

## OBJECTIVE

Electric vehicles are the future of transportation. Electric mobility has become an essential part of the energy transition and will imply significant changes in vehicle manufacturers, governments, companies and individuals. Currently, there are several HEVs and EVs commercially available. While the EVs are fully-powered by the battery, HEVs have more or less intensive usage of the battery depending on the model. Considering on the penetration of electrical energy in the HEV architecture, i.e. the power ratio between the ICE and the electric machines, it is possible to distinguish the degrees of hybridisation. In the course of vehicles becoming "More Electric" with increasing number of onboard electrically powered subsystems for both commercial and military applications, the need to manage the vehicular power system is imperative. Electrical loads for both traction and ancillary loads are expected to increase as the automotive power system architecture shifts towards a more silicon rich environment. The seminar focuses mainly on significant research areas in EV and HEV which have been directed towards improving propulsion systems and energy storage units. This seminar will facilitate the researchers to explore more avenues in the area of automotive electronics as well as power converter topologies and with their mathematical design and simulation would provide deeper understanding of the electric vehicle technologies.

## OUTCOME OF THE SEMINAR

- ❖ This workshop will be a forum to investigate the research perspectives on latest control strategies of Electric Vehicles.
- ❖ This workshop will provide a platform to an in-depth discussion on the efficient battery management systems and technological developments in converter topologies.

## TOPICS TO BE COVERED

- ❖ Introduction to Electric Vehicles
- ❖ Converter Topologies for Electric Vehicle
- ❖ Power Management System in Electric Vehicle
- ❖ Control of Electric Vehicles
- ❖ Modeling and Simulation using MATLAB

## ORGANIZING COMMITTEE

Chief Patron	: <b>Shri. K.P. Ramasamy</b> <i>Chairman</i>
Patron(s)	: <b>Dr. A. M. Natarajan</b> <i>Chief Executive</i> <b>Dr. K. Bommanna Raja</b> <i>Principal</i>
Convenor	: <b>Dr. V. Kumar Chinnaiyan</b> <i>Professor and Head / EEE</i>
Organizing Committee	: <b>Dr. J. Karpagam</b> <i>Professor/EEE</i> <b>Dr. R. Uthirasamy</b> <i>Associate Professor/EEE</i> <b>Prof. V. J. Vijayalakshmi</b> <b>Prof. P. Ravi Kumar</b> <i>Assistant Professors</i> <i>(Sr.G)/EEE</i>

## RESOURCE PERSONS

Expert members from Industries and reputed Academic Institutions.

## HOW TO APPLY

The participants can send their duly filled-in registration form to the coordinator along with the demand draft in favor of "THE PRINCIPAL, KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY" payable at Coimbatore. The applicants shall send their applications in the prescribed format to reach us on or before 14-08-2018.

**Note:** Multiple Registrations are also permitted with a single DD.

## INTENDED AUDIENCE

Academicians, Research Scholars, Industry Personnel, Undergraduate and Postgraduate students.

### Vision of the Department

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 of the Department

- ❖ 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**.

## One Day National Level Seminar

On

## "Research Opportunities and Challenges in Power Converters for Electric Vehicle Applications"

**18<sup>th</sup> August, 2018**

### REGISTRATION FORM

Name :  
Designation :  
Organization :  
Gender :  
Age :  
Educational Qualifications :  
Address for Communication :  
Mobile Number :  
E-mail ID :  
Experience :  
Teaching : \_\_\_\_\_ Year(s)  
Others (Specify) : \_\_\_\_\_ Year(s)

Accommodation Required: Yes\*/No

### Payment Details

DD. No. :  
Amount :  
Date :  
Bank Name :

*\*Limited Accommodation will be provided on chargeable basis of Rs. 150/day*

### DECLARATION:

The information is true to the best of my knowledge. I agree to abide by the rules and regulations governing the course. If selected, I shall attend the program for the entire duration.

Place:

Date: Signature of the Applicant

### IMPORTANT DATES TO REMEMBER:

Last Date for Receipt of Applications : 14/08/2018

Date of Intimation Regarding Selection : 16/08/2018

### REGISTRATION FEE:

Industrial Participants : Rs.1000 /-

Academicians / Research Scholars : Rs.500/-

UG/PG Students : Rs.300/-

(Course fee includes refreshments, working lunch and course materials)

### FOR RTGS/NEFT TRANSFER:

Name : KPR Institute of Engineering and Technology

Account No : 1122135000011955

IFSC code : KVBL0001122

Bank : Karur Vysya Bank

Branch : RS Puram, Coimbatore.



Registration form may also be submitted through link below or scan QR Code

<https://goo.gl/MUw2W8>

***Application form completed in all respect is to be sent to:***

Dr. V. Kumar Chinnaiyan M.E., Ph.D.  
Convenor

**“Research Opportunities and Challenges in Power Converters for Electric Vehicle Applications”**

Department of EEE

KPR Institute of Engineering and Technology  
Arasur, Coimbatore – 641 407

**For any other queries contact:**

Dr. R. Uthirasamy-9788576425, 9943171058  
e-mail: uthirasamy.r@kpr.ac.in

### ABOUT THE INSTITUTION

KPR Institute of Engineering and Technology (KPRIET) was established in the year 2009. The institution is promoted by KPR Group, a renowned business house in India with interest in Textiles, Wind Energy and Sugar. The main focus is to offer quality education to the younger generation to strengthen our nation in the field of Engineering and Technology. Our institution is approved by AICTE and affiliated to Anna University, Chennai and Accredited by NAAC with ‘A’ Grade. The institution offers 7 UG courses in B.E.- Bio Medical Engineering, Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering, Mechanical Engineering and 4 PG courses in M.E. -CAD/CAM, VLSI Design, Computer Science and Engineering and Structural Engineering. The vision is to become a premier engineering and technological institute of academic excellence through its commitment in offering value based education to its students and to improve their technical, intellectual and professional skills in order to enable them to meet the diverse needs and challenges of the society, the nation and the world at large. KPRIET is the youngest institution accredited by NBA.

### ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering enthalls the students to gain advanced knowledge and induces them with confidence to face the challenges of technical era. The department believes in serious academic pursuit and encourages radical and original thinking which paves the way for creativity and innovative ideas. The intellectual and dedicated team of faculty members with specialization in diversified fields has helped in making it one of the best departments on campus. Established 16 kWp solar power plant for enhancing research activities. Class rooms are enabled with ICT tools and the laboratories are equipped with live demonstration models. All the cadres of students are molded into successful graduates through Outcome Based Teaching Learning (OBTL). There are about 30 Faculty members in our department. Among them 6 are Ph.D. holders and 20 of them are pursuing Ph.D. Many of the students from our department won many prizes in various technical & non-technical competitions. We are racing towards 100 % placement.

## One Day National Level Seminar

on

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**18<sup>th</sup> August, 2018**



**Organized by**

**Department of  
Electrical and Electronics Engineering**



**KPR**  
Institute of Engineering & Technology

*(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25, Accredited by NBA (CSE, ECE, EEE & MECH) and NAAC with ‘A’ Grade, an ISO 9001:2015 and ISO 14001:2015 Certified Institution, DSIR Certified Scientific and Industrial Research Organization)*

**In Association with**

