

## DEPARTMENTAL HIGHLIGHTS

### Scientific and Industrial Research Organisations (SIROs) Recognition

KIET Group of Institutions, Delhi-NCR, Ghaziabad (UP), under Krishna Charitable Society recognized as a Scientific and Industrial Research Organisations (SIROs) by the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India. Its primary objective is to bring together voluntary organizations operating in non-commercial sector with a view to promote their activities in the area of scientific and industrial research, design and development of indigenous technology to achieve technological self-reliance and minimized foreign inputs. This prestigious recognition help KIET to establish in house Research and Development on new technologies, products, processes etc. It also provides a link between scientific laboratories and industrial establishments for transfer of technologies through National Research Development Corporation (NRDC) and facilitates investment in R&D through Central Electronics Limited (CEL).



### KIET MBS Research Centre (Centre of Excellence)

KIET MBS Research Centre was established in the month of January 2021 with the Vision to develop a Research and Development platform in the institute to meet the needs of one of the biggest industries in the world that is **Health Industry**. To become the only institute having maximum no. of commercialized products. The Mission of the Centre is to establish a high-level R&D in the Institute and to provide the emerging technology to the students, faculty and staff. Taking the concept of Make in India further, the mission of the Centre is to develop indigenous **Bio-Medical Instrument**.



### Robotics and Mechatronics Lab

Center of excellence of Robotics and Mechatronics has also been established by the Electronics and Communication Engineering Department of KIET Group of Institutions. E-Yantra Lab has also been established by the ECE Department which is sponsored by IIT, Bombay. Robotics and Mechatronics Lab is beyond the AKTU syllabus. This lab is very useful for all the other departments of engineering. In this lab we have Fire Bird V, Fire Bird VI, Fire Bird XII, Four Wheel based robots and humanoid robot.



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## 5<sup>th</sup> International Conference (Hybrid)

## on Advances in AI for Biomedical Instrumentation, Electronics and Computing (ICABEC- 2023)

22<sup>nd</sup> -23<sup>rd</sup> December 2023



**Scopus Indexed 5<sup>th</sup> International Conference (Publisher: Taylor & Francis Group, CRC Press, UK)**



**Organized by**

**Department of Electronics and Communication Engineering  
KIET Group of Institutions, Delhi-NCR, Ghaziabad**

*(Recognized as a Scientific & Industrial Research Organisations (SIROs) by Department of Scientific and Industrial Research (DSIR), New Delhi and Rank Band (151-200) for Engineering in NIRF 2023.*

## ABOUT KIET

KIET Group of Institutions is recognized as one of the best engineering colleges in Delhi-NCR, founded by the members of Krishna Charitable Society in 1998 with a modest number of 180 students, KIET Group of Institutions has now become a pioneer in the technical education domain with a strength of 6800+ students. With a rich alumni base of 19000+ students spread in all the nooks and corners of the world, KIET Group of Institutions is moving efficiently towards its vision of shaping young minds with skill-oriented & value-based education as these alumni serve the dual purpose of mentoring the present students, as well as opening new doors for them. The institute has gained a distinct image as an outstanding educational colossus among the technical institutions of Uttar Pradesh, due to its inclination towards innovative and skill-based education. Its consistent belief in 'Achieving High' is aptly reflected in its academics, extracurricular activities and placements. The success of its belief is clearly brought out in the plethora of Education Excellence Awards bagged by the institute. The institute has been accredited by NAAC with Grade 'A+' and its programmes (CSE, ECE, EEE, IT, ME, CE, MCA, MBA and Pharmacy) are NBA accredited.

## ABOUT THE DEPARTMENT

Department of ECE grooms the students to excel in the field of technology. Our students are trained in both software and hardware skills and basic inputs are provided to make them self-confident to work in industry and get encouragement for higher studies and research. The Department's motto is to upgrade skills and knowledge of our young engineers to enable them not only to survive but be the best in the present competitive world. The department also contributes to the society by accomplishing technical projects that cater to the various requirements of the present-day world. The students are also encouraged to participate in various technical and extracurricular events. The department has qualified and dedicated faculty members to provide good technical support to all the students. The department of ECE has a vision to become a centre of excellence in the field of Electronics and Communication Engineering. All our faculty and students are dedicated to achieve this goal with full vigor, enthusiasm and good ethical values. The Department is involved in high quality research on several domains like Optical Integrated Circuits, Signal Processing and Communication, Semiconductor Device Characterization and Integration, Advanced Microwave Techniques and other emerging fields in Electronics and Communication Engineering.

## ABOUT THE CONFERENCE (ICABEC-2023)

International Conference on Advances in AI for Biomedical Instrumentation, Electronics and Computing (ICABEC- 2023) is going to be held in the Department of Electronics and Communication Engineering, KIET Group of Institutions, Ghaziabad, Uttar Pradesh, India on Dec 22-23, 2023. As new technologies are being introduced every day which are drastically transforming the future of biomedical field as well as Electronics and Communication Engineering. The aim of the conference is to provide a forum to the researchers around the globe to explore and discuss on various aspects of these fields. The conference consists of various sessions and includes keynote and parallel sessions. Each session will be addressed by outstanding experts who will highlight the recent advances in various facets of Biomedical Instrumentation, sensors and Electronics and Communication Engineering. The conference will offer the budding researchers with an opportunity to present their work in front of eminent experts of their fields. Discussion on the latest innovations, trends and practical concerns and challenges faced in these fields will take place. Innovation will bring added value and widen the employment base. The present conference attempt to establish some robust and mutual interactions and cooperation with scientific educational, doctors, governmental and non-governmental organizations, and industries across local, national and international levels to meet the objectives of Creating contacts as possible to provide a means for scientific and industrial exchanges, boosting the scientific and research collaborations with other scientific centers in the country and around the world.

## PARTICIPATION

The Conference is aimed at an exchange of ideas and concepts among a broader group including Academicians, Students, Researchers, Doctors and Innovators.

## CONFERENCE TRACKS

### Track-1: AI-Based Biomedical Instrumentation

#### 1. Signal Processing and Image Analysis for Biomedical Instrumentation –

This track focus on the topics related to processing and analyzing medical signals and images using AI, such as ECG, EEG, MRI, and CT scans.

#### 2. Wearable and Implantable Medical Devices and Systems –

This track focus on the design, development, and application of AI in wearable and implantable medical devices, such as smart sensors, pacemakers, and artificial limbs.

#### 3. Intelligent Medical Robotics and Automation –

This track explores the use of AI and machine learning in medical robotics and automation, including robotic surgery, drug delivery, and patient monitoring.

#### 4. Human-Machine Interfaces and Brain-Computer Interfaces –

This track covers the development and application of AI-based human machine and brain-computer interfaces in healthcare.

### Track-2: Applications of AI and ML for Electronics and Signal Processing

#### 1. Machine Learning and Data Analytics for Biomedical Applications –

This track covers the application of AI and machine learning in biomedical data analysis and decision-making, such as disease diagnosis, prognosis, and treatment planning.

#### 2. Big Data and Cloud Computing for Biomedical Applications –

This track focus on the use of AI and cloud computing in handling and analyzing large-scale biomedical data, such as genomics, proteomics, and electronic health records.

#### 3. Healthcare Information Systems and Electronic Health Records –

This track explore the use of AI and machine learning in managing and analyzing electronic health records and healthcare information systems, including clinical decision support systems and disease registries.

### Track-3: Generalized Tracks for Space Technologies, Electronics Engineering, and Image Processing

#### 1. Space-based Medical Technologies and Satellite Program –

This track covers the use of AI and machine learning in designing and developing medical technologies for space applications, such as remote diagnosis and Health Monitoring, Space based Medical Technologies

#### 2. Electronic Circuits and devices for Biomedical Applications –

This track explores the application of electronic engineering principles, circuits and techniques in biomedical research and healthcare.

#### 3. Image Processing for Biomedical Applications –

This track focuses on the use of image processing techniques in biomedical research and healthcare, including medical image analysis and computer-aided diagnosis.

#### 4. Drug Discovery and Development –

This track includes the development of various drug discoveries for medical applications.

## GUIDELINES FOR AUTHORS

Soft copy of the full length paper in MS word / pdf format (as per conference template) must be submitted before **15<sup>th</sup> November 2023** at Email Id: [icce@kiet.edu](mailto:icce@kiet.edu). All the submitted Full Length Papers will be reviewed and evaluated based on the originality, technical aspects, research depth, authenticity of the data used and relevance to the theme of the conference. The work should be original and should not have been published in any Journal or proceedings.

## PUBLICATION AND INDEXING



The finally accepted papers will be considered for presentation (via hybrid mode) and publication in the conference proceedings. The Conference proceedings will be submitted to Scopus for indexing.

## IMPORTANT DATES

Full paper submission deadline	Nov 15, 2023
Acceptance of full paper	Nov 25, 2023
Camera ready & last date of Registration	Nov 30, 2023
Date of Conference	Dec 22-23, 2023

## REGISTRATION FEES

Category	Attendee	Research Scholars/Students		Academicians	Industry
		UG/PG	Ph.D		
Indian Origin	Rs 1,000	Rs. 7,000/-	Rs. 8,000/-	Rs. 8,500/-	Rs. 9,000/-
Others	\$55	\$200	\$250	\$350	\$400

### \* Note

- Maximum paper length is of **05** printed pages as per conference template. However, the authors can extend maximum 1 page with over length page charge, of Rs. 1000/- (for Indian participants) and US \$50/- (for International participant).
- We will also accept **short-high quality paper upto 3 pages** (per conference template). Short papers will get a **15% off in the registration fees**.

## MODE OF PAYMENT

For registration in the ICABEC-2023 conference, the amount of registration fee need to be paid through following payment link.

### Registration Fee payment Link:

<https://eazypay.icicibank.com/eazypayLink?P1=ZgicSSkGa0EjJ6FcPsSpg==>

**Note:** Kindly select these options while making payment

### Course – Others

### Branch - ICABEC 2023

### Year - Others

### Application Number - Paper Id

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## KEYNOTE SPEAKERS

Dr. Sundeep Rohilla, CEO, MBS India  
Dr. Karoon Agrawal, MBBS, MS - General Surgery, National Heart Institute, New Delhi  
Prof. (Dr.) Brijesh Kumar, PhD (IIT Roorkee) Professor at Indira Gandhi Delhi Technical University for Women Delhi (Govt of NCT Delhi)  
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Dr Abhishek Tomar, Professor, GB Pant Agriculture and Technological University, Uttarakhand  
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## BEST PAPER AWARDS

The "Best Paper Awards" will be given for each track of conference, selected by the committee among the presented papers in ICABEC- 2023.

### 1st Best Paper Award

Rs. 4,000/- Cash Prize with goodies

### 2nd Best Paper Award

Rs. 2,000/- Cash Prize with goodies

Transcending Towards Excellence

**NIRF RANKING-2023**

**2023**

PHARMACY <b>88</b> Rank	ENGINEERING <b>151-200</b> Rank Band	INNOVATION <b>51-100</b> Rank Band
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