

## Organizing Committee

### Patron

**Prof. Binod Kumar Kanaujia**  
Director, NIT Jalandhar, India

### Chairperson

**Dr. Damanjit Kaur**  
HoD, Dept. of Mathematics,  
NIT Jalandhar, Punjab, India

### Convenors

**Dr. Sivaraj R**  
**Dr. Neha Yadav**  
Department of Mathematics, NIT Jalandhar

### Coordinators

**Dr Deepika Rani**  
**Dr. S K Katiyar**  
Department of Mathematics, NIT Jalandhar

## Organizing Committee

The faculty members and research scholars of the Department of Mathematics, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab, India.

## About the STC

The present Short-Term Course (STC) aims to enlighten the mathematical modelling and numerical simulation skills of post graduate students, research scholars, and faculties in a variety of problems in applied mathematics. This STC is expected to provide a prominent platform for the scholars who are interested in pursuing problems in the field of applied mathematics to address the real-world problems. Another notable aspect of the STC is to introduce the computational software packages which are needed for addressing the computational challenges arising in solving the real-world problems.

## Speakers and Topics

**Prof. Satyajit Roy**, IIT Madras, India

- Mathematical modelling for industrial waste management system

**Prof. Panneer Selvam R**, Uni. Arkansas, USA

- CFD for wind engineering

**Dr. Sreedhara Rao G**, UWI, West Indies

- Finite element methods for convective flow problems

**Dr. Maimouna Al Manthari**, UTAS, Ibri, Oman

- Numerical simulation of 2D and 3D membrane roof model using FSI solver in OpenFoam

**Dr. Sankar M**, UTAS, Ibri, Oman

- Finite difference method for heat transfer problems

**Dr. Sumon Saha**, BUET, Dhaka, Bangladesh

- Entropy generation and MHD mixed convection heat transfer with Joule heating and internal heat generation inside a 2D enclosure

**Dr. Om P Suthar**, MNIT Jaipur, India

- Analysis and simulation of heat transfer problems using spectral methods

**Dr. Victor Job**, UWI, West Indies

- Mixed finite element methods and numerical computation for convective ferrofluid flows



## ONLINE SHORT-TERM COURSE ON MATHEMATICAL MODELLING AND NUMERICAL SIMULATION (MMNS 2023)

July 24 - 28, 2023

Organized by  
Department of Mathematics  
Dr B R Ambedkar National Institute of  
Technology Jalandhar, Punjab, India.



## About NITJ

Dr B R Ambedkar National Institute of Technology was established in the year 1987 as Regional Engineering College and was given the status of National Institute of Technology (Deemed University) by the Government of India on October 17, 2002 under the aegis of Ministry of Education (Shiksha Mantralaya), New Delhi. Now the Ministry of Education (Shiksha Mantralaya), Government of India has declared the Institute as **“Institute of National Importance”** under the act of Parliament-2007. A large number of reputed Industrial houses in the country visit the Institution and select the final year students as Engineers/ Management Trainees. As one of the National Institutes of Technology (NIT), the Institute has the responsibility of providing high quality education in Engineering, Technology and Sciences to produce competent technical and scientific manpower for the country. The Institute offers BTech, MTech, MSc, MBA and PhD programmes in the several disciplines of Engineering, Technology and Sciences.

## About the Department of Mathematics

The Department of Mathematics, NIT Jalandhar is one of the eighteen departments of the Institute. The department offers MSc and PhD programs in Mathematics. The department also teaches Mathematics to BTech, MTech and PhD students belonging to various engineering streams. The department has thirteen faculty members who are actively involved in research activities in addition

to the regular teaching activities. The faculty members of the department are specialized in frontier areas of Mathematics such as Algebra, Matrix Analysis, Numerical Analysis, Partial Differential Equations, Mechanics, Statistics, Optimization, Soft Computing, etc. The Department, till date, has produced 10 PhDs in different branches of Mathematics. Several research projects of the department are financially supported by some of the leading funding agencies such as DST and NBHM. The Department keeps in pace with the advances in technology, by providing its students state-of-the-art computer facilities. The students get the opportunity of attending seminars and invited lectures delivered by eminent mathematicians and academicians. They also get the opportunity for campus placement in various national and multinational companies.

## Target Audience

Post graduate students, research scholars and faculty members from mathematics department.

## Registration Fee

The registration fee (non-refundable) is as follows:

### International

Faculty/Research Scholar/Student: **USD 50+GST**

### National

Faculty/Research Scholar/Student: **INR 200+GST**

The e-certificate will be issued to the participants those who attend all the sessions of the STC.

## Important Dates:

Registration Deadline : June 30, 2023  
STC Dates : July 24-28, 2023

## Registration Link

The participants can register for the STC and pay the registration fee through the following link:

[https://www.nitj.ac.in/events\\_registration/stc\\_mmns/login](https://www.nitj.ac.in/events_registration/stc_mmns/login)

## Contact

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The Ministry of Education (Shiksha Mantralaya), Government of India has declared the Institute as **“Institute of National Importance”**