



Muthoot
Institute of Technology & Science

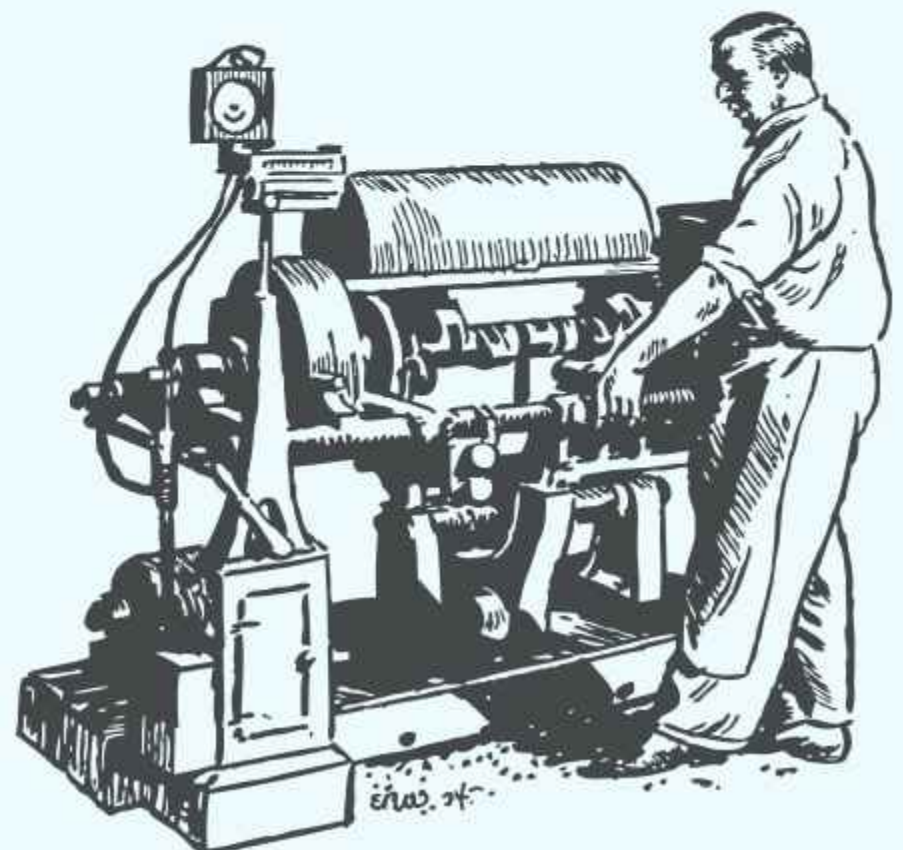


DEPARTMENT OF MECHANICAL ENGINEERING

FREE FALL

NEWSLETTER

DECEMBER 2023



DEPARTMENT PROFILE

The Department currently offers an undergraduate program (B.Tech) in Mechanical Engineering. The present intake is 60. We provide state of the art facilities both in the classrooms as well as in the laboratories. The department has a team of well qualified, experienced and committed staff members. It provides an atmosphere conducive for acquiring knowledge and emphasizes on practical learning. The department motivates both cultural and physical activities.

VISION

Excellence in Mechanical Engineering education and research through value based knowledge integration

MISSION

- To provide students state-of-the-art academic ambience for quality education
- To educate and mentor students on professional responsibilities, ethical values and life-long learning
- Facilitate inter-disciplinary learning and industry interactions focusing on long term career development goals

PROGRAMME SPECIFIC OUTCOMES (PSOs)

The graduates would be able to

- Analysis of mechanical systems: Identify Formulate and Analyze problems related to the

diverse mechanical systems

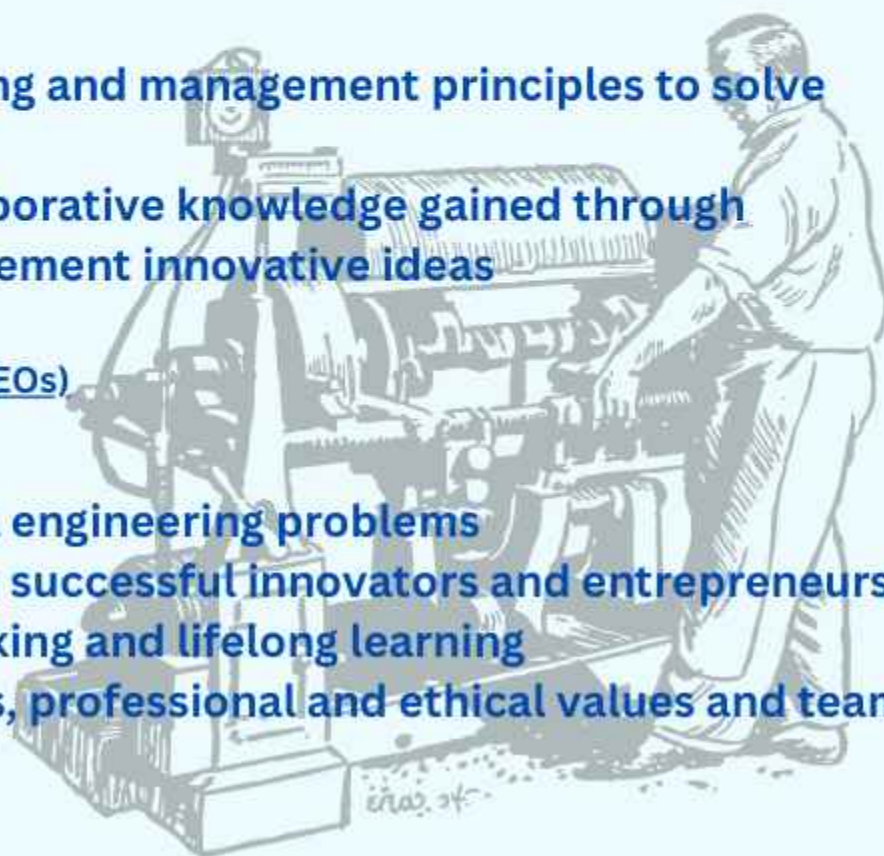
Industry readiness: Apply design, manufacturing and management principles to solve real-life problems

- Inter-disciplinary knowledge: Apply the collaborative knowledge gained through inter-disciplinary learning to develop and implement innovative ideas

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

Our students would be able to

- Design, solve and analyze real life mechanical engineering problems
- Excel in professional career and transform into successful innovators and entrepreneurs
- Imbibe intellectual curiosity for creative thinking and lifelong learning
- Manifest communication and leadership skills, professional and ethical values and team



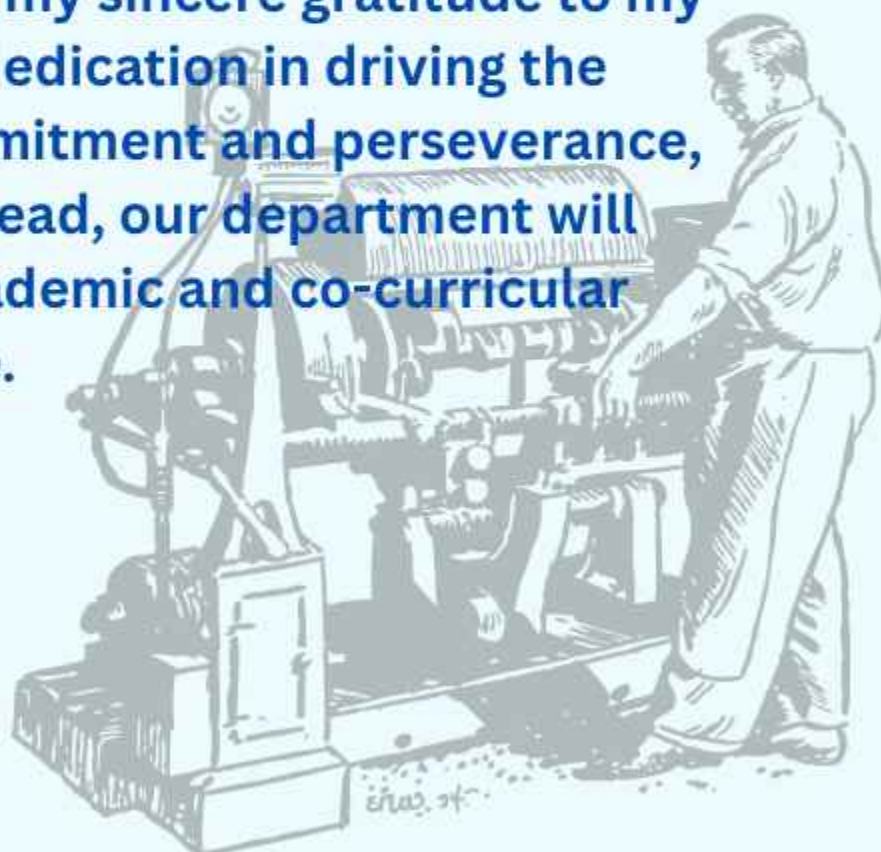
MESSAGE FROM THE HEAD OF DEPARTMENT



Pramod Kumar M
Professor & HoD
ME Dept.

I am delighted to present the 19th edition of our departmental newsletter, Free Fall. I extend my heartfelt congratulations to the entire newsletter team for their dedication and hard work in making this issue a reality. This internal publication serves as a valuable platform to share insights and updates about the vibrant activities within our department.

Success is achieved through hard work and sustained by those who strive for continuous growth. The past academic year has been a dynamic one, filled with remarkable contributions from students and faculty across academics, co-curricular and extracurricular activities, as well as research and development. As you go through these pages, you will witness the departments achievements and progress. I extend my sincere gratitude to my colleagues for their unwavering dedication in driving the department forward. With their commitment and perseverance, I am confident that in the years ahead, our department will continue to set benchmarks in academic and co-curricular excellence.



DEPARTMENT ACHIEVEMENTS

- On January 11 the department organized a session on the higher education opportunities in UK, conducted by Dr Yogesh bhalero
- On 17 January the department of mechanical engineering signed Mou with central institute of fisheries technology, cochin
- On January 20th the department signed Mou with nanospin technologies LLP, ahmedabad, gujarat.
- On Feb 22 the department of mechanical engineering conducted a session on the opportunities in the field of QA and QC by united NDT
- The department on April 12th organized a session on the development in the design and automation for the industry 4.0 by the conceptia software technologies pvt ltd



Faculty Acheivments

Attended INUP-i21 online Familiarization Workshop on Nanofabrication Technologies at IIT Bombay on 23 january 2023 to 25 January 2023



Dr Sajeed Rahman



Prisley Vargheese Mathew



Vipin Vijayan



Juby Joseph

Attended Faculty Development programme on Emerging trends in additive Manufacturing Technologies at FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY. Angamaly from 30 january 2023 to February 2023



Dr Nikhil M Thoppil

- Recieved Nptel online certification - AICTE approved 8 week FDP course - Evolutionary Computation for single and multi objective optimization jan-march 2023
- Recived NPETL online certification for completing AICTE approved 4 week FDP course on smart materials and intelligence systems design
- He also attended a two day hands on training program on IoT and Automation aat psg itech, coimbatore





Prisle Vargheese Mathew

- Completed a course on application of Naval architecture and shipbuilding in green ship technology and relevance of green technology
- Attended a workshop on wire arc additive manufacturing - theory and hands on training at IIT indore



Dr Sajeed Rahman

- Attended Faculty Development programme on data analytics for decision making at viswajyothi college of engineering and technology
- Received funding of RS 1,05,000/- for the proposal value addition of sheep wool and cuttlefish ink melanin to develop lightweight EMI shielding and sound absorbing polymer composite tiles from KTU



Dr Manoj Kumar K

- Dr. Manoj kumar K has presented a paper titled Grindability study of “intermetallic Titanium Aluminide using various Abrasive wheels” in the Indo European Conference on Advanced Manufacturing and materials processing





Dr Bibin Jose

- Published a journal on enhancement of metallurgical and mechanical properties due to grain refinement in the compressive residual stress developed surface after the laser shock peening process : a review in july 2023. the work was published by the canadian journal of metallurgical and materials science which is an SCI indexed journal
- Attended the one day workshop on space and enterprenuership on 5th october 2023 at ISRO , thiruvananthapuram
- Granted an indian design patent with the title “Multi twisted blades in solar water heater “ pon 30th october 2023
- filed a patent with the title “ Fabrication method for self lubricating cutting inserts designed for machining challenging materials” on 15th december 2023





Dr Manoj Kumar K

- Dr Manoj Kumar K published a book chapter on “Tool conditioning monitoring in micro machining “ in industry 4.0 by CRC press on 13th september 2023
- Dr Manoj Kumar K , co edited a book “macro molecular symposia - ICAMMS 2022 “ published by wiley on 12th december 2023
- Dr Manoj Kumar K presented a paper titled “Coronary vessel segmentation in X ray using u net” in 5th international conference on communication and intelligent system held at NIT jaipur on 22nd december 2023

STUDENT ACHEIVEMENTS

Winners of Buisness plan :-

**Aadith Ajay
Rishan Maju
Paul Baiju**



Winners of GD and SAE tier 3 :- Jhons Rapheal
Varun raj TR
Adithya S



Winners of SAE TIER 3 :- Alias Babu
Antony Helvis
Yaseen Ahammad



Winners of Bridge Building SAE TIER 3 :- Anju Raju s6
Febin Thomas s6
Davis Shaji s6

Abhishek p , Abhraham vargheese aby p aji nosh peter
recieved funding of RS 28500 for the project. Development of
fish scale derived Nano hydroxypatite baased paints and
putties for wall coating and crack filling
from CERD AND KTU. Principal investigator : Dr.praveen KM ,
Associate professor, ME Co - investigator : ashna vargheese ,
assistant professor,BSH

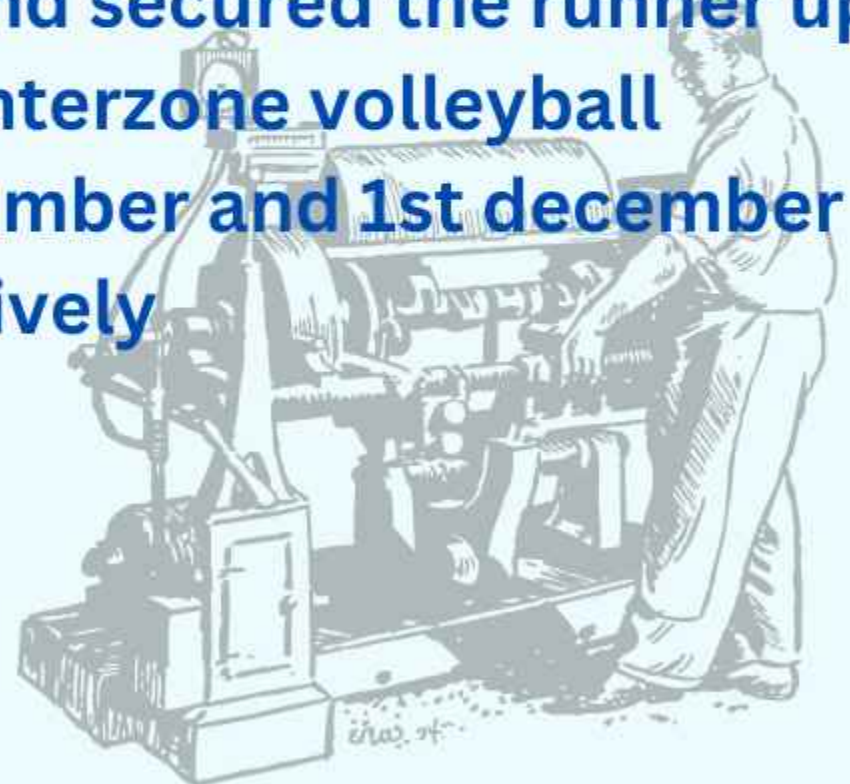


**Team Cyclomech comprising 5
students of s6 ME and 2
students of s4 Me secured
first prize and won a cash
award of rs 10000 for the best
presentation as part of the
bicycle design competition
conducted by SAE india
Sourthern Section on 1st april
2023 at PSNA College of
engineering and Technology ,
Dindigul, TN.**



Abhijith jithesh , abhinand rajesh , febin thomas , laveena wels , midhul manoj , nandu rajeev , adnan razi and vaibav krishna were part of mits motorsports team that won the overall champions title of the electric vehicle category in the FKDC season 7, conducted at the kumaraguru college of engineering and kari motor speedway , coimbatore .
athul t sajeevan and adnan razi of s5 ME secured AIR 1 in FMAE FKDC e - kart Challenge 2023

Muhammed Bazin and vyshnav s namboothirir of s5 were part of the mits volleyball team and secured the runner up position at the Dzone and interzone volleyball championship held on 28th november and 1st december 2023 respectively





Editorial Board

Student Members

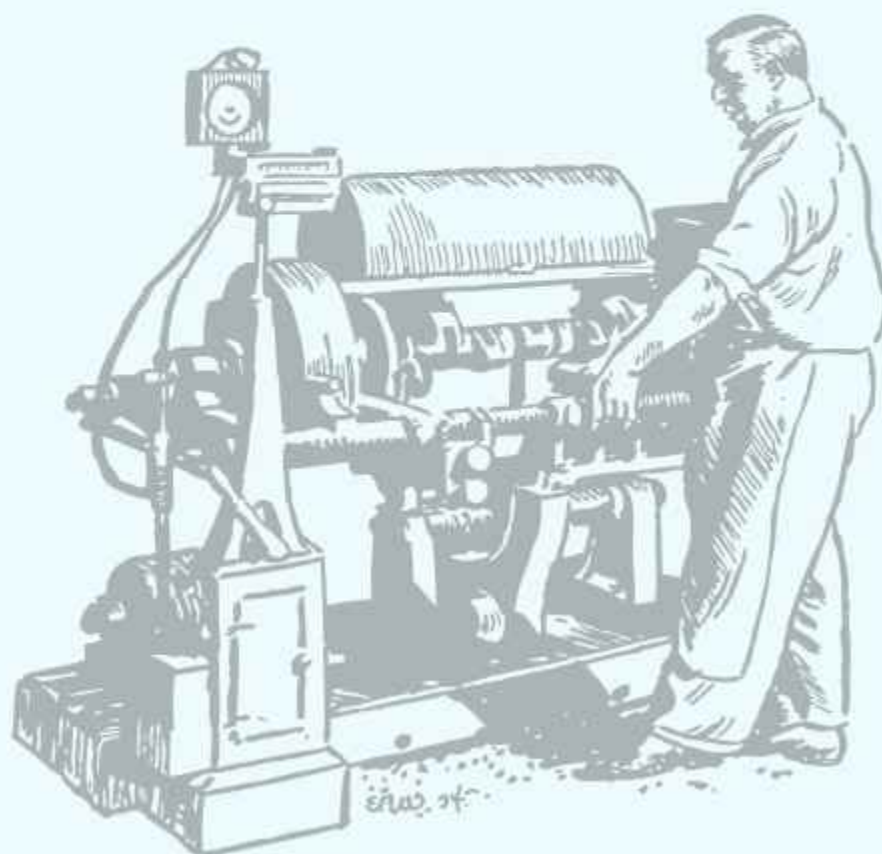
Yash Nambiar (Editor)

Sidharth Unnithan (Editor)

Alen B Kurisinkal (Designer)

Faculty Coordinator

Harikrishnan N, Assistant Professor





2019 - 2023 MECHANICAL BATCH

