

MCT
MANJARA CHARITABLE TRUST
RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
DEPARTMENT OF MECHANICAL ENGINEERING

MECHCHRONICLE

ACADEMIC YEAR
2023-2024

RGIT'S
MESA

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ABOUT MECHANICAL DEPARTMENT

Department of Mechanical Engineering at the MCT's Rajiv Gandhi Institute of Technology provides quality education, conducts strong research programs, foster close partnerships with industry, and provides related services to the campus community and the community at large. A pillar of strength from which the department draws its strength is a team of highly qualified, experienced and dedicated staff.

The cutting edge that the department has over others is its focus on technologies and knowledge about the current trends in the field of Mechanical Engineering. The academic leadership of department has endeavored itself to the students by its attention to details and personal attention. This has helped in preparing students for the challenges they face in the outside world and helping them secure a better professional future.

Department has PG in Mechanical Engineering with an intake of 18 since 2012 and PhD in Mechanical Engineering with an intake of 10 since 2017.

DEPARTMENT VISION

The department envisions to develop itself into department of academic excellence and to generate outstanding technocrats & managers, who can make valuable contributions to the global business and society.

DEPARTMENT MISSION

- To provide contemporary and cutting-edge technical education in Mechanical Engineering.
- To provide an ambience which nurtures research ideas in futuristic domains of Mechanical Engineering.
- To initiate project based learning and practical exposures in the area of Mechanical Engineering.
- To direct faculties in research and consultancy / advisory roles.
- To establish strong linkages with well-known national and international technical institutes.
- To promote the culture of imbibing environmental care and eco-friendly designs.
- To become a department of aspiration & choice.

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)

- To prepare the stakeholder to exhibit leadership qualities with demonstrable attributes in lifelong learning to contribute to the societal needs.
- To make ready the stakeholder to pursue higher education for professional development.
- To help the stakeholder to acquire the analytical and technical skills, knowledge, analytical ability attitude and behavior through the program.
- To prepare the stakeholders with a sound foundation in the mathematical, scientific and engineering fundamentals.
- To motivate the learner in the art of self-learning and to use modern tools for solving real life problems and also inculcate a professional and ethical attitude and good Leadership qualities.

- To prepare the stake holder to able to Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

INSIGHTFUL INDUSTRIAL VISIT AT CENTRAL RAILWAY WORKSHOP ORGANIZED BY MESA

The Mechanical Engineering Students Association (MESA) of Rajiv Gandhi Institute of Technology organized an industrial visit to the Central Railway Carriage Workshop in Matunga on September 29-30, 2024. A total of 108 students, accompanied by faculty members, participated in the event aimed at exploring the manufacturing, repair, and maintenance processes in railway carriage production.

Established in 1915, the workshop plays a crucial role in the maintenance of railway carriages, expanding its capacity to service both AC and non-AC coaches, including modern Linke Hofmann Busch (LHB) models. During the visit, students toured various sections of the workshop, including the Trimming Workshop, Heavy Corrosion Workshop, EMU Rehabilitation Workshop, Lifting Workshop, and the Wheel Shop.

The workshop also emphasized its commitment to sustainability through eco-friendly practices, including the innovative use of CNG in railway operations. This visit provided students with valuable insights into precision, quality, and technology in the railway industry.



DONATION DRIVE CONDUCTED BY TEAM MESA ON THE OCCASION OF DIWALI

The Donation Drive and Social Event organized by RGIT's MESA on the 13th and 14th of November 2023 was a heartfelt initiative aimed at spreading joy and making a positive impact on the lives of orphaned and street children.

On Day 1, the team celebrated Diwali with the children of Ankur Bal Vikas Kendra Orphanage in Dombivli (East). The event kicked off with warm welcomes, where students were greeted with the bright smiles of the children. The team decorated the orphanage with festive lights, creating a joyful atmosphere. A prayer session was held to mark the occasion.

The two-day event organized by RGIT's MESA brought joy to children and underprivileged communities. The event concluded with a cake-cutting ceremony and a group photo.

On Day 2, the focus shifted to the underprivileged street children in Andheri, where the team organized an educational session and distributed study kits and sweets. The event ended with community outreach, spreading the spirit of giving. The two days emphasized social responsibility and the joy of bringing happiness to those in need.



ROBOTICS CLUB TEAM PARTICIPATED IN ASIA WIDE PACIFIC ABU ROBOCON

Every Year **RGIT's Robotics Club** aims and participates in the Asia Wide Pacific ABU Robocon. This year also they participated in this competition on **31st January 2024**. In this Competition, A task is provided which is to be completed by a pair of Robots. Robots are solely made on the knowledge and Work of Students of the specific team. In General, the whole team of RRC participates in this International Event. There are Departments which consists of Mechanical Design, Electronics, Programming, Marketing. There are stages where the team must qualify to get eligible for next stage.

In this Competition, there are three stages where stage 1 requires Detailed Design report, Second Stage requires the manufactured Robot in a working stage. In third stage the participants compete other teams in an arena.



ISHRAE MUMBAI CHAPTER ORGANIZES AQUEST COMPETITION AT RGIT

The **ISHRAE (Indian Society of Heating, Refrigerating and Air Conditioning Engineers)** Mumbai Chapter organized the prestigious AQuest competition on **17th March 2023** at Rajiv Gandhi Institute of Technology (RGIT). With guidance from Dr. Rajesh V. Kale and Dr. Kiran Chaudhari, the event was successfully managed by RGIT's committee members.

AQuest is an annual student competition powered by HITACHI, culminating in a Grand Finale at ACREX INDIA, South Asia's largest exhibition on refrigeration, air conditioning, ventilation, and intelligent building services.

Inspired by popular game shows like "Kaun Banega Crorepati" and "Jeopardy," AQuest brings an engaging engineering challenge to participants. Winners of the competition are awarded exciting cash prizes.



INDUSTRIAL VISIT AT SUNRISE PROCESS EQUIPMENT ORGANIZED BY ISHARE

The Industrial Visit held by **ISHARE** on **26 March 2024** by to Sunrise Process Equipment focused on exploring various aspects of the store department, including production, manufacturing of stainless-steel MS, reactor receiver tanks, production quality, processes, and inspection procedures, especially regarding titanium in-house and third-party inspections.



TEAM IIIIE HOSTED A SEMINAR ON INTELLECTUAL PROPERTY RIGHTS TO EMPOWER INNOVATORS

A seminar on Intellectual Property Rights was held on **26th April 2024** by the committee **IIIIE RGIT** on the occasion of Intellectual Property Rights Day, Dr. Nitin Panaskar, Assistant Professor and Dr. Amol Mangrulkar, Assistant Professor were called as speaker.

The event started at 8:45 am with introduction to Different Intellectual Property rights rules, Patents and copyrights. The seminar continued for 1 hour with an explanation on applying for trademarks and copyright processes.



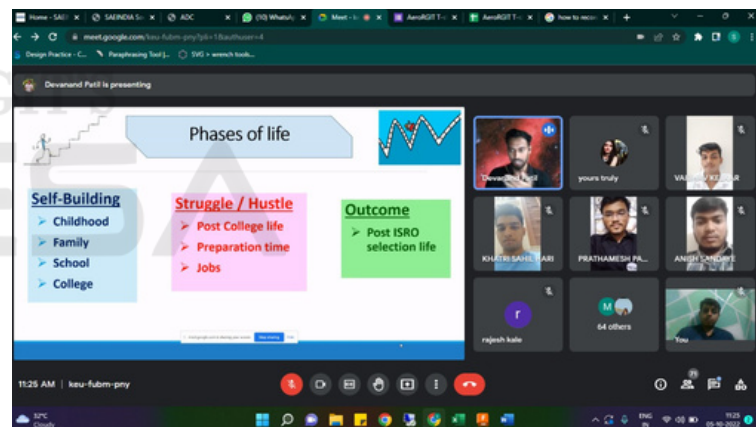
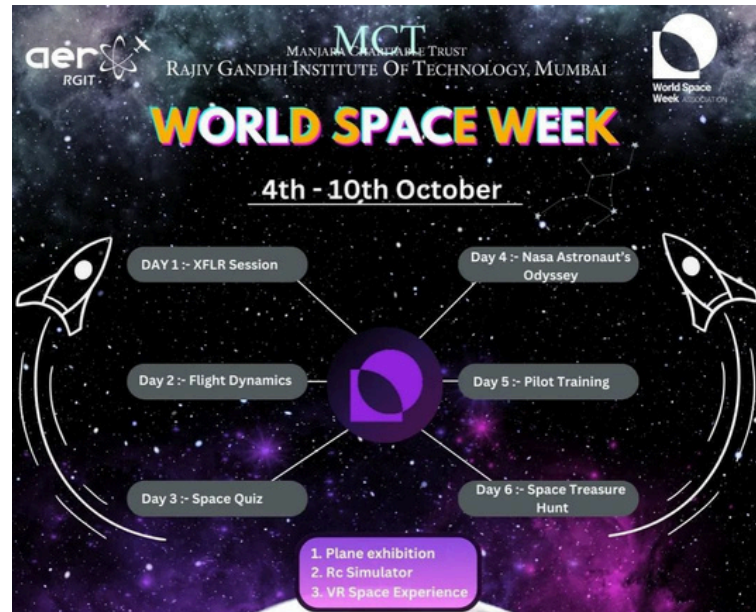
AERO RGIT HOSTED SERIES OF EVENTS ON THE OCCASION OF WORLD SPACE WEEK

The **AeroRGIT** team hosted a series of events from **October 5th to 9th, 2023**, as part of World Space Week. Highlights included a seminar on aerodynamics led by President Aditya Wavale, featuring key concepts such as lift, drag, and thrust, along with demonstrations of RC planes and drones.

On Day 2, a Space Quiz Competition tested participants' knowledge in space science, with two winners receiving cash prizes.

On Day 4, a session in collaboration with Airbuzz Training Solutions explored career opportunities in aviation, covering roles like pilots and cabin crew, along with training requirements and future prospects.

These events provided hands-on learning and fostered interest in aerospace and aviation.



INAUGURATION AND INSTALLATION OF 3D PRINTING MACHINE AT THE MECHANICAL DEPARTMENT

on 17th January 2024 mechanical department has proudly inaugurated its state-of-the-art 3D printing machine, marking a significant milestone in its pursuit of advanced technology integration into its academic and research programs.

The newly installed 3D printer will allow students to design and prototype complex mechanical components, facilitating research projects and fostering innovation in various applications such as manufacturing, aerospace, and automotive industries. It also opens new doors for collaborative work with industries and startups focusing on product development and rapid prototyping.

This 3D printing machine represents not only a technological upgrade but a commitment to empowering our students with the tools needed to lead the future of engineering.



NUMBER OF STUDENTS WHO SECURED PLACEMENTS IN THE YEAR 2023-2024

1. FIZA ARIF SHAIKH
2. ZUHAIR KHAN
3. RITUJA DHANANJAY KOTANGALE
4. ADESH DHANAWADE
5. TEJAS BHAGAT
6. HARESH GAWALE
7. DIVYA MADAV
8. MRUNMESH RIKAME
9. OM LAD
10. VAIBHAV SHINGOTE
11. SHUBHAM DIXIT
12. PRITHVIRAJ DEOGUDE
13. SHAIKH MOHAMMED AMMAR
14. SHREYA AVJEKAR
15. PRITY NATH
16. SHAMS CHAUGLE
17. RITIK PRAJAPATI
18. DARSHAN THAKARE
19. AKASH BOLDHANE
20. JAYESH SONAR
21. RISHABH MORYA
22. SUMIT ANTHAL
23. ESHANK PAWAR
24. MOHIT SAH
25. ABHISHEK SINGH
26. SAYALI CHOWDHARY
27. KEVEL VED
28. BHAGESH SONDAGAR
29. SHUBHAM YELVE
30. CHINTAN MAHALE
31. NIRGUN PAWAR
32. RUGHVED LOHAR
33. SUSHANT GURUP
34. SHANTANU NAIK

MAJOR RECRUITERS WHO VISITED THE CAMPUS FOR PLACEMENT

1. INTELLIPAAT SOFTWARE SOLUTION
2. TECNIMONT
3. QSPIDER
4. SAHAS SOFTECH LLP
5. AXIS ELECTRICAL COMPONENTS
6. PORTESCAP
7. DIGIT
8. DAKSHIN
9. BECROCHEM LOEDING PROCESS TECHNOLOGY
10. NIKHIL COMFORT
11. TECNIK VALVES PVT LTD
12. LESER INDIA PVT LTD
13. AKER SOLUTIONS
14. CONTEC AIRFLOW PROJECTS PVT LTD
15. H & K ROLLING MILL ENGINEERS PVT LTD



**COUNCIL OF VIBRATION SPECIALISTS (CVS)
RGIT STUDENTS' CHAPTER INAUGURATED
IN DEPARTMENT**

THE COUNCIL OF VIBRATION SPECIALISTS IS A NEWLY ESTABLISHED TECHNICAL TEAM AT OUR COLLEGE, DEDICATED TO THE STUDY AND APPLICATION OF VIBRATION ANALYSIS IN MECHANICAL SYSTEMS. THIS TEAM BRINGS TOGETHER PASSIONATE STUDENTS AND EXPERTS WHO AIM TO EXPLORE THE EFFECTS OF VIBRATIONS ON MACHINERY, STRUCTURES, AND EVERYDAY APPLICATIONS. THROUGH WORKSHOPS, PROJECTS, AND RESEARCH, THE COUNCIL WILL FOCUS ON DIAGNOSING, MITIGATING, AND OPTIMIZING VIBRATIONAL BEHAVIORS TO IMPROVE MECHANICAL PERFORMANCE AND SAFETY ACROSS VARIOUS ENGINEERING DOMAINS.

MEET OUR TEAM

DR. RAJESH KALE
H.O.D

PROF. REHAN SIDDIQUI
CONVENER

SAHIL DHAMANE
PRESIDENT

YASH PEDNEKAR
**VICE
PRESIDENT**

ESHA AHIRE
**GENERAL
SECRETARY**

LAVKUMAR BURA
TREASURER

SAUDAMINI KATKAR
**OPERATIONS
SECRETARY**

ANISH SALVI
EVENT MANAGEMENT SECRETARY

BEHIND THE SCENES: OUR EDITORIAL TEAM

ADVISOR

PROF. REHAN SIDDIQUI
STUDENT EDITORS

SAUDAMINI KATKAR

LAVKUMAR BURA

SAHIL DHAMANE

YASH PEDNEKAR

ESHA AHIRE

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RGIT'S MESA



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