One Week online FDP on Recent Trends in Nanoelectronics for Healthcare Applications

8<sup>th</sup> - 12<sup>th</sup> April 2024

**ICEFAI** Foundation for Higher Education (Deemed-to-be University under Section 3 of the UGC Act, 1956)

# **Organized by**

Department of ECE

Faculty of Science and Technology (Icfaitech),

ICFAI Foundation for Higher Education Hyderabad-501203, India.

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Organising Committee All Faculties of Dept. of ECE

# **Resource Persons**



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Day-1 Prof. Shiv Govind Singh, IIT Hyderabad Title: Nano-Biosensors and Pointof-Care Diagnostic Devices.



#### Prof. Dr. Aravind Kumar Rengan, IIT Hyderabad

Title: Recent Advances in Nanotech for Healthcare Applications.

## Day-2



## Prof. Suresh Kumar Garlapati, IIT Hyderabad

Title: Detection of different volatile organic compounds for healthcare applications.



#### Prof. Trupti Ranjan Lenka, NIT Silchar

Title: Design of GaN HEMT as Biosensor for Healthcare Applications.

# <u>Day-3</u>



Prof. Raj Kishora Dash, University of Hyderabad Title: Nano Fabrication of Nano-

electronics for Bio-medical and Healthcare Applications: Materials challenges and issues.

### Prof. Ekta Goel, NIT Warangal



Title: Advance Semiconductor devices for biomedical Applications

#### **Resource Persons**



#### Day-4 Prof. Surajbhan Sevda, NIT Warangal Bioelectrochemical Biosensors

for Industrial Bioprocess Monitoring: From Lab to Industry



### Prof. Raghunandan Swain, PMEC Odisha

Title: Integrating FinFET technology in III-V based Biosensors - Challenges and Opportunities.



Day-5 Durga Bhaskar Iduri, IT Director of Clinical Engineering, SHARP HOSPITAL Title: Bioelectronics for

Title: Bioelectronics Healthcare



#### Dr. Asisa Kumar Panigrahy, IFHE Hyderabad

Title: Novel Devices for Nanoelectronic Healthcare Applications

## The outcome of the FDP

This FDP will provide faculty members with the knowledge and abilities necessary for instilling moral principles in students and directing and tracking their development toward professional careers.

Faculties will learn present technologies in nanoelectronics for biomedical and healthcare applications.

This FDP aims to bring together speakers from different fields to share their knowledge and experience with participating faculties through an interactive discussion forum about recent and ongoing advances, major topics, challenges, and practices in nanoscale biosensors. This FDP will facilitate networking of faculties with ownerts researchers and industry professionals leading

experts, researchers, and industry professionals, leading to potential collaborations and funding opportunities.

### **About ICFAI Tech**

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Icfai Tech (Faculty of Science & Technology) is a constituent of The ICFAI Foundation for Higher Education (IFHE). IcfaiTech aims at nurturing graduates and researchers who are critical thinkers, creative and have a holistic education experience. At the first degree and higher degree levels, students are given the flexibility to choose their own academic courses from a wide range of electives offered to them. Innovative methods of teaching, cutting-edge curriculum, workshops and internships further broaden the intellectual and global outlook of our students.

#### About the Department of ECE

The Department of Electronics & Communication Engineering has been playing a vital role in producing Engineers and Scientists of the highest caliber since its inception in the year 2002. It currently offers Undergraduate and Ph.D. programs in Electronics and Communication Engineering to cater to the ever-challenging needs of technical excellence in all areas of Nano-electronics, VLSI, and Advanced Wireless communication. The department has a vibrant atmosphere due to the combination of input of brilliant students, the availability of outstanding faculty members, and innovative research work in all areas of Electronics and Communication.

## **Objective of the FDP**

- □ To enhance the knowledge of the participants on nanoscale biosensor technologies and disease detection methods by enhancing their expertise in the field.
- To stimulate research, teaching, and collaboration opportunities among faculties, leading to significant contributions to the field of disease detection and healthcare advancements.
- □ To strengthen the institution's research profile by bringing awareness among the faculties for attaining grants, funding, and recognition in the field of nanoscale devices and biosensors.
- □ To benefit the society by orienting faculties to conduct cutting-edge research and innovate in the nanoscale biosensor sector for early disease diagnosis and improved healthcare.

## **Registration Details**

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- □ Faculty members in the institutions of higher learning.
- Research Scholars have an aptitude for teaching and desire to take up the teaching profession as their career.
- □ The registration is free of cost but is limited to 60 seats on a first-come-first-serve basis.

## Last date of registration:

7<sup>th</sup> April 2024. Time: 10:00 PM Registration Link:

https://tinyurl.com/2p9y5ysm



## **Contact Person:**

Dr. Asisa Kumar Panigrahy (Coordinator) Associate Professor & Head, Dept. of ECE, Faculty of Science and Technology (Icfaitech),

ICFAI Foundation for Higher Education Hyderabad-501203, India.

- Email id asisa@ifheindia.org
- Phone 9398446780

Timing	Day 1	Day 2	Day 3	Day 4	Day 5
9:30 AM to 12 PM	Session 1	Session 3	Session 5	Session 7	Session 9
12 PM to 2 PM	Lunch	Lunch	Lunch	Lunch	Lunch
2 PM to 4:30 PM	Session 2	Session 4	Session 6	Session 8	Session 10 Feedback, Valedictory Session (4:30 pm to 5 pm)