



MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY



An Autonomous Institution

Affiliated to Pondicherry University. Approved by AICTE, New Delhi.

Accredited by NAAC with 'A' Grade

Kalitheerthalkuppam, Puducherry- 605 107.

DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER 2025-26 (ODD SEM)

WORLD ENVIRONMENT DAY



On the occasion of World Environment Day, the Department of Mechanical Engineering, in collaboration with the IE(I) Mechanical Engineering Students Chapter, Puducherry State Centre, organized a drawing competition for school students on 26th July 2025.

Dr. B. Radjaram, IP Chairman of IE(I), Member of ISHRAE and NIQR, and Head of the Mechanical Engineering Department, warmly welcomed the participants. The event was coordinated by Mr. S. Ganeshkumar, Assistant Professor / MECH

This initiative aimed to encourage young students to creatively express the importance of environmental conservation, thereby promoting awareness and sustainability through art.

58th ENGINEERS DAY



A guest lecture for Engineer's Day 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 15th September 2025.

Dr. B. Radjaram, IP Chairman of IE(I), Member of ISHRAE and NIQR, and Head of the Mechanical Engineering Department, warmly welcomed the students and highlighted the significance of engineers in various fields. Dr. T. Pugazhenthii, Ph.D.

(IIT Madras), Senior Design Engineer at Imeconsys Private Limited, Puducherry, was the Chief Guest and addressed the gathering on the theme “Deep Tech & Engineering Excellence: Driving India’s Techade”.

The program strengthened Mechanical Engineering students’ technical skills, innovation mindset, and readiness to contribute to India’s tech-driven future. Mr. S. Ganeshkumar, Assistant Professor, Department of Mechanical Engineering, delivered the vote of thanks.

CODE OF CONDUCT PROGRAM



A Code of Conduct Programme for II and IV Year Mechanical Engineering students was conducted on 11th and 17th July 2025

by Dr. B. Radjaram, Professor and Head of the Department of Mechanical Engineering. He provided a comprehensive overview of the college rules and regulations, elaborated on the department’s vision and mission, and encouraged students to actively engage in co-curricular activities for their holistic development.

PROFESSIONAL BODY ACTIVITY



The Department of Mechanical Engineering organized the MIT ISHRAE Students Chapter Reinstallation Ceremony for the 2025–26 Society Year on 14th August 2025.

GUEST LECTURE



A Guest Lecture for Mechanical Engineering students on the topic “**Building a Nation, Building a Career: The Impact and Opportunities in HVAC&R**” was conducted on 14th August 2025. The session was delivered by Mr. Maniventhan M, Director – Operations, Thermoflux Systems Pvt. Ltd., and Secretary of the ISHRAE Chennai Chapter. The resource person shared valuable insights into the role of HVAC&R in national development and highlighted the diverse career opportunities available in the industry.



The Department of Mechanical Engineering, in association with the Energy Club – MIT, organized a Guest Lecture on “**Energy Audit and its Scope for Engineers**” on 08th September 2025 for II, III, and IV Year Mechanical Engineering students. The session was delivered by Er. T. Sundarapandiyam, Proprietor, TSP Engineers and Consultants, Tiruchirapalli, and President of the ISHRAE Tiruchirapalli Sub Chapter. He provided a comprehensive overview of energy auditing methodologies, industry best practices, and emerging career opportunities in energy management, enhancing students’ professional exposure

and understanding of sustainable engineering applications.



A Guest Lecture on the topic “**Potable Water Quality and Control of Microbial Diseases**” was organized for Mechanical Engineering students on 13th September 2025. The session was delivered by Dr. P. Sriyutha Murthy, Scientific Officer, Department of Atomic Energy, Biofouling & Biofilm Process Section, Water & Steam Chemistry Division, Indira Gandhi Centre for Atomic Research, Kalpakkam. The lecture provided valuable insights into potable water quality standards and the control of microbial diseases, emphasizing their significance in engineering applications.



A Guest Lecture was organized on the occasion of **World Habitat Day** on the theme “**Climate-Resilient Strategies for Sustainable Urban Habitats**” for Mechanical Engineering students on

14th October 2025. The session was delivered by Dr. D. S. Sharada, Deputy Dean – International Relations and Professor, Department of Green Energy Technology, Pondicherry University, Puducherry. The lecture highlighted sustainable urban development practices and climate-resilient strategies essential for future engineers.



On the occasion of **World Standards Day – 2025** (Theme: “Shared Vision for a Better World: Partnerships for the Goals”), a Guest Lecture on “**Quality and Reliability Standards for Manufacturing Excellence**” was conducted for Mechanical Engineering students on 10th November 2025 by Mr. S. Balasubramaniyan, Quality Manager, Poclain Hydraulics Pvt. Ltd. Puducherry.

INDUSTRIAL VISIT



An Industrial Visit was organized for II, III, and IV Year Mechanical Engineering students to Villupuram District Co-Operative Milk Producers Union Ltd, Villupuram, on 21st August 2025.



An Industrial Visit was organized to Appasamy Associates Pvt. Ltd., Puducherry, on 18th September 2025. The visit provided practical exposure to industrial manufacturing operations, quality assurance practices, and real-time engineering applications, thereby enhancing technical knowledge and industry readiness.

IPR AWARENESS



The session on “**IPR Awareness for Emerging Engineers and Innovators**” was conducted on 2nd September 2025 by Dr. P. Natarajan, Assistant Professor, Department of Mechanical Engineering.

This session highlighted the importance of Intellectual Property Rights and emphasized their relevance for aspiring engineers and innovators.

QIP



A Quality Improvement Programme (QIP) titled “Energy and Quality Management Strategies for Industrial Engineering Systems” was delivered to III Year Mechanical Engineering students on 17th September 2025 by G. Deeba, Assistant Professor, Department of Mechanical Engineering.

MOUs



The Department of Mechanical Engineering, Manakula Vinayagar Institute of Technology (Autonomous), signed a Memorandum of Understanding (MoU) with Thermoflux Systems Pvt. Ltd. on 14th February 2025. This collaboration aims to strengthen industry–academia interaction

and provide enhanced training, internship, and skill development opportunities for students.



The Department of Mechanical Engineering, Manakula Vinayagar Institute of Technology, organized a Memorandum of Understanding (MoU) Signing Ceremony with Atribs Software Systems Private Ltd, powered by Shield International Group, on 14th February 2025.

The collaboration aims to strengthen industry–academia engagement by fostering knowledge exchange, promoting technical skill development, and creating opportunities for internships, training programmes, and collaborative initiatives

STAFF ACTIVITIES

JOURNAL PUBLICATIONS

Dr. B. Radjaram, HOD / MECH and Dr. P. Natarajan, AP / MECH published a research article titled “Sol–Gel Synthesis of TiO₂ Thin Films Doped with Nano SiO₂: Improved Optical and Electrical Properties” in Materials Engineering and Performance (Springer), 2025.

Mr. A. Thiagarajan, AP / MECH presented his research paper titled “Integrating Deep

Reinforcement Learning with Predictive Maintenance Algorithms for Optimized Mechanical System Performance” in AIP Conference Proceedings (Scopus Indexed), published on 30th September 2025.

He also published “Blockchain-Enabled Sustainable Supply Chain (BESSC): Securing and Optimizing Food Distribution” in the International Journal of Intelligent Technologies & Systems, July–August 2025.

Mr. S. Ganeshkumar, AP / MECH research article titled “Molecular Transport Kinetics of Non-Polar Solvents through AGNP Filled EPDM Elastomeric Composites” has been accepted for publication in the Journal of Polymer & Composite (Scopus Indexed).

Dr. A. Mathiarasu, AP/MECH, has received acceptance for publication of his research paper titled “Chemical Characterization and Performance Analysis of Post-Modified Microwave Pyrolyzed Karanja Seed Bio-Oil” in Bulgarian Chemical Communications (Scopus Indexed), 2026.

Conference Attended

Mrs. G. Deeba, AP / MECH have participated in the 2nd International Award Ceremony & Conference for Women Researchers – 2025 held on 27th September 2025

Book & Book Chapter published

1. Mr. A. Thiagarajan, AP / MECH authored a book chapter titled “AI Blockchain Synergy: Enhancing Predictive Water

Management for Efficient Supply Chain Operations” published on 17th October 2025 (ISBN: 9781394417803) in the Wiley book series “Blockchain and the Water Supply Chain: Opportunities, Challenges and Innovations” by John Wiley & Sons.

2. Mr. S. Ganeshkumar, AP / MECH contributed a research paper titled “Molecular Transport Kinetics of Benzene and Carbon Tetrachloride Solvents through AGNP Filled EPDM Elastomeric Composites” in the proceedings “Advanced and Sustainable Composites”, under the book series Springer Proceedings in Materials.

FDP ATTENDED

Mr. A. Thiagarajan, AP/ MECH and Mrs. G. Deeba, AP/ MECH attended a online FDP on Sustainability and Research in Modern Mechanical Engineering, organized by Madanapalle Institute of Technology & Science, Andhra Pradesh, India. during 02nd to 06th June 2025

Mrs. G. Deeba AP/ MECH, attended a online FDP on Sustainable Materials and Advanced Manufacturing Practices organized by Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering & Technology during 22nd to 26th Sept 2025

Mr. A. Thiagarajan, AP/ MECH and Mrs. G. Deeba AP/ MECH, attended a one day online FDP on Google Gemini Academy on 08th Oct 2025.

EXTERNAL INTERACTIONS



1. Dr. B. Radjaram, IP Chairman of IE(I), Member of ISHRAE and NIQR, and Head of the Mechanical Engineering Department, was a Chief Guest in one day expert National workshop on “Additive manufacturing “under UNSECO chair activity, organized by the Department of Green Energy Technology, Pondicherry University on 08th September 2025.



Served as the Chief Guest for the Valedictory Session of the One-Day National Workshop on “**Advances in Nuclear Energy for Sustainable Environment,**” organized by the Department of Green Energy Technology, Pondicherry University on 25th July 2025.



Chaired a session-3 in “International Conference on Energy & Water for Sustainable Environment Under UNSECO Chair Activity Sponsored By MSF/SAF 1st October, 2025 organized by the Department of Green Energy Technology, Pondicherry University.



2. **Mr. A. Thiagarajan**, AP/ MECH, represented the ISHRAE Puducherry Sub Chapter at the Regional Chapter Conference 1 held in Coimbatore on 17th & 18th July 2025.

Mr. A. Thiagarajan, AP/ MECH attended the Regional Chapter Conference–2 (RCC–2) organized by ISHRAE at Kochi on 30th & 31st August 2025.

Mr. A. Thiagarajan, AP/MECH, President of the ISHRAE Puducherry Sub Chapter, presided over the Installation Ceremony of

the ISHRAE Student Chapter at Pondicherry University on 18th September 2025.

3. **Dr. P. Natarajan**, AP/ MECH, served as the Chairperson for the One-Day Expert Workshop on “Role of Additive Manufacturing Applications Towards Sustainability.” under the UNESCO Chair Activity at Pondicherry University on 08th September 2025.

STUDENTS ACTIVITIES

University Gold Medal Achievement



The Management, Principal, Head of the Department, and Faculty Members of Manakula Vinayagar Institute of Technology, Department of Mechanical Engineering, extend their heartfelt congratulations to Ms.S.Anandamozhi for securing the University Gold Medal in Pondicherry University (2017-21 Batch). This remarkable achievement reflects academic excellence, dedication, and commitment to learning, bringing pride and honor to the institution.



The Department of Mechanical Engineering, Manakula Vinayagar Institute of Technology (Autonomous), proudly congratulates Mr.Nathanraj A and Mr.Ragul K from IInd Year Mechanical Engineering students for receiving the AICTE Yashasvi Scholarship (₹50,000 per year) awarded by All India Council for Technical Education. Their outstanding academic achievement brings great pride to the department and the institution.



Mr.Arun Kumar, III Year Mechanical Engineering student, successfully completed the Essentials of HVAC Drafting certification from Indian Society of Heating Refrigerating and Air Conditioning Engineers (ISHRAE) and earned the

distinction of becoming an ISHRAE Certified Professional in HVAC Drafting.



Sangeeth Zeon Madhav, a Final Year Mechanical Engineering student, successfully completed the L&T EduTech Course Pathway (8 courses, 22 hours) on Air Conditioning and Ventilation Systems, demonstrating commendable commitment to professional skill development in HVAC.



Final Year and Third Year Mechanical Engineering students attended the National Conference on Pharma Connect 2025 on 29th September 2025, gaining valuable exposure to emerging trends and interdisciplinary developments in the pharmaceutical and engineering sectors.



First Year Mechanical Engineering students developed a prototype of a Remote-Controlled Firefighting Drone as part of a Design Thinking initiative on 16th December 2025.