# MECHAZINE

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We are delighted to present the September to December 2024 edition of Mechazine, a snapshot of the vibrant spirit and evolving journey of our Mechanical Engineering Department. This edition captures the pulse of progress — from cutting-edge technological insights in Tech Pulse to heartwarming outreach under Human Values in Action. Alumni shared valuable lessons in From VITB to the World, while our students gear up for a global academic experience in Japan. Through industrial visits, student achievements, and faculty development, we continue to push boundaries in every direction. We invite you to explore, reflect, and be inspired by the passion and purpose that define us. Here's to learning, leading, and leaving a mark!

#### THE HEAD SPEAKS:

The September to December 2024 quarter has been eventful and inspiring. Our students achieved success in YANTROTSAV and SAEINDIA competitions, while faculty actively engaged in FDPs and industry collaborations. Visits to ARAI, LECS, and other companies strengthened academic ties. Industrial visits and alumni talks further enriched student learning. I appreciate the dedication of our students and faculty and encourage everyone to maintain this momentum as we continue our pursuit of academic and professional excellence.

Dr. N. Naga Krishna
 HoD, Mechanical Engineering

## **EVENTS/ ACHIEVEMENTS**

- Students from the department showcased their technical prowess at YANTROTSAV 2K24, a National Level Tech Fest held during 13th—14th September 2024. The team comprising Mr. M. Eswar Gopal Swamy, Mr. G V S Vishal Vardhan, Pedapati Sai Sandeep, and Gandham Vibhas Ram bagged First Prize in the Project Expo.
- Another team of P. Shanmukh, T. Durga Siva Sai Subrahmanyam, P. Siva Sai Sandeep, and P. Dineshwar won Second Prize for their innovative project.
- In academic research, Ms. Ch. Mohana Sowjanya presented a paper titled "Advanced Rain Sensing Technologies for the Modern Auto Rickshaw" at the SCITECH-24 International Conference held at WOXSEN University, Hyderabad, from 16th to 20th September 2024.
- In October, the e-BIKE team from the department secured Third Place in the Business Plan Presentation at the SAEINDIA Student Convention hosted by Kongu Engineering College, Tamil Nadu.
- Mr. D. Vamsee Krishna, Assistant Professor, and Mr. K. Venkata Sandeep, final-year student, received the Volunteer—Professional Member Award and Volunteer—Student Member Award, respectively, from SAEINDIA Southern Section on 19th October 2024 in Chennai, in recognition of their contributions to professional and student activities.



Students placed in JBM

## **VIT Students Visit to Japan**

We are excited to announce that Mr. P. Rajesh and Mr. Sri Manikanta Yaswanth, final-year students from the Department of Mechanical Engineering, have been selected to visit Kumamoto University, Japan for the Sakura Science Exchange Program January 2025. This incredible opportunity is part of the Sri Vishnu Educational Society's Global Connect Initiative, which aims to provide international exposure and collaborative learning experiences to students across its institutions.

The students were accompanied by Dr. A. Raju, (Dean-R&D, SVES) who guide them through this academic and cultural immersion. The visit includes lab explorations, technical sessions, and interactive engagements with Japanese students and faculty — all designed to broaden their horizons and inspire global thinking.

We wish Rajesh and Pavan a transformative experience and thank our beloved management for opening doors to the world for our students.



Students selected for the visit to Kumamoto University, Japan.

## **Expert Talk**

As part of our ongoing effort to bridge academic learning with real-world experiences, the Department of Mechanical Engineering organized two insightful Alumni Talks in December 2024. These sessions not only reconnected past graduates with their alma mater but also provided valuable guidance to current students.

- On 7th December 2024, Mr. D. Sri Ram, alumnus of the 2014–18 batch and currently working as Sales Manager at Rockworth Systems Furniture India Pvt. Ltd., Hyderabad, addressed first-year and prefinal-year students. In his talk titled "Professional Networking", he emphasized how building meaningful connections can significantly enhance career opportunities and personal growth. His real-world insights into client interactions, communication skills, and confidence-building left a strong impression on the young audience.
- The second session, held on 21st December 2024, featured Mr. M. Siva Krishna Kanth, alumnus of the 2017–21 batch and now a Software Engineer at Accenture, Hyderabad. His session, titled "Consistency and Procrastination," resonated deeply with second-and third-year students. Drawing from his own journey, he spoke candidly about the challenges of staying focused, the importance of time management, and making the best use of student clubs and extracurriculars alongside academics.





## **Human Values in Action**

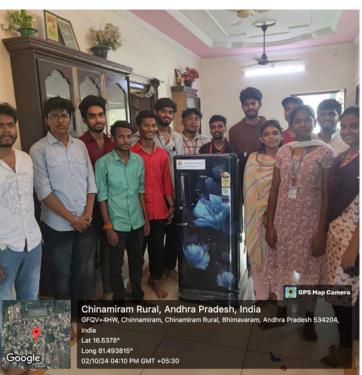
In an inspiring step toward living the values they learn, second-year Mechanical Engineering students, guided by Mr. N. Manikanta, visited Emmanuel Orphanage Children Home in Bhimavaram. The visit was organized under the banner of the Universal Human Values (UHV) course, which encourages empathy, responsibility, and service to society.

The initiative was supported wholeheartedly by our Principal Sir and HoD Sir, whose immediate approval made the visit possible. Faculty members Mr. Chandra Sekhar and Mr. Subrahmanyam accompanied the team along with Mr. Manikanta and the enthusiastic students.

During the visit, games and activities were conducted for children and also a refrigerator was donated to the orphanage — a small gesture with a big impact. The joy and warmth exchanged between the students and the children reflected the spirit of human connection and compassion.

Mr. Manikanta extended heartfelt thanks to all faculty members for their quick support and contributions, and appreciated the students whose participation made the event truly meaningful.





Faculty and Students of ME at Emmanuel Orphanage Children Home

## **TechPulse**

• ISRO's Cryogenic Engine Breakthrough (India)

ISRO successfully tested a next-gen cryogenic engine with enhanced fuel efficiency and thrust control — a major leap for Gaganyaan and future space missions.

- Tata Motors Unveils India's First Hydrogen Fuel Cell Truck
  Tata's Starbus FCEV hits Indian roads zero-emission, hydrogen-powered, and engineered for long hauls.
  - MIT Develops Shape-Shifting Materials

MIT researchers created 4D-printed materials that respond to heat and pressure — opening up possibilities in soft robotics and aerospace.

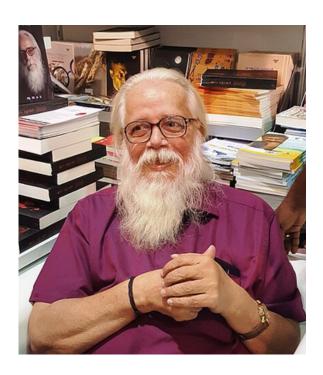
IIT Madras Builds India's Fastest Hyperloop Pod

IIT-M's student team tested a Hyperloop pod reaching 400 km/h on track simulations.

## **Cryogenic Engines: Powering India to Space**

Cryogenic engines are rocket engines that use super-cooled liquid gases—typically liquid hydrogen as fuel and liquid oxygen as oxidizer. Operating at temperatures below -150°C, these engines offer high thrust and fuel efficiency, making them ideal for launching heavy satellites into higher orbits.

India's success in developing its own cryogenic engine marked a turning point in ISRO's space capabilities. This indigenous achievement was largely driven by Nambi Narayanan, a senior ISRO scientist and aerospace engineer. Despite facing immense challenges—including geopolitical blocks and personal setbacks—he laid the foundation for India's cryogenic program in the 1990s.



Padma Bhushan Nambi Narayanan

The man behind ISRO's Cryogenic Engines. A close colleague of Dr. A. P. J. Abdul Kalam at ISRO in its early days.

## **Gallery**





### **Meet the Common Man**

Before memes and reels, one silent figure captured the pulse of India — R. K. Laxman's Common Man. Dressed in a checked coat and dhoti, this wide-eyed observer never spoke a word but said everything. For decades in The Times of India, he watched politicians, society, and daily life with quiet humor. He represents the everyday Indian — curious, patient, and caught in the chaos. Through him, Laxman reminded us: sometimes, the silent ones understand the most.



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