

MECHAZINE

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We are delighted to present the May 2023 edition of Mechazine, the official quarterly newsletter of the Department of Mechanical Engineering, Vishnu Institute of Technology. This edition captures a dynamic blend of academic initiatives, student achievements, alumni interactions, industrial exposure, and participation in national events. It reflects our department's commitment to holistic development and innovation-driven learning. The dedicated efforts of students, faculty, and alumni are evident in every section, from technical workshops to inspiring alumni talks and prestigious competitions. Through this platform, we aim to celebrate milestones, encourage talent, and strengthen our academic community. We thank all contributors and readers for their support and invite you to explore the stories that make our department vibrant, forward-thinking, and student-centric.

THE HEAD SPEAKS:

As we turn the pages of this Mechazine edition, we witness the energy, ideas, and achievements that define our Mechanical Engineering Department. Each event and accomplishment reflects the dedication of our students and faculty toward excellence and innovation. From industrial visits to alumni talks and national-level participations, the journey has been inspiring. I extend my heartfelt appreciation to all contributors and urge every student to keep questioning, exploring, and engineering solutions that shape a brighter, sustainable future.

— Dr. M. Venu
Head, Dept. of Mechanical Engineering

Department Activities and Achievements

The Department of Mechanical Engineering proudly celebrated several significant participations and victories during the first quarter of 2023.

- Team KRONOS showcased engineering excellence at various national competitions.
- At the Go-Karting Championship 2023 held from January 23–25 at GMR Institute of Technology, Rajam, the team earned Runner-Up in the Traction Event, demonstrating their vehicle's superior design and performance under load.
- In Aravalli Terrain Vehicle Championship 2023, organized from March 1–5 at Pune, Team KRONOS was honored with the Best Fair Play Award, recognizing their sportsmanship and professional conduct.
- From April 5–8, the team also participated in the prestigious eBAJA 2023 at Chitkara University, Baddi, where they gained hands-on experience with electric vehicle concepts.
- Apart from competitions, 25 students served as marshals during the Formula E Race on February 11 in Hyderabad, and 2 students presented a socially impactful innovation project at IIT Madras Research Park, Chennai.



Department Activities

- Lost-Foam Casting Workshop (Jan 6, 2023)
- A guest lecture with hands-on demonstration on the Lost-Foam Casting process was conducted by Mr. K. Chiranjeevi, enabling students to understand advanced casting techniques used in industry.
- Expert Talk on Automotive Materials (Jan 19, 2023)
- Dr. G. V. Sarath Kumar from Ashok Leyland delivered a technical session covering steel selection for automotive components and explained real-world failure analysis with case studies.
- Talk on Employability Skills (Jan 25, 2023)
- Mr. K.N. Balaji, Senior Advisor in the automobile industry, shared insights on resume building, soft skills, and preparation strategies to enhance placement readiness among students.
- AutoCAD Workshop for First Years (Mar 27–31, 2023)
- A week-long hands-on workshop on AutoCAD was organized to train first-year students in 2D and 3D drafting, essential for mechanical design and visualization.
- Pre-placement Talk by Thriveni Earthmovers GM (Apr 3, 2023)
- Mr. Sasidhar Aripaka, General Manager at Thriveni Earthmovers Pvt. Ltd, discussed mining industry opportunities and offered career guidance tailored for third-year mechanical engineering students.
- Awards by VEDIC (Apr 24, 2023)
- Dr. N. Naga Krishna was recognized with the Best Vedic Coordinator Award, while Mr. B. Bangarraju received the Pedagogical Innovation Award for their contributions to academic excellence.
- Expert Lectures at NIT Delhi (Feb 20–22, 2023)
- Dr. M. Venu, Professor and HoD, delivered expert sessions on National Education Policy 2020 and Human Values during an ATAL FDP held at NIT Delhi.

Industrial Visits



- Feb 14–17, 2023: Dr. M. Venu visited 11 renowned industries in Vadodara, including MG Motors, HITACHI, and TOTO India, to understand advanced manufacturing systems and explore collaborative opportunities for internships, student projects, and academic-industry alignment.
- Jan 19–25, 2023: Five final-year students and two faculty members attended IMTEX 2023 at BIEC, Bengaluru. The visit provided exposure to cutting-edge technologies like CNC machines, automation systems, robotics, and digital manufacturing tools, enhancing their industry awareness and technical competence.

Parent Meet

A Parent–Faculty meeting was held on March 11, 2023, for III-year students. Faculty discussed academic performance, learning styles, and overall development. Parents appreciated the personalized feedback and transparent communication, strengthening the partnership between home and institution to support student success and future career readiness.

From VIT to the World

As part of its continuous mentorship initiative, the department invited successful alumni to interact with students, offering real-world perspectives, career guidance, and motivation to help them prepare for life beyond campus

- Feb 4, 2023: Mr. D.Y.S.S.N.V. Manikanta Srikanth shared insights into launch vehicles and aerospace careers, inspiring students with his journey from VIT to Skyroot Aerospace as Team Lead.
- Feb 25, 2023: Mr. Ravi Teja Gorugantu explained gas turbine technologies and global energy systems, offering valuable perspectives from his role at Siemens Energy, Germany.
- Jan 30, 2023: Mr. P. Pavan Kumar discussed transitioning to data science, highlighting Python and machine learning, based on his experience as Team Lead at Infosys, Hyderabad.
- Mar 25, 2023: Mr. Joel Likithapudi spoke about abroad studies, industry expectations, and career planning, sharing his experience working as a Senior Analyst at Capgemini, Bengaluru.
- Apr 21, 2023: Mr. B. Surya Bhaarat emphasized GATE preparation and PSU careers, drawing from his journey to becoming Assistant Manager at SAIL, Rourkela Steel Plant.



TechPuse

- Intel Introduces Glass Substrates for Next-Gen Chips

In Q1 2023, Intel introduced glass substrates for chip packaging, offering better thermal and power performance, and allowing denser chip integration—crucial for AI and high-performance computing.

- China Unveils World's First Methanol-Fueled Ship

In March 2023, China launched the world's first large container ship powered entirely by methanol, a clean-burning alternative fuel. It represents a significant step towards sustainable marine transportation

- MIT Develops AI-Controlled Material That Changes Shape

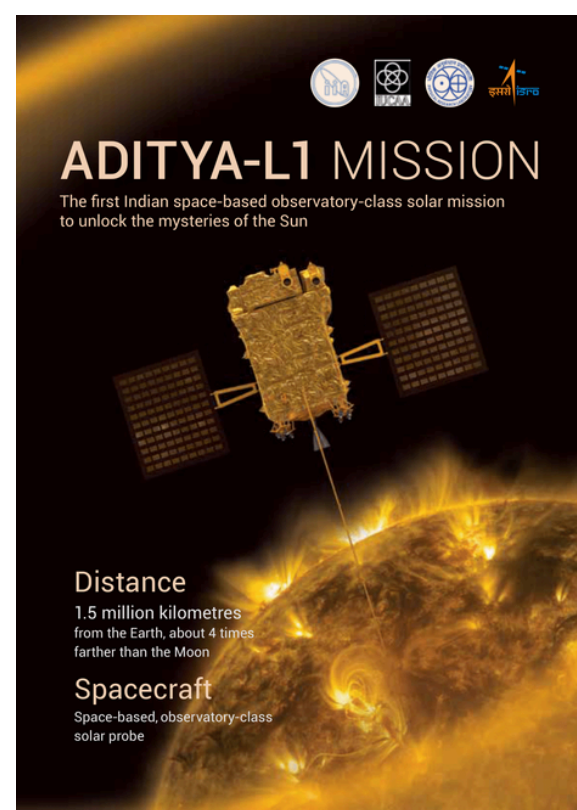
Researchers at MIT created a material embedded with AI that can reshape itself in response to stimuli. This innovation could have applications in aerospace, biomedical devices, and adaptive architecture.

- Aditya-L1 Mission Readiness for Solar Observation

ISRO completed integration of Aditya-L1, India's first solar mission spacecraft, during early 2023. It's designed to study solar activity and space weather from Lagrangian point L1, enhancing India's scientific contributions to heliophysics.

Aditya-L1 mission

The Aditya-L1 mission is India's first dedicated solar observatory, developed by ISRO to study the Sun from Lagrangian Point 1, about 1.5 million km from Earth. Scheduled for launch in 2023, the mission aims to observe the solar corona, solar wind, and flares, contributing to space weather prediction and solar physics. Equipped with seven advanced payloads, Aditya-L1 will provide continuous real-time data, helping scientists understand the Sun's impact on Earth's climate, satellites, and communication systems.



Gallery





Believe in your potential, stay curious, and never fear failure—it's the stepping stone to success. Every challenge is an opportunity to grow. With passion, perseverance, and purpose, you can shape the future and leave a lasting impact on the world.

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