

Webinar Report

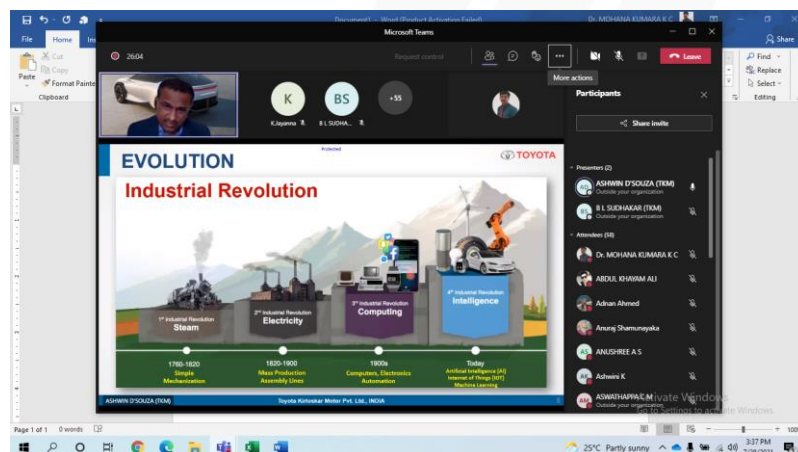
Topic: Hybrid Electrical Vehicle Technology- Basics

Department of mechanical engineering is organized a webinar on the topic **Hybrid Electrical Vehicle- Basics on 28th July 2021** for the benefit of students. This webinar conducted in association with **Toyota Kirloskar Motors Ltd. Bidadi, Bangalore. Mr. Ashwin D Souza**, speaker of this webinar explained the basics on the above said topic. Prof. Devaraj M R welcomed all the faculty and student participants for this program. The webinar started at 3.30 PM and finished at 5.15 P M after the discussions and interactions for the participants queries. Mr. Ashwin D Souza the presenter of the webinar started his speech and briefed right from the history of automobiles and their revolutions as the technology developed.

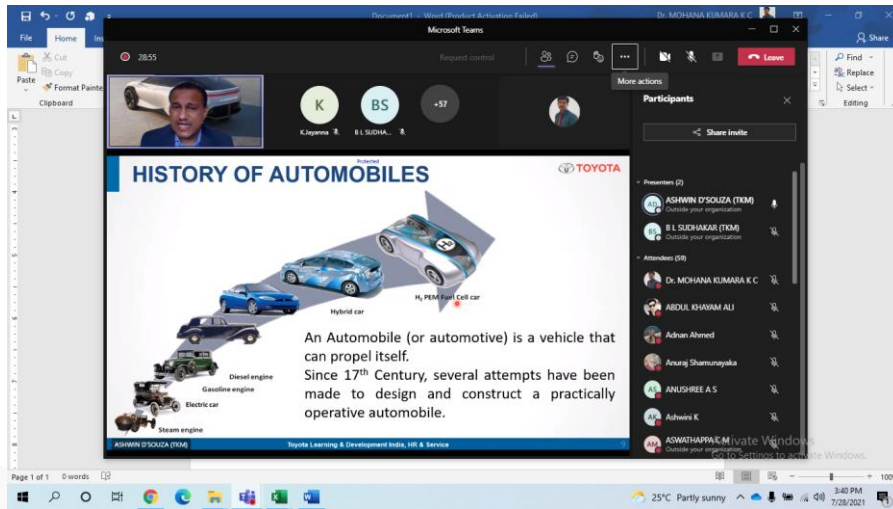
In his speech highlighted on categories of xEV vehicles such as Battery EV, Fuel Cell EV and Hybrid EV etc. He also touched upon the hybrid variants such as Micro, Mild and Strong.

The speaker also spoke on Batteries like Lead-Acid battery, Lithium-Ion battery and solid-state battery. Mr. Ashwin also covered about function of Electric motor and power control unit in the hybrid vehicles including upcoming technologies in the field of automotive sector. The session was completed after expressing thanks to speaker and all participants by Dr. Srinivasa K.

The team involved in organizing this event are **Dr. Rathnakar G** Prof. and Dean, **Dr. Srinivasa K** HOD, Department of Mechanical Engineering. The program coordinated by **Prof. Devaraj M R**, **Dr. Mohanakumara K C** and **Prof. Niranjana kumar V S** Department of Mechanical Engineering.



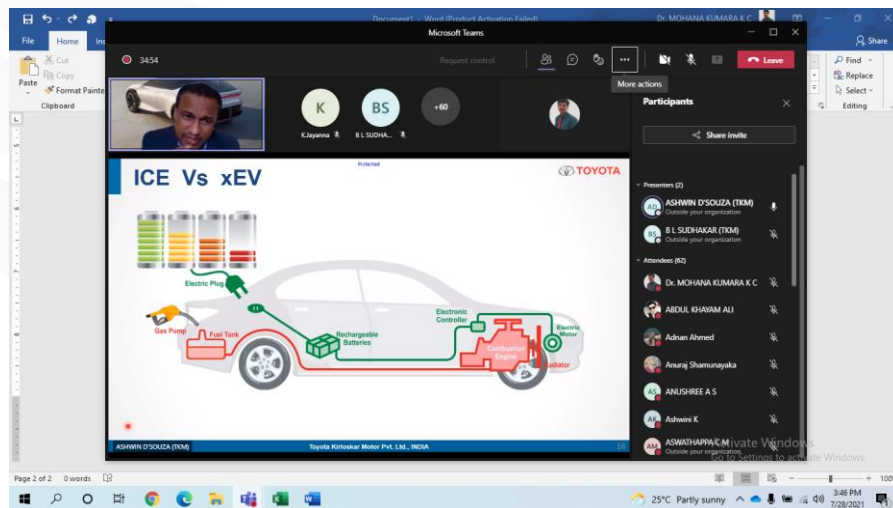
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HISTORY OF AUTOMOBILES

An Automobile (or automotive) is a vehicle that can propel itself. Since 17th Century, several attempts have been made to design and construct a practically operative automobile.

Diagram showing engine types: Steam engine, Electric car, Gasoline engine, Diesel engine, Hybrid car, H₂ PEM Fuel Cell car.



ICE Vs xEV

Diagram comparing ICE (Internal Combustion Engine) and xEV (Electric Vehicle) components: Gas Pump, Fuel Tank, Rechargeable Batteries, Electronic Controller, Electric Motor, Electric Plug, and Electric Vehicle.



CATEGORIES of xEV

BATTERY EV

FUEL CELL EV

HYBRID EV