

Webinar on “Emerging trends in Electrical Machines Drives: Design and Application ”

IEEE Student Branch College of Engineering Karunagappally firmly believes in imparting enriched knowledge resources to the youth and clasp onto every opportunity that might help achieve the target. One of the clawed-in effort was taken up as *IEEE SB CEK* in association with *Industry Applications Society* organised a webinar on “**Emerging trends in Electrical Machines Drives: Design and Application** ” by **Mr Adil Usman**, Senior Member IEEE, Phd IIT Mandi, Chair IEEE MGA-SAC -SPC (R1-R10), Member IAS-PES Electrical Machinery Committee 2020 on 27th May 2020.

The backbone of the topic seemed quite enticing and evidently proved to be more amusing as Mr. Adil stepped in deeper to expose the true insight of his session. First off, he explained the purpose of such an electric drive system through detailed graphs and block representation for the better understanding of the attendees. He explained the basic individual components needed in such a system including power converter, load, electrical machine, controller (Field Programmable Gate Array). He gave an overview on various modes of such systems and specified various applications of each mode. The speaker quite effectively blended in with the technical restrictions and demands, his ideas of increasing the system’s performance by the selection of electrical drives. As the concepts of such a system became clear, he moved on to the development of advanced electrical drive systems using brushless synchronous motor and FPGA based controller, and explained each and every basic component constituting them. Mr. Adil gave an overview of the modelling, working and flow of the whole system using various diverse diagrammatic block representations with detailed functioning and graphs.

The session was quite a revelation on the elevating developments in technology with attendees being around 30. The participants dynamically participated to calm out their curiosities and entangle their doubts. Empowering sessions like this involving experienced and established personalities are indeed to look forward to as their footsteps are going to lead us to the unimaginable innovations.

