



## SRI VENKATESWARA COLLEGE OF ENGINEERING

(AUTONOMOUS - Affiliated to ANNA UNIVERSITY, Chennai) Sriperumbudur tk- 602 117

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Solicit your esteemed presence for the

**GUEST LECTURE** 

on

"Design of Electric Vehicles"

by

Dr. Ranjan Kumar Behera

Professor, IIT Patna

### ALL ARE WELCOME

Venue: Video Hall

Date : 16<sup>th</sup> December 2019 (Monday)

Time : 01.00 PM to 02:00 PM

#### SRI VENKATESWARA COLLEGE OF ENGINEERING

Name of the department: Electrical and Electronics Engineering

**Title of the event** : Guest Lecture on "Design of Electric Vehicles"

**Date** : 16.12.2019

**Time** : 01:30 to 03:00 PM

Venue : Video Hall

#### **Program details:**

The guest gave a brief introduction about history of electric vehicle in India. He said the following key trends that are shaping the EV industry today

- Advanced Creative Design
- Intelligent Vehicles
- Increased Range
- Growing EV Production
- Electrify ICE
- Using PLM to Speed Up EV Innovation.

But the steady improvements in cell chemistry, anode and cathode material, higher-yield fabrication process and economies of scale should help see a reduction in cost for each battery by around **6-8%** every single year.

He discussed about various environmental benefits and personal benefits for having an electric car

- Most electric motors can travel up to 150 180 km before they need to be charged
- No tail pipe exhaust means no greenhouse gases such as CO2, NOx and PM10s
- No oil consumption means less reliance on fuel
- Cars can be recharged whenever is convenient to the user
- More cost-effective than regular cars because of long-lasting battery use
- Cheaper to maintain because they have fewer moving parts
- Creates less noise pollution because the engine is silent

The above advantages however, will be part and parcel of Demo EV's analysis, when comparing electric vehicles to internal combustion engine.

He stated the booming placement opportunity for electrical engineer in the market. He concluded his lecture by asking the students to develop their practical knowledge and have a very strong foundation on the basics of their subjects.



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