

Guest Lecture Report 25-01-2024

Department of Chemical Engineering

DEPARTMENT OF CHEMICAL ENGINEERING

Event Type: Guest Lecture

Event Title: *Hydrogen Electrolyzers and the Green Economy*

Date: May 8, 2025

Time: 10:00 AM – 12:30 PM

Venue: Seminar Hall 2

Target Audience: UG Students (II, IV, VI Sem Chemical Engineering)

Number of Participants: 48

Objective of the Event

The guest lecture aimed to provide students with insights into hydrogen production technologies, particularly electrolyzers, and to discuss their role in the transition toward a sustainable green economy. The session also sought to introduce the participants to career and research opportunities in the emerging hydrogen energy sector.

Speaker Details: Mr. Sai Teja M, Senior Engineer – Process & Automation, New Trace Pvt Ltd, Bangalore

Mr. Sai Teja, with hands-on experience in hydrogen production systems and automation, provided deep technical knowledge blended with industry insights. He shared real-world case studies of ongoing hydrogen projects and spoke about policy and economic factors influencing green hydrogen adoption.

Session Highlights

- Overview of hydrogen as a clean energy vector
- Types of hydrogen electrolyzers: Alkaline, PEM, and Solid Oxide
- Technological advancements and operational challenges
- Storage, transportation, and industrial applications of hydrogen
- India's National Hydrogen Mission and global policy drivers
- Q&A session and career opportunities in the hydrogen sector

Outcomes of the Event

- Students gained a clear understanding of how hydrogen electrolyzers work.
- They were introduced to current trends in the hydrogen economy and their significance in decarbonizing industry and transport.

• The session inspired students to explore further research or career pathways in the green energy domain.

This presentation provided a valuable and educational experience for all participants, cultivating a greater understanding and recognition of the potential of solar energy in influencing the future of the power business. We thank the management of MVJCE for providing the necessary support needed for conducting this event.



