

Department of Biomedical Engineering
KPR Institute of Engineering and Technology



KPR Institute of Engineering and Technology

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Highlights of this month

**Event -1
Association Inauguration**

**Event -2
Alumni Interaction**

**Event - 3
Webinar**

Students' achievements

Faculty Contribution

"We are Engineers for Doctors"

Biomedical Engineering is one of the premier Engineering disciplines among technocrats since it merges Healthcare Technology with Electronics and Software technologies including Artificial Intelligence, Machine Learning, Robotics in Medicine, Bioinformatics, Prosthetic Engineering etc. to serve better to the human community with advance and continuously upgrading technologies. In KPRIET, we nourish our students with advance laboratories like Bio-signal processing, Diagnostics and Therapeutic Equipment, Human Anatomy and Physiology, Biomedical Instrumentation to learn by practicing. Hospital training and internship are arranged with leading multispecialty hospitals and biomedical industries to facilitate the students for better career. Research activities are vibrant with publications and patents in the recent trends.

Dr. D. Ganesh kumar HoD/BME

Monthly Newsletter: Department of Biomedical Engineering

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About KPRIET

KPR Institute of Engineering and Technology (KPRIET), founded by Dr. K. P. Ramasamy, is one of the leading institutions of academic excellence by imparting technical, intellectual and professional skills to students. The Institution is ranked 100-150 band by NIRF. The institute, with its diverse and energetic community of students offers a distinguishing blend of some of the premium graduate, undergraduate and research programs, talented faculty, world class amenities and a residential campus set on a sprawling 150 acres of lush green campus.

While students at KPRIET immerse themselves in academics, the institute has a lot in store for them outside the classroom. Student life includes participation in sports, co-curricular activities and cultural. In short, at KPRIET, students will find an academic and social environment where everyone- from faculty members to peer's support shape their future. KPRIET is a home to artistically designed buildings with state of the-art computer and internet facilities, modern workshops, seminar halls, auditoriums and well stocked libraries, sports and games fields in addition to an indoor badminton court and gymnasium.

KPRIET has a faculty strength of 264 with a faculty student ratio of 1:16. Out of the total, 139 faculty members PhDs. and 95 are in the process of completing their PhDs. As an exemplary institution of learning, KPRIET follows an admission policy that strongly favours merit, even as it enables access to education for students from all strata of society through appropriate scholarships. The Institution boasts of a strong alumni network with alumni events held every year serving as a platform for past students to give back to KPRIET and share their experiences with its present fellow students.

About the Department

The Department of Biomedical Engineering of KPR Institute of Engineering and Technology, Coimbatore was established in the year 2017 with an annual intake of 60 students. The Department has highly qualified faculty members with Ph. D. and M.E. / M. Tech / M.S. under various specialize such as Biomedical Signal and Image Processing, Medical Electronics, Healthcare Data Analytics, Biomaterials, Regenerative medicine and Nanoscience. The total strength of the faculty members in the Department is thirteen. Out of which, 60% of the faculty Members (8 Faculty) have completed their PhD and four faculty members are pursuing their PhD.

The faculty members contribute to academic development by publishing books / journals, products, patent filing and presenting papers in International and National Conferences. The Department of Biomedical Engineering signed MoUs with the reputed industries like Silicon systems, Aravind Eye Care Hospital, GEM Hospitals, Ganga Medical Center and Hospital, Masonic Medical Centre for children and ALERT (NGO) to bridge the gap between theory and field practices.

The Department also provides an opportunity for students in improving practical knowledge in the field of Biomedical Engineering and Software skills like MATLAB, LabVIEW, Wokwi simulation through Centre of Excellence, in addition to Communication and Presentation skills. The students have to undergo Industrial Training and Industrial Visit to facilitate them to take up industrial live projects to understand the industry needs. The Students from Biomedical Engineering as well as faculty members has membership in various Professional Societies like BMESI and IEEE (EMBS) to gain knowledge through various programs conducted by these bodies across the Nation.

Vision of the Department

To be the **centre of excellence** for **dissemination of knowledge, research and development** in biomedical engineering to serve **society with moral values**.

Mission of the Department

The **Mission** of the Department is to

- Impart **value-based education** in biomedical engineering using **modern equipment and tools**.
- Build an **integrated team** of biomedical engineers to foster technologies through **research, development and innovation**.
- Provide **healthcare industries** with solutions imbued **through lifelong learning** with **ethics and moral values**

**LIST OF EVENTS / PROGRAMS CONDUCTED
DURING AUGUST 2023-24**

S. No.	Date	Type of Event / Program	Title of the Event
1.	07.08.2023	Association Inauguration	Inauguration of student association - Medico Sapiens 2023 - 2024 & BMESI student chapter 2023 - 2024
2.	12.08.2023	Alumni interaction	Biomedical Engineer as an Embedded Engineers
3.	26.08.2023	Webinar	Bioelectronic Marvels

Industry visits by the Department

S. No	Date of Visit	Name of the Industry visited by the faculty during August 2023
1.	15.08.2023	Prashan Medical Technologies, Coimbatore
2.	26.08.2023	KMCH Medical College & Hospitals, Coimbatore
3.	30.08.2023	Medsby Health Care & Engineering Solutions, Coimbatore

EVENT - 1

ASSOCIATION INAUGURATION

The Department of Biomedical Engineering successfully hosted a momentous event on August 7, 2023, to mark the launch of 'Students Association - Medico Sapiens 2023 – 2024' and the 'Student Chapter - Biomedical Engineering Society of India (BMESI) 2023 – 2024'. The inaugural ceremony took place at Thanam Hall, witnessing an impressive gathering of both faculty members and students. The event was graced by the presence of Dr. S. Jeevithan, MD (Com Med), a distinguished Professor in the Department of Community Medicine at KMCH Institute of Health Sciences and Research, Coimbatore, who served as the esteemed Chief Guest. The event was a resounding success, with a total of 120 participants in attendance. Among them, 5 were faculty members, and the remaining 115 participants comprised enthusiastic students. The ceremony began at 2:00 PM and unfolded with a warm welcome extended to all attendees. The dignified presence of our beloved Principal Dr. M. Ramasamy, the Head of the Department Dr. D. Ganeshkumar and the chief guest Dr. Jeevithan set the tone for the event, signifying the importance of the themes to be discussed. Dr. S. Jeevithan delivered an enlightening talk on the topic of 'Assistive Technologies for Community Healthcare'. Drawing from his extensive expertise in the field of Community Medicine, Dr. Jeevithan shed light on how innovative assistive technologies can bridge gaps in accessibility and inclusivity within healthcare systems. His presentation was enriched with real-world examples and success stories that demonstrated how these technologies empower individuals with disabilities to actively participate in their own healthcare, thus fostering a more inclusive and supportive community health environment. The session further delved into the latest advancements in wearable devices, communication aids, and remote monitoring solutions, which were presented by Dr. Jeevithan. These technological innovations were showcased as powerful tools that promote better patient engagement and outcomes. Attendees gained valuable insights into the potential of these technologies to reshape patient-centered care and enhance the effectiveness of healthcare services.

KPR Institute of Engineering and Technology
Learn Beyond (Autonomous, NAAC 'A')

Department of Biomedical Engineering

Great Place To Work Certified

Inauguration of
Students Association - Medico Sapiens 2023 – 2024
&
Student Chapter - Biomedical Engineering Society of India (BMESI) 2023 – 2024

Guest of honor

Dr. S. Jeevithan MD (Com Med),
Professor,
Department of Community Medicine,
KMCH Institute of Health Sciences and Research,
Coimbatore

Date: 07.08.2023 (Monday)
Time: 2.00 PM – 4.00 PM
Venue: Thanam Hall

Expert Talk on
"Assistive Technologies for Community Healthcare"

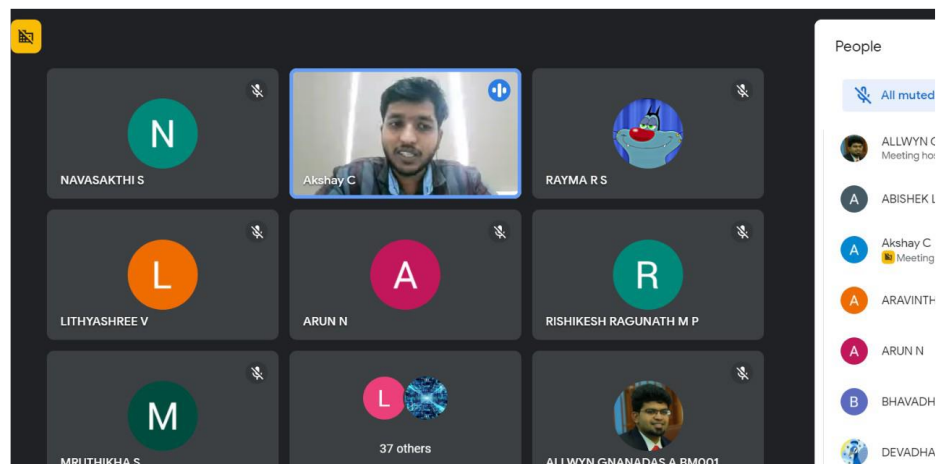
kpriet.edu.in /KPRIETonline



EVENT - 2

Alumni interaction on Biomedical Engineer as an Embedded Engineers

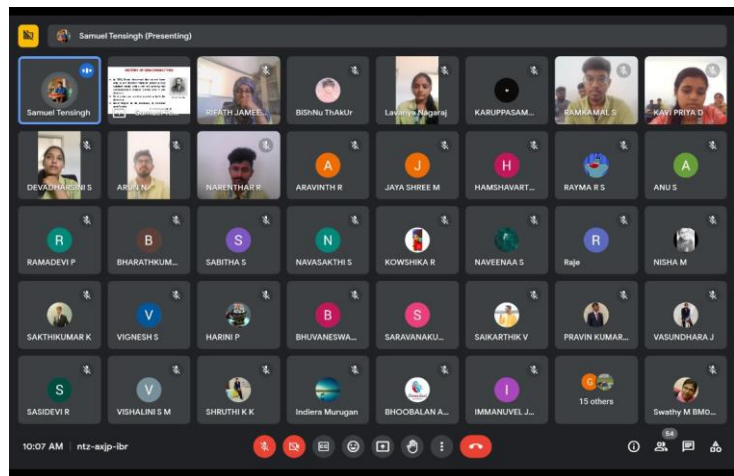
Dr.A.Allwyn Gnanadas, Alumni Coordinator welcomed the alumni Mr.Akshay.C. The Alumni began the session with a small introduction and he started the presentation. In the presentation, he explained the fundamentals of embedded systems. He spoke about embedded software and hardware development. He mentioned the important phases of them both. He shared the need for embedded systems software with a Television illustration, as like what will be displayed initially when the TV is turned on. The logo that is appearing first is because of the embedded system software. He further added the importance of these in wearables and other healthcare devices. He also suggested some points on carrying out their final year projects using microcontrollers. He also justified why embedded systems are considered a core of the biomedical devices field. Few were the smart additions, the automation, the future adaptations, etc. From his personal experience, he shared that working in embedded systems one should continuously update themselves for all the changes in the trends of embedded systems. He shared his personal experience, and how the subjects he learned here such as basic electronics, microcontrollers, C programming and others helps him in performing well in the industry. Further, in the feedback collected after the session, the students were very satisfied and they provided multiple positive responses. instilled a sense of appreciation for the central library's role as an indispensable resource hub within the institution.



EVENT - 3

WEBINAR ON BIOELECTRIC MARVELS

On August 26, 2023, Our organization, Medico Sapiens Association, successfully hosted a webinar titled 'BIOELECTRONIC MARVELS' featuring Mr. Samuel Tensingh as the speaker. The event commenced at 10:00 AM and was conducted in an online format. Following the introduction, Mr. Samuel Tensingh, our esteemed guest speaker, took the reins of the session. The webinar centered around the intriguing fusion of biology and electronics, paving the way for innovative future health solutions. The topics covered included VLSI, pacemakers, biofuels, biosensors, upcoming health technologies, and digital electronics. The discourse primarily delved into semiconductors, bioelectronics, and advancements in cancer treatment. An interactive question-and-answer session was thoughtfully included for the benefit of the attending students. Our efforts were rewarded with an impressive registration count of over 60 participants, with more than 80 attendees actively taking part in the event. The session proved to be exceptionally informative, offering valuable insights into the intersection of biology and electronics. We are elated to report receiving a multitude of positive feedback from the participants, expressing their appreciation for the event's content and organization. Their thoughts and insights were shared through a dedicated feedback link, reaffirming the success of the webinar and its significance to those who attended.



Student Achievements –Technical / Non-Technical/Sports

S. No	Name of the Student	Year	Name of the Event / Program	Achievement
1.	Ms. D.S Libuja	III BM	Oratorical Competition	1 st Prize
2.	Mr. M. Kishore	III BM	(Sports) Kabaddi – Isha Gramotsavam	2 nd Prize

