

3_Expert Talk on Energy Conservation Strategy in Electric Vehicles by Mr.Kavan Raval, Chief Strategic Sales and Partnership Officer, Earth Energy EV,Vasai



Vidyavardhini's College of Engineering and Technology
K.T.Marg, Vasai Road [(west); Dist-Palghar; Pin-401202

Academic Year	2022-23		
TITLE	Expert Talk on Energy Conservation Strategy in Electric Vehicles by Mr.Kavan Raval Chief Strategic Sales and Partnership Officer, Earth Energy EV,Vasai		
Organizing Committee	Institute innovation Council		
Date:	14/12/2022	Time	10 am
Venue of the Event	Seminar hall		
No of participating Students	65		
No of participating faculty	05		

[Handwritten Signature]

Faculty In-charge

[Handwritten Signature]
HOD,

HEAD
Dept. of Mechanical Engg.
Vidyavardhini's College of
Engineering & Technology
Vasai Road-401202.



Report of Expert Talk on Energy Conservation Strategy in Electric Vehicles 14th Dec 2022

Objective: To create awareness for innovations in energy conservation strategies needed in electric vehicles

About the Speaker: The guest speaker for the session

1. Speaker:- Mr.Kavan Raval

Chief Strategic Sales and Partnership Officer, Earth Energy EV, Vasai

Brief introduction

Mr. Kavan is A Techno-Commercial expert in the field of EV Automobiles with a proven record in sales, operations, and corporate relations. Been part of an electrified journey where Mr. Raval saw a company & product in making from scratch and contributed to solidifying the roots of the same. Always ready to take up the driving seat of prototypes, push the machine to its limits, present the inputs to R and D team. Mr.Raval undertook vehicle development & logistical operations, event management, company representation activities at seminars and conferences.

Beyond vehicle technology, a significant boost in EV adoption could be awareness programs for users and technicians. Mr.Raval and team create a pool of EV promoters by organizing seminars/workshops for potential users and mechanics. There are many misconceptions about EVs that need to be addressed, which can be clarified by continuous interactions as a community. EV charging infra-availability is also an important game changer.

Brief Summary of the talk

Mr. Raval started his session with the introduction of his company Earth Energy EV and the startup growth and present status in field of electric vehicles. Mr.Raval highlights upon the key factors during design and development of the electric vehicle is the weight of the vehicle and the battery usage for maximum milage.

To understand this , the weight of the electric vehicle could be kept low using the innovative materials without compromise of the safety and anti-collision test. Various materials are under research and utilized in the making of electric vehicles. The weight of vehicle could be substantially reduced using the composite materials maintaining the same strength.

The lower the weight higher will be the performance of the vehicle. Further the battery system of the electric vehicle is another important part for the best efficiency of the vehicle. The battery system is such

that it should be light in weight. Different orientations of the cell and frame design is crucial in the development of battery system of the electric vehicle.

The cooling system of the battery affects the performance in electric vehicle. In two-wheel vehicles, air cooling or natural draft cooling only possible, however in four wheel vehicle the cooling system need to be designed which could keep the cell temperature below designed limit of 40-45 degree centigrade. For this liquid coolant flow around cell is important. The maximum heat generated in the cell in axial direction which need to be dissipated to the surrounding, for this Mr.Kaval demonstrated different designs which are in exist and also under research. Mr. Kaval emphasis scope for innovation and research in this field of battery management system.

Optimum design of Battery system will automatically improve the performance of the vehicle. Battery swapping method which is a new technology initiated by the different start ups in India. Government of India is promoting the young engineers to establish their start up in this sector. Mr.Kaval gives the detailed explanation of the Battery Swapping technology.

Further Mr. Kaval put forward a question whether the electric vehicle causes pollution/emission. Mr. Kaval explains the clean environment or zero carbon footprint policy of Government of India. Electric vehicles consume electricity for charging. This electricity if generated from renewable sources such as solar photovoltaic or wind turbine farm could make a difference.

Overall the program was full of research and innovation. Students interacted with Mr.Raval with lots of question for this very new and silent technology of Electric Vehicles,

Around 50 students and 4 faculty members attended the event.

Thank you sir,



Dr. Ashish Chaudhari

Dr.Ashish Chaudhari

President IIC

Report of Expert Talk on Energy Conservation Strategy in Electric Vehicles 14th Dec 2022

Glimpses of the Event





ATTENDANCE SHEET
Seminar on "Energy Conservation Strategy in Electric Vehicle"

Expert Speaker

Mr. Kavan Raval

Lead Corporate Alliance at Jindal Mobilitric | Chief Strategic Sales and Partnership
Officer at Earth Energy EV

Sr. No.	Name of Student	Year	Branch	Sign
1	Rish. U. Manjrekar	FE	Comp	
2	Rohit Malvi	FE	COMP	
3	Ambhish MANE	FE	COMP	
4	Makadiya Vatsal J.	FE	Comp	
5	Suyash S. Palkar	F.E	Comp	
6	Smit mhatre	F.E	Comp	
7	Siddhesh S. Mave	F.E	COMP	
8	Ashirwad Kathawale	F.E	COMP	
9	Tanmay Narayanrao	F.E.	COMP	
10	Mihir Kumar V. Ladi	F.E	COMP	
11	Sambit Hajumdar	F.E	COMP	
12	Wajiba Kulkarni	FE	comp	
13)	Vedant U. Kale	FE	comp	
14)	Jilla Saivamshi R	FE	COMP	
15)	Teril Rajesh Kotadia	F.E	comp	
16)	SAURABHSING DZPAKING PARDESHI	F.E	AIIDS	
17)	APURV Sanjay Kini	F.E	AIIDS	
18)	Saurabh mane	F.E	AIIDS	
19)	SAKSHI KARKTE	D.S.E	Civil	
20)	Anuruddha Rane	D.S.E	Civil	
21)	Prasham A. Sankar	D.S.E	Civil	
22)	Prasham K. Jondhi	D.S.E	Civil	
23)	Tejas T. Shevale	D.S.E	Civil	
24)	Shubham Gorivale	D.S.E	Civil	
25)	Jay. Patil	F.E	AIIDS	
26)	Vedika. Pawar	F.E	AIIDS	
27)	Yash. Patil	FE	AIIDS	
28)	Rohan Ganpat. Mangaonkar	FE	AIIDS	
29)	Sakshi Anant shelar	D.S.E	Civil	
30)	Sai S. Gosavi	D.S.E	Civil	
31)	Kaustubh K. Chavan	D.S.E	Civil	
32)	Apurva Umakant Jagtap	D.S.E	Civil	
33)	Ajay S. Lechaka	D.S.E	CIVIL	
34)	Yajurved. V. VAIIDYA	D.S.E	CIVIL	
35)	JATIN. VATARE	D.S.E	CIVIL	

Sr.No.	Name of Students	Year	Branch	Sign.
36]	Jay Panchaj	D.S.E	mech	<u>Jay</u>
37]	DHRUV HANANIA	DSE	CIVIL	<u>DHRUV</u>
38]	Aniket Fokra	DSE	mech	<u>Aniket</u>
39]	Kohit Kache	DSB	CIVIL	<u>Kache</u>
40]	Krutesh AAsekar	DSE	CIVIL	<u>Krutesh</u>
41]	Nikitar P. Sawdekar	DSE	Mech	<u>Nikitar</u>
42]	Bansal Simaria	DSE	MECH	<u>Bansal</u>
43]	Aniket Jha	FE	COMP	<u>Aniket</u>
44]	Sandesh Lakhide	F.E.	AI/DS	<u>Sandesh</u>
45]	Shubham S. Mohanty	F.E	AI/DS	<u>Shubham</u>
46]	Sainath S. Khot	FE	AI/DS	<u>Sainath</u>
47]	Yash. Mayekar	FE	AI/AS	<u>Yash</u>
48]	Amish. Mayekar	FE	AI (DS)	<u>Amish</u>
49]	AFVAN PATHAN	FE	AI(CDS)	<u>AFVAN</u>
50]	Dnyanesh Panchal	FE	AI(CDS)	<u>Dnyanesh</u>
51]	Lavanya Murudkar	FE	AI (DS)	<u>Murudkar</u>
52]	Kaithik Pandey	FE	AI/DS	<u>Kaithik</u>
53]	Ketan N. Mahadik	F.E	AI/DS	<u>Kmahadik</u>
54]	Tarun P. Pathak	F.E	AI/DS	<u>Tarun</u>
55]	Mihantsh R. Goswami	F.E.	AI/DS	<u>Mihantsh</u>
56]	Chaitanya P. Pimple	D.S.E	CIVIL	<u>Chaitanya</u>
57]	Prathmesh Pandey	FE F.E	Comps	<u>Prathmesh</u>
58]	Kashyap Jemaja	FE	COMPS	<u>Kashyap</u>
59]	Piyush Kushe	F.E	Comps	<u>Piyush</u>
60]	Krish Vaity	TE	MECH	<u>Krish</u>
61]	Naman Annadate	TE	Mech	<u>Naman</u>
62]	Aditya A. Lawate	SE	COMPS	<u>Aditya</u>
63]	Shrushti Lane	TE	EXTC	<u>Shrushti</u>
64]	Heramb Shinde	D.S.E	MECH	<u>Heramb</u>
65]	Reuben Noronha	DSE	MECH	<u>Reuben</u>
66]	Shrutij. Nirgun	DSE	MECH	<u>Shrutij</u>
67]	Niran Umam Uges	TE	AI	<u>Niran</u>