



## SERB Sponsored High-End Workshop (Karyashala)

On

### “Futuristic Trends in Microwave and Millimeter Wave Technologies: An ML Approach”

June 1-7, 2023

#### Coordinators

**Dr. M. V. Swati**

**Dr. Gaurav Singh Baghel**



Organized By

**Department of Electronics and  
Communication Engineering  
National Institute of Technology Silchar  
Assam-788010, India**

*(An Institute of National Importance, MHRD, Govt. of India)*

#### About Karyashala

Karyashala is a noble endeavour of Government of India under Accelerate Vigyan Scheme to improve research productivity of promising MTech and PhD students from universities and colleges through high-end workshops on specific themes. These events are sponsored by Science and Engineering Board (SERB). These workshops aim to equip the participants with specialized research skills. The workshops are facilitated at institutions of national importance. This High End Workshop on Futuristic Trends in Microwave and Millimeter Wave Technologies: An ML Approach is organized by the Dept. of Electronics & Communication Engineering, NIT Silchar. The present event will be physically conducted during May-July, 2023.

#### Course Highlights

- ISM Applications of Microwaves.
- Metamaterials and Applications.
- Bio-electromagnetics.
- Bio MEMS & RF MEMS.
- Microwave Photonics.
- Smart Antennas.
- Active Phased Array Antennas.
- MIMO Antennas.
- High Freq. Applications on Meta-surfaces.
- AMC Integrated Antennas.
- Microwave Imaging and Sensing.
- Deep/Machine Learning Optimization Techniques.

#### Eligibility Criteria

- The program is meant to support motivated PG and Ph.D. level students, who are having a strong willingness to get excellence in their scientific and engineering research pursuits.
- The applicants should produce a declaration form along with “No Objection Certificate (NOC)” from the institute for allowing their student to undergo training in the workshop, if selected.

#### Registration & Certification

- No registration fees will be collected.
- Number of participants are limited to **25**.
- Selected Candidates will be informed via Email.
- Accommodation with food will be provided to selected participants.
- Students selected for this workshop are eligible for travel allowance (TA) reimbursement (3rd AC) for their journey to and from NIT Silchar through the shortest route as per SERB and GoI norms.
- Certificates will be provided to the participants after successful completion of the workshop.
- 100% attendance is compulsory.

[Click here to register online](#)



[Scan the QR Code](#)

## About the Institute

National Institute of Technology, Silchar is one of the 31 National Institutes of Technology of India and was established in 1967 as a Regional Engineering College in Assam. In 2002, it was upgraded to the status of National Institute of Technology and was declared as Institute of National Importance under the National Institutes of Technology Act, 2007. NIT Silchar is a fully residential institution situated on the banks of the Barak River and on a sprawling green campus spread over 625 acres of land consisting more than 30 lakes and surrounded by scenic tea estate on the outskirts of Silchar. The institute is having well equipped laboratories with state-of-art research facilities. It helps the research scholars work 24 hours to achieve new heights in technical field. NIT Silchar secured 38<sup>th</sup> rank in engineering, 50<sup>th</sup> rank in research institutes, and 76<sup>th</sup> in overall category, in NIRF 2022 ranking.

## About the Department

The Department of Electronics and Communication Engineering is established in 1983 with initial intake of 20 students in UG program. The Department lays special emphasis on research and development activities both on the part of the faculty members as well as the students. At present, the department is offering B. Tech. in Electronics and Communication Engineering and M. Tech. with specialization in Microelectronics, VLSI Design. Communication & Signal Processing, and recently started in THz Communication. The department is also offering Ph.D. programmes in various areas like VLSI, MEMS, Signal Processing, Antenna Design, Microwave Engineering, Communication Engineering, etc.

## Chief Patron

Prof. Rajat Gupta, Director, NIT Silchar

## Patron

Prof. N. B. D. Choudhury, Dean R & C, NIT Silchar

## Convener

Prof. R. H. Laskar, HOD, ECE Dept., NIT Silchar

## Coordinators

Dr. M. V. Swati, ECE Dept., NIT Silchar  
Dr. G. S. Baghel, ECE Dept., NIT Silchar,

## Organizing Committee

All faculty members of Department of Electronics and Communication Engineering, NIT Silchar

## How to reach NIT Silchar

The city is well connected by Road, Train and Air. There are direct flights from Guwahati, Kolkata and Delhi and trains from New Delhi, Kolkata, Guwahati, and Agartala. Daily bus services are available from Agartala, Guwahati, Aizawl, and Imphal. The Institute is located around 35kms from the Silchar airport, 11kms from the Silchar railway station, 14kms from ISBT Silchar, and 10 kms from the heart of the Silchar town. Pre-paid taxi and auto services are available from Silchar.

## Key Note Speakers

- Prof. Animesh Biswas, IIT Kanpur
- Prof. S. Raghavan, Retd. Prof. (HAG), NIT Trichy
- Dr. Ravi K. Gangwar, IIT (ISM) Dhanbad
- Dr. Somak Bhattacharyya, IIT (BHU) Varanasi
- Dr. V. S. Gangwar, Sci.-F, LRDE, DRDO, Bengaluru
- Dr. Sarthak Singhal, MNIT Jaipur
- Dr. Banani Basu, NIT Silchar
- Dr. Taimoor Khan, NIT Silchar
- Dr. Arnab Nandi, NIT Silchar
- Dr. Ranjay Hazra, NIT Silchar
- Dr. Prabina Pattanayak, NIT Silchar
- Dr. Chandrajit Choudhary, NIT Silchar

## Important (Last) Dates

Online Registration	17.05.2023
Confirmation to Participants	19.05.2023
Acceptance by Participants	20.05.2023

## For queries, please contact:

### **Dr. M. V. Swati (Coordinator)**

Assistant Professor

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**Karyashala (High-End Workshop)**  
**on**  
**Futuristic Trends in Microwave and Millimeter Wave Technologies:**  
**An ML Approach**  
**June 1<sup>st</sup>-7<sup>th</sup>, 2023**

**Funded By:** Science & Engineering Research Board (SERB), Under the Accelerate Vigyan Scheme  
**Organized By:** Department of Electronics and Communication Engineering, National Institute of Technology  
 Silchar, Silchar-788010, Assam, India

**Registration cum NOC Form**

Name of the Participant: .....

Gender: .....

Pursuing Degree (P.G. / Ph. D.) & Semester: .....

Department: .....

Organization: .....

Mobile Number: .....

Email: .....

I agree to abide by the rules and regulations governing the workshop.

Signature of the Participant

Place:

Date:

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Mr. /Ms. /Mrs. .... is a student of our  
 Institution and is permitted to attend the program.

Signature of the Head of Department and Seal

Place:

Date: