Name of the programme	Battery Operated Electric vehicles		
Date	26.05.2020		
No. of Participants	45		
Nature of participants	Internal and External Faculty Members, Industry participants & Students		



# Webinar on "Battery Operated Electric vehicles" Presented by Mr. Pranav RamanlalMistry, PM Tech Innovator, Mumbai, India.

On 26May 2020 10.30 A.M to 12 Noon

#### **Department of Mechanical Engineering,&**

#### **Department of Electrical and ElectronicsEngg**

**BSACIST Organized a Webinar on "Battery Operated Electric vehicles"** 



Coordinators

**Dept. of Mechanical Engineering** 

Dr.M.A.Sai Balaji ,Asso Professor

Dr.S.Ravikumar, Asst Professor

School of Mechanical Sciences,

BSACIST.

**Dept of Electrical and Electronics Engg** 

Mrs .Bharanigha

Asst Professor,

Dept. of Electrical & Electronics Engg

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Speaker:

Mr. Pranav Ramanlal Mistry,

PM Tech Innovator,

Mumbai, India.

#### **PREAMBLE**

- The webinar on "Battery Operated Electric vehicle" was organized in collaboration with PM Tech Innovator. The presentation was delivered by Mr. Pranav Ramanlal Mistry of PM Tech Innovator. The webinar offers a brief introduction on battery operated electric vehicle (BEV) and cleared the myth with already existing pure electric vehicles namely Electric trains, Trams etc., BEV is a type of electric vehicle (EV) that exclusively uses chemical energy stored in rechargeable battery packs, with no secondary source of propulsion (e.g. hydrogen fuel cell, internal combustion engine, etc.). BEVs use electric motors and motor controllers instead of internal combustion engines (ICEs) for propulsion. They derive all power from battery packs and thus have no internal combustion engine, fuel cell, or fuel tank. BEVs include motorcycles, bicycles, scooters, skateboards, railcars, watercraft, forklifts, buses, trucks, and cars.
- He demonstrated with various Innovative techniques developed by him which was adopted by several auto giants like volkswogen, Tesla etc., He emphasized the students to become entrepreneur confidently with their new ideas regarding the battery-operated electric vehicle. In addition, funding agencies specifically for innovative ideas toward BEV is listed by the presenter. Furtherthe speaker explained how Industry-Academy Interaction activities can be enhanced through this concept.

1. M.A.

2.

COORDINATORS

(Dr.M.A.SaiBalaji) (Dr.S.Ravikumar) HEAD OF THE DEPARTMENT

(Dr. H. Siddhi Jailani)

# <u>Attendees</u>

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#### Future vehicles of the world



organised by Depatment of Mechanical Engg (School of Mechanical Sciences)

> Department of Electrical and **Electronics Engineering**

### **Battery Operated Electric vehicles**

Tuesday ,  $26^{th}$  May 2020 10:30 AM - 12:00 NOON

**DELIVERY METHOD** Google Virtual Classroom meet

#### COORDINATORS

MECH DEPT

Dr.M.A Sai Balaji Dr.S.Ravikumar

EEE Dept

Mrs .V.Bharaniga



**FACILITATOR** 



Mr. Pranav Ramanlal Mistry

PM Tech Innovator Mumbai, India.

#### **Register Online**

https://forms.gle/CT64DPEaKDCKhvpaA



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Contact: 9500056511, 86820 41097





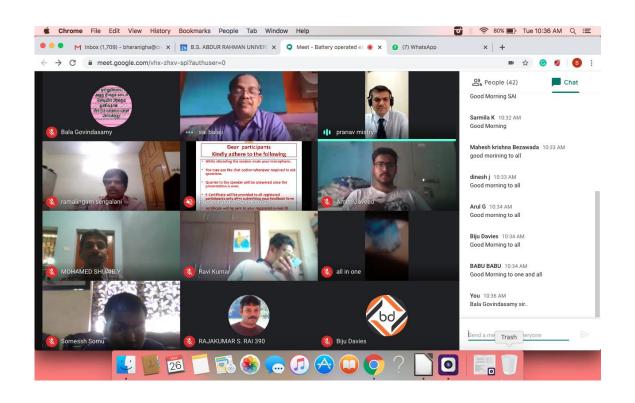
Name- Pranav Ramanlal Mistry

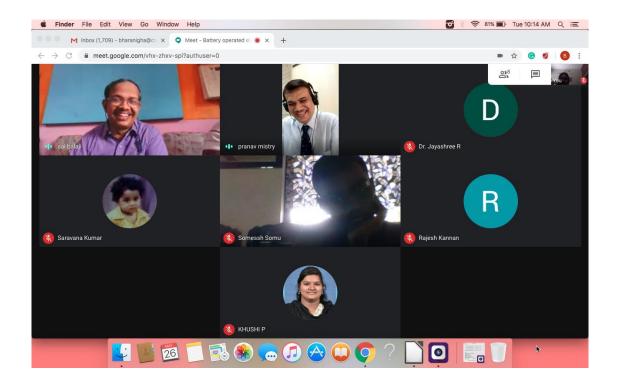


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#### **Screen shot during presentation:**







Some sample presentations:

## **Introduction to Innovation**

- Have Innovated <u>Battery Operated Vehicles (BEV)</u> concept & working on this topic for last 21 years
- Need for BEV was felt as found during my development work in Auto sector that Fossil Fueled vehicles with IC Engine are the most polluting ,Less efficient and High in maintenance.
- Inspiration came from BEV concept seen in books and magazines during year 2005
- Developed preliminary concept design and did all relevant calculations to make it viable.
- Prototype was planned with help of Auto MNC's & Indian companies in year 2006
- "My Design of Bev can run for 500 to 600 Kms per charge with highest ever efficiency, low running cost, Faster charging in 20 Minutes and Low maintenance"

### Innovation Concept 3 (Latest Design)

Highest surface area covered to get maximum mileage ( 600 Kms /Charge)

-Main battery storage will be in Chassis - 60 %,

Top frame with hood - 20 %,

Other section joining - 20 %

-You will find that all batteries connected in series will hold power for running car weighing 1 Ton to 500 to 600 Kms per charge



# Innovation Concept -4 Solar Flexi sheets on outer surface of BEV

- Top hood of car to have flexi solar panel available at affordable rates .Can be just fixed on hood to generate 100 to 300 Watts extra power .
- 1 Sq Ft generates 40 Watts power X 8 Sq Ft=320 Watts





# Electric Vehicles Business Ideas & Opportunities for Indian Entrepreneurs

- -Production of Electric Cars, Scooters, Bikes, Cycles etc \*\*\*
- -Electric Vehicle Charging Station, Ports, Spares \*\*\*\*\*
- -Production of Spare Parts for Electric Cars, Scooters, Bikes,
- -Electric Car Repair and Servicing Garage
- -Electric Car Sales Garage/Electric Car Dealership Shop
- Electric Car Tracker Installation
- -Sale of Electric Car Customized Insurance Policy Cover
- -Sale of Electric Car Spare Parts\*\*\*
- -Production of Batteries for Electric Cars\*\*\*\*
- -Electric Car Battery Sales/Service Shop
- -Run a Fast Charging Center for Electric Vehicles \*\*\*
- -Conversion of ICE Vehicles to BEV \*\*\*\*\*\*

(Continued ...2)



#### Webinar

on

#### **Battery Operated Electric Vehicles - Research perspective**

#### Certificate of Participation

This is to certify that

#### Lisa Simpson of Springfield Elementary

has actively participated in the Webinar on "Battery Operated Electric Vehicle – Research Perspective" organized by the Department of Mechanical Engineering and Electrical & Electronics Engineering, BSA Crescent Institute of Science and Technology, Chennai – 48 on 26<sup>th</sup> May 2020.

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