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 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.V.Kumar Chinnaiyan	Professor & Head
2.	Dr.J.Karpagam	Professor
3.	Dr.K.Mohana Sundaram	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.	Ms.B.Lalitha	Assistant Professor (Sr.G)
17.	Ms.R.Revathi	Assistant Professor (Sr.G)
18.	Mr.A.Mohamed Ibrahim	Assistant Professor (Sr.G)

19.	Mr.P.Ravikumar	Assistant Professor (Sr.G)
20.	Mr.V.Kamalkumar	Assistant Professor(Sr.G)
21.	Mr.C.J.Vignesh	Assistant Professor(Sr.G)
22.	Mr.C.Dinesh	Assistant Professor(Sr.G)
23.	Mr.K.Balamurugan	Assistant Professor
24.	Mr.M.Mohana Sundaram	Assistant Professor
25.	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	Technical Officer
3.	Mr.C.Gobalakrishnan	Lab Technician
4.	Mr.K.S.M.Manoj Kumar	Lab Technician
5.	Mr.T.Loganathan	Lab Instructor
6.	Mr.M.Muthukumar	Lab Instructor
7.	Mr.M.Karuppusamy	Lab Technician
8.	Ms.P.Parameshwari	Office Assistant

### ASSOCIATION ACTIVITIES

#### EKKI Influencers Workshop

The EKKI-KPRIET International Water Technology Centre, KPR Institute of Engineering and Technology, Coimbatore organized the "EKKI Influencers Workshop" in association with EKKI Pumps on 20/07/2022. The following topics were discussed in the workshop.

- Single phase and three phase supply system
- Voltage fluctuations and Phase sequence
- Motor performance characteristics
- Power quality issues
- Cavitation, Priming, Water hammering
- Losses in a pumping system
- Vertical Vs horizontal pump performance
- Selection of pumps
- Control panel and cable
- Trouble shooting

Prof.B.Lalitha, AP (Sr.G)/Department of EEE, KPR Institute of Engineering and Technology welcomed the gathering and the Head of the Department, Dr. V. Kumar Chinnaiyan, Department of EEE, KPR Institute of Engineering and Technology, felicitated the function. Dr. M.Akila, Principal, gave the presidential address and deliberated the purpose of this training to the plumbers and dealers of EKKI Pumps. Nearly 56 plumbers and dealers from Cochin and Calicut region were participated in the workshop. The organizer made all the necessary arrangements for the smooth conduct of the program. The program was concluded with the feedback session and certificate distribution to the participants. Prof.C.J.Vignesh, AP (Sr.G) delivered the vote of thanks.















#### **Guest Lecture on Power System Modeling**

The department of Electrical and Electronics Engineering organized a Guest Lecture on Power System Modeling on 21/07/2022. Dr.S.Ravindran, AP (Sl.G)/Department of EEE, KPR Institute of Engineering and Technology welcomed the gathering and the Head of the Department, Dr. V. Kumar Chinnaiyan, Department of EEE, KPR Institute of Engineering and Technology, felicitated the function. The chief guest Er. Narendran Krishnan, Senior Construction Electrical Engineer, Al –Ghanim International Co.W.L.L, Kuwait deliberate about power system modeling on real time environment, opportunities for electrical engineers in the power system area of planning, design, relay coordination, electrical construction and commissioning. Students gained knowledge on power system design and design software's. They got the idea of reading single line diagram of the power plant.









### Quiz Series on Electric Vehicles XXXVIII

The department of Electrical and Electronics Engineering organized a "Quiz Series on Electric Vehicles – XXXVIII" on 23/07/2022 open to all, who are keen on emerging EV technologies. The poster is circulated to various Institutions and in social media digitally. Participants from various Institutions, Universities and Industries across India have participated in this quiz. This Quiz had 10 questions covering Electric Vehicle Technologies

- Each question carries 10 marks.
- The participants who scored 50% and above were issued with Certificate of Appreciation.

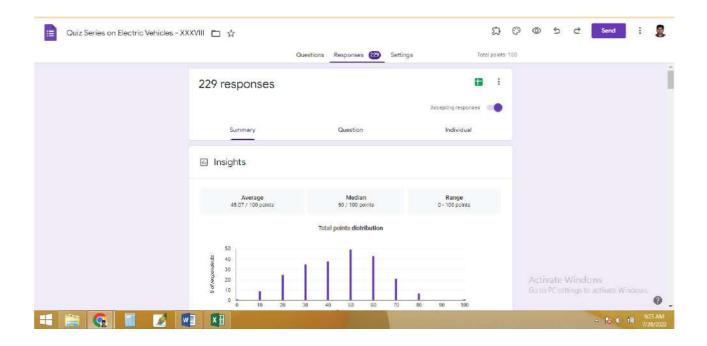
The details of the Program Participants are given below:







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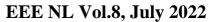


### Seminar on Angel Investment/VC Funding Opportunity for Early Stage Entrepreneur

The department of Electrical and Electronics Engineering in association with Centre for Innovation, Incubation and Entrepreneurship Development organized a seminar on "Angel Investment/VC Funding Opportunity for Early Stage Entrepreneur" on 26/07/2022 open to all, who are keen on Entrepreneurship.

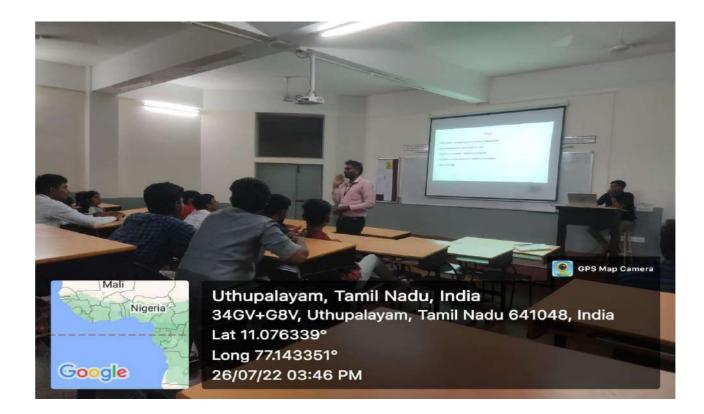
The student Ms. J. Devadharshini welcomed the gathering and Associate Professor Dr.P.Pandiyan felicitated the gathering. The resource person Mr. S. Sam Jaikumar, Field Coordinator, EDII – TN, IEDP – Hub – AURCC deliberated the sessions and gave glimpse about Angel Investment/VC Funding Opportunity for Early Stage Entrepreneur. Nearly 52 students have benefited. He shared his own experiences and ignited the students to become an entrepreneur. The session was concluded with the vote of thanks delivered by the student Mr. M. Jerome.















#### **Association Inauguration**

The Department of Electrical and Electronics Engineering Inaugurated the EEE student association on 29/07/2022. А heart-warming welcome remark was delivered by Mr. A. Manikandan (Secretary - EEE student Association) and Prof. S. Vivekanandan, AP (SI.G)/EEE was delivered the presidential address Mr. Jones Barnabas (Joint Secretary) presented a brief note about our chief guest and the session was take our by our chief guest Mr. L. Sathyanarayanan, Director – Operations, Velan Valves India Private Limited, Coimbatore. He was shared the experience in core industry and future technologies required by the core industry. The event is concluded with vote of thanks delivered by Ms. R. Kavipriya (Treasurer).





### Alumni Series I

The Department of EEE organized an Alumni on 30/07/2022. A heart-warming welcome was delivered by Mr. A. Manikandan (Secretary – EEE Association), Chief Guest was introduced by Ms. Chithrika (Office Bearer) and Er. R. Jeevanantham, Lead Engineer – FIS Global, Chennai addressed the gathering and gave glimpse about launching the career in Post Pandemic Scenario. He was enthusiastically shared his experience and also discussed about the interview process. The working culture of IT industry with glimpse of waterfall to agile method is discussed. Ms. Vaishnavi (Joint Secretary – EEE Association) delivered Vote of thanks.







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### Publication by the Faculty Members

- Dr.A.Karthick, "Investigation on Mechanical and Durability Performance of Reinforced Concrete Containing Red Soil as Alternate for M-Sand ", Journal of Nanomaterials, July 2022.
- 2. Dr.A.Karthick, "Mechanical Properties and Electrical Resistivity of the Friction Stir Spot-Welded Dissimilar Al–Cu Joints", International Journal of Polymer Science, July 2022.
- Dr.A.Karthick, "IoT-Based Intelligent System for Internal Crack Detection in Building Blocks ", Journal of Nanomaterials, July 2022.
- 4. Dr.V.Parimala, "A Novel Neuro Fuzzy Method DTC of Induction Motor Drive for Efficient Torque Response", International Conference for Emerging Technology, July 2022.

#### **Book Chapter Publication by the Faculty Members**

• Dr.P.Pandiyan, "A Comprehensive Review on Energy Storage System ", Smart Electrical Grid System: Design Principle, Modernization, and Techniques, July 2022.







## List of Eminent Academicians/Scientists Visit

S.No.	Name and Designation	Organization
1	Mr. K.V.Anil Kumar, Sales Manager	EKKI Pumps, Coimbatore
2	Er. Narendran Krishnan, Senior Construction Electrical Engineer	Al –Ghanim International Co.W.L.L, Kuwait
3	Mr. S. Sam Jaikumar, Field Coordinator	Entrepreneurship Development and Innovation Institute, Chennai
4	Mr. L. Sathyanarayanan, Director	Velan Valves India Private Limited, Coimbatore
5	Er. R. Jeevanantham, Lead Engineer	FIS Global, Chennai

## **Student Placement Details**

S.No.	Student Name	Organization
1	Sanjey R.	Kone Elevator, Chennai
2	Karthi M.	Kone Elevator, Chennai
3	Magendrakumar C.B.	Kone Elevator, Chennai
4	Manoj K.	Kone Elevator, Chennai
5	Sakthi Sree P.	Kone Elevator, Chennai
6	Sudharsana J.	Kone Elevator, Chennai
7	Rajeshkumar C.	Kone Elevator, Chennai
8	Ramakrishnan M.	Kone Elevator, Chennai
9	Vignesh.S.	Kone Elevator, Chennai
10	Rathish D.	Advantech, Bangalore
11	Kaushikkumar.K.	Advantech, Bangalore





