

## About the Symposium

The use of AI with robotics in the healthcare sector has shown a remarkable rising trend in the past few years for interdisciplinary research. The combination of extraordinary advances in robotics, medicine and computing are transforming healthcare ecosystems ensuring exclusive patient care. Computer vision, medical image analysis, haptics, navigation, precise manipulation, and machine learning (ML) allow robots to carry out the surgical procedures autonomously. Many new techniques are underway in the use of robotics in the health sector which may be more cost-effective in the future. Use of AI and robotics in healthcare sector in India may prove to be a milestone in improving the present status of healthcare services. The Symposium will help the participants to cultivate their knowledge in the following aspects.

- Use of biomedical robots to help the clinicians and patients.
- Enhance the knowledge about robotic surgery system
- Provide the application of prosthetic devices as rehabilitation
- Discuss the present trends of Biomedical signal processing
- Applications of AI in the medical devices and related analysis

## Certification

Participation certificates will be issued after completion of the symposium to the successful participants.

## Who can Apply?

The symposium is open for faculty members, research scholars, industry professionals, post graduate and final year UG students from Engineering Colleges/Universities.

## Resource Persons

A group of eminent Professors from IITs, NITs, IEST-Shibpur, Tezpur University and CIT Kokrajhar have confirmed their presence in the symposium.

- Prof. Asokan Thondiyath, Professor, Indian Institutes of Technology, Madras
- Prof. Subir Kumar Saha, Professor, Indian Institutes of Technology, Delhi
- Prof. Utpal Bora, Professor, Indian Institutes of Technology, Guwahati
- Prof. Tapan K Gandhi, Professor, Indian Institutes of Technology, Delhi
- Prof. Shyamanta M Hazarika, Professor, Indian Institutes of Technology, Guwahati
- Prof. Samarendra Dandapat, Professor, Indian Institutes of Technology, Guwahati
- Prof. Subhasis Bhaumik, Professor, Indian Institute of Engineering Science and Technology, Shibpur
- Prof. Bhabesh Deka, Professor, Tezpur University
- Prof. Nayan Moni Kakoti, Professor, Tezpur University
- Prof. Amitava Nag, Professor, CIT Kokrajhar
- Dr. Anup Nandy, Assoc. Professor, National Institutes of Technology, Rourkela
- Dr. Haradhan Chel, Asst. Professor, CIT Kokrajhar
- Dr. Apurbalal Senapati, Asst. Professor, CIT Kokrajhar

## One Week Symposium

On

## AI in Medical Robotics: Present Challenges and Future Directions

22<sup>nd</sup> to 26<sup>th</sup> July 2024



Organised by



Department of Instrumentation Engineering  
Central Institute of Technology  
Kokrajhar, Assam

Sponsored by



Science and Engineering Research  
Board (SERB), New Delhi



## About CIT Kokrajhar

Central Institute of Technology (CIT), Kokrajhar is situated in Kokrajhar District of Bodoland Territorial Region (BTR) in Assam. CIT has been established for the basic objective of fulfilling the aspirations of the Bodo People relating to their cultural identity, language, education and overall economic development of the region and to impart Bodo youths with requisite technological and vocational training to produce the required manpower to give the impetus to economic growth of this area and to integrate the Bodo People into the mainstream of Technical and Vocational Education. It is a Centrally Funded Institute under the Ministry of Education, Government of India. For more details, visit <https://www.cit.ac.in/>.

## How to Reach?

Nearest railway station is Kokrajhar/Bongaigaon. Nearest airport is LGBI Guwahati. By Road from NH27 (Karigaon) 19.5 km (30 min approx.) through SH14.



## About the Department of IE

The Instrumentation Engineering (IE) Department, CIT Kokrajhar was established in 2007. The department presently offers 3 programmes: Diploma, B.Tech. and PhD. The Department is well equipped with the modern laboratory facilities. The faculties and staffs are involved in dedicated teaching, learning, and research in the pursuit of academic excellence. The Department is committed to the overall development of the institute. The objective of the Department is to produce quality individuals who can fulfill the ever increasing demand of skilled professionals in the area of Instrumentation and Control Engineering.

## How to Apply?

Please follow the link to register for the symposium.

Apply here

<https://forms.gle/W4DTWipzbf83YMx29>



## Registration Fees and Account Details

The registration fee (Rs.500 only) have to be paid before filling up the Google form.

Account Name	Central Institute of Technology Kokrajhar
Account No.	30495666063
Bank	State Bank of India
Branch	North Kokrajhar Branch
IFS Code	SBIN0007379

## Patron

Prof. A. Srinivasan, Director,  
Central Institute of Technology Kokrajhar,  
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## Convenor

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## Co-Convenor

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