MKSSS's Cummins College of Engineering For Women

MECHANICAL DEPARTMENT

ACADEMIC YEAR 2024-25

ISSUE#12

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FROM HOD'S DESK

Dr.Ajit Bhosale : HOD Mechanical Department

Dear Mechanical Engineering Students :

As the Head of the Mechanical Engineering Department, I wanted to take a moment to connect with each of you and share some thoughts as we progress through this academic year.

Mechanical engineering is a field that not only demands intelligence and creativity but also a relentless pursuit of excellence. Your decision to embark on this path speaks volumes about your determination and passion for innovation.

As students, you are at a crucial stage of your journey, where the knowledge you gain and the skills you develop will lay the foundation for your future careers. I urge you to approach your studies with diligence and curiosity.

Take advantage of every opportunity to learn, whether it's through lectures, labs, projects, or internships. Remember, it's not just about mastering the theory but also about applying it in real-world scenarios.

Furthermore, I encourage you to collaborate with your peers and engage with faculty members. Your classmates can offer valuable perspectives and insights, while your professors are here to guide and support you every step of the way. Don't hesitate to seek help when you need it and always strive to foster a culture of mutual respect and collaboration within our department.

Lastly, I want to remind you to never lose sight of your passion for engineering. In the face of challenges and setbacks, it's easy to become discouraged, but it's important to stay focused on your goals and persevere. Remember why you chose this path and let that passion drive you forward, even when the road ahead seems daunting.

I have full confidence in your abilities and potential to succeed in the field of mechanical engineering. Together, let's continue to push the boundaries of innovation and make meaningful contributions to the world.

WORD FROM TEAM

Greetings from the Newsletter Team!

Welcome to this year's edition of the Mechanical Department Newsletter. From technical teams to cultural highlights, student achievements, and professional chapters, the annual newsletter is your gateway to staying informed and engaged about the activities of the Mechanical Department for the academic year of 2024-2025.

Our team has worked with passion and dedication to capture the highlights and milestones of the year. We hope you enjoy reading it as much as we enjoyed putting it together for you!

Happy Reading!

Design and Literature Teams
Faculty Advisor-Prof. Poonam Bhore

NEWSLETTER TEAM

Prof. (Dr.) Ajit Bhosale
Department Head

Prof. Poonam Bhore
Faculty Advisor

DESIGN TEAM

Kashmira Lohar
Team Lead, Final Year

Jjya Kalmegh
Third Year

Tarini More
Third Year

Aditi Chitode
Second Year

Sanskruti inamdar
Third Year

Tanisha Joshi
Third Year

Sejal Badugu
Second Year

Ananya Patil
Second Year

LITERATURE TEAM

Mugdha Deshmukh
Team Lead, Final Year

Shravani Kumbhar
Final Year

Kajol Sharma
Third Year

Sanika Khadilkar
Second Year

Trupti Jumbad
Final Year

Devashree Harkare
Third Year

Gargi Rajput
Second Year

Shreya Bongale
Second Year

ASME

ASME-CCOEW is the official student chapter of the American Society of Mechanical Engineers (ASME) at MKSSS's Cummins College of Engineering for Women, Pune. The chapter organizes various events, workshops, and competitions throughout the year, providing students with hands-on learning experiences in the field of mechanical engineering.

With a strong focus on technical knowledge and industry exposure, ASME-CCOEW encourages students to participate in national and international competitions, technical paper presentations, and project-based learning. ASME-CCOEW has consistently upheld its reputation by excelling in various technical challenges and events.

Achievements:

ASME-CCOEW received the Distinguished Student Section Award for the second consecutive year (2023-24), recognizing its outstanding contributions and activities.

Events Conducted:

- *Drone Technology Webinar:* The Drone Technology Webinar, held on 17th August 2024, saw students delve into drone aerodynamics, design, and UAV flight dynamics. The session was led by Ms. Shraddha Kale, an alumna and Co-founder of ZephDroids, who shared her expertise on PID controllers and UAV applications.
- *GD&T Competition:* The GD&T Competition was conducted on 4th October and 16th November 2024. Under the expert guidance of Mr. Anand Bhise, students developed inspection reports and gauge models, enhancing their understanding of geometric dimensioning and tolerancing.

ASME CCOEW at Maharashtra Meet

- *Industrial Visit to Thermax, Chinchwad, Pune:* An Industrial Visit to Thermax in Chinchwad was conducted on 17th March 2025. The visit provided students with valuable exposure to energy and environmental solutions. They learned about industrial boilers, water treatment plants, and sustainable engineering practices. Industry experts guided them through key manufacturing processes, allowing students to understand real-world industrial applications and gain practical knowledge.

Industrial Visit to Thermax, Pune

ASME

ASME-CCOEW continues to create opportunities for students to gain practical knowledge and industry exposure. With a strong focus on learning, innovation, and leadership, ASME-CCOEW remains committed to developing future engineers and fostering an environment where creativity, technical skills, and teamwork thrive.

Team members:

Faculty Advisor: Dr. Yashwant Munde

Sr. No.	Name	Position	Year
1	Chaitrali Kulkarni	Chairperson	B.Tech Mechanical
2	Surabhi Sangale	Vice - Chairperson	B.Tech Mechanical
3	Ananya Bhusare	Vice-Chairperson	T Y Mechanical
4	Mugadha Deshmukh	Secretary	B.Tech Mechanical
5	Devashri Harkare	Associate Secretary	TY Mechanical
6	Shreya Bongale	Associate Program Head	SY Mechanical
7	Gayatri Kulkarni	Public Relation Head	TY Mechanical
8	Tanisha Joshi	Publicity Head	TY Mechanical
9	Gargi Rajput	Documentation Head	SY Mechanical
10	Sanika Khadilkar	Associate Documentation Head	SY Mechanical
11	Divya Bagane	Treasurer	SY Mechanical
12	Akshata Nagmoti	Social Media Head	SY Mechanical

MATERIAL ADVANTAGE STUDENT CHAPTER

The year 2024 marked the beginning of an exciting new chapter for the Department of Mechanical Engineering with the opening of the Material Advantage Student Chapter at Cummins College, Pune.

Material Advantage (MA) is an elite membership program specifically designed for students at universities, founded by four of the world's top professional societies in the materials science and engineering discipline:

1. ASM International (American Society of Materials)
2. AIST (Association for Iron and Steel)
3. TMS (The Minerals, Metals and Materials Society)
4. ACerS (The American Ceramics Society)

This chapter advances materials science and engineering by providing resources like study materials, networking, leadership programs, and research support. It offers funding access for international conferences and professional growth through technical events, industry partnerships, and competitive forums. Connecting students with professionals and researchers, the chapter creates career-building opportunities in materials engineering.

Achievements/ Events:

- *Inauguration:* The Inauguration of the Material Advantage Student Chapter was held on 9 November 2024, celebrating the launch of the new chapter under the mechanical engineering department.
- *Industrial Visits:*

1. Bhat Metals
2. Energy Systech
3. ELCA Labs
4. SprayMet Surface Technologies

- *Technical Talk:*

1. Investment casting and opportunities for women. (9 November 2024)
2. Thermal Spray Technology. (13th February 2025)

- *Plasto 2025:* The Association for the Promotion of Plastics (APP) hosted PLASTO 2025 on 11th January, 2025. Four Materials Advantage Student Chapter members attended the exhibition.

Technical Talk by Dr. Karandikar

- *M&MT Conference and Exhibition:*

1. Day 1 (4 Dec 2024): Sessions on surface engineering, coatings, and thermal spraying.
2. Day 2 (5 Dec 2024): Focus on heat treatment, coatings, and surface hardening.
3. Exhibition: Students explored hardening equipment, quenching oils, diamond plating, additive manufacturing, microscopy tools, and material testing methods.

MATERIAL ADVANTAGE STUDENT CHAPTER

Industry Visit to Bhat Metals

Industry Visit to Elca Lab

Team Members:

Faculty advisor: Prof. Poonam Bhore

Sr. No.	Name	Position	Year
1	Aditi Kulkarni	Chairperson	TY Mechanical
2	Sanjeevani Naik	Vice Chairperson	TY Mechanical
3	Vishwa Patil	Treasurer	TY Mechanical
4	Krishna Manke	Secretary	TY Mechanical
5	Purva Kulkarni	Program Head	TY Mechanical
6	Isha Mahajan	Associate Program Head	TY Mechanical
7	Avidnya Nalawade	Associate Program Head	SY Mechanical
8	Arya Jadhav	Documentation Head	TY Mechanical
9	Isha Gattawar	Associate Documentation Head	SY Mechanical
10	Jiya Kalmegh	Sponsorship Head	TY Mechanical
11	Ishani Bore	Associate Treasurer	SY Mechanical
12	Sakshi Deshmukh	Social Media Head	TY Mechanical
13	Aditi Gudale	Associate Social Media Head	SY Mechanical

ASHRAE

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) is an international professional organisation focused on promoting the design and construction of heating, ventilation, air conditioning, and refrigeration (HVAC&R) systems.

Founded in 1894, ASHRAE today has a membership base of more than 50,000 members globally, comprising building services engineers, architects, mechanical contractors, building owners, equipment manufacturers, and other professionals responsible for HVAC&R system design and construction. The organisation aids research efforts, offers continuing education courses, and sets technical standards to improve building services engineering, energy efficiency, indoor air quality, and sustainable development.

The ASHRAE Student Branch was formed in January 2022 and has thirty-two student members belonging to the Mechanical Engineering Department.

Industry Visit to Deenanath Mangeshkar Hospital

Industry Visits:

- Visit to Persistent Ramanujan office, Hinjewadi to study variable refrigerant flow system
- Visit to Deenanath Mangeshkar Hospital to study vapor absorption plant
- Visit to Kirloskar Pneumatic company Ltd to study compressors
- Visit to IITM (Indian Institute of Tropical Meteorology) to study Radiant cooling system and Earth ventilation system
- Visit to Yashwantrao Chavan Natyagruh to study central air conditioning facility

Industry Visit to IITM

Industry Visit to Yashwantrao Chavan Natyagruha

ASHRAE

Team Members:

Faculty Advisors: Prof. Rujuta Agavekar and Prof. Dr. Parag Chaware

Sr No	NAME	POSITION	YEAR
1	Vaidehi Murdandgauda	President	TY Mechanical
2	Bharati	Vice-President	SY Mechanical
3	Ishani Bore	Secretary	SY Mechanical
4	Sneha Amte	Treasurer	SY Mechanical

Industry Visit to Persistent Ramanujan Office

SAE - ZENITH

Introduction

Team Zenith is the official m-BAJA SAE team of MKSSS's Cummins College of Engineering for Women, Pune. Each year, they participate in SAE m-BAJA, a highly competitive event that challenges student engineers to design, manufacture, and test an all-terrain vehicle (ATV) capable of withstanding extreme off-road conditions. They test their off-road vehicle to compete in various static and dynamic events, demonstrating technical expertise and innovation.

The team is structured into six key subsystems: Suspension, Steering, Transmission, Chassis, Brakes, and Data Acquisition, ensuring a well-coordinated approach to vehicle development.

Beyond their technical roles, team members also contribute to manufacturing, sponsorship, cost analysis, and marketing, making them a well-rounded team.

This year, the m-BAJA SAE-India 2025 competition was held from 8th to 12th January 2025 at Pithampur, Madhya Pradesh, with 50 collegiate teams competing from across India. Team Zenith stood out as the only all-girls team, demonstrating exceptional technical skills and perseverance in a male-dominated field.

Achievements

Team Zenith delivered yet another stellar performance at BAJA SAE-India 2025, securing top ranks across multiple categories. Competing against 50 teams, they displayed innovation, technical expertise, and consistency throughout the event.

Key Achievements:

Overall Rank: ***AIR 8***

- Sustainability & Go Green: (AIR 2)
- Suspension & Traction: First team to complete the toughest track without toppling. (AIR 3)
- CAE (Computer-Aided Engineering): (AIR 4)
- Acceleration: (AIR 6)
- Sled Pull: (AIR 7)
- Maneuverability: (AIR 10)
- Phase 1 & 2: (AIR 4)
- 'All Girls Team Championship Award' and a Cash Prize of ₹1,00,000 from Renault-Nissan Automotive India.

With yet another remarkable performance, Team Zenith continues to make history, proving that passion, perseverance, and teamwork can break barriers and redefine excellence in engineering.

Team Zenith at BAJA SAE-India 2025

SAE - ZENITH

Team Members:

Faculty Advisor: Prof. Nitin Patil

Sr No.	Name	Position	Year
1	Shreya Bhosale	Captain	TY Mechanical
2	Nysa Gupte	Vice Captain	SY Mechanical
3	Gargi Bahalkar	Transmission	TY Mechanical
4	Sai Motade	Brakes	TY Mechanical
5	Shrutika Karande	Steering	TY Mechanical
6	Razia Ahmed	Steering	TY Mechanical
7	Rajeshwari Khapke	Chassis	SY Mechanical
8	Mrunal Harishchandre	Brakes	SY Mechanical
9	Vaidehi Bangali	Brakes	SY Mechanical
10	Sayali Chavan	Transmission	SY Mechanical
11	Ananya Patil	Transmission	SY Mechanical
12	Mitali Ruikar	Transmission	SY Mechanical
13	Ruchita Chavan	Steering	SY Mechanical
14	Avnee Abhyankar	Suspension	SY Mechanical

SAE - BHARADWAJ

Formed in 2016, Team Bharadwaj, a committed group of aerospace and aviation enthusiasts, is the official aeromodelling club of Cummins College of Engineering for Women, Pune. They are dedicated to the highest standards of aircraft design and development. They take pride in their ability to conceptualize, design, fabricate, and pilot fixed-wing RC aircraft.

They are the only all-girls team in India to compete in major events like the SAE Aero Design Challenge. Driving innovation and technical excellence in aeromodelling, this diverse team, which includes individuals from a variety of engineering fields, specializes in important areas including structural design, avionics, and simulation.

Team Bharadwaj at SAE Competition (2024)

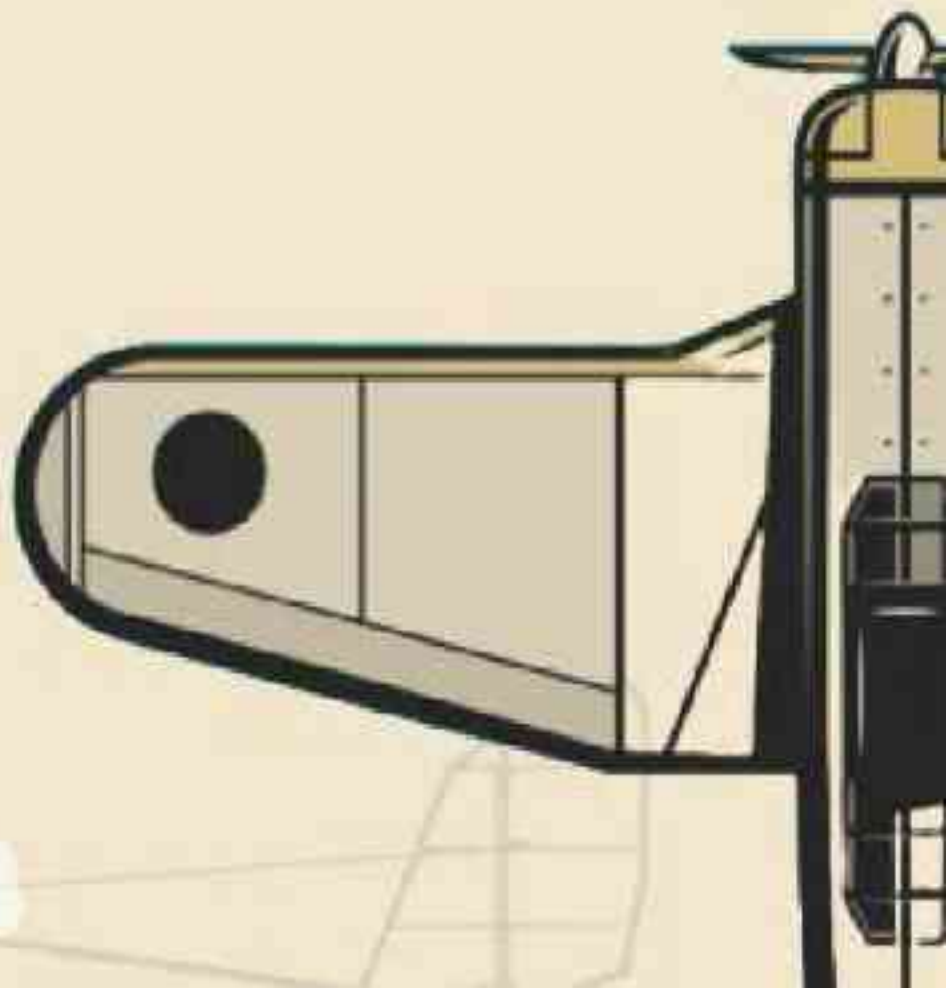
Achievements:

SAE competitions (2024):

- AIR 3 in the Micro Class Overall and
- AIR 3 for Best Aerodynamic Analysis (CFD)
- AIR 12 in the Regular Class Overall

Demonstrating their strong performance across multiple categories, these achievements reflect the team's dedication, technical skills, and continuous pursuit of excellence in aerodynamics and vehicle design.

Team with faculty advisor



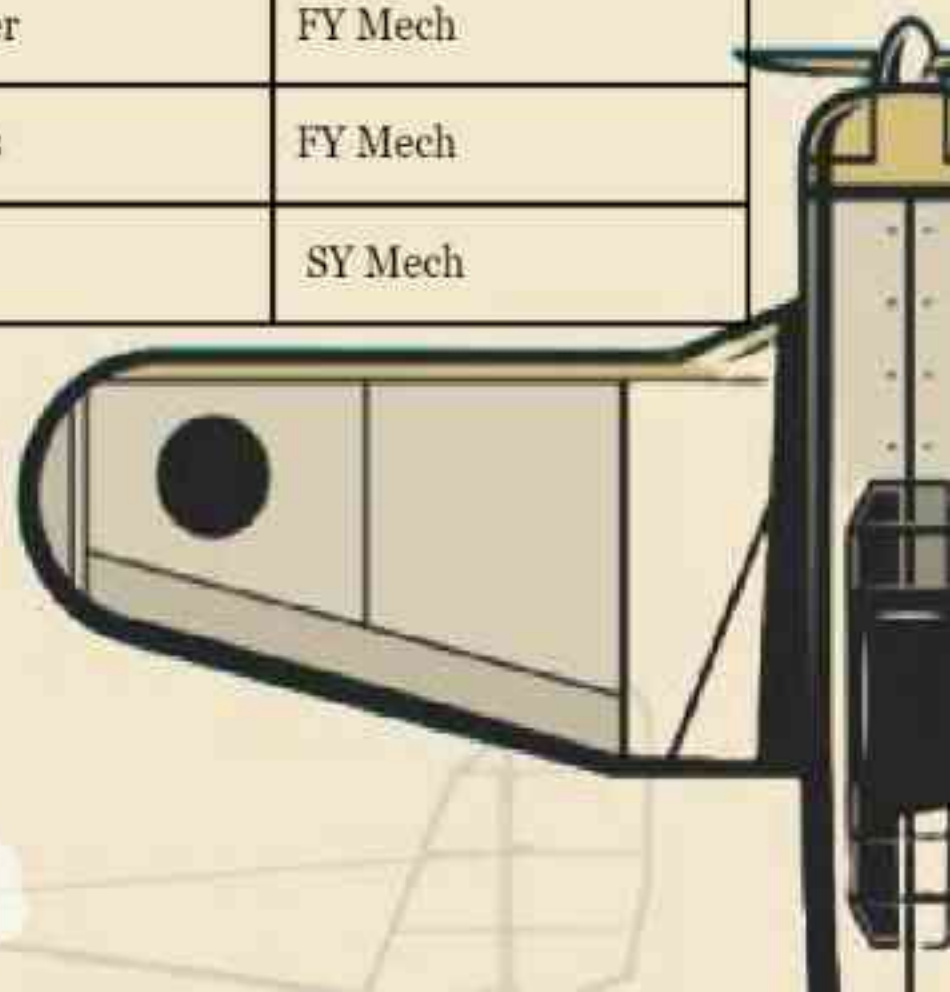
SAE - BHARADWAJ

Remote Control Planes and awards of Team Bharadwaj

Team Members:

Faculty coordinator: Dr. Atul Joshi

Sr No.	Member	Position	Year
1.	Nandini Sawale	Stabilizer	SY Mech
2.	Rutuja Gaikwad	Fuselage	FY Mech
3.	Krishnali Pawar	Fuselage	FY Mech
4.	Pari Sisode	Stabilizer	FY Mech
5.	Ilvika Pimpley	Wings	FY Mech
6.	Diva Malhotra	Stabilizer	FY Mech
7.	Aaditi Shankershetti	Avionics	FY Mech
8.	Piya Shrivastava	Pilot	SY Mech



TEAM AAVEG

Team Aaveg is an energetic collective of women passionately committed to the realm of Robotics. Their objective extends beyond simple involvement, striving to create a meaningful impact in the field. Established in 2012, the team has consistently achieved remarkable advancements year after year.

- **Achievements:**
  1. IIT Bombay Techfest Zonals (2024) : Secured 1st, 4th Rank; 5th Rank in Meshmerize.
  2. COEP Mindspark Techfest (2024): 2nd Rank in Search-n-Destroy Competition.
  3. IIT Bombay Techfest Finals (2024): AIR 1 in Meshmerize Competition.
  4. VJTI Technovanza Techfest (2024): 1st Rank in VRC Competition.

Receiving 2nd Rank at COEP

Aaveg Team with Faculty Advisor

Team Members:

Faculty Advisor: Dr. Atul Joshi

Sr. No.	Name	Position	Year
1	Shreya Kulkarrni	Mechanical Lead	TY Mechanical
2	Sakshi Chavan	Vice-Captain	TY Mechanical

ADIRA

Team Adira Electric proudly debuted its first-ever Formula Student-style Electric Vehicle at Formula Bharat 2025, marking a significant milestone for both the team and our college. The team comprises a dedicated group of students passionate about electric vehicle technology and motorsport engineering, focusing on research, design, and manufacturing of high-performance electric race cars, fostering innovation and technical excellence.

Team Adira at FB 2025

Project

They developed the first-ever FS EV for the Formula Bharat 2025 season. The team worked extensively on design, manufacturing, and testing, leading to the successful construction of the vehicle. This included rigorous simulations, iterative improvements, and extensive workshop hours to ensure a competitive vehicle.

The team consists of the following sections: Chassis and Aerodynamics Optimization, Powertrain and Battery System Design, and Control Systems and Vehicle Dynamics.

Pre-Event Activities:

This included rigorous simulations, iterative improvements, and extensive workshop hours to ensure a competitive vehicle. Pre-event logistics, including vehicle transportation and team accommodations, were also carefully planned.

Event Participation Summary

The team registered, set up the pit, and attended the Welcome Ceremony. Pre-tech checks began with valuable feedback, followed by Accumulator TI and the EDP Finals. After reworking our first Mechanical TI attempt, we completed the Battery Pack Challenge. Accumulator and Electrical TIs concluded with final refinements.

The team participated in the Engineering Design Presentation (EDP), the Battery Pack Challenge by Baaz, and engaged in in-pit discussions with TI inspectors and industry experts.

Achievements

- Successfully built and showcased our first FS EV
- Achieved AIR 23 overall and AIR 9 in the Engineering Design Event
- Gained valuable experience in all aspects of the Formula Student competition
- Established strong connections with teams, industry professionals, and event organizers

ADIRA

Targets for Next Season

- Improve technical performance based on feedback received at Formula Bharat 2025
- Enhance vehicle reliability and efficiency
- Develop new design and testing methodologies
- Strengthen industry collaborations and sponsorships

- Develop new design and testing methodologies
- Strengthen industry collaborations and sponsorships

Adira's car Bijlee at Formula Bharat 2025

TEAM MEMBERS:

Faculty Advisors: Dr. Nitin Palan and Dr. Prachi Mukherji

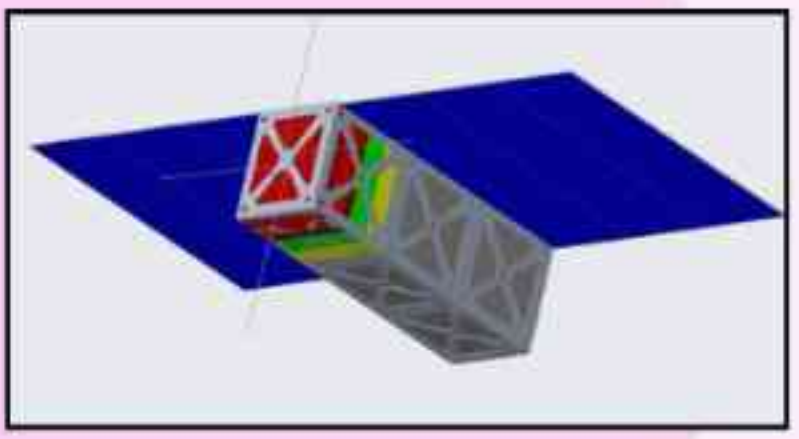
Sr. No.	Name	Positions	Year
1.	Palavi Gaikwad	Team Captain	B.Tech Mechanical
2.	Sweta Vimal	Brakes Lead	B.Tech Mechanical
3.	Vaishnavi Ramesh Patil	Brakes Subsystem Member	SY Mechanical
4.	Apurva Bhagwat	Chassis Lead	B.Tech Mechanical
5.	Maitreyee Badgire	Chassis Subsystem Member	SY Mechanical
6.	Shravani Kherdekar	Chassis Subsystem Member	SY Mechanical
7.	Shravani Gogawale	Vehicle Dynamics Lead	B.Tech Mechanical
8.	Devika Menon	Vehicle Dynamics Subsystem Member	SY Mechanical
9.	Vaishnavi Borkar	Vehicle Dynamics Subsystem Member	B.Tech Mechanical
10.	Pranavi Desmukh	Vehicle Dynamics Subsystem Member	B.Tech Mechanical

VINIDRA

KARVESAT

Team Vinidra, a distinguished satellite club, is currently working on an exciting project called KarveSat. This ambitious initiative aims to launch a CubeSat into space, contributing to advancements in space exploration and technology.

Team Vinidra's KarveSat members showcased their talent at the Satellite Design Competition by Brahmand Exploration Pvt. Ltd. in August 2024. To foster learning, the team formed sub-groups of four, enabling cross-functional collaboration and hands-on experience with CubeSat subsystems from June to August, guided throughout by the Project Manager.



Team Gamma's CubeSat Design

Team Vinidra with Faculty Advisor at National Space Day, ISRO

Achievements:

- 1st Place: Team Gamma_Vinidra
(Team Members: Tarini More (Lead), Dnyanda Patil, Mrudula Dafne, Dnyaneshwari Patil)
- 3rd Place: Team Epsilon_Vinidra
(Team Members: Mrunal Bodas (Lead), Sakshi Varhadi, Rashmi Apte, Saloni Madhekar)

TEAM MEMBERS:

Faculty Advisor: Dr. Dipti Patil

Sr. No.	Name	Position	Year
1	Aditi Sant	ADCS |Project Lead	B.Tech Mechanical
2	Mugdha Deshmukh	SnT | Sr. Engg/Lead	B.Tech Mechanical
3	Tarini More	ADCS |Deputy Lead	TY Mechanical
4	Mrunal Bodas	SnT | Deputy Lead	TY Mechanical
5	Shreya Dhumal	SnT |Deputy Lead	TY Mechanical
6	Sanskruti Inamdar	SnT | Engg.	TY Mechanical
7	Gargi Rajput	ADCS | Engg.	SY Mechanical

VINIDRA

TEAM SHAKTI

Under the umbrella of Team Vinidra, Team Shakti, the CanSat team for 2025, is also participating in a competition organized and mentored by In-Space. This team is working on their innovative CanSat project contributing to the growing efforts in space, technology and exploration. As they compete in this exciting challenge, Team Shakti is setting high standards for creativity, precision, and teamwork in the realm of small satellite development.

TEAM MEMBERS:

Faculty Advisor: Dr. Dipti Patil

Sr. No.	Name	Position	Year
1	Aditi Chitode	Structure and Thermal Member	SY Mechanical

TEAM NOVA:

Under the umbrella of Team Vinidra, Team Nova, the rocketry division, is actively participating in a prestigious rocket competition organized and mentored by In-Space. This collaboration showcases the team's expertise and commitment to pushing the boundaries of rocketry and space exploration. As they compete in this high-stakes event, Team Nova is poised to demonstrate their innovation, teamwork, and technical prowess in the world of rocketry.

TEAM MEMBERS:

Faculty Mentor: Dr. Atul Joshi; **Faculty Advisor**: Dr. Dipti Patil

Sr. No.	Name	Positions	Year
1	Mihica Khare	Team Captain, Simulations Head	SY Mechanical
2	Rutuja Deshmukh	Assembly & Finance Head	SY Mechanical
3	Vaibhavi Bandgar	Design & Structures Head	SY Mechanical
4	Raavi Barve	Inventory & Quality Assurance Head	SY Mechanical

SURYAKSH

Team Suryaksh is a dedicated solar car manufacturing team committed to promoting sustainability through innovative and eco-friendly transportation solutions. Our team brings together talented engineers, designers, and visionaries who strive to create a greener future by harnessing the power of the sun.

Projects

The team debuted in the National Solar Vehicle Challenge (NSVC). Building on that experience, the design aspect of our vehicle was improved which enabled them to participate in the ASME Autonomous Vehicle Challenge, where the vehicle performed virtually.

Sub-systems

The team is structured into three key subsystems:

- Mechanical - responsible for designing and building the car's structural and aerodynamic components
- Electrical - focused on developing the power system, battery management, and solar integration
- Software subsystem, which enhances vehicle performance through advanced control systems and data analytics.

With a passionate team of engineers and visionaries, we strive to push the boundaries of renewable energy and drive the world toward a more sustainable future

Events

- National Solar Vehicle Challenge (Season/Year)
- ASME Autonomous Vehicle Challenge

Targets for Next Season

The team is currently focusing on refining the vehicle design to prepare for Vehicle Design Competition by HCII (full form), further strengthening our expertise in sustainable and efficient vehicle development, the platform provides the opportunity to showcase their innovation on a larger platform.

- Integrating different components of electrical and mechanical systems, and ensuring their seamless functionality
- Implement safety measures to enhance reliability and efficiency.
- Aim to participate in ESC (Electric Solar Vehicle Championship) for 2026 season to gain deeper insights, and move a step closer toward full-scale manufacturing.

Suryaksh Team Members

SURYAKSH

TEAM MEMBERS:

Faculty Advisor - Dr. Seema Rajput

Sr. No.	Name	Position	Year
1	Gayatri Kulkarni	Captain	TY Mechanical
2	Bhuvaneswari Giri	Mechanical Subsystem Head	TY Mechanical
3	Tanisha Joshi	Member	TY Mechanical
4	Aditi Chitode	Member	SY Mechanical
5	Sejal Badugu	Member	SY Mechanical
6	Rasika Pati	Member	FY Mechanical
7	Shravani Umbrajkar	Member	FY Mechanical
8	Apurva Madgum	Member	FY Mechanical

NSS

The National Service Scheme (NSS) is a voluntary organization aimed at fostering a sense of social responsibility among students. Launched in 1969 by the Government of India, it encourages young people to engage in community service while developing leadership, teamwork, and personal growth. Through various activities such as rural development, health and hygiene awareness, and environmental conservation, NSS plays a crucial role in shaping responsible citizens who actively contribute to the betterment of society.

Even at college level, NSS CCOEW organizes various activities such as cleanliness drives and tree plantation initiatives. A key highlight of being an NSS volunteer is the opportunity to attend a 7-day camp in a rural area. During this camp, volunteers engage with village students and youth through educational activities, awareness programs, street plays, and rallies, aiming to spread valuable social messages and inspire positive change. This is a once in a lifetime experience for the student volunteers who are the future engineers, entrepreneurs and leaders of our country.

Student Volunteers of NSS CCOEW

NSS

Sr. No.	Name	Year
1	Geeta Sutar (B.R.)	TY Mechanical
2	Ananya Bhusare	TY Mechanical
3	Gargi Rajput	SY Mechanical
4	Ishani Bore	SY Mechanical
5	Amruta Lingayat	SY Mechanical
6	Anika Raykar	SY Mechanical
7	Anjali Lonare	SY Mechanical
8	Ankita Atole	SY Mechanical
9	Baghyashri Waghmare	SY Mechanical

Awareness Rally at Ekhatpur-Munjavdi village by volunteers

PANEL MEMBERS

Vaishnavi Borkar

Sakshi Bansode

Sanskruti Inamdar

Tanisha Joshi

Sanskruti Jawade

Sakshi Deshmukh

MECHANICAL DEPARTMENT PANEL MEMBERS 2024-25

NAME	POSITION	YEAR
Vaishnavi Borkar	Branch Representative	B.Tech Mechanical
Sakshi Bansode	Assistant Operations Secretary	TY Mechanical
Sanskruti Inamdar	Training and Placement Rep.	TY Mechanical
Tanisha Joshi	Library Representative	TY Mechanical
Sakshi Deshmukh	Assistant Technical Secretary	TY Mechanical
Sanskruti Jawade	Assistant Cultural Secretary	SY Mechanical

GANDHAAR

GANDHAAR 2024-2025

As the heart of Cummins College beat to the rhythm of music and creativity, GANDHAAR 2025: Sonic Verse – 4 Days of Musical Discovery unfolded as a spectacular celebration of art, culture, and camaraderie. This year's festival took us on a mesmerizing journey across musical genres, blending theatrical elegance with high-energy beats. From the vibrant Pre-Gandhaar themes that set the tone to the electrifying performances, dance battles, and soulful melodies of the main event, every moment was a testament to the talent and enthusiasm of our student community.

Main Event: A Melodic Extravaganza

From January 29 to February 1, 2025, GANDHAAR unfolded into a spectacular showcase of musical diversity, blending theatrical grandeur with electrifying beats. The exciting themes that brought out the glamour in the journey were:

Day 1 – Broadway Ballad (Jan 29th)
Day 2 – Streat Beats (Jan 30th)
Day 3 – Chart POP-ers (Jan 31st)
Day 4 – Alankar Allure (Feb 1st)

Faculty Advisor -

Prof. Rujuta Agarvekar , Prof. Harish Shinde

Gandhaar Launch

With memories made and melodies still echoing, GANDHAAR 2025 proved to be a festival like no other, uniting students through the universal language of music. Here's to another year of culture, creativity, and celebration—until **GANDHAAR 2026**!

Mech Winners in Gandhar !!

Runner-up in BTech Fashion Show

Best Department Award

PENTACLE 2024-25

Pentacle turned out to be a thrilling event for Mechanical this year. Each team showcased remarkable enthusiasm and sportsmanship, with the **Third Year Dodgeball Team securing the position of first runner-up in this Interclass competition!!**

TY DOGDEBALL TEAM - 1ST RUNNER UP

Vishwa Patil - Captain	**Shreya Bhosale - Vice Captain**
Kajol Sharma	Pradnya Ambawale
Sakshi Deshmukh	Sakshi Chavan
Krishna Manke	Gayatri Kulkarni
Adima Aphale	Ananya Bhusare
Sakshi Bansode	Mehak Shaikh

PENTACLE 2024-25

FY DOGDEBALL TEAM

Tanvi Matsye - Captain	**Madhura Asnikar - Vice Captain**
Shravani Umbrajkar	Janhavi Zadke
Apurva Magdum	Shweta Tomar
Krishnali Pawar	Kavyanjali Gurme
Ilvika Pimpley	Mrudula Waghachware

TY THROWBALL TEAM

Aditi Kulkarni - Captain	**Arya Jadhav - Vice captain**
Shruti Dudhe	Geeta Sutar
Shraddha Bhabad	Sakshi Zimur
Shruti Jadhav	Sanika Sheolikar
Aarati Bharale	Prashashti Sarkar
Dipti Gulme	Shruti Sarpe

PENTACLE 2024-25

SY THROWBALL TEAM

Avidnya Nalawade - Captain	**Isha Gattawar - Vice Captain**
Gargi Rajput	Carol Deodhar
Vaishanavi kaple	Suzen sayyad
Rutuja Shekade	Vedika Dhage
Purvi Kelkar	Anjali Lonare
Khushi Panwar	Vaibhavi Kolase

SY DOGDEBALL TEAM

Samrudhi Harne - Captain	**Ketki Deshpande - Vice Captain**
Sakshi Hiran	Vishakha Shelkande
Krupa Jadhav	Bhagyashree Waghmare
Kanishka Jagtap	Sneha Amte
Himani Kulkarni	Bharti
Ankita Atole	-

INNOVATION

Introduction

Innovation Techfest 2025 at MKSSS's Cummins College of Engineering for Women (CCOEW) is a celebration of technology, creativity, and engineering excellence. This annual event serves as a dynamic platform for students to showcase their problem-solving skills, technical knowledge, and innovative thinking.

There were three events focused on concepts of Mechanical Engineering, namely, Engineers' Monopoly, Structural Showdown, and ProtoSprint. Each event was designed to challenge participants and enhance their practical understanding of core engineering concepts.

Participation counter at Engineer's Monopoly

Auction Round at Engineer's Monopoly

Engineers' Monopoly

Engineers' Monopoly is an innovative twist on the classic board game, integrating mechanical engineering principles into strategic gameplay. Participants navigate through various industry-based scenarios, making crucial decisions related to manufacturing, design, and product development. This event not only tests technical knowledge but also sharpens analytical thinking and business acumen in an engaging and competitive format. Engineers' Monopoly is being successfully conducted for the third consecutive year, reinforcing its popularity and impact among participants.

INNOVATION

Structural Showdown

Structural Showdown challenges participants to design and construct bridges using limited resources. The primary objective is to create a structure that can withstand maximum weight while demonstrating principles of load distribution and structural integrity. This hands-on competition allows students to apply theoretical concepts in a practical setting, fostering creativity and engineering problem-solving.

Bridge Testing at Structural Showdown

ProtoSprint presentations

ProtoSprint Winners

ProtoSprint

ProtoSprint is a 3D modeling challenge where participants develop digital prototypes for a given problem statement. Using CAD software, contestants must create innovative and functional designs within a stipulated time frame. This event enhances participants' proficiency in computer-aided design while encouraging rapid ideation and precision in engineering modeling. ProtoSprint is being successfully conducted for the second time, further establishing itself as a key event in the techfest.

Innovation Techfest provides an exceptional opportunity for students to engage with real-world engineering challenges. These events not only test participants' technical abilities but also promote teamwork, innovation, and critical thinking.

BEST OUTGOING STUDENT

Best Outgoing Student - Apurva Bhagwat

Being recognised as **"THE BEST OUTGOING STUDENT"** is an impressive honour that acknowledges a person's outstanding academic achievement, remarkable abilities and all-around superb performance during their academic career. This year's title is awarded to **Ms. Apurva Bhagwat**, a final-year B.Tech mechanical student. Apurva's hard work and dedication are evident in this award, which she received, and it should inspire others. Let's learn more about her and the highlights of her academic career over the years.

Congratulations Apurva, for winning the Best Outgoing Student award for this year. How does it feel to win this honour?

Thank you so much! I feel very privileged to have been graced with this honour. It truly is a pay-off when your work is acknowledged. My spirits are even higher now, and I feel humbled yet inspired to work towards further growth.

This honour is not just a personal achievement, but a reflection of the journey- the late nights, the teamwork, the setbacks, and the small wins that led up to this moment. It's a beautiful way to start my story beyond college!

What unique qualities or efforts do you believe contributed to winning this award?

I believe the versatility that I possess has always helped me to keep my mind fresh. Alongside, consistency and keenness to explore and learn make me give my level best in every case- may it be academics, kathak, sports or building a car.

How did you stay motivated during semesters when balancing exams, competitions, and social commitments felt unmanageable ??

This is where managing time and prioritization came into play. Honestly, it does get overwhelming at times, but pushing yourself to make a better version of yourself is the key to personal growth. And not to forget my supportive bunch of friends who've always had my back! Sports and dance also act as perfect breathers during such times.

What was the biggest obstacle you faced as a student, and how did you navigate it?

I'd say effective time management and smart decision-making were the tough parts. There were times when exams, competitions, and internship clashed, but I practised proper organization to conduct my activities smoothly. Transparency in communication is a must too!

BEST OUTGOING STUDENT

As Head of Chassis, what's the most thrilling and nerve-wrecking moment you've faced while building your team's Formula One car?

The most thrilling part was definitely seeing our fully assembled racecar for the very first time! When our car Bijlee was no more on Solidworks and Ansys, but in front of our eyes in our workshop! Despite the innumerable hurdles, we had finally made our college's first electric race car. It's my most cherished memory!

And talking about the most nerve-wrecking moment, that would be going for the technical inspection at the Formula Bharat competition! But the team was an absolute sport throughout.

How do the precision of Kathak, agility in badminton, and teamwork from basketball contribute to your personal and academic success?

Kathak has instilled grace, discipline and concentration to detail, which have shaped me into a valued engineer. Badminton and Basketball taught me sportsmanship, group ethics, and tuned my reflexes and decision-making skills. These have collectively shaped my character and prepared me for the industry.

What are your future plans or is there anything you want to achieve that would make your younger self proud?

I would like to work in the design and optimization areas of motorsport sector in future. As we all know more is always less, but my younger self seems satisfied and proud to have been able to do well in all her passions and even more by building a car.

What's one thing you want to say to the Mechanical Department faculty or peers who supported you?

This college and mainly my dear Mechanical Department have not only shaped me as an engineer but have challenged me and pushed me to explore myself and bring out my true potential! The entire faculty and associated staff have been incredibly supportive throughout the journey. I have been blessed with such beautiful friends who made college life an unforgettable experience.

If you could give one piece of advice to incoming students, what would it be?

I'd say go beyond your limits and keep exploring! Don't be contained in a bubble. Break it and push yourself! Trust me, the rest falls right in your way. Live life in a way that never allows you to regret missing out on making memories.

How do you hope the Mechanical Department will remember you beyond this award??

I hope the department remembers me as a student who showed enthusiasm and active involvement in multiple academic and co-curricular events. Someone whose participation helped the department in some way or the other. Hopefully to help make others believe that it is possible to follow your passions if you have the will to do it.

TOP 10 STUDENTS

S.Y. TOPPERS

RANK NO.	STUDENT NAME	CGPA
1	Kajol Sharma	8.92
2	Shreya Kulkarni	8.77
3	Sanjeevani Naik	8.45
4	Shreya Dhumal	8.43
5	Prashasti Sarkar	8.43
6	Devashree Harkare	8.37
7	Vishwa Patil	8.31
8	Sai Motade	8.11
9	Pradnya Ambawale	8.07
10	Aditi Kulkarni	8.04

T.Y. TOPPERS

RANK NO.	STUDENT NAME	CGPA
1	Surabhi Sangale	8.96
2	Tanaya Naik	8.52
3	Sunidhi Gaikwad	8.48
4	Manali Yadav	8.27
5	Shravani Gogawale	8.27
6	Sanika Kulkarni	8.21
7	Vaishnavi Dhotre	8.19
8	Indrayani Naik	8.19
9	Aayushi Jagtap	8.16
10	Chaitrali Kulkarni	8.1

TOP 10 STUDENTS

BTECH. TOPPERS

RANK NO.	STUDENT NAME	CGPA
1	Amruta Puranik	9.13
2	Ulhas Vaikhari	9.07
3	Maithili Deshpande	8.95
4	Akanksha Chodankar	8.8
5	Gargi Bhonde	8.79
6	Amita Jambhale	8.68
7	Ruchita Kadam	8.59
8	Surprada Mahadik	8.59
9	Sai Phate	8.42
10	Avani Pande	8.39

SUBJECT TOPPERS

S.Y. SUBJECT TOPPERS SEM-III

SR. NO.	COURSE TITLE	COURSE CODE	SUBJECT TOPPER NAME
1	Calculus and Statistics	20BSME301	Kajol Sharma
			Shraddha Bhabad
2	Engineering Metallurgy	20ME301	Purva Kulkarni
			Shreya Kulkarni
3	Engineering Thermodynamics	20ME302	Kajol Sharma
			Shreya Kulkarni
4	Machining and Machine Tool Operations	20ME303	Prashasti Sarkar
			Shreya Dhumal
5	Strength of Materials	20ME304	Shreya Kulkarni
			Devshree Harkare

S.Y. SUBJECT TOPPERS SEM-IV

SR. NO.	COURSE TITLE	COURSE CODE	SUBJECT TOPPER NAME
1	Elements of Electrical and Electronics Engineering	20ES401	Purva Kulkarni
			Sanjeevani Naik
2	Analysis and Synthesis of Mechanisms	20ME401	Vishwa Patil
			Aditi Kulkarni
3	Fluid Mechanics	20ME402	Sanjeevani Naik
			Bhuneshwari Giri
4	Metal Casting, Forming and Joining Processes	20ME403	Purva Kulkarni
			Kajol Sharma
5	Machine Design	20ME404	Kajol Sharma
			Shreya Kulkarni

SUBJECT TOPPERS

T.Y. SUBJECT TOPPERS SEM-V

SR. NO.	COURSE TITLE	COURSE CODE	SUBJECT TOOPER NAME
1	Computer Aided Engineering	20ME501	Vaibhavi Magdum
			Neha Patel
2	Heat Transfer	20ME502	Vaishnavi Dhotre
			Surabhi Sangale
3	Power Train Design	20ME503	Surabhi Sangale
			Apurva Bhagwat
4	Industrial Inspection & Quality Control	20ME504	Mital Paratane
			Saloni Gaikwad
5	Numerical Methods	20ME505	Tanaya Naik
			Surabhi Sangale

T.Y. SUBJECT TOPPERS SEM-VI

SR. NO.	COURSE TITLE	COURSE CODE	SUBJECT TOPPER NAME
1	Robotics and Control Systems	20ME601	Saloni Gaikwad
			Urvi Deokar
2	Applied Thermodynamics	20ME602	Surabhi Sangale
			Manali Yadav
3	System Dynamics Modeling and Simulation	20ME603	Sanika Kulkarni
			Surabhi Sangale
4	Turbo Machines	20ME604	Sunidhi Gaikwad
			Saloni Gaikwad
5	Industrial Engineering and Operation Research	20HS601	Saloni Gaikwad
			Indrayani Naik

SUBJECT TOPPERS

BTECH. SUBJECT TOPPERS SEM-VIII

SR. NO.	COURSE TITLE	COURSE CODE	SUBJECT TOPPER NAME
1	Introduction To Mechanical Micro Machining	20PEME801B	Shamai Jadhav Gargi Bhonde
2	Dynamics and Control Mechanical Systems	20PEME801A	Ulhas Vaikhari Tanvi Sagonkar
3	Mechanics of Composite Materials	20PEME802A	Amita Jambhale Ruchita Kadam
4	Finite Element Method	20PEME802C	Maithili Deshpande Ulhas Vaikhari
5	Product Design and Development	20PEME803B	Akanksha Chodankar Aishwarya Ambekar
6	Design Thinking for Innovation	20PEME803D	Swarali Dabke Sakshi Joshi
7	Advance Solid Mechanics	20PEME804B	Maithili Deshpande Dnyaneshwari Bangar
8	Optimization Techniques	20PEME804C	Teertha Kulkarni Avani Pande

FACULTY ACHIEVEMENTS

Academic Year 2024-25: Faculty Publications

Sr. no	Author Name	Paper Title	Name Of the Journal	Month Yr. Volume, Issue no. Page no.
1.	Prashant Anerao, Atul Kulkarni, **Yashwant Munde,** Namrate Kharate	A Comparative Study of Machine Learning Techniques for Predicting Mechanical Properties of Fused Deposition Modelling (FDM)-Based 3D-Printed Wood/PLA Biocomposite	**Mechanics of Advanced Composite Structures**	August, 2024
2.	Amol Kolhe, Sachin Karale, Prashant Anerao, **Yashwant Munde**	Mechanical Characterization of Banana Fibers/PLA Biocomposite Samples Produced by Fused Deposition Modeling Based 3D Printing Using Taguchi Method	**SSRG International Journal of Mechanical Engineering**	August, 2024
3.	Jyoti Chitale, Vishwas Mohite, Vishal Deore, **Harish Shinde,** Vaibhav Shelar	Assessing The Impact of IEEE Cloud Computing Platform Training on Student; Knowledge: A Pre- and Post-Study at MKSSS Cummins College of Engineering for Women, Pune.	**Library Progress International**	July, 2024
4.	Vishal Deore, Sneha Singh, Jyoti Chitale, **Harish Shinde,** Vaibhav Shelar, Harsh Gaikwad, Smita Waghmare	Role Of Various Higher Education Discipline Students In Indian Rural Development Through Unnat Bharat Abhiyan Mission – Theoretical Interdisciplinary Approach	**Library Progress International**	July, 2024
5.	Vishal Deore, Sneha Singh, **Harish Shinde,** Vaibhav Shelar, Amol Ladhe, Harsh Gaikwad, **Avinash Shinde**, Milinda Mahajan, I. Siva, Smita Waghmare	Reflection EMI Shielding effect on Graphen/Cuo Silicon Rubber Nanocomposites Over Broad Frequency Range of 1 GHz to 20 GHz	**Nanotechnology Perceptions**	July, 2024

FACULTY ACHIEVEMENTS

Academic Year 2024-25: Faculty Publications

Sr. no	Author Name	Paper Title	Name Of the Journal	Month Yr. Volume, Issue no. Page no.
6.	**Shridhar Kedar, Anand Bewoor,** Govindarajan Murali, G.V.More, Anandita Roy	Thermal Analysis of Sea Water Hybrid Solar Desalination System - An Experimental Approach	**International Journal of Heat and Technology**	August, 2024
7.	G Murali, PSN Masthan Vali, J Jaya, **A.K. Bewoor**, Ravinder Kumar	Experimental studies on solar reusable can air heating system integrated with latent heat storage	**Journal of Thermal Analysis and Calorimetry**	Volume 149, Issue 6, Aug, 2024
8.	Laxmi Bewoor, **Anand Bewoor,** Pravin P. Hujare, Praveen Rathod, Vedant Yetekar, Shrish Dollin	Deep learning-based classifier for geometric dimensioning and tolerancing symbols	**International Journal of Artificial Intelligence (IJ-AI)**	Volume 14, Issue , April 2025
9.	Tejas Patil, **Ajit Bhosale**, SGK Manikandan, Bibin Jose, Mithul Naidu, Sachin Salunkhe, Robert Cep, Emad Abouel Nasr	Experimental investigation on solidification cracking & amp; intergranular corrosion of AISI 321 &; AISI 316 L dissimilar weld on pulsed current gas tungsten arc welding (PCGTAW)	**Heliyon**	August, 2024
10.	Mitul Naidu, **Ajit Bhosale**	Influence of alkali pre-treatments on the physio-mechanical, tribological and thermal performance of hemp fibre reinforced phenolic brake friction material	**International Journal of Materials Engineering Innovation**	July, 2024

FACULTY ACHIEVEMENTS

Academic Year 2024-25: Faculty Publications

Sr. no	Author Name	Paper Title	Name Of the Journal	Month Yr. Volume, Issue no. Page no.
11.	**Shridhar Kedar, Harish Shinde,** G.V.More, Deepak **Watvisave, Ajit Bhosale**	A critical review on solar applications of parabolic trough collector	**Journal of Thermal Analysis and Calorimetry**	March, 2025
12.	G.V.More , **Shridhar Kedar**	Wasted Pomegranates as a potential and novel third generationfeedstock: optimization, characterstics and thermogravimetric investigation	**Journal of Thermal Analysis and Calorimetry**	October, 2024
13.	A. Kolhe, S. Karale, P. Anerao, and **Y. Munde**	Mechanical Characterization of 3D-Printed Banana Fibers Reinforced PLA Biocomposite	**International Journal of Mechanical Engineering.**	vol. 11, no. 10, pp. 74–84, Oct. 2024.
14.	Ravikant Nanwatkar, **Deepak Watvisave**	Investigative Approach to Thermal and Electrical Synergy of Lithium Ion Battery and Supercapacitor Hybrid Energy Storage Systems	**International Journal of Electrical and Electronics Engineering**	October, 2024
15.	Ravikant Nanwatkar, **Deepak Watvisave**	Investigations of Lithium-Ion Battery and Supercapacitor Hybridization on Relative Effectiveness and Energy Performance of E-Bicycle with Regenerative Braking	**International Journal of Mechanical Engineering**	February, 2025

FACULTY ACHIEVEMENTS

Academic Year 2024-25: Book/Book Chapter

Sr No	Faculty Author	Chapter Titles	Book Title	Month /Yr., Page No.	Publisher
1.	**Avinash Shinde,** Siva Irulappasamy, **Yashwant .S Munde**, Raghavendra Gujjala	Characterization of carbon nanotube nanocomposite for aerospace materials to shield electromagnetic interference	Aerospace Materials	Januray, 2025 435-449	Elsevier
2.	**Shridhar Kedar, Himani Kadam**	A New Pedagogy Technique for Research-Based Application-Oriented Case Study Presentation	Interactive Media with Next-Gen Technologies andTheir Usability Evaluation	November, 2024 197-211	Taylor and Fransis
3.	M. B. Kulkarni, R.Kumbhakarn, D. S.Bhutada, BhushanHazare S. Thorat, S.Radhakrishnan, **Y. S. Munde**	Effect of Epoxidized Soyabean Oil on Mechanical and Structural Properties of Sepiolite-Filled Polypropylene / Polyolefin Elastomer Composites	Smart Innovations and Technological Advancement in Civil and Mechanical Engineering	December, 2024 1-13	Apple Academic Press
4.	**Nilesh Kolhalkar**, Gunjan Chhabra, Navdeep Kumar Chopra, Balakrishna Kothapalli, P. Veeramanikandan, P. S. Ranjit, Leszek Ziora	Optimising Battery Maintenance in Electric Vehicles Using Machine Learning	Recent Trends In Engineering and Science for Resource Optimization and Sustainable Development	15th January, 2025	CRC Press

FACULTY ACHIEVEMENTS

Academic Year 2024-25: Conferences Paper

Sr. No.	Faculty Author	Paper Title	Name of Conference	Volume, Issue No., (Month/Yr.) & Page No.
1.	Ketki Kshirsagar, Akanksha Kulkarni, Jui Karkhele, Divya Gajare, Nutan Deshmukh, **S.A.Kedar**	IoT Based Automation of the Prebuilt Solar Desalination System	8th International Conference on Information and Communication Technology for Competitive Strategies - (ICTCS-2023)	Nov 2024 Volume 941 PP - 397-410
2.	Prashant Anerao, Atul Kulkarni, **Yashwant Munde**, Namrata Kharate, Omkar Wagh	A Machine Learning Approach to Compressive Strength Prediction of 3D-Printed Biocha Reinforced PLA Biocomposite	2024 IEEE Pune Section International Conference (PuneCon)	Conference: 13-15 December, 2024 IEEE Xplore: 27 February, 2025
3.	**Avinash Shinde, Yashwant Munde,** I Siva, Chithirai Pon Selvan, Smita Deore, **Ajit Bhosale**	Investigation on Mechanical and Tribological Performance of Biodegradable Polylactic Acid (PLA)-Hemp Composite	International Conference on Innovation, Sustainability, and Applied Sciences (ICISAS 2023)	12 February, 2025
4.	**Yashwant Munde, Avinash Shinde,** Prashant Anerao, I Siva, **Ajit Bhosale**	Statistical Analysis of the Mechanical Properties of FDM 3D-Printed PLA-Based Composites	International Conference on Innovation, Sustainability, and Applied Sciences (ICISAS 2023)	12 February, 2025
5.	SS Adewar, **A.K. Bewoor**	Characterizing single point tool for incremental die less forming of thin titanium sheet	International Conference on Progressive Research in Industrial & Mechanical Engineering	August 05-07

FACULTY ACHIEVEMENTS

Academic Year 2024-25: Conferences Paper

Sr. No.	Faculty Author	Paper Title	Name of Conference	Volume, Issue No., (Month/Yr.) & Page No.
6.	**Nilesh R. Kolhalkar**; Anupama A. Pandit; **Shridhar Ashok Kedar**; G. Yedukondalu	Artificial Intelligence Algorithms for Robotic Harvesting of Agricultural Produce	1st International Conference on AIML-Applications for Engineering & Technology (ICAET-25)	Conference: 16-17 January 2025 IEEE Xplore: 26 March 2025
7.	**Nilesh R. Kolhalkar**; Anupama A. Pandit	State-of-Charge (SOC) Balancing and Temperature Assessment of Lithium-Ion Battery with Internet of Things (IoT) Technology	1st International Conference on AIML-Applications for Engineering & Technology (ICAET-25)	Conference: 16-17 January 2025 IEEE Xplore: 26 March 2025
8.	**Ashwini Salunkhe (Final Year Mechanical); Nilesh R. Kolhalkar**	Artificial Intelligence (AI) for Crash Risk Forecasting During Automotive Crash Simulations	1st International Conference on AIML-Applications for Engineering & Technology (ICAET-25)	Conference: 16-17 January 2025 IEEE Xplore: 26 March 2025
9.	Sangeeta S. Mundra; Krutika O. Pandya; Janhavi G. Thikekar; Dinesh R. Salunke; **Anand K. Bewoor**	Condition Monitoring of Automotive Gearbox: Vibration Signal Analysis Using PCA and Random Forest Algorithm	1st International Conference on AIML-Applications for Engineering & Technology (ICAET-25)	Conference: 16-17 January 2025 IEEE Xplore: 26 March 2025

STUDENT ACHIEVEMENTS

Sr no.	Name	Achievements	Year
1	Aditi Sant	Researcher at Deep Space Initiative (DSI): Contributed to a research paper analyzing sustainable approaches for bioprinting in space, with implications for wound healing, organ regeneration, and astronaut healthcare.	Final Year
		Co-author: "Optimizing Small-Sat Constellation Design for Detection and Tracking in LEO" The paper was submitted to and presented at the International Astronautical Congress (IAC) 2024, Milan.	
		Co-author: "Biomaterials for Aerospace Applications A Sustainable Technological Analysis"	Final Year
		Co-author: "Considerations of the long-term future in space"	
2	Shreya Bhosale	DAMINI: 2nd Rank in Kho-Kho *Description:* Intra College Sports Competition	Third Year

STUDENT ACHIEVEMENTS

Sr no.	Name	Achievements	Year
3	Surabhi Sangale	Hybrid Solar Desiccant Wheel Air Conditioning System – ASHRAE Undergraduate Project Guide: Prof. Parag Chaware. *Description:* Our project focuses on designing a solar-powered hybrid air conditioning system integrating a desiccant wheel for efficient dehumidification and cooling. The project won Rank 1 in the ASHRAE Undergraduate Project Equipment Grant Design Competition, recognizing its innovative approach to energy-efficient cooling. Also a grant of $5000 is awarded for the project.	Final Year
4	Shravani Gogawale		
5	Nayyara Sayyad		
6	Samiksha Jadhav	DAMINI: 2nd Rank in Kho-Kho *Description:* Intra College Sports Competition	Second Year
		COEP ZEST: 3rd rank in Kho-Kho *Description:* Intra College Sports Competition	

ALUMNI INTERVIEW:

Tejaswani Jaglan

Tejaswani Jaglan is a distinguished mechanical engineer and an alumna of the Mechanical Department at Cummins College of Engineering for Women, Pune. Currently serving as the Regional Lean Leader – Asia Pacific at GE Vernova, she leads strategic lean transformation initiatives across multiple sites. With a strong foundation built through GE's Operations Management Leadership Program, Tejaswani is also a passionate advocate for workplace inclusion, diversity, and equity.

Here are some insights from our accomplished alumna in this exclusive interview.

How was your journey since graduating from college?

I graduated from Cummins College in 2017 and soon after, joined the global giant General Electric (Now GE Vernova) into their flagship Operations Management Leadership Program. I am glad to have been exposed to multiple businesses globally, including power, aviation, and renewable energy. I did various roles in Operations, Manufacturing and Supply Chain domains. In my current role, I take care of Lean (Continuous Improvement) for the Asia-Pacific region.

Can you share your experiences at Cummins College and how they shaped your career path?

Cummins College holds a special place in my heart. From serving as Class Representative in my first year to becoming General Secretary in my final year, the journey was filled with growth and learning. I was part of the SAE Supra team that built a Formula 1 prototype from scratch and also co-founded the college's ASME Student Chapter in 2015, serving as its first Chair. My journey at Cummins was a true stepping stone into adulthood. I have got some of the closest friends, cherished memories, supreme mentors and amazing juniors - All thanks to Cummins :)! From academic and technical growth to industry projects and an internship at GE that led to a pre-placement offer, Cummins shaped both my personal and professional path in the best way possible.

What has been the most Rewarding Experience in your role as Regional Lean Leader in GE?

I would like to take this opportunity to mention that the best part about working at GE is that I can be myself. All that I have inculcated as a person right from childhood until now is what I can apply in my professional sojourn with utmost honesty and dedication. As for my current role as Regional Lean Leader, I get to interact and work with teams across the horizon for continuous improvement initiatives - from Sales to Engineering, Project Management to Supply Chain, Operations to Site Commissioning. It is enriching to work with such diverse teams for deploying a lean mindset.

What technical and leadership skills do you believe mechanical engineers need to develop today to stay ahead in the next 10 years?

Blending deep technical knowledge with strong interpersonal and strategic capabilities will be the hallmark of future engineering leaders. Technically, focus should be on Advanced Manufacturing Technologies, Industry 4.0, Sustainability, and Materials Science. For leadership, the key elements are Effective Communication and collaboration, strategic thinking and vision, adaptability and continuous learning, and emotional intelligence and team leadership.

ALUMNI INTERVIEW

How do you train and mentor engineers to adopt a problem-solving and continuous improvement mindset?

I believe that cultivating a problem-solving and continuous improvement mindset isn't just about training and mentoring techniques; it's about fostering a culture and providing consistent opportunities for growth. We should introduce engineers to core problem-solving concepts (8D, Root Cause Analysis, etc.) and continuous improvement frameworks (Lean, Six Sigma, etc.). Sharing real-world examples of how effective they are with significant positive outcomes in various industries helps to make the concepts tangible and inspiring. We should also encourage participation from cross-functional teams during improvement initiatives and utilize simulations to make learning engaging and equip them with the skills to collect, analyze, and interpret data effectively. Fostering a culture of curiosity and learning is indeed a positive sign of a growth mindset.

You were recently featured on GE Vernova's page. How do you think organizations can create more meaningful representations of women beyond such campaigns?

Yes, I feel honoured to have been featured on GE Vernova's global page for International Women's Day 2025. There are a lot of ways in which we can move beyond performative allyship and foster meaningful change. We should embed Equity and Inclusion into the culture by going beyond taglines and holding leaders accountable for fostering inclusive environments and achieving representation goals. Moving forward, we should implement systemic changes in key processes like Inclusive Hiring, Equitable Promotion and Development and Fair Compensation and Benefits. We must also foster an inclusive and supportive workplace by creating a positive working environment, actively addressing any bias and discrimination, promoting inclusive leadership and having strong employee resource groups(ERGs).

I would like to reiterate that meaningful motivation comes from feeling valued, respected, and having genuine opportunities for growth and impact. This benefits the entire organization by increasing innovation, creativity, and employee engagement.

Were there any significant challenges you faced as a woman in mechanical engineering? If yes, how did you overcome them?

To be honest, I have not faced any significant challenges as a woman in mechanical engineering. I am very proud to be born to a progressive family, and I thank my parents immensely for trusting me and helping me pursue my dreams. I am also glad to be married into a forward-thinking family who always encourages me to follow my vision, and a special shout-out to my husband, who is a pillar of support and pushes me to give my best each day. To my friends who do come across challenging circumstances, I would like to say that "Tough times don't last, Tough people do". Hold in there, trust yourself, and you are going to come out of it stronger than ever.

In today's fast-paced world, how do you maintain a balance between professional success and personal well-being?

That's a crucial question in today's demanding work environment. It's a dynamic and continuous balancing act rather than a fixed state, and it requires conscious effort. To be candid, I am not yet there in terms of managing work-life balance well, but striving towards it. I believe a couple of good practices would be to identify priorities, what truly needs our attention, and what can wait, what could be delegated, blocking time for focused work and meetings and avoiding multitasking. Next would be talking with with loved ones, connecting with colleagues and seeking mentorship/support. What we should also focus on is embracing flexibility and ability to adjust. What works for balance at one stage of our career or life might not work later.

ALUMNI INTERVIEW

We should regularly reassess our strategies and be willing to adapt them. At the end, I truly believe that a healthy personal life can often fuel greater fulfilment in our career.

What advice would you give to current students and recent graduates aspiring to build a successful career in mechanical engineering?

That's a fantastic aspiration! Mechanical engineering offers such a diverse and impactful field. Here's some advice I'd like to offer. To begin with, dive deep into the fundamentals as these are the bedrock of our future work.

Embrace hands-on experience - Theory is crucial, but practical application is where it truly comes alive. Seek out lab opportunities, design projects, and even personal projects. The more you build and tinker, the better you'll understand the real-world challenges.

Network Actively - Attend industry events, career fairs, and connect with professionals on platforms like LinkedIn. Don't be afraid to reach out for informational interviews. Building relationships can open doors you might not even know exist.

Develop Soft Skills - Technical prowess is essential, but so are communication, teamwork, problem-solving, and critical thinking. Participate in group projects, presentations and leadership roles to hone these skills. Employers highly value well-rounded individuals.

Stay Curious and Adaptable - Cultivate a habit of continuous learning by reading industry publications, following advancements, and being open to new ideas. Seek Mentorship by connecting with professors, senior students, or professionals in the field who can offer you guidance and support. Their experience can provide invaluable insights.

Develop a Growth Mindset - Embrace challenges as opportunities for learning and growth. Don't be discouraged by setbacks; instead, analyze them, learn from them and move ahead.

As it is rightly said by Marie Curie, "Nothing in life is to be feared, it is only to be understood. Now is the time to understand, so that we may fear less". Thank you very much. Wishing everyone All the very Best. Cheers!

INTERNSHIP DATA

SR.NO.	NAME OF THE STUDENT	NAME OF THE COMPANY
1	Pruva Kulkarni	Caterpillar
2	Devashree Harkare	Caterpillar
3	Sai Motade	Caterpillar
4	Aditi Kulkarni	Caterpillar
5	Sanskruti Inamdar	Caterpillar
6	Sakshi Chavan	Caterpillar
7	Snehal Madane	Baxter
8	Tanisha Joshi	General Mills
9	Shreya Dhumal	Garrett Motion
10	Sanjeevani Naik	Garrett Motion
11	Vishwa patil	Garrett Motion
12	Prashasti Sarkar	Garrett Motion
13	Maithilee Tathare	Garrett Motion
14	Pradnya Ambawale	Garrett Motion

INTERNSHIP DATA

SR.NO.	NAME OF THE STUDENT	NAME OF THE COMPANY
15	Gayatri Kulkarni	Garrett Motion
16	Samruddhi Vaikar	Garrett Motion
17	Jiya Kalmegh	Garrett Motion
18	Sakshi Deshmukh	Garrett Motion
19	Samyukta Nair	Garrett Motion
20	Arya Vispute	Garrett Motion
21	Shreya Kulkarni	Ansys
22	Akshada Salunkhe	Cummins India
23	Shravani Nalegave	Cummins India
24	Shreya Bhosale	Cummins India
25	Adima Aphale	Cummins India
26	Snehal Pawar	Cummins India
27	Anushka Dixit	Cummins India
28	Razia Ahmed	Cummins India

INTERNSHIP DATA

SR.NO.	NAME OF THE STUDENT	NAME OF THE COMPANY
29	Arpita Mahind	Cummins India
30	Ananya Bhusare	Stellantis (Off-Campus)
31	Vaidehi Murdandgauda	Onesubsea
32	Shrutika Karande	Onesubsea
33	Kadambari Patil	Onesubsea
34	Vasudha Bhagat	Onesubsea
35	Bhuwneshwari Giri	Onesubsea
36	Krishna Manke	Onesubsea
37	Gargi Bahalkar	Onesubsea
38	Dipti Gulme	Worley
39	Shraddha Bhagat	Worley
40	Shreya Bhosale	MSCI

PLACEMENT DATA

Sr No.	NAME	NAME OF THE COMPANY
1.	Saloni Gaikwad	Caterpillar (Perkins)
2.	Trupti Jumbad	Caterpillar (Perkins)
3.	Manali Yadav	Caterpillar (Perkins)
4.	Sharvari Ghorpade	Caterpillar
5.	Jui Bhasale	Caterpillar
6.	Ayushi Jagtap	Caterpillar
7.	Chaitali Kute	Micron
8.	Kshitija Ghorpade	Ather
9.	Vaishnavi Dhotre	Ather
10.	Aastha Shah	Ather
11.	Sonam Khatal	Ather
12.	Sakshi Ninale	Cummins
13.	Vaishnavi Borkar	Cummins India
14.	Sanika Kulkarni	Eaton
15.	Sharvari Londhe	Eaton
16.	Urvi Deokar	Eaton

PLACEMENT DATA

SR.NO.	NAME	Name of Organization
17.	Rutuja Mane	Eaton
18.	Sunidhi Gaikwad	Eaton
19.	Nayyara Sayyad	Eaton
20.	Vaishnavi Patil	Eaton
21.	Shravani Gogawale	Eaton
22.	Mital Paratane	Eaton
23.	Pranavi Deshmukh	Hero Motocorp
24.	Madhura Bartakke	Hero Motocorp
25.	Vaibhavi Magdum	Hero Motocorp
26.	Janhavi Bhopale	Hero Motocorp
27.	Arya Deo	Thyssen Krupp
28.	Tanaya Naik	Daimler Truck
29.	Manasi Chaudhari	Daimler Truck
30.	Tisha Bais	Technip FMC
31.	Avanti Durale	Technip FMC
32.	Bhagyashri Sasane	Aditya Birla

PLACEMENT DATA

SR.NO.	NAME	Name of Organization
33.	Shivani Jadhav	Aditya Birla
34.	Indraja Nene	Aditya Birla
35.	Neha Patel	Onesubsea
36.	Sakshi Patil	Onesubsea
37.	Pratiksha Divate	Onesubsea
38.	Rucha Shende	Onesubsea
39.	Kirti Alai	Onesubsea
40.	Palavi Gaikwad	Garrett Motion
41.	Apurva Bhagwat	Garrett Motion
42.	Sweta Vimal	Garrett Motion
43.	Chaitrali Kulkarni	Garrett Motion
44.	Tanvi Kamat	Garrett Motion
45.	Indrayani Naik	Bajaj Electricals
46.	Ashwini Salunkhe	Arabelle Solutions
47.	Vaishnavi Pawar	Arabelle Solutions
48.	Pradnya Pawar	Arabelle Solutions
49.	Shravani Kumbhar	Mukand

PLACEMENT DATA

SR.NO.	NAME	Name of Organization
50.	Vaishnavi Satbhai	Mukand
51.	Kalyani Kulat	Mukand
52.	Pooja Shewale	Portscap (Regal Rexnord)
53.	Mrunal Khatke	Portscap (Regal Rexnord)
54.	Kanchan Chaudhari	Adient
55.	Shrushtee Gaikwad	Adient
56.	Pooja Patil	Thermax

"Engineers turn dreams into reality."
– Hayao Miyazaki

BATCH OF 2025