



NALLA NARASIMHA REDDY

Education Society's Group of Institutions–Integrated Campus

Approved by AICTE, PCI, New Delhi. Affiliated to JNTU - Hyderabad

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School of Engineering DEPARTMENT OF MECHANICAL ENGINEERING

Date 12-12-2022

A Report on work shop on “Advances in Battery technologies for Electric and Hybrid Vehicles”

Advances in Battery Technology for electric and hybrid vehicles provide an in-depth insight into the research activities being conducted on the development of more efficient batteries capable of travelling long distances. It is aware that the electric vehicles and hybrid vehicles are the future automobiles for transportation and other requirements. The availability of the batteries for long life is a major challenge and the lot of research work is going at different corners of India and across the globe. The government's target to ensure that at least 15% of the vehicles in the country are electric by 2030 is aimed at reducing vehicular pollution for about 11% of India's carbon emissions. Electric vehicles are expected to account for 30% of vehicle sales in India by 2030 based on the estimated report by the Council on Energy, Environment and Water.

To discuss the important technological developments of electrical and hybrid vehicles in India.

- The status of reduction in pollution level.
- The advancement of electrical energy storage material for better time of discharge and also to provide more number of charging and discharging cycles of a battery.
- It is also prudent to discuss the use of hybrid vehicles in Indian road conditions.
- Design and development of batteries for the operation of electric and hybrid vehicles.
- Latest developments in fuel cells for direct generation and integration with the hybrid vehicles

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