

Department of Mechanical Engineering

SEPTEMBER 2023

IGNITION NEWSLETTER





FACULTY EXCELLENCIES | STUDENTS ACCOLADES | EVENT ORGANIZED | PLACEMENTS I INDUSTRIAL VISIT

About the Department

The department of Mechanical Engineering started its successful journey in 1985 and has been accredited by the NBA since 1998. It is recognized as a research center approved by Anna University, as well. The UG/PG courses offered by the department cover the thrust areas such as Thermal, Design, Manufacturing and Industrial Engineering supplemented by well - equipped laboratories, reputed research supervisors and dedicated faculty members. The department has the privilege of housing research cellsnamely the Fibre Reinforced Composite (FRP) Cell, Engine Testing and Bio – Fuel Research cell, Tribology research cell, Welding research cell which are used extensively for research and consultancy projects. The department has completed sponsored research projects for a worth of more than 1.5 crore and consultancy projects for more than 75 lakhs. The department has established a center of excellence in Additive Manufacturing and Computer Integrated Manufacturing, which houses the facilities such as Digital Manufacturing, Robotics and HMI based Automation and 3D printers. The department has published more than 150 papers in peer reviewed journals during the last 4 years.

The following programs are offered by the department

- 1. B.E. Mechanical Engineering
- 2. B.E. Mechanical and Automation Engineering
- 3. M.E. Industrial Automation and Robotics

Vision

To be a leader in Higher Technical Education and Research by providing the state of the art facilities to transform the learners into global contributors and achievers.

Mission

- 1. To be renowned for offering Programs in the field of Mechanical Engineering that imparts competent technical knowledge along with skill, research& innovation, leadership and life skills needed for the students to contribute and achieve at global level.
- 2. To provide quality education encompassing recent technological developments by continuously upgrading the academic infrastructure thereby enhancing the technical knowledge of students, teachers and supporting staff which facilitates technical assistance to industrial and societal needs.
- 3. To offer need based training to the students in tools relevant to mechanical engineering.
- 4. To continuously upgrade the research facility and provide a conducive environment leading to continuous learning, development and transfer of knowledge.
- 5. To inculcate in students minds about Professional ethics, Human Values and Environmental issues in Engineering.

"A Glimpse of Remarkable Achievements"

Acknowledging faculty accomplishments, where passion, knowledge, and commitment converge for exceptional educational journeys.

In a collaborative gesture between academia and industry, Professor Dr. K. Pitchandi, Dr. S. Ramesh Babu, Dr. J. Venkatesan, Assistant Professor Mr. M. Maheswaran participated in a Teachers' Day celebration organized by **Delphi TVS** at Plant - 1 in Mannur on 12th September, 2023. The event, dedicated to honoring educators, aimed to strengthen the bond between academia and industry. The professors expressed gratitude for the recognition, highlighting the significance of collaborative efforts.







"A Glimpse of Remarkable Achievements"

On 28th September, 2023, Dr. S. Natarajan completed an extensive 12-module course in "ENERGY LITERACY TRAINING" under the **Energy Swaraj Foundation**. This training delves comprehensive aspects of energy, covering generation, consumption, environmental impact, carbon footprint, and strategies for sustainable practices, emphasizing energy solutions and debunking misconceptions.





Mr. M. Maheswaran, along with students A. Mohammed Aashig, J. Manikandan, and S. Arunkumar, showcased their entitled, innovation "Design and **Fabrication of Hybrid-Battery Powered** Cycle" in the Second International Conference on Advanced Trends in Renewable Energy (ICATRE 2023), held at Nehru Institute of Technology, Coimbatore. They highlighted sustainable transportation solution aligning with the conference's renewable energy focus on 29th & 30th September. 2023.

"A Glimpse of Remarkable Achievements"

Engaging the academic community, **Dr. C.** Senthamaraikannan delivered a presentation on the paper titled "Design and Analysis of Parallel Manipulator with Six Rotational Motions" at the Second International Conference on Advanced Trends in Renewable Energy (ICATRE 2023). The event was hosted by the Centre for Renewable Energy at Nehru Institute of Technology, Coimbatore, on 29th & 30th September, 2023.





Dr. M. Mohandass attended the "Post Finishing of Additive Manufactured complex External and Internal features" Workshop at IIT Tirupathi on 5th September, 2023.

Dr. S Saravanan, Mr. V Senthil Velan, Mr. M. Balakumar actively participated in a five-day online Faculty Development Program (FDP) titled "Optimizing Techniques and its Application from a Research Perspective" from 13th to 17th September, 2023, organized by Scientifica Research Reports, Chennai.



"A Glimpse of Remarkable Achievements"

Dr. R. Ramesh, Dr. Muniraj. Mr. Kaliyanasunder, actively Sivaramapandian participated in the All India Seminar on Advances in **Nanotechnology** for Sustainable Development held at Manakula Vinayagar Institute of Technology. Puducherry, from 4th to 5th September, 2023.





Showcasing expertise in material science, Mr. V Senthil Velan presented a paper titled "Fatigue Performance of Wire Arc Additive Manufactured Aluminium Allov 5356" at the International Conference on Processing and Fabrication of Advanced Materials. The conference took place from 6th to 8th September, 2023, at IIT Tirupathi.

"A Glimpse of Remarkable Achievements"

Dr. M Prem Ananth and Mr. J Sivaramapandian presented a paper titled "Experimental Investigation on **Mechanical Characterization of Glass** Fibre Reinforced Polvmer" The presentation was part of the Second International Conference Advanced Trends in Renewable Energy (ICATRE 2023) held by the Centre for Renewable Energy at Nehru Institute of Technology, Coimbatore, on 29th &30th September, 2023.

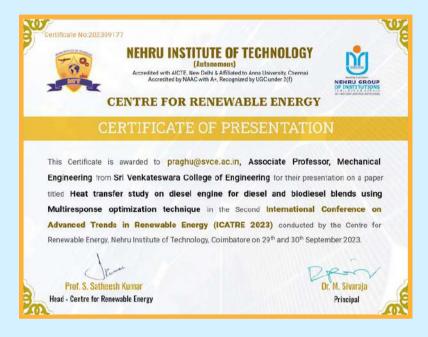




Dr. P Raghu showcased innovation in renewable energy with his paper **Fabrication** "Design & **Power** Generation from A/C Exhaust" at the **International** Second Conference on Advanced Trends in Renewable Energy (ICATRE 2023). The event, organized by the Centre for Renewable Energy at Nehru Institute of Technology, Coimbatore, unfolded on 29th & 30th September, 2023.

"A Glimpse of Remarkable Achievements"

Raghu contributed to Dr. advancements in renewable energy with his paper "Heat Transfer study on diesel engine blends biodiesel usina Multiresponse **Optimization** techniques" presented at the Second International Conference Advanced **Trends** in on Renewable Energy (ICATRE 2023). The conference, organized by the Centre for Renewable Energy at Nehru Institute of Technology, Coimbatore, took place on 29th & 30th September, 2023.





Immersing themselves in the forefront of technological innovation, Mr. M Maheswaran G and Mr. Kirubakaran participated the in **Ansys** Academic **Innovation** Conference 2023. held in Chennai on 13th September, 2023.

STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

In the journey of education, students' achievements illuminate the path to excellence. We proudly acknowledge their recent accomplishments

V. Monish, a final year student, achieved the remarkable feat of securing the Third position in the Anna University zonal tournament, hosted by Saveetha Engineering College on 23rd September, 2023.



Raviram R (2127201001057) final year, continues his learning journey by successfully completing the "Product Development using AutoCAD" online non-credit project, authorized by Coursera Project Network and offered through Coursera on 19th September, 2023.



STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

Harish Ramanathan Babu showcased his expertise at the 29th International Conference on Processing and Fabrication of Advanced Materials, themed "Smart NextGen PFAM: Technology & Innovation Landscape," held from 6th to 8th September, 2023. He delivered a



presentation on "Processing and Characterization of Medical Implants by Surface Modification," contributing valuable insights to the conference organized by IIT Tirupati.

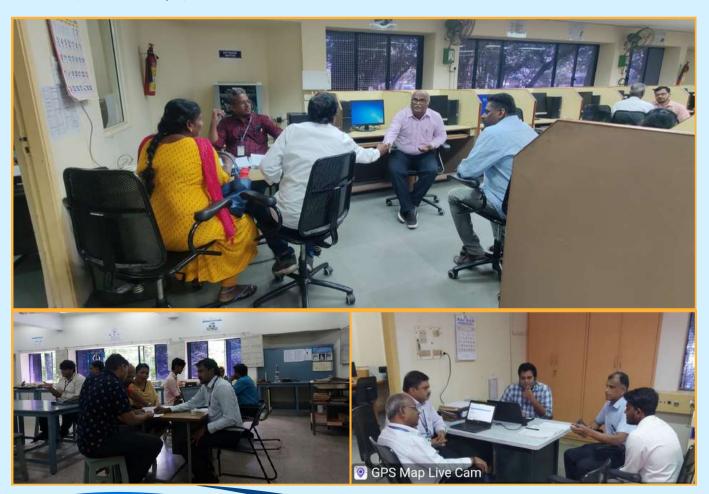


Raviram R (2127201001057) final year, showcased dedication to learning by successfully completing the "Understanding Research Methods" online noncredit course, authorized by the University of London and SOAS University of London, offered through Coursera on 17th September, 2023.

EVENT ORGANIZED

Parents Teachers Meeting

The Parent-Teacher Meeting (PTM) for the Odd semester of the academic year 2023-2024 took place on **23rd September, 2023**. UG parents were cordially invited. The event saw active participation, with over **70 parents attending. Dr. S. Ramesh Babu** HOD/Mech addressed parents, outlining the college's vision, mission, and the Mechanical Engineering Program's objectives. Emphasis was placed on Course Outcomes (CO), Program Outcomes (PO), and Specific Outcomes (PSO) for achieving program goals. The importance of student knowledge, skills, and attitudes, along with attendance requirements, was highlighted. Details on placements, company visits, attendance regulations, grading criteria, internship importance, research facilities, scholarships, and student awards were communicated.



PLACEMENTS

"Opening Doors to Career Opportunities"



Congratulations to **AKASH R** (2127201001004) and **RAAGHAV V** (2127201001052) for receiving job offers on **23rd September, 2023**, as **Graduate Engineer Trainees** at **M/s. Daimler India Commercial Vehicles Pvt Ltd** upon the successful completion of their internships from 3rd July to 1st September, 2023.

"Factory Chronicles: Where Learning Takes Shape"

Industrial visits bridge the gap between classroom learning and practical application, immersing participants in the dynamic environment of real-world operations

On 22nd September, 2023, 48 students from Mechanical Engineering and 32 students from Mechanical and Automation, embarked on an industrial visit to Podaran Food Pvt. Ltd. in Chittor, Andhra Pradesh. Coordinated by Assistant Professors Mr. M. Maheswaran, Mr. M. Arul Kumar, Dr. A. Saravanan, and Mr. A. Kumarasamy, the visit offered insights into Podaran Food's beverage offerings, from Carbonated Drinks to Fresh Fruit Juices, making it a comprehensive experience for the students.



Podaran Food Pvt. Ltd. in Chittor, Andhra Pradesh

"Factory Chronicles: Where Learning Takes Shape"

On 22nd September, 2023, 80 students from B.E. Mechanical Engineering and B.E. Mechanical and Automation program, led by Assistant Professors Mr. M. Maheswaran, Mr. M. Arul Kumar, Dr. A. Saravanan, and Mr. A. Kumarasamy, explored the world of advanced technology at Jai Plastic Industries Pvt. Ltd. The industrial visit aimed to provide practical insights into the manufacturing of sophisticated moulds, dies, tools and plastic products there by enhancing students' understanding of cutting-edge processes.



Students from II Year belonging to B.E Mechanical Engineering and B.E Mechanical and Automation Engineering programs during their visit to Jai Plastic Industries Pvt. Ltd. in Chittor, Andhra Pradesh

"Factory Chronicles: Where Learning Takes Shape"

On 15th September, 2023, 38 students from II Year B.E Mechanical and Automation engineering program, accompanied by faculty Dr. V. Sridharan and Mr. A. Ranjith Raj, embarked on an insightful industrial visit to Scorpio Sealings Private Limited in Pennalur, Chennai. The visit aimed to provide students with practical exposure to real-world manufacturing processes, with respect to forging processes.





Students from II Year B.E Mechanical and Automation Engineering program during their visit to Scorpio Sealings Private Limited in Pennalur, Chennai.

"Factory Chronicles: Where Learning Takes Shape"

On 21st September, 2023, our Third year B.E. Mechanical Engineering students visited Dinesh Engineering Industry, Thodukadu, Tamil Nadu. The department of Mechanical Engineering would like to express sincere gratitude to Shri. Dinesh S, CEO for permitting the visit. The students were exposed to various CNC Machine tools used for machining the cast automobile products.

On the same day they visited **SK Auto Tech** located at Thandalam, which is involved in manufacturing rubber sealings for automobiles



Students from III Year belonging to B.E Mechanical Engineering department during their visit to Dinesh Engineering Industry

EDITORIAL TEAM



Dr. S. RAMESH BABU
Professor & Head
Mechanical Engineering



Dr. S. MUNIRAJ
Assistant Professor
Mechanical Engineering



Mr. A. Ranjith Raj
Assistant Professor
Mechanical Engineering

STUDENT EDITORIAL TEAM



Mr. Lohesh M V IV Year Mechanical Engineering



Mr. Raviram R IV Year Mechanical Engineering



Mr. Kiran Kumar D P III Year Mechanical Engineering



Mr. Mithun Aravind O III Year Mechanical Engineering



Mr. G Bharath Kumar II Year Mechanical Engineering



Mr. Bharath Vigneshwar R II Year - Mechanical and Automation Engineering



Mr. M Sanjay I Year Mechanical Engineering



Mr. Lithesh C I Year - Mechanical and Automation Engineering

ALUMINI INTERACTIONS

"Connecting Alumni: Celebrating Success Stories"

In the spirit of lifelong learning, we cherish interactions with our esteemed alumni, whose achievements continue to inspire and enrich our academic community.

ALUMNI WRITE-UP

4471

Comments

"Factory Chronicles: Where Learning Takes Shape"

On 21st September, 2023, Shri. Satish SasiKumar, a proud alumnus of the batch 2014-2018 and CEO of SK Auto Tech, Thandalam, orchestrated a valuable industrial visit to his company. During the industrial visit, our alumni and students engaged in enriching interactions, fostering knowledge exchange and industry-academia collaboration.



Students from III Year belonging to Mechanical Engineering program during their visit to Scorpio Sealings Private Limited in Pennalur, Chennai.