



J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY

(UGC Autonomous)

Accredited by NAAC&NBA, Approved by AICTE & Permanently Affiliated to JNTUH
Bhaskar Nagar, Moinabad Mandal, Hyderabad, Telangana 500075



DEPARTMENT OF MECHANICAL ENGINEERING
SAEINDIA COLLEGIATE CLUB OF JBIET

WORKSHOP ON

ELECTRICAL VEHICLE TECHNOLOGY

(In Aid Under AICTE – SPICES)

23-09-22 TO 24-09-22

PROGRAM SCHEDULE

Day	Date	Name of the Topic	10:00 AM – 12:00 PM	1:00 PM – 3:30 PM
1	23/09/2022	Electric Vehicle Technology and Power Train	Introduction and working of Electric Vehicle and Introduction to Electric Vehicle Components Mr. Siddhanth Patnaik	Practical of Electric Vehicle. Mr. Siddhant Patnaik and Mr. Sanjay Kumar Baral
2	24/09/2022	Electric Vehicle Batteries and BMS(Battery Management System)	Introduction to Electric Vehicle Batteries and Introduction to BMS and Calculation for Battery Packs Mr. Siddhanth Patnaik	Manufacturing Lithium-Ion Battery Packs with BMS Mr. Siddhant Patnaik and Mr. Sanjay Kumar Baral



J.B.INSTITUTE OF ENGINEERING & TECHNOLOGY

(UGC Autonomous)

Accredited by NAAC&NBA, APPROVED BY AICTE& PERMANENTLY AFFILIATED TO JNTUH
Moinabad,Hyderabd.www.jbiet.edu.in



SAEINDIA COLLEGIATE CLUB OF JBIET PRESENTS EV-TECH In Aid Under AICTE - SPICES Workshop on ELECTRIC VEHICLE TECHNOLOGY

DATES : 23 & 24 SEP 2022

DAY	NAME OF THE TOPIC	10.00 AM To 12.00 PM	1.00 PM To 3.30 PM
23-09-22	Electric Vehicle Technology and Powertrain	Introduction and Working of Electric Vehicle and Introduction to Electric Vehicle Components	Practical Of Electric Vehicle
24-09-22	Electric Vehicle Batteries and BMS (Battery Management System)	Introduction to EV Batteries and Introduction to BMS and Calculation for Battery Packs	Manufacturing Lithium-Ion Battery Packs With BMS

VENUE: MINING AUDITORIUM

No Registration Fee

Registration Link

<https://forms.gle/GBCu45SSTLGW2XyUA>

Participation
Certificate
will be
provided

**ORGANIZED
BY
SAEINDIA COLLEGIATE CLUB OF JBIET
MECHANICAL ENGINEERING DEPARTMENT**



SCAN ME

CHIEF PATRON

Shri J.V.Krishna Rao
Secretary, JBES

PATRON

Dr.P.C.Krishnamachary
Principal, JBIET

CONVENOR

Dr.Anoop Kumar Shukla
HOD-ME, JBIET

CO-CONVENOR

J.Nagaraju
Asst. Prof, MED, JBIET

FACULTY COORDINATORS

J.Narendra, Asst Prof, MED
P.Sreenivasulu, Asst Prof, MED

Organizing Team

Mr.VASAM SRINIVASA RAO, Asst. Prof
Mr.MOHD. RAFAQ UR RAHMAN, Asst. Prof
Mr.S.BADULLA, Asst. Prof
Mrs.V.V KRISHNA VANDANA, Asst. Prof

Mrs.PATANGAY SEEMA RANI, Asst. Prof
Mr.G.GOPINATH, Asst. Prof,
Mr.SHAIK ASHRAF, Asst. Prof
Mr.JAMMULA SHYAM SUNDER, Asst. Prof

Mr.MAHESH.MG, Asst. Prof
Mr.A.SAI KUMAR, Asst. Prof
Mr.G.NARASIMHULU, Asst. Prof
Mr.K.SRINIVAS, Asst. Prof

STUDENT COORDINATORS :- G. Bheemesh-81428919172, K. Tejaram - 9398120854

PROGRAM EVALUATION COMMITTEE



J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY
(UGC Autonomous)
Accredited by NAAC&NBA, Approved by AICTE & Permanently Affiliated to JNTUH
Bhaskar Nagar, Moinabad Mandal, Hyderabad, Telangana 500075



F. No. JBIET/ME/29/SAE/02/01/2021-22

Date: 22/09/2022

DEPARTMENT OF MECHANICAL ENGINEERING

SAEINDIA COLLEGIATE CLUB OF JBIET

CIRCULAR

The following faculty have been appointed as a Program Evaluation Committee (PEC) Member for the AICTE-SPICES Sponsored "Workshop on Electric Vehicle Technology". The PEC Members are requested to monitor the Workshop for smooth conduction and Evaluation.

Program Evaluation Committee

S. No	Member Name	Position in PEC
1	Dr. Niraj Upadhyaya	Chairman
2	Dr. R. Himanshu Sharma	Member Secretary
3	Dr. Sumagna Patnaik	Dean - IQAC
4	Mr. K. Roshan	HOD – ECM
5	Mrs. V.V. Krishna Vandana	Subject Expert

Principal

PRINCIPAL

**J.B. INSTITUTE OF
ENGINEERING & TECHNOLOGY**
Bhaskar Nagar, Yenkapally (V)
Moinabad (M), R.R. Dist.-500 075

PROGRAM EVALUATION COMMITTEE

REPORT ON THE EVENT

Day 1, Session 1:

Date: 23rd September, 2022 – Session I

Topic: Electric Vehicle Technology and Power Train

Resource Person: Mr. Siddhant Patnaik, Manager-Business Development Skyy Rider Institutions for Advanced Skill & Research

Workshop was inaugurated on 23rd September 2022 by **Dr. U. V. S. N. Murthy, Director coordinator of JB Group of Educational Institutions**, along with **Dr. P. V. Krishnamachary, Principal, JBIET(A)**, **Dr. Salauddin, Dean of Academics**, **Dr. Niraj Upadhyaya, Dean R&D** and **Dr. Anoop Kumar Shukla, Head of the Department, ME - JBIET(A)**.

Mrs. P. Seemarani, Assistant Professor, JBIET (A), has commenced the session by welcoming the delegates and the resource persons **Mr. Siddhant Patnaik and Mr. Sanjay Kumar Baral**

Mr. M.G. Mahesh, Assistant Professor, JBIET (A), welcomed the participants and in his welcome speech, he highlighted the importance and objectives of organizing this Workshop. Later the session was taken over by resource person Mr. Siddhant Patnaik and explained Electric Vehicle Technology and Power Train starting from the basics of Electric Vehicle Technology and further concentrated on First vehicle in Indian Electric Vehicle Industry, Modern Day Indian Electric Vehicle Industry.





EMPOWER

GROWTH

PROSPERITY

FIRSTS IN INDIAN EV INDUSTRY

1. Vikram Safa-E:-

- First Electric rickshaw, launched in 1996.
- Manufactured by Lucknow-based company, Scooters India Pvt Ltd.
- Equipped with a 72V Pb-acid battery pack.
- Only 400 models were sold throughout its lifecycle.

www.skyrider.com

EMPOWER

GROWTH

PROSPERITY

MODERN DAY INDIAN EV INDUSTRY

1. Ather Energy:-

- Most valuable EV start-up in India.
- Products- Ather 340, Ather 450 & Ather 450X.
- Ather 340- 1.92 kWh Li-ion pack, 60 km range, 70 km/hr top speed.
- Ather 450- 2.4 kWh Li-ion pack, 75 km range, 85 km/hr top speed.
- Ather 450X- 2.9 kWh Li-ion pack, 85 km range, 80 km/hr top speed

www.skyrider.com

EMPOWER

GROWTH

PROSPERITY

MODERN DAY INDIAN EV INDUSTRY

1. Mahindra Electric:-

- First electric car manufacturer of India.
- Products- Mahindra E20 Plus, Mahindra e-Verito.
- Mahindra E20 Plus- 11-15 kWh Li-ion pack, 140 km max. range, 80 km/hr top speed.
- Mahindra e-Verito- 21.2 kWh Li-ion pack, 181 km max. range, 86 km/hr top speed.

www.skyrider.com

Day 1, Session 2:

Date: 23rd September, 2022 – Session 2

Topic: Practical of Electric Vehicle.

Resource Person: Mr. Siddhant Patnaik, Manager-Business Development Skyy Rider Institutions for Advanced Skill & Research and Mr. Sanjay Kumar Baral, Assistant Trainer, Skyy Rider Institutions.

Mr. Siddhant Patnaik along with **Mr. Sanjay Kumar Baral**, set up the Electric Vehicle Components on the table and started the practical session. He discussed about various Components one by one by showing them practically. Later connected all the circuits & components and made the induction motor to run. He explained the practical of Electric Vehicle to students in well-organized manner by separating the participants in batches. The session was ended by a formal vote of thanks by Mrs. P. Seema Rani, Assistant Professor, JBIET (A).



Day 2, Session 1:

Date: 24th September, 2022 – Session 1

Topic: Electric Vehicle Batteries and BMS (Battery Management System)

Resource Person: Mr. Siddhant Patnaik, Manager-Business Development Skyy Rider Institutions for Advanced Skill & Research

Mrs. P. Seema Rani, Assistant Professor, JBIET (A), welcomes the resource person **Mr. Siddhant Patnaik**. Then technical session was started by **Mr. Siddhant Patnaik, Manager-Business Development Skyy Rider Institutions** and shared his views on **Electric Vehicle Batteries and BMS (Battery Management System)**. He demonstrated on how to implement **BMS (Battery Management System) to Electric Vehicles in Industry**.



Day 2, Session 2:

Date: 24th September, 2022 – Session 2

Topic: Manufacturing Lithium-Ion Battery packs with BMS (Battery Management System)

Resource Person: Resource Person: Mr. Siddhant Patnaik, Manager-Business Development Skyy Rider Institutions for Advanced Skill & Research

Mrs. P. Seema Rani, Assistant Professor, JBIET (A), welcomes the resource person **Mr. Siddhant Patnaik**. Then the resource person along with colleague showed students how the manufacturing of Lithium-Ion battery packing is done with Battery Management System(BMS) and later on Valedictory ceremony was commenced after explaining all the things to participants.

Further the resource person **Mr. Siddhant Patnaik** was appreciated with memento by **Dr. Salauddin**, Dean of Academics and **Dr. Sumagna Patnaik**, Dean – IQAC.

At the end, vote of thanks is given by P. Seema Rani, Assistant Professor, JBIET (A) by congratulating participants for gaining appreciable knowledge on Electric Vehicles. She thanked SAEINDIA Collegiate Club of JBIET for organizing the workshop in a wonderful manner. She heart fully thanked management for giving permission to conduct workshop and dignitaries for gracing the workshop. Finally, she shared his heartfelt thanks to AICTE for granting fund under SPICES scheme to Institution and Encouraging such young talent who will become the future developers of India and World.

