

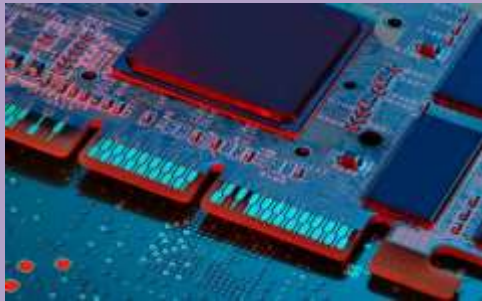
**FIVE DAY SHORT TERM
TRAINING PROGRAMME (STTP)**

on

**“Advanced Micro/Nano Sensor
Technologies: Modeling,
Simulation, and Fabrication”**

5th – 9th July, 2021

Conducted as part of the Diamond Jubilee
Year Celebrations of NITC



Organized by



**Department of Electronics and
Communication Engineering
National Institute of Technology Calicut**

About the Department

The UG programme in Electronics & Communication Engineering started in 1980 in the Department of Electrical Engineering. The rapid development in Electronics and Communications initiated the inception of a separate Department of Electronics & Communication Engineering in 1997, after the trifurcation of the Department of Electrical Engineering.

The department offers four regular M. Tech programmes, viz., Electronic Design and Technology, Microelectronics & VLSI, Signal Processing and Telecommunication leading to the M. Tech degree of the institute. In addition to the above, there are a number of students pursuing research at the Department in various fields of Electronics & Communication Engineering leading to Ph.D. The Department is a recognized QIP Centre of the AICTE for both M. Tech and PhD programs. The Department is also actively engaged in R&D activities. Sponsored research programmes funded by various agencies are undertaken by the faculty of the department. For details see our website: www.ece.nitc.ac.in

About NIT Calicut

National Institute of Technology Calicut (NITC) is fully centrally funded by MHRD and is governed by the NIT Act 2007. Institute has ten departments, three schools and nine research centers. It offers ten UG, and thirty PG programmes along with the Ph.D programme in various fields of Science, Technology and Engineering. Faculties in the various Departments have active collaborations with universities and elite institutions within and outside India for research and have active consultancy for industries. For details visit the website: www.nitc.ac.in

About Calicut

NITC is located about 22 kilometers north-east of Calicut City. Calicut, also known as Kozhikode, is known as the city of spices. Calicut is a major knowledge hub of Kerala and is the hometown of institutions of national importance including NITC, IIMK, DOEACC, CWRDM etc. Calicut is connected by direct trains/road/air to all major cities in India. Kozhikode beach, Kappad beach where Vasco De Gama landed first, Kadalundy bird sanctuary, Tusharagiri Waterfalls. Pazhassiraja Museum, Tali Temple and Kuttichira Masjid are some of the local attractions.

Preamble

Sensors are used in everyday life for widespread applications in daily households, industries, and medical field. As the current technological scenario demands further miniaturization and performance enhancement of devices, new material technology and device concept need heed and probe. This STTP is intended to provide a timely update on most recent developments in the area of sensor technology focusing on semiconductor technology. This STTP also focuses on the promotion of advanced research areas related to modeling, simulation and fabrication of sensors. The participants will also get a chance to familiarize with simulation software packages such as SILVACO, SENTAUROS, and COMSOL through the lab sessions planned on all days.

Topics to be covered

This programme will cover the following topics:

- Nano-materials and Devices for Sensors
- Sensor Physics & Modeling
- Microelectronics Technology
- MEMs/NEMs based Sensors
- Photodetectors, Gas Sensors, Biosensors etc.
- III-V Semiconductors based HEMTs
- Fabrication and Characterization Techniques of Sensors at Micro and Nano level
- Lab sessions on device simulators such as SILVACO, SENTAUROS, and COMSOL

Who can apply?

Faculties/ research scholars/ PG students and Industry employees, who are working/ interested in the area of Micro/Nano-Electronic Sensors can attend the course.

Registration Fee Details

- Faculties/ research scholars/ PG students: Rs.1190/-
- Industry participants: Rs.3570/-
(The registration fee is inclusive of GST)
- For registration, fill the online form at <https://forms.gle/r5eNnXwcfg2fAXkZ8>
- The endorsement form link is given below <https://cutt.ly/6npAFzF>
- The registration fee has to be paid through online transfer. The bank details are given below.

Account Name: Director, NIT Calicut,
Continuing Education Programme,
Account No: 37618269594,
Bank: SBI NIT Calicut,
Branch: CREC, Chathamangalam,
IFSC code: SBIN0002207,
MICR Code: 673002012.

Last date for registration is 20th June 2021.



The QR Code can also be used for online registration.

Certificates will be provided to registered participants upon completion of the course.

Resource Persons

All the sessions will be handled by invited experts and faculty of NITC:

Confirmed invited speakers are

1. **Dr. Satyabrata Jit**, Professor, Department of Electrical Engineering, IIT BHU
2. **Dr. Samaresh. Das**, Associate Professor, Centre for Applied Research in Electronics, IIT Delhi
3. **Dr. Digbijoy. N. Nath**, Associate Professor, CeNSE, IISc Bangalore
4. **Dr. Revathy Padmanabhan**, Assistant Professor, Department of Electrical Engineering, IIT Palakkad
5. **Dr. Arathy Varghese**, Post-Doctoral Research Fellow, Cardiff University, UK

Coordinators

Dr. Lintu Rajan & Dr. Gopi Krishna S.

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For registration and other information

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