

Department of Biomedical Engineering  
KPR Institute of Engineering and Technology



# KPR Institute of Engineering and Technology

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"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**

## Highlights of this month

**28.10.2022**

**NBA Mock Audit Criteria 1 to 7**

**29.10.2022**

**Strategic Plan Review Meeting**

**Quizzical Event**

**Student Participation / Achievements**

**Faculty Contribution**

**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 200-250 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 1:15. 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 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 Aravind Eye Care Hospital, Helix Private Ltd., GEM Hospitals, Ganga Medical Center and Hospital, Masonic Medical Centre for children, Waxwing Medical Technologies, Vital Bio-systems 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, Proteus, Pspice simulation through

KPI 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 lifetime membership in various Professional Societies like ISTE and BMESI to gain knowledge through various programs conducted by these bodies across the Nation.

### **Vision of the Department**

To be a **center of excellence** for **dissemination of knowledge, research and development** in biomedical and allied engineering fields to serve the society.

### **Mission of the Department**

The Mission of the Department is to

- To impart value-based education in biomedical engineering with state-of-the-art facilities.
- To build an integrated team of biomedical engineers to foster the technologies through research, development and innovation.
- To be in pace with healthcare industries by practicing lifelong learning with ethical and moral values.

**LIST OF EVENTS / PROGRAMS CONDUCTED DURING  
OCTOBER 2022-23**

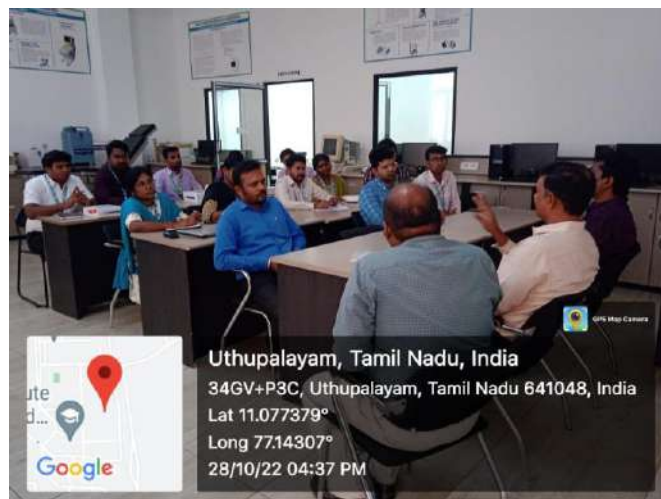
<b>S. No.</b>	<b>Date</b>	<b>Type of Event / Program</b>	<b>Title of the Event</b>
1	28.10.2022	External Audit	NBA Mock Audit Criteria 1 to 7
2	29.10.2022	Review Meeting	Strategic Plan Review Meeting
3	29.10.2022	BMESI student chapter	Quizzical Event

## EVENT 1

## NBA MOCK AUDIT

The Department of Biomedical Engineering organized a mock audit on 28.10.2022 at the Medical Analytics Laboratory. The Auditing Members are Dr. Vijay, Associate Professor and Dr. S. Pravin kumar, Associate Professor, SSN College of Engineering, Chennai.

Dr. D. Ganesh kumar, HOD & professor/BM, welcomed the Auditing Members and Dr. A. Allwyn Gnanadas, NBA coordinator/BM have presented Vision, Mission, PEO and PSOs and the outline of the NBA data to the Auditors. After the presentation, the SAR and Proof of documents were reviewed criteria wise by Auditing members and discussions were done. The faculties of BME have noted all the suggestions, given by Auditors and ensured to reflect it in the documents.



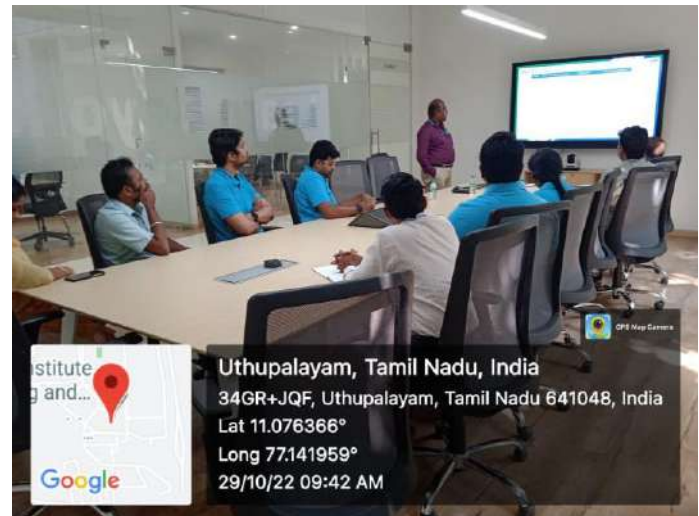
## EVENT 2

## STRATEGIC PLAN REVIEW MEETING

The Department of Biomedical Engineering conducted Strategic plan Review meeting on 29.10.2022. The Review members are Mr.BB Mohanty, Regional Manager, Ottobock Pvt. Ltd, Coimbatore and Dr. Vijay, Associate Professor, Department of Biomedical Engineering, SSN college of Engineering, Chennai. Dr. D. Ganesh kumar, HoD/BME, KPRIET had addressed the Review members and presented the strategic plan with target fixed for the Department for the Academic year 2022-23 and target achieved as on date 28.10.2022 to the Review members in the presence of Department Faculty members. The strategic plan was conducted in offline mode at Daffodil Hall at KPRIET, Coimbatore.

The following suggestions are given by the Review members after the Presentation:

1. Installation of Calibration laboratory
2. Publication of Research paper in collaboration with MOU signed Hospital Doctor.
3. Suggestion given to increase the number of PhD. Supervisors in the Department



## EVENT 3

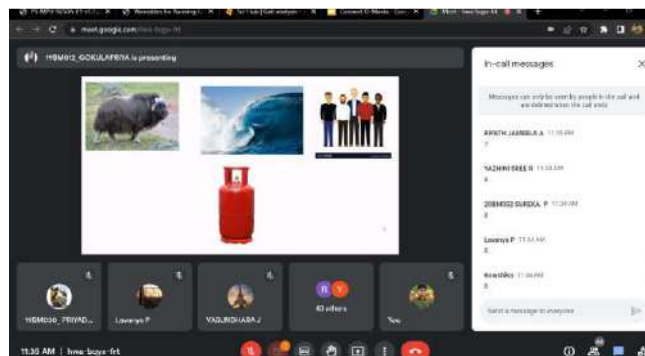
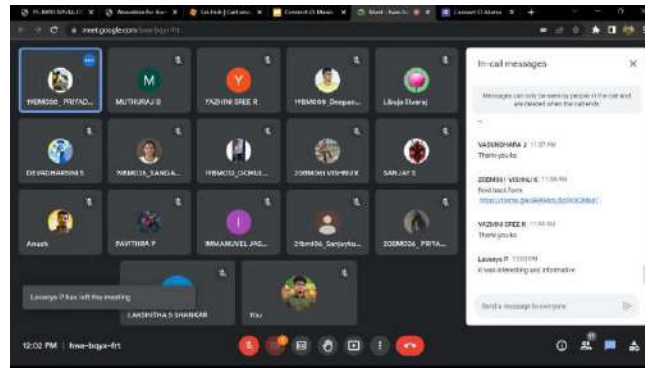
## BMESI STUDENT CHAPTER – Connect-O-Mania

The Department of Biomedical Engineering in association with the BMESI student chapter organized 'Connect-O-Mania' on 29.10.2022. The students were actively participated in the Online Connection based quiz and it evaluates their task challenging skill sets on basic biomedical Equipments, radiological equipment and Diagnostic & Therapeutic equipment knowledge levels.

The event was aimed to induce and enhance the biomedical devices and new modern equipment knowledge level to the BME students. Nearly 80 students' participants and 6 faculty members attended the Connect-O-Mania session. The meeting started with a key note by the event coordinator Dr. S. Logesh Kumar, followed by welcome address by Ms. S. Gokula Priya (IV-year BME). Then Mr. K. Vishnu (III-year BME) shared the Connect-O-Mania event rules and how to play this technical quiz event.

The BMESI student coordinators provides logistic support and smooth conduction of the quiz event. After all questions were posted the students enthusiastically and technically connect the images and posted their answers. Many students showcased their brilliance by rapidly answering the questions. It was a very informative and knowledge enriching competition for the participants along with the faculty audience.

A healthy competition between BME students develop a good relationship between II-, III- and IV-year students. However, they knew modern medical device name, leading healthcare industry name, Product applications and functional features. And the final winners and runners were awarded with a certificate of appreciation. and Ms. Aaditi (IV BME) gives vote of thanks to the participants.





### Student Achievements – Technical / Non-Technical

S.No	Name of the Students	Year	Name of the Event / Program	Achievements
1	Ms. R. Kanika Sabari	II BME (2021-25 batch)	Dance Competed at Chinmaya school	Second prize
2	Ms. Lakshitha S Shankar		Sarvam Naatiyamayam	
3	Ms. Lakshitha S Shankar		Dance competition in Anna university	First prize (Team)
4	Ms. R. Kaaviyah		Photonics_Photography contest	Third price (Sri Krishna College)
5	Ms. J. Vasundhara		Coursera - Online course	Completed
6	Mr. S. Sanjay		Coursera - Online course	Completed
7	Mr.R. Narendhar		Innovsense 2022	Best Commercialization Award
8	Ms. S. Bhuvaneshwari		NPTEL Swayam	Completed with Elite score
9	Ms. K.C. Aarthi		NPTEL Swayam	Completed with Elite score
1	Ms. S Isabella	III BME (2020-24 batch)	All India Vayu Sainik Camp (NCC)	Won Silver Medal – Best Pilot event
2	Ms. S Ruth		800 m Junior District Athletic meet	Bronze medal

## Faculty Contribution

### Patents / Achievements / FDP/ Conference and Workshops Attended

S. No	Name	Name of the Webinar/ Workshop/ FDP/ Internship/ Achievement	Organized by
1	Dr. D Ganesh kumar	Completed NPTEL course with Elite+ Gold score	NPTEL Swayam
2	Dr. P. Sreelatha	Submitted MSME project proposal	Not Applicable
3	Dr. A. Allwyn Gnanadas	IEEE conference Paper Publication (Status – Accepted)	RVS college of Engineering and Technology, Coimbatore
		Submitted MSME project proposal	Not Applicable
4	Dr. S. Logesh kumar	IEEE conference Paper Publication (Status – Accepted)	RVS college of Engineering and Technology, Coimbatore
		Completed NPTEL course with Elite score	NPTEL Swayam
		Submitted MSME project proposal	Not Applicable
		Faculty Development Training on Organ Bioprinting	Tisel Biopark, Coimbatore
5	Dr. N. Rajasingam	IEEE conference Paper Publication (Status – Accepted)	RVS college of Engineering and Technology, Coimbatore
6	Dr. T. Gayathri	Project proposal submitted to CERB-SURE	Not Applicable
		Attended 5-day online Faculty Development Program	AICTE
		Completed NPTEL course with Elite score	NPTEL Swayam

7	Mr. V. Bharat	IEEE conference Paper Publication (Status – Accepted)	RVS college of Engineering and Technology, Coimbatore
8	Ms. R. Rajeshwari	Submitted MSME project proposal	Not Applicable
		Completed NPTEL course with Elite score	NPTEL Swayam
9	Dr. P. Arunkumar	IEEE conference Paper Publication (Status – Accepted)	RVS college of Engineering and Technology, Coimbatore
		Project proposal submitted to CERB-SURE	Not Applicable
		Submitted MSME project proposal	Not Applicable
		Completed NPTEL course with Elite score	NPTEL Swayam
10	Ms. M. Swathy	IEEE conference Paper Publication (Status – Accepted)	RVS college of Engineering and Technology, Coimbatore
		published paper in SCI Journal.	Not Applicable
11	Ms. B. PriyaDarshini	published paper in SCI Journal.	Not Applicable
		Submitted MSME project proposal	Not Applicable
		IEEE conference Paper Publication (Status – Accepted)	RVS college of Engineering and Technology, Coimbatore
12	Mr. R. Krishna kumar	Faculty Development Training on Electrocardiogram – Interpretation and Application in Clinical Practice	NPTEL Swayam