# Department of Electrical and Electronics Engineering KPR Institute of Engineering and Technology



# NEWSLETTER





**ELECTROBLITZ** 

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# **VISION AND MISSION OF THE DEPARTMENT**

### Vision:

To be the **centre of higher learning** in the field of Electrical and Electronics Engineering by educating the students to meet the **global challenges** with **professional ethics and social consciousness**.

#### Mission:

- Providing technical, intellectual and ethical environment to the students through knowledge centric education and research.
- Collaborating with industries in the vicinity, nationally and internationally for exposure and **innovation**.
- Enabling the students to serve the society through prolific ideas.

## Programme Educational Objectives (PEOs)

The Graduates of Electrical and Electronics Engineering will

- **PEO1** Possess an adequate knowledge to meet the needs of the stakeholders and excel in their chosen profession with good communication and managerial skills.
- **PEO2** Adapt to emerging technologies and practice their profession confirming to ethical and human values.
- **PEO3** Continuously improve the habit of self-study through professional development activities.

### Programme Outcomes (POs)

Graduates of Electrical and Electronics Engineering will be able to:

- **PO1 Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2 Problem Analysis: Identify, formulate, review research literature, and analyze complex
  engineering problems reaching substantiated conclusions using first principles of mathematics,
  natural sciences, and engineering sciences.
- PO3 Design/development of Solutions: Design solutions for complex engineering problems and
  design system components or processes that meet the specified needs with appropriate
  consideration for the public health and safety, and the cultural, societal, and environmental
  considerations.





- **PO4 Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5 Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern
  engineering and IT tools including prediction and modeling to complex engineering activities with
  an understanding of the limitations.
- **PO6 The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7 Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8 Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9 Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10 Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11 Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO12 Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

# Programme Specific Outcomes (PSOs)

Graduates of Electrical and Electronics Engineering will be able to:

- **PSO1** Develop skills to the expectations of the dynamic industrial practices in Electrical Engineering and allied areas.
- **PSO2** Analyze, design, and integrate various renewable energy sources to meet the energy demand.





# **FACULTY DETAILS**

S.NO	NAME OF THE FACULTY	DESIGNATION
1.	Dr.K.Mohana Sundaram	Professor & Head
2.	Dr.V.Kumar Chinnaiyan	Professor
3.	Dr.J.Karpagam	Professor
4.	Dr.V.S.Chandrika	Associate Professor
5.	Dr.P.Pandiyan	Associate Professor
6.	Dr.A.Karthick	Associate Professor
7.	Mr.S.Vivekanandan	Assistant Professor (Sl.G)
8.	Mr.G.Saravanan	Assistant Professor (Sl.G)
9.	Dr.R.Sampathkumar	Assistant Professor (Sl.G)
10.	Dr.C.Pazhanimuthu	Assistant Professor (Sl.G)
11.	Dr.D.Sathish Kumar	Assistant Professor (Sl.G)
12.	Dr.I.Baranilingesan	Assistant Professor (Sl.G)
13.	Dr.S.Ravindran	Assistant Professor (Sl.G)
14.	Dr.A.Matheswaran	Assistant Professor (Sl.G)
15.	Dr.V.Parimala	Assistant Professor (Sl.G)
16.	Dr.A.Rakesh Kumar	Assistant Professor (Sr.G)
17.	Dr.N.Prakash	Assistant Professor (Sr.G)
18.	Dr.Rangu Seshu Kumar	Assistant Professor (Sr.G)

19.	Ms.B.Lalitha	Assistant Professor (Sr.G)
20.	Ms.R.Revathi	Assistant Professor (Sr.G)
21.	Mr.A.Mohamed Ibrahim	Assistant Professor (Sr.G)
22.	Mr.P.Ravikumar	Assistant Professor (Sr.G)
23.	Mr.V.Kamalkumar	Assistant Professor (Sr.G)
24.	Mr.C.J.Vignesh	Assistant Professor (Sr.G)
25.	Mr.C.Dinesh	Assistant Professor (Sr.G)
26.	Mr.K.Balamurugan	Assistant Professor
27.	Mr.M.Mohana Sundaram	Assistant Professor
28.	Mr.G.Xavier Richards	Assistant Professor

# SUPPORTING STAFF

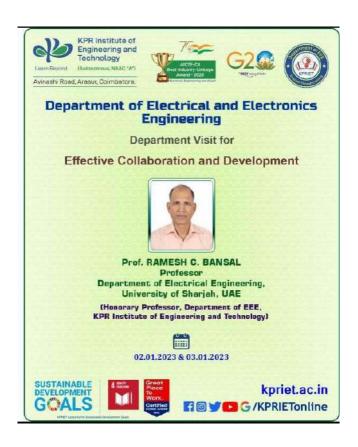
S.NO	NAME OF THE STAFF	DESIGNATION	
1.	Mr.M.Vinoth Kumar	Technical Officer	
2.	Mr.R.Vinoth Kumar	nar Technical Officer	
3.	Mr.C.Gobalakrishnan	Lab Technician	
4.	Mr.M.Muthukumar	Lab Instructor	
5.	Mr.M.Karuppusamy	Lab Technician	
6.	Ms.R.Suvalakshmi	Lab Technician	
7.	Ms.P.Parameshwari	Office Assistant	

#### ASSOCIATION ACTIVITIES

#### **Expert Visit for Effective Collaboration and Development**

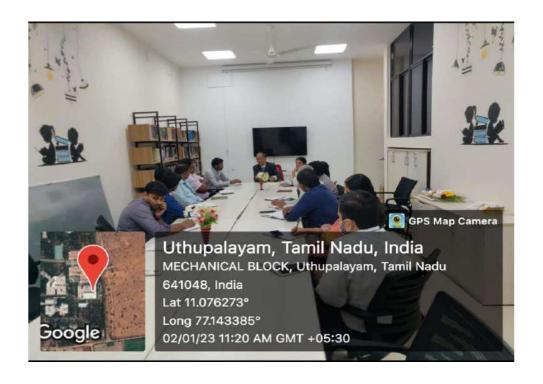
The Department of EEE organized an expert visit for effective collaboration and development on 02/01/2023 and 03/01/2023. The resource person is Prof. Ramesh C.Bansal, Professor, Department of Electrical Engineering, University of Sharjah, UAE. Prof. Bansal was greeted by the head of the institution and visited the Dept. of EEE. The first event was the meeting with all the faculty members of the department and the one-on-one interaction with them. Faculty members gained research insights and the different recent technologies on which research has been carried out. Further, the art of writing research articles was discussed and shared with faculty members. This was further followed by a visit to individual laboratories of the department and finding the ways to strengthen the research facilities. The machines laboratory was identified as a potential area where the scope to improve the lab is high. New machines that run on advanced control techniques can be installed to replace the old ones. Renewable Energy Lab also has equal scope to improve with the use of advanced controllers and better student involvement.

An interactive session with the students of the EEE Dept was organized. The relevance of green energy and the potential growth of renewable energy was discussed in depth by him. The students present asked about the different opportunities to pursue higher research programs in countries abroad, including the University of Sharjah. Prof. R C Bansal also expressed the need to carry out research-based learnings to foster a better learning environment.









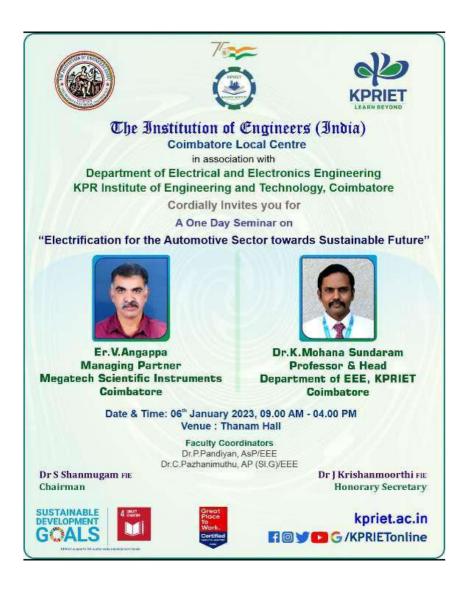
#### One Day Seminar on Electrification for the Automotive Sector towards Sustainable Future

The Department of EEE organized a IEI sponsored one day seminar on Electrification for the Automotive Sector towards Sustainable Future on 06/01/2023. The registration commenced at 9.00 am and went on till 9:30 am at Electrical and Electronics Engineering Department, KPRIET. The Inaugural function started at 10.00 am and Dr.S Shanmugam, Chairman, IE(I) presented the welcome address and briefed upon the activities of IE(I) in promoting Science and Technology. Dr.K. Mohana Sundaram, Professor and Head, Department of Electrical and Electronics Engineering, KPRIET presented an overview of a one day Seminar. Er.V.Angappa, Managing partner, Megatech Scientific Instruments, Coimbatore delivered the chief guest address elaborating the importance of Electric Vehicles. The proceeding was released in the form of CD by the dignitaries. Dr.C.Pazhanimuthu, Assistant professor (Sl.G), KPRIET proposed the vote of thanks. Technical Session - I The first Technical session started at 10:45 AM was on "Overview of Powertrain and Drivetrain" by Er.V.Angappa. The speaker shared his experiences in developing a new start-up company and challenges faced in developing electric vehicle and retrofit vehicles. The innovation in hybrid electric vehicle and the start-up ideas about electric vehicles were discussed with the participants. The key points discussed in the session are basics of drivetrain, types of powertrain transmission, and the difference between powertrain and drivetrain.





The second keynote session commenced at 12.00 pm delivered by Dr.K.Mohana Sundaram, Professor and Head, Department of Electrical and Electronics Engineering, KPRIET shared his expertise on 'Battery Management System'. The resource person details about the main functions of a battery management system such as battery protection, battery monitoring and battery optimization for electric vehicles. Also discussed the recent trends in charging technologies and challenge faced in battery management system. Technical Session - III There are 6 papers were presented in this session. The valedictory session began by 03:45 pm and Dr.K. Mohana Sundaram presented the certificates to the participants. Feedback from the participants was obtained. The workshop ended by 04.00pm.







#### **Webinar on Career Awareness Program in Core Sectors**

The department of Electrical and Electronics Engineering organized a webinar on "Career Awareness Program in Core Sectors" on 06/01/2023 for the student community. Ms. Gokul Sri N, III EEE A, Department of EEE delivered a heart-warming welcome remark. Mr. Shiva Prasad K, Mr. Jeevan Gowda D S, Mr. Sudeep G, Mr. Srivatsan S, Ms. Khushi S N, and Mr. Jeevan Sagar U IV EEE, Department of Electrical and Electronics Engineering, The National Institute of Engineering, Mysuru, presented the following deliberations,

- How to prepare for the core placement
- What are the core companies
- Salary package of the various companies
- What are the subjects need to prepare
- Internship in the core sector

Students expressed gratitude towards the resource person for their shared knowledge. This webinar is interesting for the students. 130 Participants of our students attended the webinar. Dr.I.Baranilingesan, Assistant Professor (Sl. G), Department of EEE proposed the vote of thanks.







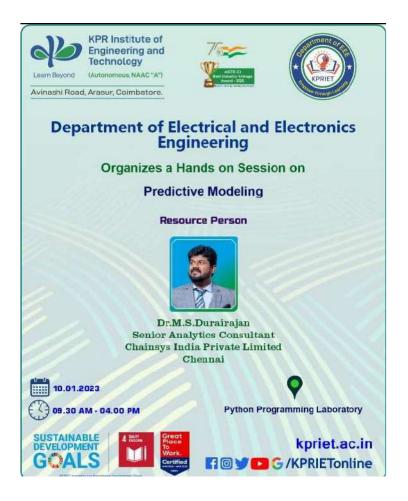






#### Hands on Session on Predictive Modeling

The Department of EEE organized the hands on session on predictive modeling on 10/01/2023. The Head of the Department Dr. K. Mohanasundaram welcomed the gathering with hearty welcome speech. Ms.H.P.Chitrika, office bearer of EEE association, introduced about the resource person. The resource person delivered the session and gave glimpse about the ERP model, BI and BA model, Machine learning model and R Programming. He explained about choices of job like information technology and entrepreneurship. The event ended with vote of thanks delivered by Prof. G.Saravanan, AP (Sl.G) / EEE.





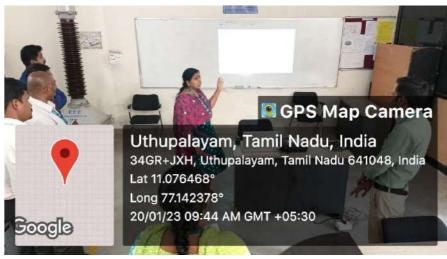




#### Power Quality Monitoring Using Fluke 434 Ii Series

The Department of EEE organized the hands on training on **Power Quality Monitoring using FLUKE 434 II Series** on 20/01/2023. The resource person delivered the session and gave glimpse about the FLUKE 434 II series Power Quality, Power Quality Analyzer, FLUKE 434 II Series Specification, Screen types and navigation and selection key, Setup the various configurations Monitoring of Various Electrical Parameters such as RMS voltage and current, THD, Real Power and reactive power and total energy consumed.



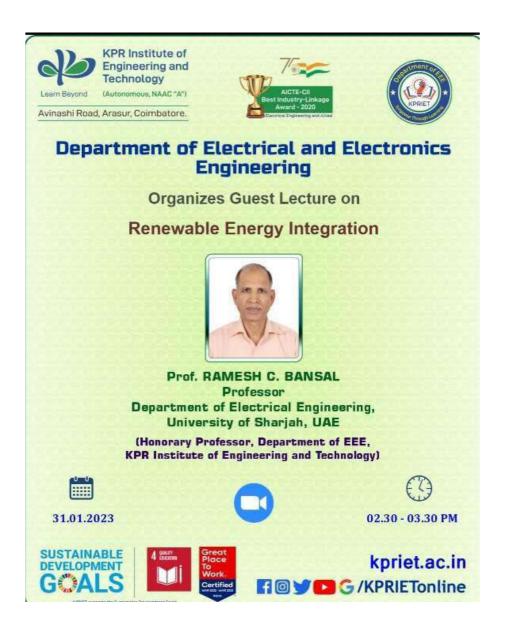






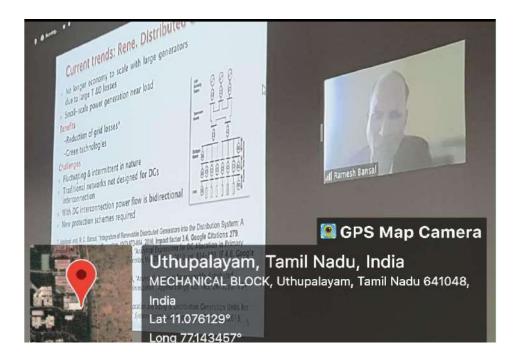
#### **Guest Lecture on Renewable Energy Integration**

The department of Electrical and Electronics Engineering organized a Guest Lecture on "Renewable Energy Intergration" on 31/01/2023 for the student community. Dr.A.Rakesh Kumar, Assistant Professor (Sl.G), Department of EEE delivered a heart-warming welcome remark. Professor Ramesh C Bansal, Department of Electrical and Electronics Engineering, University of Sharjah,UAE, presented the following deliberations, how to prepare for the core placement and core companies related to renewable sector. Students expressed gratitude towards the resource person for sharing his knowledge. This Guest Lecture was interesting for the students. 112 Participants of our students attended the Guest Lecture. Dr.A.Rakesh Kumar, Assistant Professor(Sl.G), Department of EEE proposed the vote of thanks.









#### **Publication by the Faculty Members**

- 1. Dr.Pandiyan P, "Design and simulation of piezoelectric MEMS logic gates", Ferroelectrics, January 2023.
- 2. Dr.Chandrika V S, "Fault diagnosis in a five-level multilevel inverter using an artificial neural network approach", Electrical Engineering and Electromechanics, January, 2023.
- 3. Dr.Pandiyan P, "Design and Development of Voice and Keypad Controlled Smart Wheelchair", IEEE conference on Smart Technologies, Communication and Robotics (STCR), January 2023.
- 4. Mrs.Revathi R, "Voice Controlled Indoor Air Purifier with Sleeping Aid", Mathematical Statistician and Engineering Applications, January 2023.
- 5. Mrs.Revathi R, "Iot Based Industrial Protection System with Energy Management", Mathematical Statistician and Engineering Applications, January 2023.
- 6. Dr.Ravindran S, "Electricity Price Forecasting using Multilayer Perceptron Optimized by Particle Swarm Optimization", IEEE conference on Smart Technologies, Communication and Robotics (STCR), January 2023.





# List of Eminent Academicians/Scientists Visit

S.No.	Name and Designation	Organization
1	Prof. Ramesh C.Bansal, Professor	Department of Electrical Engineering, University of Sharjah, UAE
2	Dr.S Shanmugam, Chairman	Institution of Engineers, Coimbatore Local Centre
3	Er.V.Angappa, Managing partner,	Megatech Scientific Instruments, Coimbatore
4	Dr.M.S.Durairajan, Senior Analytics Consultant	Chainsys India Private Limited, Chennai

# Faculty Participation in FDP/Seminar/Workshop/Orientation Program

S. No	Faculty Name	Type of the Event	Event Name	Venue	Duration of the Event
1	Mr.G.Saravanan	Online Course	Training Program	SDG- Resource Efficiency	30/01/2023
2	Dr.V.S.Chandrika	Online Course	E-Learning Course on Resource Efficiency	United Nations ESCAP	26/01/2023
3	Mr.C.Dinesh	Online Course	E-Learning Course on Resource Efficiency	United Nations ESCAP	26/01/2023
4	Dr.V.Parimala	Online Course	E-Learning Course on Resource Efficiency	United Nations ESCAP	26/01/2023
5	Mr.K.Balamurugan	Online Course	NASSCOM - Future Skill Prime	KPRIET	24/01/2023
6	Ms.R.Revathi	Seminar	Electrification for the Automotive Sector Towards a Sustainable Future	KPRIET	06/01/2023





# Students Participation in FDP/Seminar/Workshop/Orientation Program

S. No	Student Name	Year	Event Name	Venue	Prize
1	Mohamed Kaja Nawaz A.Z.	II	Dance Performance - Sangamam 23	KPRIET, Coimbatore	-
2	Nidhin S.	II	Debate Event - Youth Parliament	KPRIET, Coimbatore	-
3	Vishnu M.	II	Debate Event - Youth Parliament	KPRIET, Coimbatore	-
4	Saran S.	II	Organizer - Sangamam 23	KPRIET, Coimbatore	-
5	Nidhi Kothari D.	II	Dance Performance - Sangamam 23	KPRIET, Coimbatore	First
6	Sukant S.	II	Drone Racing	GMR Institute of Engineering and Technology, Vizag	First
7	Sukant S.	II	Hovercraft Racing	GMR Institute of Engineering and Technology, Vizag	First
8	Deepak J.	IV	Organizer - Sangamam 23	KPRIET, Coimbatore	5 <sup>th</sup> Place
9	Kavipriya R.	IV	Organizer - Sangamam 23	KPRIET, Coimbatore	5 <sup>th</sup> Place
10	Manikandan A.	IV	Organizer - Ignittron 23	KPRIET, Coimbatore	-
11	Devadharshini J.	III	Organizer - Sangamam 23	KPRIET, Coimbatore	-
12	Hari Hara Sudhan M.	III	Eureka - Sangamam 23	KPRIET, Coimbatore	-
13	Girithar R.R.	II	Organizer - Sangamam 23	KPRIET, Coimbatore	-
14	Divya Bharathi S.	II	Performer - Sangamam 23	KPRIET, Coimbatore	-
15	Deepan Kumar S.	II	Event: What a Kameral-Sangamam 23	KPRIET, Coimbatore	-
16	Dhanaraj P.	II	Event: What a Kameral-Sangamam 23	KPRIET, Coimbatore	-
17	Joshua R.	II	Event: Slow Cycle Race- Sangamam 23	KPRIET, Coimbatore	-
18	Agaash V.S.	II	Event: Slow Cycle Race- Sangamam 23	KPRIET, Coimbatore	-





### Centre for Excellence















Industry Institute Interaction



















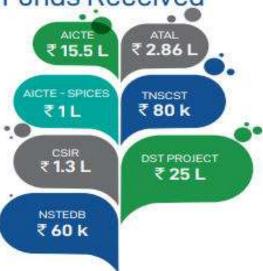
### Top Recruiters



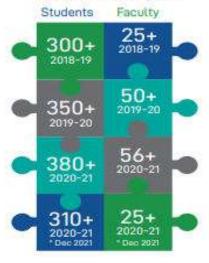
#### R&D

h index	95+	i10	110+	Publications	410+
Patents	22+	Conferences	120+	Copyrights	1
NPTEL	250+	Awards	18+	Citations	5450+

## **Funds Received**



# Internships



#### CONTACT

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