

PANIMALAR ENGINEERING COLLEGE

Accredited by NBA and Affiliated to Anna University
Approved by All India Council For Technical Education, New Delhi
POONAMALLEE, CHENNAI- 600 123



DEPARTMENT OF MECHANICAL ENGINEERING



.... Ready to be driven



EDITORIAL BOARD

CHAIRMAN

Dr.P.CHINNADURAI, M.A, Ph.D.,

Secretary & Correspondent Mrs. C.VIJAYARAJESWARI,

Director

Dr.C.SAKTHI KUMAR M.E.,Ph.D.,

Director

Dr.SARANYA SREE

SAKTHIKUMAR, B.E., M.B.A., Ph.D.,

Director

CHIEF EDITORIAL BOARD

Dr.K.MANI M.E., Ph.D.,

Principal

Dr.L. KARTHIKEYAN, M.E., Ph.D.,

HOD / MECH

EXECUTIVE EDITOR

Dr.M. PUVIYARASAN, M.E., Ph.D.,

EDITOR-IN-CHIEF

Dr. A. ANBARASU, M.E., Ph.D., Dr. K.R. PADMAVATHI, M.E., Ph.D.,

ASSOCIATE EDITORS

Mr. S.THAMIZHSELVAN, M.E.,

Mr. J. MURUGESAN, M.E.,

STUDENT EDITORIAL BOARD

Mr. SUJAY SARVESH P V

Mr. SRIDHARAN.V

VISION

The Department of Mechanical Engineering will be globally recognized as a pioneer for its excellence in teaching and research in the field of Mechanical and allied Engineering disciplines.

MISSION

M1: To provide world-class education and pioneering research opportunities, enabling students and faculty to contribute meaningfully to society through innovation and excellence.

M2: To advance engineering and science by fostering technological innovation, academic excellence, and strong industry collaborations for impactful research and technology transfer.

M3: To develop skilled, innovative, and entrepreneurial graduates who drive national and global sustainable development.

FROM THE HOD'S DESK

I am very happy that our Mechanical Engineering Department is releasing this newsletter as a fore runner of the department activities for this semester. It is of upmost importance that students know things apart from the fundamentals in all fields to help them in their future.

KARVAN'S CLUB Inauguration Ceremony

Event Name: KARVAN'S CLUB Inauguration Ceremony Inauguration Date: 21.08.2024



KARVAN'S CLUB is a pioneering initiative aimed at fostering innovation, creativity, and expertise in cutting-edge technologies.



Our mission is to provide a dynamic platform for students, faculty, and industry professionals to share knowledge, develop skills, and collaborate on projects related to 3D Printing, Design, and Additive Manufacturing.

ROUTER WORKSHOP

The Router Workshop, organized by Idea Lab, trains 2nd-year Mechanical students in routing techniques and applications held on Sept 9 to 10, 2024.



Expert facilitators guide hands-on sessions conducted to participants. Student coordinators Sachin, Nishanth, Keerthi, Prasanna, Kathiravan, and Manoj ensure a valuable learning experience, fostering innovation and industry readiness.



CNC WORKSHOP

Idea Lab's CNC Workshop on Sept 10, 2024, provides 2nd-year Mechanical students with handson CNC experience.





Expert guidance covers programming, operation, and applications. Students learn design, manufacturing, tooling, and safety protocols. Fostering innovation and industry readiness, this workshop enhances employability and prepares

MAGNETIC GEAR TRANSMISSION SYSTEM (MGT)

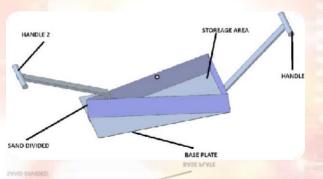
The Design and Development of a Magnetic Gear Transmission System project focuses on creating an advanced torque transmission system using magnetic coupling instead of traditional mechanical gears. Conventional gear systems face issues such as friction, wear, and noise due to direct contact between gear teeth, which leads to frequent maintenance and reduced efficiency.

Project done by,
S. Hariharan,
R. Harish,
L. Kavin
Final year / Mech



SHOVELING YOUR WAY TO A BEAUTIFUL YARD

The traditional Shovel is only used for digging, lifting, and moving materials like soil, snow, or gravel. They come in various shapes and sizes, such as flat shovels for scooping and required more human effort.



In this shovel the soil can easily move by two corners and it will create the water way for the farming land with less stress to human.

This shovel only easy to use in the loose soil then only it will move freely. By using this shovel we can create the water way in the less time.

> Creativity by, Sanjay E. K Third year / Mech

SELF-IMPROVING AI METHOD INCREASES 3DPRINTING EFFICIENCY

An artificial intelligence algorithm can allow researchers to more efficiently use 3D printing to manufacture intricate structures. The development could allow for more seamless use of 3D printing for complex designs in everything from artificial organs to flexible electronics and wearable biosensors.



As part of the study, the algorithm learned to identify, and then print, the best versions of kidney and prostate organ models, printing out 60 continually improving versions.

S. Monan
II year / Mech

Intelligent systems shape mechanical engineering's future