling via ODE's and PDE's
- ❖ Control Theory
- ❖ Fractional and Stochastic Differential Equations
- ❖ Fluid Mechanics
- ❖ Computational Techniques for Mathematical Models
- ❖ Neural Networks
- ❖ Machine Learning and AI
- ❖ Numerical Analysis

## Organizing Committee

### Chief Patron

Dr. K. Gopal, I.A.S.

### Convener

Prof. S. Saravanan

### Patrons

Prof. F. X. Lovelina Little Flower

Dr. C. A. Vasuki

Prof. Ajeet Kumar Lal Mohan

Prof. Rupa Gunaseelan

### Organizing Secretary

Dr. K. Mathiyalagan

### Committee Members

Dr. S. Narayanamoorthy

Dr. M. Muthamilselvan

Dr. R. Rakkiyappan

Dr. N. Annapoorani

## Invited Speakers

- Prof. Jong Kyu Kim, Kyungnam University, South Korea  
Prof. S.S. Sritharan, National Academies/Air Force Research Laboratory, U.S.A.  
Prof. M. Lakshmanan, Bharathidasan University, Tiruchirappalli, India  
Prof. Mohana Sundaram Muthuvalu, Universiti Teknologi Petronas, Malaysia  
Prof. Natesan Srinivasan, IIT, Guwahati, India  
Prof. S. Dharmaraja, IIT, Delhi, India  
Prof. Md. Golam Hafez, Chittagong University of Engineering & Technology, Bangladesh  
Prof. Sashikumar Ganesan, IISc, Bangalore, India  
Prof. K. Murugesan, NIT, Tiruchirappalli, India  
Prof. P. Balasubramaniam, The Gandhigram Rural Institute, Dindigul, India  
Dr. Venky Krishnan TIFR, Bangalore, India  
Dr. K. Sakthivel, IIST, Trivandrum, India  
Dr. Anupam Pal Choudhury, NISER, Bhubaneswar, India  
Dr. Mahendra Kumar Gupta, IIT, Bhubaneswar, India

## Call for papers

Research contributions describing original and unpublished results related to Nonlinear Dynamics Modeling and Computation are invited for presentation at the conference. Interested participants must submit a brief abstract in prescribed format through ICNDMC - 2025 website. Topics of interest include (but not limited to)

- ❖ Nonlinear Dynamical Systems
- ❖ System Modeling
- ❖ Control and Stability Problems
- ❖ Symmetries of Differential Equations
- ❖ Infinite-dimensional Systems
- ❖ Fuzzy Dynamical Systems
- ❖ Optimization Techniques
- ❖ Mathematical Biology

Specific topics of interest could be found in the conference website\*.

## Publication

The accepted papers will get an opportunity to get published in the Conference Proceedings (with ISBN number). Also, the Selected papers will be recommended for publication in one of the following journals after peer review\*.

1. International Journal of Dynamics and Control (ESCI & Scopus, Impact Factor: 2.2)
2. Discontinuity, Nonlinearity, and Complexity (Scopus)

There will be no Article Processing Charges for publications.

## Registration

Registration is compulsory for all the participants\*. No TA/DA will be provided.

### Registration Fee

Category	Fee
Students / Research Scholars	₹ 1500
Faculty Members	₹ 2000
Industry	₹ 2500
Only Participation	₹ 1000
Foreigners	\$100

## Accommodation

Paid accommodation for participants will be arranged either in the University guest house or nearby hotels reachable from the conference venue on prior request\*.

## Important dates

Last date for abstract submission : Feb 10<sup>th</sup>, 2025

Notification on acceptance of abstract : Feb 12<sup>th</sup>, 2025

Last date for registration : Feb 14<sup>th</sup>, 2025

## Address for communication

Dr. Mathiyalagan Kalidass  
Organizing Secretary - ICNDMC 2025  
Assistant Professor, Department of Mathematics  
Bharathiar University, Coimbatore - 641 046