## **Organizing Committee**

#### Chairman

CA.V. K. Dharmarajan, B.B.A., F.C.A., Secretary

Dr. S. Senthil, M.E., Ph.D., Principal

#### Coordinator

Dr. D. Prince Winston, M.E., Ph.D., Prof & Head / EEE 16 years of teaching experience



#### Co-coordinator

Dr. B. Gurukarthik Babu, M.E., Ph.D., Asso. Prof. / EEE 14 years of teaching experience



#### who can attend?

**Assistant Professors/Professors / Associate** Professors / Ph.D. Scholars/PG students

## for registrations please contact

Dr.D.Prince Winston, Prof & Head / EEE

Dr. B. Gurukarthik Babu, Asso. Prof. / EEE

#### Website:

http://www.kamarajengg.edu.in/





# **Key Highlights of the Programme**

- "NO CHARGE FOR REGISTRATION **,COURSE AND CERTIFICATION "**
- · Hands-on Sessions, Live demo sessions and Industrial Exposure

#### **OBJECTIVES**

A game changing solution to Ensure access of affordable, reliable, sustainable transport through green energy for safe and resilient operation in alignment with the Sustainable Development Goal 7 (Energy) and 11 (Transport)

- To adopt Electric Vehicle and Hydrogen Fuel Cell technology by reducing greenhouse gas emissions and improve air quality.
- · To enhance Infrastructure by Improving efficiency and affordability of sustainable transportation.
- To foster Innovation by advancing R&D through publicprivate partnerships.
- To integrate Renewable Energy by promoting sustainable energy use in Electric Vehicle and hydrogen infrastructure.
- · To strengthen multisectoral partnerships by Driving technological-advancements in sustainable transport.







(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI) S.P.G.Chidambara Nadar - C.Nagammal Campus S.P.G.C. Nagar, K. Vellakulam - 625 701 (Near VIRUDHUNAGAR).





# **DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

## **Organizes**

# ATAL SPONSORED ONE WEEK ONLINE **FACULTY DEVELOPMENT PROGRAM ON**



NAVIGATING THE GREEN REVOLUTION: INTEGRATING ELECTRIC VEHICLES AND HYDROGEN FUEL TECHNOLOGIES FOR SUSTAINABLE MOBILITY

03rd - 08th February, 2025 Timings: 6.00 p.m to 9.00 p.m



## **ABOUT THE COLLEGE**

Kamaraj College of Engineering and Technology (KCET), is a self-financing Autonomous Institution established in the year 1998. The Institution is approved by AICTE, New Delhi, and affiliated to Anna University, Chennai. The Institution offers 9 UG programmes and 2 PG programmes. Our College has been recognized as Research Institute by Anna University, Chennai. The Institute is accredited by National Assessment and Accreditation Council (NAAC). Seven UG programmes got accredited by the National Board of Accreditation (NBA). College is ranked 28th among India's Top Engineering Colleges in DQ-CMR Employability TSchool Employability Index. The college also received Best Engineering College award in South India for Industry Interface - 2022 by CEGR, New Delhi, and has been recognized as a Scientific and Industrial Research Organization (SIRO) the Department of Industrial Research (DSIR) New Delhi.



The Department of Electrical & Electronics Engineering was established in the year 2002. It offers UG program in Electrical and Electronics Engineering and PG program in Power Systems Engineering. The Department has Research Center approved by Anna University, Chennai and offers Ph.D. Program. The Department has obtained Permanent Affiliation from Anna University, Chennai for the UG program. The department has recently received funds worth 72 lakhs from MSME, IE India, TNSCST, AICTE, DST for projects, MODROBS, etc.

## **TOPICS TO BE COVERED**

- 1. Introduction to Electric Vehicles (EVs)
- 2. Introduction to Hydrogen Fuel Cell Vehicles (HFCVs)
- 3. EV Components and Design
- 4. Hydrogen Fuel Cell Components and Design
- 5. Energy Management in EVs and HFCVs
- 6. EV Integration in Smart Grids
- 7. HFCV Integration in Transportation Networks
- 8. Policy and Economic Aspects
- 9. Advanced Battery Technologies
- 10. Innovations in Hydrogen Technology
- 11. Autonomous and Connected Vehicles





## RESOURCE PERSONS

- Dr.S.Senthil Kumar.Professor .NIT.Trichy
- Dr.Ahmad Asrul Ibrahim, Professor, University Kebangasam, Malaysia
- Dr.K.Shanti Swarup, Professor, IIT, Madras
- Prof. Jayanta Deb Mondol, Professor, Belfast School of Archi & the Built Envi, Ulster University, Uk
- Dr.S.Kumaravel, Asso. Prof., NIT, Calicut.
- Er.Kesavan alangaramohan,CEO,Quantanics
  Techserv Pvt,Ltd,Madurai.
- Dr.Zakir Hussain Rather, Professor, IIT, Bombay
- Er.Lakshman,Annamalai,Vicepresident,TVS, Eurogrip,Madurai
- Dr.S.Rajesh, Deputy Research Associate, High Energy Batteries, Mathur
- Er.S.Selva Kumar, Chief Executive Engineer, Power Projects, Chennai.
- Dr.S.Kalyani,Subject Matter Expert,Electrical, L&T EduTech,Chennai,
- Dr.Marshal R,Scientist,Indian Computer Emergency Response Team,Delhi.
- Mr.T.Senthil,TMI Head,TATA Motors,Madurai.

#### **OUTCOMES**

- 1. Reduced Emissions and Improved Air Quality through Adopting of EVs and hydrogen fuel cell technologies leads to a significant decrease in greenhouse gas emissions, enhancing urban air quality.
- 2. Efficient and Affordable Transportation through Enhanced infrastructure ensures sustainable transportation is efficient, affordable, and accessible to all communities.
- 3. Innovative Solutions by advancements in R&D through public-private partnerships drive innovation in sustainable transport technologies.

