



MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

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Accredited by NBA & NAAC 'A' Grade

Kalitheerthalkuppam, Puducherry - 605107



DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER 2024-25 (EVEN SEM)

SCIMIT 25



SCIMIT 25 – National Science Day (A Mega Project Contest) was celebrated on 28th February 2025 to commemorate the birth anniversary of Nobel Laureate Sir C.V. Raman. The event was organized by Manakula Vinayagar Institute of Technology, an Institution member of The Institution of Engineers (India).

Dr. B. Radjaram, IP Chairman of IE(I), Member of ISHRAE and NIQR, and Head of the Department of Mechanical Engineering, served as the Convener of the event

250 projects across India, from more than 100 colleges and 700 students participated and exhibited a wide range of innovative and application-oriented projects that reflected emerging technologies and problem-solving approaches.

Cash prizes worth more than ₹1,50,000 were awarded to the most outstanding projects to recognize and motivate young minds in the domains of research, innovation, and product development.

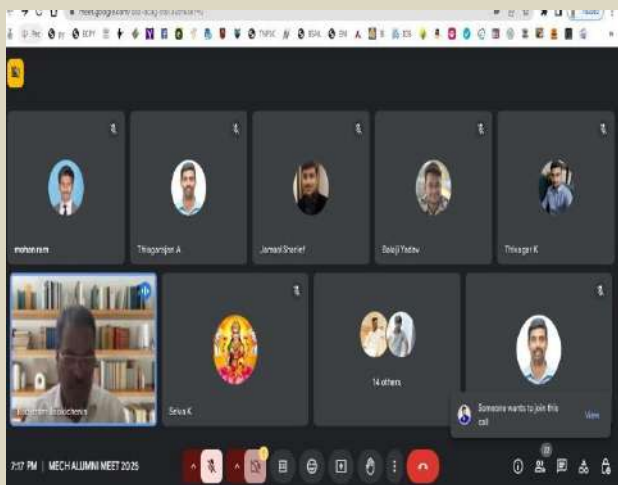
MITILENCE 25



MITILENCE – a National Level Technical Symposium – was held on 14th March 2025, showcasing a variety of events across Mechanical Engineering and other departments. The symposium featured both technical and non-technical competitions, drawing enthusiastic participation from students of various institutions. Aimed at nurturing innovative, skilled, and entrepreneurial engineers capable of contributing to cutting-edge engineering and research. The winners of the various events are awarded with cash prizes and merit certificates. Dr. B. Radjaram, Head / MECH, warmly welcomed the participants. The

event was coordinated by Mr. R. Ilandjezian, AP/MECH.

ALUMNI MEET



The Department of Mechanical Engineering conducted a vibrant **Alumni Meet 2K25** to reconnect former students and reinforce their bond with the institution. Alumni from various batches participated enthusiastically, sharing memories and professional insights.

The event served as a valuable platform for interaction between alumni, faculty, and current students. Discussions focused on industry trends, career development, and emerging technologies in mechanical engineering.

Notable alumni achievements were highlighted, fostering inspiration and pride among attendees. Opportunities for future collaboration in internships, mentorship, and research were explored. Mr. A. Thiagarajan, Assistant Professor, delivered the welcome address.

Dr. B. Radjaram, Head of the Department, delivered the felicitation address. Several alumni shared their interview experiences, industrial exposure, and preparation tips for juniors. The event concluded with a vote of thanks from the Alumni Coordinator, expressing appreciation to all contributors.

GUEST LECTURE



A guest lecture on “**Unleashing the Power of Engineers to Advance Sustainable Development**” was organized by the Department of Mechanical Engineering in collaboration with IE(I) on 10th March 2025.

Dr. B. Radjaram, Head of the Department, delivered the welcome address, emphasizing the pivotal role engineers play in shaping a sustainable future.

The session was delivered by the Chief Guest, Mr. Murugavel Bala, Chief Skills Officer, Shield Group, Chennai, who shared valuable perspectives on empowering engineering professionals to drive sustainable development initiatives. The event concluded with a vote of thanks delivered by Mr. S. Ganeshkumar, Assistant Professor, Mechanical Engineering.



To commemorate **World Water Day 2025**, Department of Mechanical Engineering organised a Guest Lecture on the topic “**Importance Of Valves And Water Level Controllers**” for Mechanical Engineering students in association with Indian Plumbing

Association (IPA)-MIT Students Chapter on 19th March 2025.

Dr. B. Radjaram, Head of the Mechanical Engineering Department, warmly welcomed the gathering and emphasized the relevance of fluid control technologies in modern engineering applications.

The session was delivered by the Chief Guest, Mr. S. V. Raja, Managing Partner of ADR Automation & Technologies, Chennai, who shared valuable insights on the practical significance and innovations in valve systems and water level controllers.

The event concluded with a vote of thanks delivered by Dr. A. Mathiarasu, Assistant Professor, Department of Mechanical Engineering.



A Guest lecture on **“Transformative & Futuristic Technologies: Industry 4.0 and Beyond with Learning 4.0”** was organized by the Department of Mechanical Engineering in Association with the ISHRAE on 10th March 2025.

Dr. B. Radjaram, Head of the Mechanical Engineering Department, extended a warm welcome to the gathering. He highlighted the significance of preparing students for the rapidly evolving digital landscape.

The session was delivered by Chief Guest Mr. Sriram Hariharan, Founder and Chief Strategist of shield group, Chennai, who provided a

comprehensive overview of Industry 4.0 advancements, the evolving landscape of intelligent systems, and the critical role of Learning 4.0 in preparing students for the demands of future-ready engineering careers. Dr. A. Thiagarajan, Assistant Professor, delivered the vote of thanks.



A guest lecture on **“Significance of AI in Sustainable Energy Technologies”** was organized by the Department of Mechanical Engineering in collaboration with the Energy Club on 3rd April 2025.

Dr. B. Radjaram, Head of the Mechanical Engineering Department, extended a warm welcome to the students and highlighted the importance of integrating AI into emerging energy solutions.

The session was led by the Chief Guest, Dr. K. Karthik Selva Kumar, Assistant Professor, Department of Green Energy Technology, Pondicherry University, Puducherry, who delivered a thought-provoking lecture focusing on the transformative role of Artificial Intelligence in optimizing and advancing sustainable energy systems. Mr. S. Ganeshkumar, AP/MECH, delivered the vote of thanks.

INDUSTRIAL VISIT



Students of II, III, and IV Year Mechanical Engineering undertook an industrial visit to Puducherry Power Corporation Limited, Karaikal, on 13th February 2025, with the objective of acquiring in-depth exposure to power generation technologies and gaining firsthand understanding of the operational dynamics and engineering practices within a thermal power plant setting.



Students of I, II, III, and IV Year Mechanical Engineering visited the Batteries Lab at the Centre for **Green Energy Technology, Pondicherry University**, on 25th March 2025. This visit aimed to provide students with practical insights into advanced battery technologies and their applications in sustainable energy systems.



Students of I, II, III, and IV Year Mechanical Engineering visited the Micro, Small, and Medium Enterprises (MSME) Centre in Puducherry on 25th March 2025 to gain exposure to industrial practices, understand the role of MSMEs in the manufacturing sector, and explore opportunities for innovation, entrepreneurship, and skill development in small-scale industries.

WORKSHOP COURSES



A one-day workshop on “GATE & Government Exams: Roadmap to a Secure Career” was conducted by the Department of Mechanical Engineering in association with the Institution of Engineers India IE(I) Mechanical Engineering Students Chapter, Puducherry state centre on 18th February 2025.

Dr. B. Radjaram, IP Chairman of IE(I), Member

of ISHRAE, NIQR, and Head MECH, warmly welcomed the students and emphasized that GATE is a crucial stepping stone for higher education, government jobs, and professional growth in engineering. Mr.S.Poonkundran, Director, Genz Academy 2025 was the Chief guest and delivered an insightful session emphasizing the value of competitive exams such as GATE, ESE, SSC JE, and PSU recruitments in building a stable and rewarding career path. This session provided valuable guidance and motivation for students to pursue competitive exams as a pathway to a secure and successful engineering career. Mr. S. Ganeshkumar, AP/MECH, delivered the vote of thanks.



Mr.M.R.Hariharan,Senior CAD Engineer – Business Support Chairman,CADD CENTRE Puducherry conducted a workshop titled **“Digital Factory”** for Mechanical Engineering students on 25th February 2025. This workshop aimed to provide students with insights into the evolving landscape of industrial design and research, emphasizing emerging trends, innovation strategies, and the skillsets required to pursue careers in R&D and product development within the engineering industry.



Mr. M. Govindan, Faculty in the domain of CAD/CAM/CAE, conducted a workshop under the aegis of NIQR titled **“Recent Technology in Computer Aided Engineering”** for Mechanical Engineering students on 25th March 2025. This program aimed to equip students with insights into the latest advancements and practical applications of Computer Aided Engineering technologies.



A one-day workshop on **“Green Energy Technology”** was conducted on 25th March 2025 by Dr. Perumal Elumalai, PhD (IISc) and Professor in the Department of Green Energy Technology, Puducherry University, for Mechanical Engineering students of I, II, III, and IV year.This workshop aimed to enhance students’ understanding of sustainable energy solutions, introduce emerging technologies in the green energy sector, and encourage environmentally responsible engineering practices.



A one-day workshop titled **“Opportunities for Engineers in Industrial Design and Research”** was organized on 12th April 2025 for I, II, III, and IV year Mechanical Engineering students, led by Er. J. Pugazhendhi, Assistant Manager – R&D at Schwing Stetter India Pvt. Ltd., Chennai. The session aimed to expose students to career prospects in industrial design and research, highlighting current industry trends, innovation processes, and the essential skills required for R&D roles in the engineering sector.



A workshop on **“Data Collection Procedures and Data Analysis Methods”** was conducted on 11th February 2025 by Dr. A. Mathiarasu, Assistant Professor, Department of Mechanical Engineering, for Mechanical Engineering students. The session was designed to enhance students' research capabilities by providing in-depth knowledge of systematic data acquisition techniques and analytical methodologies.

PROFESSIONAL ETHICS PROGRAM



A poster presentation event on **“Professional Ethics and the Indian Constitution”** was organized for final-year students on 2nd April 2025, providing them an opportunity to explore and visually communicate key concepts related to ethical practices and constitutional values in the professional domain.

IPR AWARENESS PROGRAM



An awareness session on **“How to File IPR”** was conducted on 18th March 2025 by Dr. S. Krishna Kumar, Assistant Professor / Mechanical Engineering, for **III year students**. This session aimed to educate students on the fundamentals of Intellectual Property Rights (IPR), with the objective of fostering innovation and guiding them through the procedures and importance of protecting their original ideas, designs, and inventions through proper IPR filing.

EDC ACTIVITIES



A workshop on “**CNC and Advanced Manufacturing Ventures**” was conducted on 22nd March 2025 for final-year Mechanical Engineering students by Mr. A. Krishnan, Marketing Manager at the Micro, Small, and Medium Enterprises (MSME), Puducherry. The session aimed to provide insights into modern CNC technologies and entrepreneurial opportunities in advanced manufacturing within the MSME sector.

ALUMNI ACTIVITIES



A session titled “**Preparing for the Core Industry Environment**” was held on 8th January 2025 for third-year Mechanical Engineering students, delivered by Mr. Prassana, an alumnus of the 2016–2020 batch. The session focused on equipping students with practical insights, industry expectations, and

essential skills needed to thrive in core engineering sectors.



A session titled “**Success Principles for a Promising Future in the Core Industry**” was conducted on 8th January 2025 for final-year students by Mr. Siranthan, an alumnus from the 2016–2020 batch. The session aimed to inspire students by sharing key strategies, industry insights, and personal experiences essential for building a successful career in the core engineering sector.

STAFF ACTIVITIES

JOURNAL PUBLICATIONS

Mr. S. Ganeshkumar has published a research article titled “**Effect of Filler on Mechanical Properties, Diffusion Kinetics, Thermal Stability, Damping, and Dielectric Properties of EPDM-AGNP Nanocomposites**” in Emergent Materials (Springer) on April 26th, 2025 with an impact factor of 4.8

PATENT

Mr.B.Vasanth and Dr. S.Krishna Kumar, published a patent on Design and Fabrication of Iot Based Solar Powered Grass Cutter With Plougher.

CONFERENCE ATTENDED

1. Dr. B. Radjaram, Dr. P. Natarajan, Mr. R. Ilandjezian, Dr. A. Mathiarasu, and Mrs. G. Deeba participated in the South Asia Foundation-sponsored National Conference on **“Green Energy Technologies for Sustainability”** (NCGETS2025), a UNESCO Chair Activity, held from 20th to 21st March 2025.

2. Mrs. G. Deeba presented a paper in the International Conference on “Emerging Trends in Engineering, Technology & Management” held at Viswam Engineering College, Madanapalle, Andhra Pradesh, from 11th to 12th February 2025.

3. Mr. A. Thiagarajan participated in ICON: EHIAS'25 (International Conference on Engineering Horizons, Innovation, Advancements, and Sustainability) held at SRM Madurai College of Engineering & Technology from 16th to 17th May 2025.

4. Mr. A. Thiagarajan, Mr. R. Ilandjezian, and Mr. B. Vasanth participated in the 8th National Conference URJAVARAN 2024–25, held at IGCAR, Kalpakkam, focusing on the theme “Policy and Regulatory Frameworks for Sustainable HVAC Practices.” January 10-11, 2024

FDP ATTENDED

Mrs. G. Deeba, AP / Mech participated in the Faculty Development Program on “Generative AI Tools Across Disciplines: Transforming Research and Innovation” organized by Ramachandra College of Engineering (Autonomous), Eluru, West Godavari District, Andhra Pradesh, from 9th to 14th January 2025.

Mr. R. Ilandjezian, AP / Mech, and Dr. A. Mathiarasu, AP / Mech have successfully participated in a five-day online Faculty Development Program (online) on **“Innovations and Frontiers in Metallurgical Engineering”** from 13th to 17th January 2025

Mr. K. Selvam, Mr. R. Ilandjezian, Mr. A. Thiagarajan, Mr. B. Vasanth, Mr. S. Ganeshkumar, Dr. P. Natarajan, Dr. S. Krishnakumar, and Dr. A. Mathiarasu, Assistant Professors from the Department of Mechanical Engineering, participated in the Faculty Development Program on **“Innovations and Frontiers in Metallurgical Engineering (IFMETE)”** held at Dr. Vishwanath Karad MIT World Peace University, Pune, from 13th to 17th January 2025.

Mr. B. Vasanth, AP / Mech participated in the Faculty Development Program on **“Emerging Trends in Mechanical Engineering”** held at Syed Ammal Engineering College (Autonomous), Ramanathapuram, from 10th to 15th February 2025.

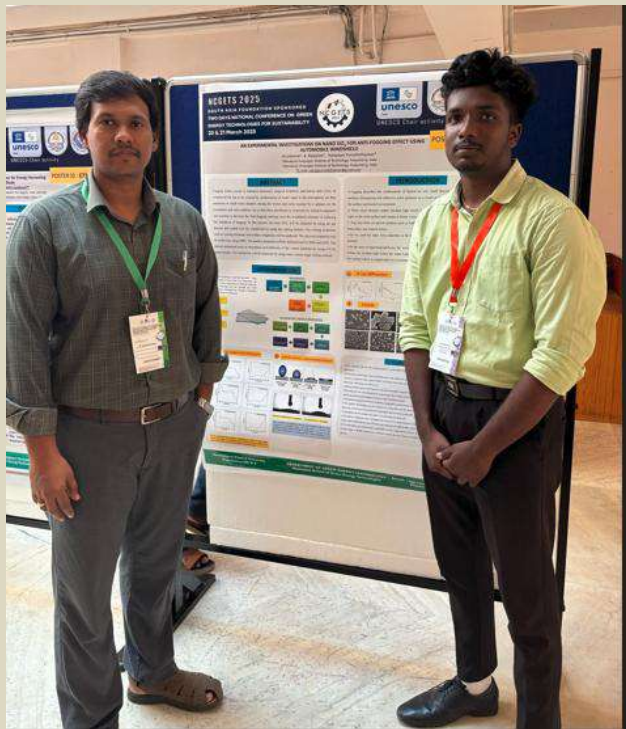
Mrs. G. Deeba participated in the Faculty Development Program on **“Advanced Technologies and Trends in Robotics”** organized by SR University, Warangal, from 24th to 28th February 2025.

STUDENTS ACTIVITIES



Ms.S.Pavithra and Mr.Sangeeth Zeon Madhav, third-year Mechanical Engineering students,

successfully completed a specialized course on “**Advanced Manufacturing Techniques and Process Monitoring**” conducted from 17th to 21st March 2025. This intensive program was organized by the Department of Mechanical Engineering, Indian Institute of Technology, Madras, and aimed at enhancing technical competencies in cutting-edge manufacturing methodologies and real-time process analytics.



Mr. A. Arunkumar, a second-year student, participated in the **poster presentation** at the South Asia Foundation-sponsored National Conference on “Green Energy Technologies for Sustainability” (NCGETS2025), a UNESCO Chair initiative, held on 20th and 21st March 2025.



First Year Mechanical Engg students Ragul.K, Jean Francois, Kalaiperarasu have presented a project titled Auto Sleep Detection in Mailam Engineering college in Tech Xplore 25 project competition on 26th March 2025

EXTERNAL INTERACTIONS



Dr. B. Radjaram, Head of the Department of Mechanical Engineering, has been appointed as a **National Advisory Committee Member** for the National Conference on “Green Energy Technologies for Sustainability” (NCGETS 2025). This conference is sponsored by the South Asia Foundation and organized under the aegis of the UNESCO Chair initiative held on 20th and 21st March 2025. He was a chief guest for the valedictory function of the event.



Mr.A.Thiagarajan AP/Mech, has been elected as the President of the ISHRAE Puducherry Chapter for the term 2025–2026.

Dr. P. Natarajan, AP/Mech, served as a technical reviewer at the International Conference on Sustainable Goals in Materials, Energy, and Environment (ICSMEE'25), held at Mangalam College of Engineering, Kottayam, Kerala, India, from April 3rd to 4th, 2025.



Dr. P. Natarajan, AP/Mech, participated in the MSME Business Connect event held at Hotel Athithi Hotel, Puducherry.