## **REPORT**

## Five day Faculty Development Programme on Electric and Hybrid Vehicle at MES College of Engineering, Kuttippuram 16 July 2019 – 20 July 2019

Department of Electrical and Electronics Engineering organized a Faculty Development Programme on Electric and Hybrid Vehicles at M.E.S College of Engineering, Kuttippuram from 16<sup>th</sup> -20<sup>th</sup> July 2019. The FDP aims to provide opportunities to enrich the theoretical and technical knowledge of faculty members of various Engineering colleges. The programme is also intend to develop the knowledge of participants for simulation with advanced software in the area of Electric and Hybrid vehicles. The programme was inaugurated by Dr. Mohammed Bedeeuzaman, Vice Principal, MESCE, Kuttippuram. Dr.Nafeesa K, Head of the Department of EEE detailed the significance and relevance of the FDP. Dr. Sasidharan Sreedharan, Head of the Department CSE, MESCE, Kuttippuram and Dr. Ajaya Babu, Asst.Prof, EEE Department, NSS College of Engineering, Palakkad were also emphasized the benefits of this kind of FDP and facilitated the function. Prof Jayasree N.R., Associate professor, EEE Department expressed the vote of thanks.

Faculty members from various Engineering colleges and Research/M.Tech scholars were participated the programme effectively. On the first day, Dr. Ajay Babu ,Asst Prof., EEE Department, NSS College of Engineering, Palakkad handled a session on 'Electric vehicles and energy management strategies' and Prof. Thanweer Gafoor delivered an interactive lecture on Hybrid electric drive trains.. In the following days, Er. Paul Davis, Hykon India Ltd, Dr. Nikhil Sasidharan, Assistant professor, NIT Calicut, Dr. Sheik Mohammed, Assistant Professor, TKM college of Engineering, Kollam, Er.Ismail, Assistant Professor, Wachemo University, Ethiopia, Dr. Nafeesa K., HoD, EEE department MESCE, Kuttippuram, Dr. Sasidharan Sreedharan, HoD CSE Department, MESCE, Kuttippuram were handled various sessions on 'Energy storage requirements in Hybrid and Electric vehicles', 'DC communication grid charging station', 'Design of Electric and hybrid vehicles', 'Electric components used in hybrid and electric vehicles', 'Role of PEV in smart grid' and 'Sizing of Electric and Hybrid Vehicles'. Case study on Hybrid Electric Vehicle which is designed and implemented by students of MES college of Engineering and hands on session for simulation using MATLAB software were also given. All the sessions were very much informative. The discussed areas are of great benefit for the participants as the topic match with the academic curriculum. All the participants were inspired and enlightened as topics discussed were related to futuristic technologies. On the Valedictory session, Dr.Sheik Mohammed, Assistant Professor, EEE Department, TKM College of Engineering, Kollam distributed the certificates to participants. Participants were put forward their feedback in the valedictory session. The programme came to an end with vote of thanks by Prof. Priya N., Assistant Professor, EEE Department, MESCE, Kuttippuram. This faculty development programme accomplished its key objective of enhancing the theoretical and technical knowledge of faculty members who are handling the young and bright engineering students.



Dr. Badeeuzaman, Vice Principal ,MESCE, Kuttippuram inaugurating the FDP



Session by Dr. Ajay Babu, Assistant Professor, NSSCE, Palakkad



Session by Dr. Nafeesa K, Professor, MESCE Kuttippuram



Session by Er. Paul Davis, Application Engineer, Hykon India Ltd



Memento presented to Prof. Ismail E.K, Wachemo University, Ethiopia



Session by Dr. Sasidharan Sreedharan, HoD, CSE Dept., MESCE



 ${\it Memento\ presented\ to\ Dr.\ Nikhil\ Sasidharan,\ Assistant\ professor,\ ,\ NIT,\ Calicut}$ 



Session by Dr. Sheik Mohammed, Assistant Professor, EEE Department, TKMCE, Kollam



Case Study on Hybrid Vehicle designed by EEE Department



Session by Prof. Thanweer Gafoor, Asst. Professor, MESCE



Certificate distributed by Dr. Sheik Mohammed



Participants of FDP