

MECHAZINE

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SPECIAL POINTS OF INTEREST:

- INDUSTRIAL VISITS
- SHOUT OUT LOUD
- MINDSET
- GUEST LECTURE

• “Team AMIGOS” of the Mechanical Engineering Department wrapped up its busiest season by participating in various automobile competitions, including SAEINDIA hBAJA, the SIEP E-Bike Challenge, the SAEINDIA Southern Section Electric Two-Wheeler Design Competition 2024, and Tier-III events in Chennai. The Department of Mechanical Engineering organized a two-day workshop on Lean Six Sigma with Prof. Mohammad T. Khasawneh from Binghamton University, New York. The Department of Mechanical Engineering organized an Alumni Talk on "Career Guidance" on 23rd March 2024, delivered by Mr. B. Venkatesh, an alumnus of the 2014–18 batch. Enriching Experiences: Industrial visits, hands-on workshops, valuable internships, and beyond...

THE HEAD SPEAKS:

I am pleased to release 34th volume of 'MECHAZINE' which showcases the student's interest and their capability for achieving that compatibility to convert their ideas in reality. I am proud to share the remarkable achievements of our Engineering Department. Our “Team AMIGOS” emerged as Runner-Up in the SAEINDIA hBAJA 2024 event and actively participated in various other automobile competitions. Students also secured paid internships with reputed organizations and showcased their talent through our tech fest, VALIENT. These accomplishments reflect our students' dedication and the unwavering support of our faculty. Keep aiming higher!

-Dr. N. Naga Krishna
Head of the Department- ME

Team AMIGOS: A Season of Excellence

Team AMIGOS from Vishnu Institute of Technology, Bhimavaram, had an extraordinary season, showcasing remarkable talent and innovation across prestigious competitions.

At SAEINDIA's hBAJA 2024, held from January 9 to 13 in Pithampur, Indore, the team emerged as the Overall Runner-Up, winning a cash prize of Rs 35,000. They also secured awards for Best Design, Sales, Engine Simulation Design, Sustainability, and Acceleration, each with a cash prize of Rs 15,000.

The team also participated in the SIEP E-Bike Challenge 2024, organized by ISIE INDIA in Bhopal, Madhya Pradesh, from January 24 to 28, 2024.

Adding to their achievements, they took part in the Dr. G. Padmanabham Memorial Electric Two-Wheeler Design Competition 2024, organized by SAEINDIA Southern Section at Rajalakshmi Engineering College, Chennai, on February 17–18, 2024, earning the Third Prize in the Best Innovation Award Category.

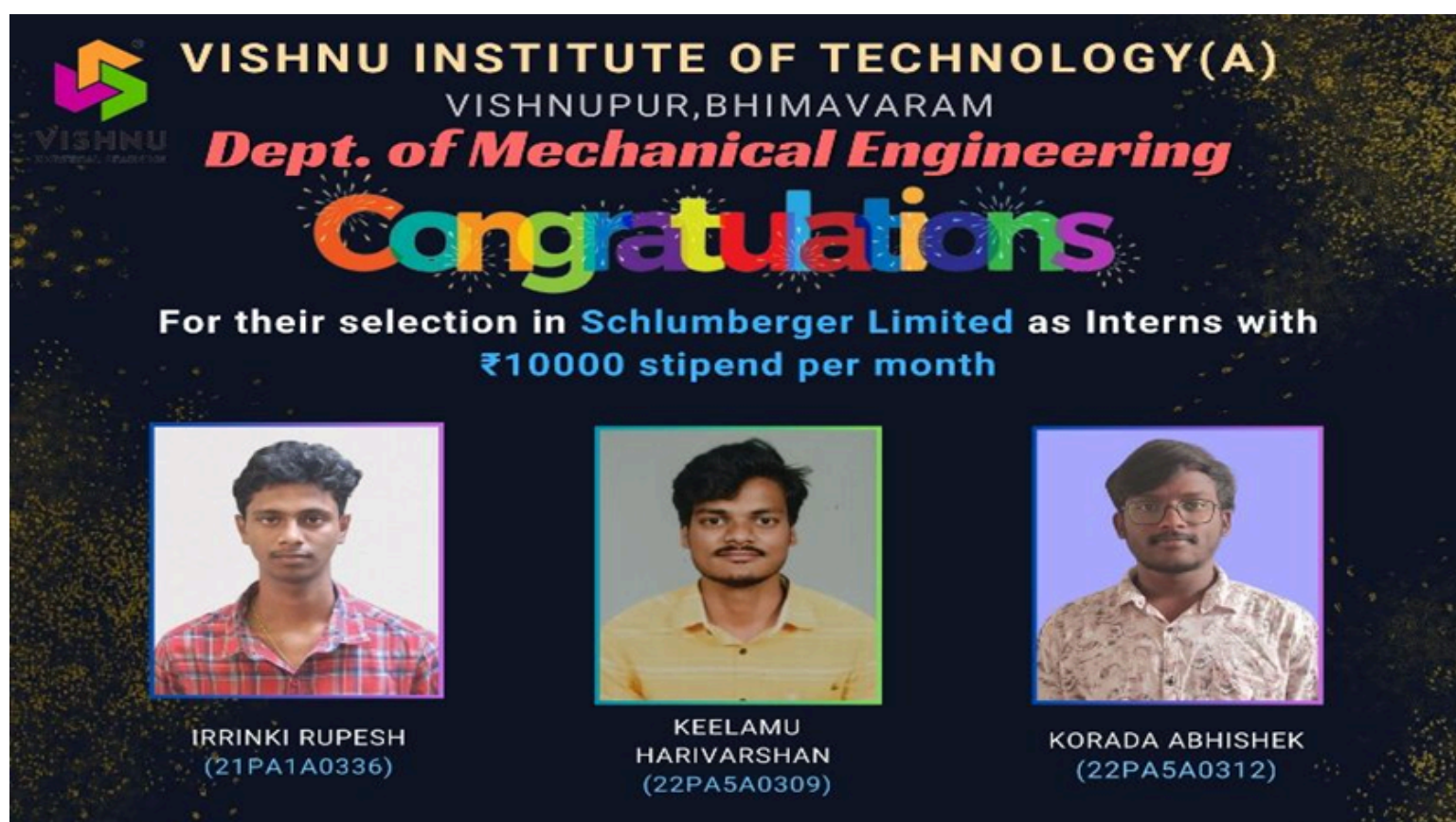


Events and Participations



Exploring Innovation at IMTEX Forming-2024

Four final-year students and Mr. J Chandrasekhar from the Department of Mechanical Engineering visited IMTEX Forming-2024 at Bengaluru International Exhibition Centre from January 19 to 23, 2024. This prestigious event showcased cutting-edge technologies in metal forming, featuring live demonstrations, interactive sessions, and expert engagements, offering valuable insights into the latest industry trends and innovations.



Alumni Talk

The Department of Mechanical Engineering, Vishnu Institute of Technology, Bhimavaram, organized an Alumni Talk on "Career Guidance" on 23rd March 2024. The session featured Mr. B. Venkatesh, an alumnus of the 2014-18 batch and currently the Mandal Engineering Officer (FAC) in Devipatnam, East Godavari District.

Mr. Venkatesh shared his journey from Engineering Assistant to his current role, highlighting his experience managing crucial infrastructure projects. He motivated pre-final year students, emphasizing the importance of utilizing the opportunities provided by the college.

The interactive session saw active participation from students and was graced by Dr. M. Venu, Principal, and faculty members of the Mechanical Engineering Department. Sincere thanks to Mr. Venkatesh for his inspiring and valuable insights.



Industrial Visits

Mechanical Engineering students actively participated in numerous industrial visits, gaining valuable hands-on experience and industry exposure. They explored semiconductor manufacturing at Bengaluru; observed EMI/EMP shielding product manufacturing at SSD Polymers, Machilipatnam; learned about thermocol production at Shri Srinivasa Polymers, Bhimavaram; and witnessed large-scale infrastructure at the Polavaram Project. Students also visited IMTEX Forming 2024 in Bengaluru, showcasing cutting-edge metal forming technologies.



Faculty members from the department engaged in impactful industry collaborations and visits, strengthening academia-industry relationships. They visited renowned companies like Triven Industries Pvt Ltd, Hyderabad; RANE Brake Lining Ltd and Colorshine Coatings Ltd, Chennai; and several leading firms in Coimbatore, including Aquasub Engg and L G Balakrishnan & Bros Ltd. These visits paved the way for MoUs, internships, and potential research opportunities, enhancing the department's industrial interface.

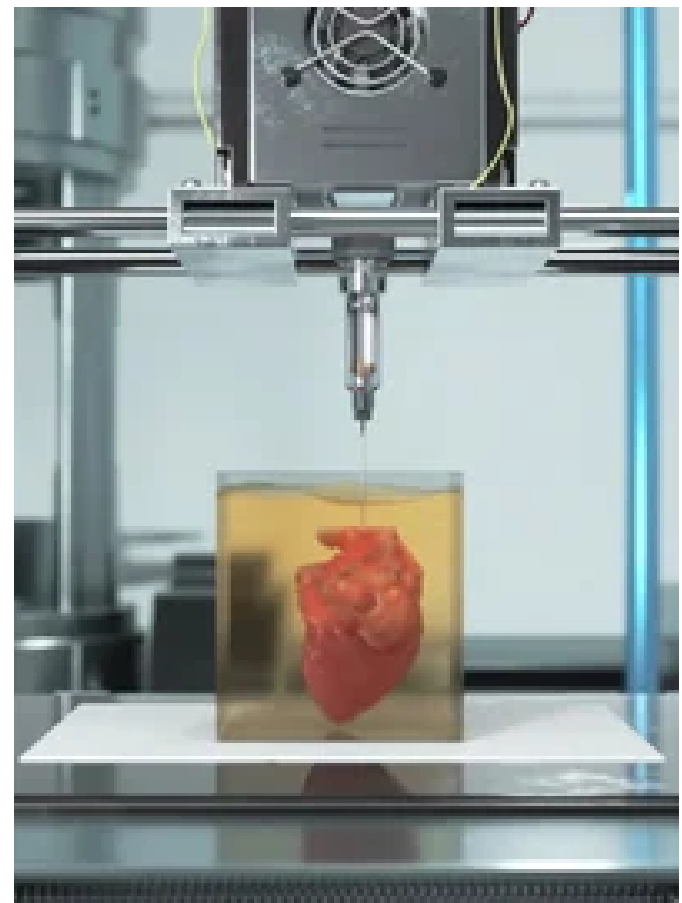


Tech Pulse

- NVIDIA introduced its Blackwell series GPUs, designed for AI workloads. It promises up to 30x efficiency gains in training large models, revolutionizing deep learning and data centers.
- 3D-printed organ trials: For the first time, bio-printed liver tissues created via 3D printing entered clinical trials. This milestone brings the possibility of lab-grown transplant organs closer to reality.
- ISRO's Gaganyaan abort test successful: ISRO completed a successful in-flight abort test for Gaganyaan, proving astronaut safety mechanisms. This brings India closer to launching its first human spaceflight mission by 2025.
- Tata Motors unveils electric commercial trucks: Tata Motors launched new electric trucks built for last-mile delivery. With fast charging and high payloads, they support India's transition to sustainable transportation in logistics.

What is Organ 3D Printing?

Organ 3D printing is a cutting-edge medical technology that uses 3D printers to fabricate human tissues and organs layer by layer. Instead of using plastic or metal, these printers use bioinks—materials made of living cells and supportive scaffolds. The aim is to replicate complex biological structures, such as kidneys, hearts, or liver tissues, which can be used for transplantation or research. Organ 3D printing can solve the organ shortage crisis, reduce transplant rejection, enable personalized medicine, and accelerate drug testing using patient-specific, lab-grown tissues.



Gallery





Do You Know?

Magnetorheological Fluids: These smart fluids change viscosity when exposed to a magnetic field, leading to innovative applications in adaptive braking and suspension systems.

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