**Online** e-Workshop

On

### MATHEMATICAL TECHNIQUE AND RESEARCH INNOVATION IN INTERDISCIPLINARY APPLICATION

(e-MATRICA-2025) 19<sup>th</sup>May–23<sup>rd</sup>May2025 (Five Days)





# Organized by

Department of Mathematics and Scientific Computing National Institute of Technology Hamirpur Hamirpur, Himachal Pradesh-177005, India Web: www.nith.ac.in **Chief Patron** Prof. H. M. Suryavanshi Director, National Institute of Technology Hamirpur

Patron Prof. Anoop Kumar Dean (Faculty Welfare)

**Chairman** Head, DoMSC

**Convener** Dr. Ramesh. K. Vats

Coordinator(s) & Treasurer Dr. Pankaj Kumar Dr. Jeetendrasingh Maan

**Organizing Committee** 

All Faculties and Staff Members of Mathematics & Scientific Computing Department, NIT Hamirpur

#### **Contact Persons**

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Department of Mathematics & Scientific Computing National Institute of Technology Hamirpur-, Himachal Pradesh-177005, India.

### **About the Institution**

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, established in 1986 as Regional Engineering College, as a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. On 26<sup>th</sup> June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology.

The goals of the institute as embodied in the logo are truly remarkable in their scope of vision. The Institute provides Undergraduate, Postgraduate and Doctorate Education in Engineering, Sciences & Humanities; fostering the spirit of National Integration among the students, a close interaction with industry and a strong emphasis on research, both basic and applied.

### **About the Department**

The Department of Mathematics & Scientific Computing came into existence in August 2009. Previously, this department was a part of the former department of Applied Science & Humanities, which came into existence in 1986. Presently, this department has 12 regular faculty members from diverse areas of specialization in Mathematics, Statistics, Operation research, Functionl Analysis, Harmonic Analysis, Image Processing and Cryptography & Network Security.

The Department admits students in M.Sc. (Mathematics & Computing), B.Tech (Mathematics & Computing) and for Ph.D. programmes in various specializations of Mathematics, Statistics & Computing. This department has contributed a lot to the overall development of the institution.

### **Objective of e-MATRICA**

The primary objective of this workshop is to explore and disseminate advanced mathematical techniques and their applications interdisciplinary research. Provide a platform for researchers, academicians to discuss recent advancements in mathematical methodologies. Highlight the role of mathematical modeling, computational techniques, and data driven approaches in solving real-world problems across various disciplines.

This workshop will facilitate interactive discussions, technical sessions, and expert lectures, contributing to the enhancement of interdisciplinary research and practical problem-solving through mathematical innovation.

#### **Resource Persons/Speakers**

Prof. Geetanjali Panda (IIT Kharagpur)
Prof. B. V. Rathish Kumar (IIT Kanpur)
Prof. Akhilesh Prasad (IIT Dhanbad)
Dr. Harekrushna Behera (NTOU, Taiwan)
Dr. Jayakrushna Sahoo (IIIT Kottayam)
Dr. T Ramalingeswara Rao (TCS)
Dr. Mahakpreet Singh (University of Limerick IE)
Dr. Pankaj Kumar (NIT Hamirpur)
Dr. Jeetendrasingh Maan (NIT Hamirpur)

### **Topics to be Covered:**

- Applied Analysis & Applications
- Data Science & Machine Learning
- Operation Research, Statistics etc.

### Certificate

e-Certificate will be issued to the participants, with at least 85% attendance and after successfully submitting the feedback form on completion of the online STC.

### **Important Dates**

Last Date of Registration	15 <sup>th</sup> May 2025
e-MATRICA Duration	19th -23rd May 2025

### About the e-MATRICA-2025

The e-Workshop on Mathematical Techniques and Research Innovation in Interdisciplinary Applications (e-MATRICA-2025) serves as a premier platform for advancing mathematical methodologies and their transformative role in interdisciplinary research. This event unites leading researchers, academicians, and industry experts to explore state-of-the-art mathematical approaches and their applications in solving complex real-world problems.

Focusing on mathematical modeling, computational methods, and data-driven strategies, the workshop highlights their critical impact across diverse domains such as engineering, finance, healthcare, and data science. By fostering collaboration and knowledge exchange, **e-MATRICA-2025** aims to bridge the gap between theoretical advancements and practical implementation.

Through expert lectures, technical sessions, and interactive discussions, participants will gain valuable insights into the integration of mathematical techniques with emerging technologies. This workshop aspires to drive innovation, inspire new ideas, and promote collaborative efforts, equipping participants with the tools to tackle contemporary challenges through mathematical excellence.

# Eligibility

This program is open to faculty members, scientists, research scholars, PG & UG students and industrial personnel.

## Registration

The registration fee is mandatory for all the participants, and registration fees is non-refundable.

- Rs. 200/-Research Scholars/Students
- Rs. 500/-Participants from Academia/R&D lab
- Rs. 1000/-Participants from Industry

# How to Apply

The interested participants must deposit the nonrefundable registration fee through SBIi-collect and filling the Google form as given below:

https://forms.gle/hVSYfrXsfySDcXACA



### The SBI-i Collect has following steps:

- 1) Visit SBI collect at <u>https://www.onlinesbi.sbi/sbicollect/icollectho</u> me.htm
- 2) Select State of Corporate/ Institution: Himachal Pradesh and Type of Corporate/Institution as Educational Institution and click Go.
- Select Educational Institutions Name: NIT Hamirpur Select Payment Category: WORKSHOP STC FDP CONFERENCE (Last option)
- 4) Fill up all the details.
- a. Write the TITLE of e-MATRICA
- b. Organizing Department
- c. Address: Filling the Postal code is a must

d. Submit the form and generate the receipt. **Notes:** The applications will be accepted on a "first come, first serve" basis.

**Venue:** Google Meet. The link for the online course will be shared through email/ WhatsApp later.