

REPORT OF ONE DAY WORKSHOP

Name of Centre / Overseas Chapter

IE(I) Kattankulathur Local Centre, 603 203

Title of Activity:

One Day Skill Development on Exploring Sensors in Electric Vehicle Applications

Activity under Divisional Board

ELDB – Electrical Engineering Division

Date: **28.10.2024**

Venue:

Conference Hall, EEE Department, Kattankulathur, SRMIST



Group Photo during Inaugural and valedictory Session with the banner of IEI

Photos during technical sessions

Sensors in Electric Vehicle Applications

Electric vehicles (EVs) have emerged as a sustainable alternative to conventional internal combustion engine vehicles, offering reduced emissions and dependence on fossil fuels. The one-day skill development workshop on "Exploring Sensors in Electric Vehicle Applications" is designed to provide participants with a comprehensive understanding of the role, function, and application of sensors in the context of electric vehicles (EVs). With the rapid advancement of EV technology, sensors play a pivotal role in enabling various functionalities such as battery management, safety systems, autonomous driving, and environmental monitoring. This workshop aims to equip participants with the necessary skills and knowledge to effectively work with sensors in EVs, fostering their professional development in this rapidly evolving field.

The workshop will cover various aspects related to sensors in electric vehicles, including types of sensors, their functionalities, integration challenges, and real-world applications. Participants will have the opportunity to engage in interactive sessions, hands-on demonstrations,

and discussions with industry experts. The workshop is targeted to the researchers working in the field of EVs, and UG and PG students.	
Details of the Sessions:	
(Forenoon) Inaugural Session Inaugural programme, Keynote Address	Inaugural programme , Dr. R. Senthil, FIE, Honorary Secretary, KTRLC, IE(I), has delivered a speech about the Institution of Engineers, India and shared the benefits of organizing events through IE(I) and motivated to the students to become members to participate in more events with IEI.
(Forenoon) Technical Session I 1 Invited Lecture (about 1 hour duration) and minimum 4 papers or two invited lectures / presentations	Technical Session by: Mr. B. Suresh, Lead Hardware engineer, Valeo India private limited, Chennai. Topic: Overview of Sensors in EV applications Technical Session by: Mr. R. Venkatesan, EEE, SRMIST, Kattankulathur Topic: Importance of Sensors in EV Applications, Key Challenges and Opportunities
(Forenoon) Technical Session II 1 Invited Lecture (about 1 hour duration) and minimum 4 papers or two invited lectures / presentations	Technical Session by: Mr. B. Suresh, Lead Hardware engineer, Valeo India Private Limited, Chennai. Topic: Types and Functions of Sensors in Electric Vehicles, Classification of Sensors: Position, Temperature, Pressure, etc. Technical Session by: Dr. A. Dominic Savio, EEE, SRMIST, Kattankulathur Topic: Sensors used in EV applications, Troubleshooting Common Sensor Issues
(Afternoon) Technical Session III Minimum 2 papers or two invited lectures / presentations	Technical Session by: Ms. Divya, Tapcon Electricals, Chennai. Topic: Sensors utilized in Battery Management, Motor, Control and Safety Systems. Technical Session by: Dr. A. Dominic Savio, & Dr. C. Balaji, EEE, SRMIST, Kattankulathur Topic: Demonstration on Sensor Integration and Calibration
Day-2 (Afternoon) Valedictory Session	Valedictory Address by Dr. S. Dhanalakshmi, FIE, Chairman, KTRLC, IE(I) and Dr. R. Senthil, FIE, Honorary Secretary, KTRLC, IE(I), The valedictory function started at 3.45 pm and Dr C. Balaji recapped the list of sessions that happened and the details of registration. 34 Participants, Including the research scholars working in the EV area, appreciated the insights they got from the technical sessions. Other participants wanted to attend more workshops related to Electric vehicles. Also, the participation certificate was distributed in the valedictory and the event ended successfully with the national anthem.