



KPR Institute of Engineering and Technology

Arasur, Coimbatore - 641407

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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

Aug 06

Association Inauguration

Aug 13

Seminar on Digital Electronics and IoT

Aug 27

Online Webinar session with Alumni

Aug 27

BMESI Student Chapter

Student Participation / Achievements

Faculty Contribution

BIO-SCOPE
BIO-SCOPE

Monthly Newsletter: Department of Biomedical Engineering

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FACULTY COORDINATOR

Mr. R. Krishna kumar, AP/BME, KPRIET

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Student Achievements

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About KPRIET

KPR Institute of Engineering and Technology (KPRIET), founded by Dr. K. P. Ramasamy, stands out as a leading institute 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 227 with a faculty student ratio of 1:15. Out of the total, 97 faculty members PhDs. and 102 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. 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 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 Department of Biomedical Engineering as well as faculty members has lifetime membership in various Professional Societies like ISTE, BMESI and IBSC. The Department of Civil Engineering has various Students Chapter like ISTE and BMESI to gain knowledge through various programs conducted by these bodies across the Nation

Vision of the Department

To be a **centre of excellence** for **dissemination of knowledge, research and development** in biomedical and allied engineering fields

Mission of the Department

The Mission of the Department is to

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

Programs Organized

LIST OF EVENTS / PROGRAMS CONDUCTED DURING AUG 2022-23

S. No.	Date	Type of Event / Program	Title of the Event
1	06.08.2022	Association Inauguration cum Guest Lecture	Medical X-ray production
2	13.08.2022	Seminar	Digital electronics and IoT
3	27.08.2022	Webinar - Alumni	Webinar on Introduction to Golang, ReactJS and NestJS
4	27.08.2022	BMESI Activity	Quizzical

EVENT 1

ASSOCIATION INAUGURATION CUM GUEST LECTURE

Topic: MEDICAL X-RAY PRODUCTION

The Department of Biomedical Engineering in association with the ISTE student chapter inaugurated the student's association 'Medico Sapiens 2022' on 06.08.2022. As a part of the event, a Guest lecture was conducted on the topic Medical X-Ray Production and Radiation Safety. Mr. Arul Naveen, QA-DXE(BARC) RADQ SERVICES was the resource person of the session. He explained the students about Basic Radiation Physics, Production of X-Ray, X-Ray Tube, Diagnostic X-Ray Equipment and Factors affecting X-Ray. He also explained about the Properties of X-Ray Radiation Units (Diagnostic Radiology) Machines which produces X-Ray in Diagnostic Radiology Biological Effects and Radiation Safety. The students interacted with the guest and discussed about the latest trends and opportunities in the field of radiological equipment.

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

Department of Biomedical Engineering

ASSOCIATION OF MEDICO SAPIENS

ASSOCIATION INAUGURATION
IN ASSOCIATION WITH
ISTE STUDENT CHAPTER

GUEST OF HONOUR

06/08/2022
Venue : Thennam Hall
Time : 2.00pm to 4.00pm

ARUL NAVEEN S
QA-DXE(BARC)
RADIOLOGICAL SAFETY OFFICER,
RADQ SERVICES,
NO 99/1, 2ND AGRAHARAM,
SALEM-636001

TOPIC : MEDICAL X-RAY PRODUCTION

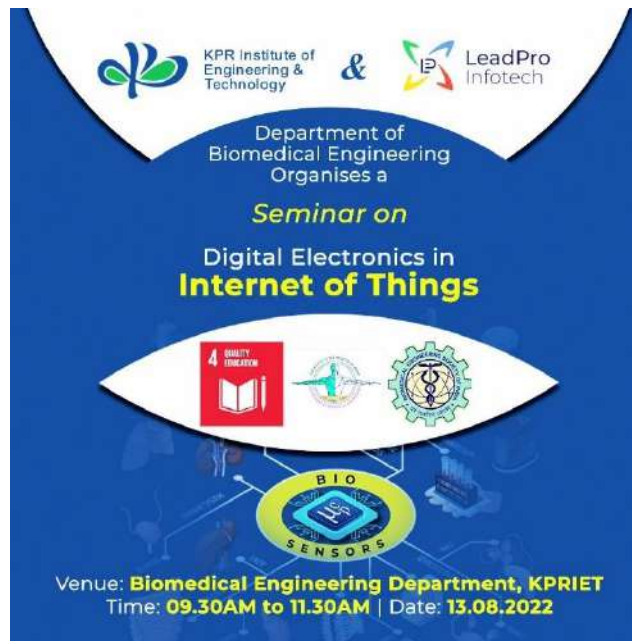
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EVENT 2

SEMINAR ON DIGITAL ELECTRONICS AND IOT

The Department of Biomedical Engineering has organized a seminar presentation to give the students, an insight into the basics of technologies used in IoT. Poonkodi.S, LeadPro Info Tech & Silambarasan.K DSIB Tech, Coimbatore were the Resource persons. The session was conducted for about two hours. Discussions on facts behind the networking layers and where the IoT are operated was detailed. Students has a demo session on basic and advanced boards used for IoT applications and basic programming techniques used. The session went on with good interaction and question answer sessions. This seminar helped the students to get to know various details on digital electronics as applied to IoT.



EVENT 3

WEBINAR ON INTRODUCTION TO GOLANG, REACTJS AND NESTJS

The department of Biomedical Engineering and Office of Alumni Relations has organized a webinar on “Introduction on Golang, ReactJS and NestJS” on 27.08.2022 (Saturday) between 3:00 PM to 4:00 PM, through the google meet platform. The lecture in this webinar was given by Ms. Maheshwari. P, M. Nisha (BME III), she has delivered welcome address with few details about Resource person. Ms. Maheshwari. P has delivered a lecture on the topic of “Introduction on Golang, ReactJS and NestJS” She explained about the Blockchain Technology. She specifically explained that how the blockchain is secured. 0% hacking on blockchain and there are three languages to code blockchain they are Golang, ReactJS and NestJS. she explains about these three then the companies which is working with blockchain are Accenture, HCL Technology, ZOHO, TCS, Cognizant, IBM

We received good response from the students and also, they gave very good feedback. A Total of about 77 students participated the event. The resource person thanked the organizers for arranging the live webinar. At the end of the webinar B. Neha nesnas (BME III), she has delivered the vote of thanks. She thanked the resource person, Faculty members (Mr. Bharath. V and Dr. Allwyn Gnanadas. A), students of Biomedical Department and other officials for their active support for making the event to be successful.




EVENT 4

BMESI EVENT - QUIZZICAL

The Department of Biomedical Engineering in association with the BMESI student chapter organized ‘QUIZZICAL’ on 27.08.2022. As a part of the event, the new student board members for the academic year 2022-23 were introduced and followed by the online quiz event was held. The students were actively participated in the quiz event and evaluated their skill sets on basic biomedical Equipments, radiological devices and medical regulatory.

**DEPARTMENT OF BIOMEDICAL ENGINEERING
&
BMESI STUDENT CHAPTER**



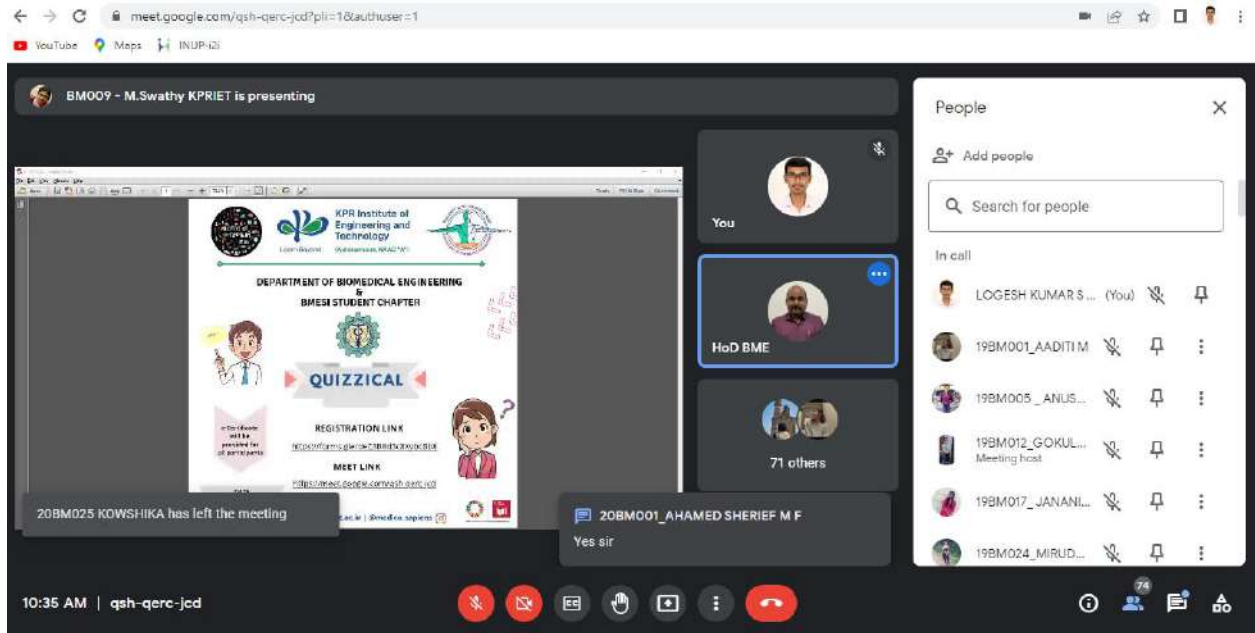
QUIZZICAL

REGISTRATION LINK
<https://forms.gle/deZ3B8d3c8XybcBb8>

MEET LINK
<https://meet.google.com/qsh-qerc-jcd>

DATE
27/08/2022
TIME
10:00 AM TO 11:30 AM

kpriet.ac.in | @medico_sapiens



Student Achievements – Technical / Non – Technical

Name of the Students	Name of the Event	Achievements
1.Kowshika R III BME 2.Meiyarasan V III BME 3.Gokul B IV BME 4.Gokulanath IV BME 5.Nithin IV BME	ELEKTROTEC '22 Expo – Smart Bio waste Collector	Product Demonstration
Kanika sabari, II BME Lakshitha, II BME Prithika, II BME	Dance competition at Codissia, conducted by Codissia in association with District Administration, bapasi and Rotary club of Coimbatore	Awarded 2nd Prize
kaaviyah R, II BME	Quiz conducted by YI YUVA Club, KPRIET	Secured 1st Prize
Rifath Jamila, II BME	Essay writing conducted by Toastmaster's Club	Secured 2nd Prize
Mercy V, III BME	Tricafteria contest, KPRIET	Secured 1st Prize
Lohitha R, III BME, Rithana Sri, III BME	Tricafteria contest, KPRIET	Secured 2nd Prize
Anush S, IV BME, Tamil selvan A, IV BME, Vijay M, IV BME	Engineering Science and Technology Exhibition, MAHSA University Malaysia	Won Bronze medal
Soniya N, IV BME Mirudula Devi R, IV BME Aaditi M, IV BME	Engineering Science and Technology Exhibition, MAHSA University Malaysia	Won Bronze medal
11 students from II BME	Great learning course	Completed

Faculty Contribution

Patents / Achievements / Workshops / FDP/ Exhibition Attended

Name	Name of the Webinar/ Workshop/ FDP/ Internship / Achievement	Organized by	Date
Mr. R. Krishna kumar, AP/BME	Workshop: Designing and Modelling of IoT, AI & ML systems	AICTE, ATAL Academy, Arm Education and STMICROELECTRONICS	01.08.2022 to 05.08.2022
Mr. R. Krishna kumar, AP/BME	Patent Publication: Intelligent Restaurant using Smart Beacons	NA	04.08.2022
Mrs. R. Rajeshwari, AP(Sr. G)/BME	Product Demonstration in Elektrotec '22 Expo	Codissia Intec Technology centre	12.08.2022 to 15.08.2022
Dr. P. Sreelatha, Professor/BME	Won two bronze medals in Engineering Science and Technology Exhibition	MAHSA University, Malaysia	18.08.2022
Mr. R Krishna kumar, AP/BME	FDP on Research Perspectives and Future Trends in Artificial Intelligence and Data science	Department of Artificial Intelligence and Data science, KPRIET	22.08.2022 to 26.08.2022
Ms. Priya Darshini, AP/BME	Resource Person - Data Acquisition and Processing using LabVIEW, conducted for 09 students of II MECH, KPRIET	Department of Mechanical Engineering, KPRIET	26.08.2022
Mr. John Amose, AP/BME	Speaker – Guest lecture on Bio Innovation and IPR	Department of Biomedical Engineering, Karpagam Academy of Higher Education, Coimbatore	30.08.2022