

### ORGANIZING COMMITTEE

Patron Prof. Rakesh Sehgal Director, NIT Srinagar

#### Coordinator

**Prof. Adnan Qayoum** Professor & Head, Department of Mechanical Engg.

### **Co-Coordinator**

**Dr. Sheikh Shahid Saleem** Associate Professor, MED

#### Convener(s)

**Dr. Mohammad Mohsin Khan** Assistant Professor, MED

### **Dr. Ovais Gulzar** IUST Awantipora

#### **Organizing Members**

Mr. Gowhar Shafi Bhat Mr. Mohammad Kamran Mr. Abrar Shafi Mr. Amir Bhat Mr. Amir Yousuf Mr. Mohammad Dilawar Mr. Umair Ashraf Mr. Mohammad Irfan Hajam Mr. Tabrez Qureshi Mr. Sajid Nazir Mir Mr. Ilyas Ahmad N Shah Mr. Akash Dwivedi

### **IMPORTANT DATES**

Last Date of Registration March 7, 2023 Intimation to selected candidates

March 8, 2023

For more Information Visit https://sites.google.com/nitsri. ac.in/faculty-developmentprogram/home

## AICTE Training and Learning (ATAL) Academy AICTE, New Delhi Sponsored

# Two Weeks Faculty Development Program on

# Thermal Characterization and Advanced

# **Measurement Techniques**

(13<sup>th</sup> -24<sup>th</sup> March, 2023) Organized by Department of Mechanical Engineering National Institute of Technology Srinagar



- No registration fee will be charged from the participants.
- This FDP is for faculty members of the AICTE approved institutions, School Teachers, Research Scholars, Scientist, Industry personnel, etc.
- The FDP will be conducted in the blended/Hybrid mode. Online for theory & offline for experimental learning.
- Participants willing to participate in this online FDP should have relevant online gadgets with adequate internet connectivity.
- Only online registration of participants to be done through the given link: <u>https://atalacademy.aicteindia.org/participant/workshop</u>

## **About NIT Srinagar**

National Institute of Technology, Srinagar was established in 1960 as the Regional Engineering College, Srinagar. The Institute acquired the status of NIT in August, 2003 and attained full autonomy in its Academics. In 2007, it became an Institute of National Importance. It is one of the 31 NITs and it is directly under the control of the Ministry of Education. The Institute is situated at the banks of world-famous Dal Lake. Besides running various undergraduate, post graduate and doctoral programmes, Institute has also established an Innovation Incubation and Entrepreneurship Development (IIED) centre.

## About the Department

The Department of Mechanical Engineering has evolved into one of the finest in terms of teaching curriculum and methodology supported by a well-organized and adequately funded research program. The Department has a very well-established B. Tech program complemented by three M. Tech programs in Mechanical System Design, Thermal Engineering and Industrial Tribology and Maintenance Management. The department is, perhaps, the most versatile in terms of the range of specializations of its faculty members and a well experienced support staff.



# **AICTE Training and Learning (ATAL) Academy** AICTE, New Delhi **Sponsored**

## WHO WILL BE **BENEFITTED**?

- Faculty and Students of Engineering and Science.
- Engineers & Scientists from Industry and R & D Organizations.

## **RESOURCE PERSONS**

NIT Srinagar Dr. Junaid H. Masoodi University of Kashmir University of Kashmir **IUST** Awantipora **IUST** Awantipora

SMVDU Jammu

## ADDRESS FOR COMMUNICATION

For any query, you can contact

to the course convener Dr. Mohammad Mohsin Khan Assistant Professor, MED mohsinkhan@nitsri.ac.in +91-6265750295

**APPLY ONLINE AT:** https://atalacademy.aicteindia.org/participant/workshop





## **Contents**

- Introduction to Experimental Methods.
- Basics of Flow and Temperature Measurements.
- Liquid Crystal Thermography.
- Infrared Imaging.
- Particle Image Velocimetry.
- Thermal Conductivity Measurement.
- Hot Wire Anemometry.

Prof. Amaresh Dalal

IIT Guwahati

NIT Rourkela

- Rheometry.
- SEM and Raman Spectroscopy.
- TGA/DSC.
- Zeta Potential.

The prime focus of the FDP is to introduce the faculty members to various advanced techniques available for experimentation in the field of thermo-fluid sciences. Virtual demonstration of equipment usage and procedures involved shall enable the participants to connect to the theory involved effectively for classroom demonstration.

Program Objectives



Prof. Andallib Tariq **IIT Roorkee** 



Prof. J. Banerjee **SVNIT Surat** 



**IIT Roorkee** 



Prof. Subhash Chander Prof. Manoj Moharana **NIT Jalandhar** 

Organized by Department of Mechanical Engineering National Institute of Technology Srinagar Hazratbal Srinagar-190006, Jammu & Kashmir



Prof. J. L. Bhagoria **MANIT Bhopal** 



Prof. Adnan Qayoum NIT Srinagar





Prof. Manish Mishra





# National Institute of Technology Srinagar Department of Mechanical Engineering Two Weeks ATAL Faculty Development Program on



Thermal Characterization and Advanced Measurement Techniques

March 13-18 2023 (Online) March 20-24 2023 (Offline)

## Week 1 Schedule (Online Sessions: 7:00 pm-9:30 pm)

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
7:00 pm - 7:50 pm					
Session 1 (I)	Session 2 (I)	Session 3 (I)	Session 4 (I)	Session 5 (I)	Session 6 (I)
8:00 pm - 8:50 pm					
Session 1 (II)	Session 2 (II)	Session 3 (II)	Session 4 (II)	Session 5 (II)	Session 6 (II)
9:00 pm - 9:30 pm					
Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
Interactions	Interactions	Interactions	Interactions	Interactions	Interactions



# National Institute of Technology Srinagar Department of Mechanical Engineering Two Weeks ATAL Faculty Development Program on



Thermal Characterization and Advanced Measurement Techniques

March 13-18 2023 (Online) March 20-24 2023 (Offline)

Week 2 Schedule (Offline Sessions)

Day 1	Day 2	Day 3	Day 4	Day 5
9:00 am - 9:30 am	9:30 am - 12:00 Noon	9:30 am - 12:00 Noon	9:30 am - 12:00 Noon	9:30 am - 12:00 Noon
Inauguration	Session 8	Session 10	Session 12	Session 14
9:30 am - 12:00 Noon	12:00 Noon - 1:00 pm	12:00 Noon - 1:00 pm	12:00 Noon - 1:00 pm	12:00 Noon - 1:00 pm
Session 7	Article 1 Discussion	Article 2 Discussion	MCQ	Visit Report
12:00 Noon - 1:00 pm	1:00 pm - 2:00 pm	1:00 pm - 2:00 pm	1:00 pm - 2:00 pm	1:00 pm - 2:00 pm
Lunch	Lunch	Lunch	Lunch	Lunch
1:00 pm - 2:00 pm	2:00 pm - 4:30 pm	2:00 pm - 4:30 pm	2:00 pm - 4:30 pm	2:00 pm - 4:30 pm
Travel for Visit	Session 9	Session 11	Session 13	
2:00 pm - 4:00 pm	4:30 pm - 5:00 pm	4:30 pm - 5:00 pm	4:30 pm - 5:00 pm	4:30 pm - 5:00 pm
Visit	<b>Teaching Practice</b>	<b>Teaching Practice</b>	<b>Teaching Practice</b>	Feedback
4:00 pm - 5:00 pm				4:00 pm - 5:00 pm
Back from Visit				Valedictory