J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY

(UGC Autonomous)

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Bhaskar Nagar, Moinabad Mandal, Hyderabad, Telangana – 500075

Date: 22/04/2026

DEPARTMENT OF MECHANICAL ENGINEERING

REPORT ON

Industrial Visit to National Conference on "Rare Earths and E-Vehicles"

1. Event Title:

Industrial Visit to National Conference on "Rare Earths and E-Vehicles"

2. Event Date:

22nd April 2026

3. Event Duration:

09:30 AM to 04:30 PM

4. Event Venue:

Centenary Convention Centre, ESCI Campus, Hyderabad

5. Industrial Visit Organized By:

Department of Mechanical Engineering, JBIET

Host Organization:

Engineering Staff College of India (ESCI)
(An Autonomous Organ of The Institution of Engineers (India))

6. Theme of the Conference:

"Towards Sustainable and Self-Reliant Critical Mineral Ecosystem for EV Growth"

7. Attended By:

Dr. Anoop Kumar – HOD, Department of Mechanical Engineering

Attended by Students: 28 Students

8. Chief Patron:

Er. Manish Mahendra Kothari, FIE
President, The Institution of Engineers (India)

9. Patron:

Dr. Raghupatruni Bhima Rao, FIE
Formerly CSIR Chief Scientist & Chairman, Governing Council, ESCI

10. Advisory Committee & Invited Speakers:

- Dr. Kacham Anand Rao – CMD & Managing Director (UCIL), Jharkhand
- Dr. Kali Sanjay – Chief Scientist, IMMT, CSIR, Odisha
- Dr. V. Balaram – Ex-Emeritus Scientist, CSIR-NGRI, Hyderabad
- Thonangi Gouricharan – Former Chief Scientist, CSIR-CMPRI, Dhanbad
- Dr. R. Gajapathi Rao – Formerly Scientific Officer-G, Atomic Minerals Division, Visakhapatnam

11. Technical Committee:

- Dr. S. V. Ranganayakulu, FIE – Dean, R&D, GNI Technical Campus
- Dr. R. Venkat Reddy – Advisor, ESCI

12. Organizing Committee:

- Dr. G. Rameshwar Rao, FIE – Director, ESCI
- Er. K. Amarnath – Sr. Faculty & Head – Mining, ESCI
- Er. Sai Kishore, MIE – Head, FDP Cell, ESCI

13. Objectives of the Industrial Visit:

The main objectives of the National Conference were:

- To create awareness about the importance of rare earth elements and critical minerals in EV technology
- To discuss sustainable approaches for critical mineral extraction and utilization
- To promote research and innovation in electric vehicle technologies
- To explore opportunities for India's self-reliance in the EV ecosystem
- To encourage collaboration among academia, industries, researchers, and policymakers
- To understand emerging trends in battery technology, recycling, and electrified mobility

14. Event Outline:

The Department of Mechanical Engineering organized an Industrial Visit to the National Conference on "Rare Earths and E-Vehicles" held at the Centenary Convention Centre, ESCI Campus, Hyderabad on 22nd April 2026.

The industrial visit provided an opportunity for faculty members and participants to gain exposure to the latest developments in electric vehicle technologies, critical minerals, and sustainable industrial practices. The event brought together scientists, academicians, researchers, policymakers, and industry experts to discuss sustainable solutions for EV growth and mineral resource management.

During the visit, participants attended technical sessions, expert lectures, and interactive discussions conducted by distinguished scientists, academicians, and industry experts from reputed organizations. Eminent speakers shared their knowledge and experiences related to mining technologies, battery materials, EV ecosystem development, and sustainable industrial practices.

Dr. Anoop Kumar, HOD of Mechanical Engineering, attended the conference and actively participated in the technical discussions and knowledge-sharing sessions.

15. Key Topics Covered in the Conference:

1. Rare Earth Elements and Critical Minerals:

- Importance of rare earth elements in EV manufacturing
- Availability and extraction of critical minerals in India
- Sustainable mining and processing techniques
- Strategic importance of mineral security

2. Electric Vehicle Technologies:

- Emerging trends in electric mobility
- EV battery technologies and performance
- Charging infrastructure and energy management
- Future scope of sustainable transportation

3. Recycling and Sustainability:

- Recycling of lithium-ion batteries
- Circular economy approaches in EV industries

- Environmental challenges in mineral extraction
- Green technologies for sustainable development

4. Industry and Research Collaboration:

- Role of research organizations and industries in EV growth
- Opportunities for academic and industrial partnerships
- Government initiatives and policies supporting EV adoption
- Innovation and entrepreneurship in clean energy technologies

16. Learning Outcomes of the Industrial Visit:

The conference provided valuable insights into the future of electric vehicles and the critical role of rare earth materials. The major outcomes include:

- Enhanced understanding of critical minerals and their applications in EVs
- Awareness about sustainable practices in mining and material processing
- Knowledge of advanced EV technologies and battery systems
- Exposure to current industry trends and government initiatives
- Opportunities for networking with experts, scientists, and industry professionals
- Motivation for further research and innovation in sustainable transportation

17. Conclusion:

The Industrial Visit to the National Conference on “Rare Earths and E-Vehicles” at ESCI provided valuable exposure to recent advancements in electric vehicles, battery technologies, rare earth materials, and sustainable industrial development. The visit enabled participants to interact with scientists, researchers, and industry experts, thereby enhancing their technical knowledge and awareness regarding emerging technologies in the EV sector. The sessions offered practical insights into critical mineral ecosystems, sustainable mining practices, and future opportunities in electrified transportation. Dr. Anoop Kumar, HOD of Mechanical Engineering, attended the industrial visit and actively participated in the technical sessions and discussions. The visit proved to be highly informative, educational, and beneficial for understanding the future scope of sustainable mobility and industrial innovation.


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GPS Map Camera
Google
Hyderabad, Telangana, India
Esci Road, Lake, Beside Khajaguda, Jayabheri Pine Valley,
Gachibowli, Hyderabad, Telangana 500032, India
Lat 17.427575° Long 78.370853°
Wednesday, 22/04/2026 11:24 AM GMT +05:30


World Earth Day Special Event
ESCI
NATIONAL CONFERENCE
ON
RARE EARTHS &
ELECTRIC VEHICLES
WORLD EARTH DAY
22 APRIL 2026
CHIEF GUEST
Dr. G. Vivek Venkatswamy
Minister for Labour, Employment,
Training and Factories
Government of Telangana


BATTERY PACK
END USE
EV BATTERY MARKET INDIA
2030
175 GWh

EEE

1) K. Pranay → 24675A0207 EEE
2) K. Sai Teja → 24675A0211 EEE
3) T. Sandeep → 24675A0214 EEE
4) G. Siddartha → 24675A0204 EEE
5) H. Bharath → 24675A0215 EEE
6) Ch. Pavan → 24675A0201 EEE
7) Tarun. Sai → 24675A0209 EEE
8) Devandas → 24675A0217 EEE
9) Y. Pavan → 24675A0205 EEE
10) Vignesh → 24675A0223 EEE
11) P. Siddarth → 24675A0221 EEE
12) Abdul rahman → 24675A0212 EEE
13) B. Akshitha → 24675A0203 EEE
14) Manju Bargavi → 24675A0219 EEE
15) Swathi → 24675A0220 EEE
16) Mohitha Sree → 23671A0204 EEE

Extra

17) Manikanth → 24675A0210 EEE

1. Abhiram	24671A0405	ECE-A	
2. Thanuj Jadav	24671A0449	ECE-A	
3. A. Bharath	24671A0407	ECE-A	
4. E. Premkiran	25675A0405	ECE-A	Prem.
5. M. Vivek	24671A0445	ECE-A	M. Vivek
6. L. Lokesh kumar	24671A0497	ECE-A	L. Lokeshkumar
7. M. Suresh	24671A0440	ECE-A	Suresh
8. T. Sathwik	24671A0463	ECE-A	Sathwik
9. R. Bavakeerthan	25675A0403	ECE-A	
10. Madhukar	24671A0460	ECE-A	
11. Sharad Dur			