

### AISSMS

#### **COLLEGE OF ENGINEERING**





Accredited by NAAC with "A+" Grade | NBA -6 UG Programmes

# **MECHPULSE**

A NEWSLETTER BY DEPARTMENT OF MECHANICAL ENGINNERING



#### Vision

To be recognized as a premier centre in the field of mechanical engineering education

# Mechanical Engineering Department



### INDEX

- Editorial Note
- Editorial Board
- Vision/Mission
- ❖Principal's Message
- ❖HOD's Message
- Achievement of Faculty Members
- Achievements of Student
- Training and Placement Corner
- ❖ Department Activities
- Student's Clubs/Chapters
- ❖Research Contribution
- ❖Industry Visits
- ❖A Few Glimpse from The Year 2023-24

## EDITOR'S NOTE

#### Greetings readers!

We are thrilled to present another successful edition of MECHPULSE newsletter, representing the Mechanical Engineering Department. This edition has been a joy to curate, and as editors, we are grateful for the opportunity to collaborate with the bright and enthusiastic minds within the mechanical engineering student community. The dedication, ingenuity, and teamwork showcased by our writing and design teams underscore the collaborative ethos we strive to cultivate within MECHPULSE. Within these pages, you'll find a treasure trove of knowledge, engaging research, and insightful discussions spanning the realm of mechanical engineering. We've also dedicated significant effort to provide valuable insights into the realm of placements, aiming to demystify and assist you in navigating this pivotal process.

Above all, this edition serves as a showcase for the myriad exciting endeavors undertaken by both faculty and students within our department, and we're honored to document and share them with you. We extend our heartfelt congratulations to our writers for their informative and meticulously researched articles, and to our designers for their visually captivating layouts and designs. Special thanks to our head of department, Dr. S. V. Chaitanya, and the entire mechanical engineering department for their unwavering support in bringing MECHPULSE to fruition. We also express our gratitude to our Principal, Dr. D. S. Bormane, whose mentorship and guidance have been instrumental in shaping this edition.

We invite you to delve into MECHPULSE and hope that you find it as enjoyable to read as it was for us to create!

Dr. P. R. Tete, Asst. Prof., Mechanical Engineering AISSMS COE, Pune

### EDITORIAL BOARD

#### **Faculty Coordinator**:

Dr. S. V. Chaitanya, Head, Dept. of Mechanical Engineering

#### Faculty in charge & Editor:

Dr. P. R. Tete Assistant Professor Dept. of Mechanical Engineering

#### Design and editing team:

Vedant Raut- First Year

Manthan Songirkar- First Year

### Vision and Mission

#### Vision:

To be recognized as a premier centre in the field of mechanical engineering education

#### Mission:

- ❖ To strive continuously for an advancement of academics and lifelong learning through effective teaching learning process.
- ❖ To strengthen industry-institute interface, association with professional societies to develop leadership, team work and industry oriented attributes through internship.
- ❖ To develop skill based mechanical engineering professionals for sustainable development through project based learning and active research

### Principal's Message



Dr. D. S. Bormane

Dear Students and Faculty members,

Greetings from the Principal's Office!

I am glad to announce that with the commencement of the year 2023, AISSMS College of Engineering has completed 31 remarkable years since its establishment.

AISSMS COE as an outcome of academic excellence achieved, is consistently producing University gold medallists and top rankers in different branches of engineering. Faculty is actively involved in research and development. College has number of very high-end analytical, computational and experimental facilities at the disposal of students. As we are in 31<sup>st</sup> year, we have inclined our focus towards Research Field.

We are going to concentrate more upon the Engineering Research activities and use those for students and society welfare. I that the College is in a position to deliver the best theoretical and practical training to the students and offer the best talent to the employers. Due to pandemic situation at end of semester mode of teaching suddenly. This sudden change is adopted by faculty & students with focus on continuous learning trough online mode.

I'm delighted to present the latest edition of "MECHPULSE," the Mechanical Department Newsletter. I extend my heartfelt congratulations to the Mechanical Department for their dynamic activities. I wish aspiring students, employers, and all other stakeholders in the Mechanical Department the very best in achieving their goals.

### HOD's Message



Dr. S. V. Chaitanya

Dear Students,

A hearty welcome to the Department of Mechanical Engineering at AISSMS College of Engineering, Pune.

The department has well qualified and dedicated faculty. The department strives to Impart knowledge and training of the highest standard. The objective of the department is to prepare students for a successful career in Industry, Research and Academics to meet the needs of growing technology. Our efforts are to develop the ability among students to synthesize data and technical concepts for application to product design. We provide an opportunity for students to work as members of a team on multidisciplinary projects.

I wish to express my gratitude to our faculty, students, and the community for their contributions to a fruitful and constructive 2023. This past year has seen significant accomplishments, and we remain committed to exploring innovative avenues to realize the institute's vision as we anticipate the coming year.

### Achievements of Faculty Members

#### The President of India prize

**Dr. M. R. Phate** has won the President of India prize by Institution of Engineers for the paper titled "Analysis of Seat to Head Transmissibility of the Seated Human Body using Artificial Neural Network" (published in Series C, Volume 103 Issue 4) at 38th Indian Engineering Congress Jabalpur (MP) on 27 December 2023 by the deputy chief Minster, Madhya Pradesh and Mr. UP Singh, former Secretary to the Government of India.



#### Railway Board's Prize by Institution of Engineers

**Dr. S. V. Chaitanya and Dr. D. Y. Dhande** has received the Railway Board's prize by Institution of Engineers for the paper titled "Complex assembly analysis for geometric and dimensional tolerance to obtain selective assembly from partitioned bins using a multi-objective approach to control clearance variation of IC Engine" (published in series c, volume 103 issue 4) at 38th Indian Engineering Congress Jabalpur (MP) on 27 December 2023.



#### Outstanding Intrapreneurial Team Award

**Dr. S. H. Wankhade** has received the Outstanding Intrapreneurial Team Award – Higher Education, At The Global Intrapreneurs Summit and Awards Ceremony 2023 On 09/11/2023.





#### Nurturing the Mother Earth...

**Dr. S. R. Patil** spearheaded a tree plantation drive at Tukai Tekadi, Baner, on 15th August 2023, emphasizing environmental stewardship. Not only did he organize the event, but he also personally tends to the plants, ensuring they receive proper care and attention for their healthy growth. His passion for greening initiatives underscores his commitment to creating a more sustainable and eco-friendly environment for the community.







#### Dr. D. Y. Dhande

Working as a Project Leader for the international research project entitled, "Development of Environmental Friendly Corrosion fouling inhibitors for Marine applications", under research collaboration agreement with UMT, Malaysia, UKM Malaysia and Rivers state university, Nigeria.

#### "NBA Awareness session"

**Dr. C. S. Choudhari** has taken the initiative to organize an "NBA Awareness session" for Mechanical Engineering Department students, highlighting the significance of accreditation by the National Board of Accreditation (NBA). Through this activity, students gain valuable insights into the importance of NBA accreditation in ensuring the quality and standards of engineering education, empowering them with knowledge to excel in their academic and professional pursuits.





### Student Achievements

### **UNIVERSITY TOPPERS**

BE MECHANICAL (APR/MAY 2023)

| Rank | Student Name     | Marks | Class                        |
|------|------------------|-------|------------------------------|
| 1    | Rane Mohit Umesh | 9.8   | First Class With Distinction |
| 8    | Lot Tejas Harish | 9.575 | First Class With Distinction |

### BE MECHANICAL SANDWICH (APR/MAY 2023)

| Rank | Student Name                   | Marks | Class                        |
|------|--------------------------------|-------|------------------------------|
| 1    | Pattanshetti Siddharth Sheetal | 9.7   | First Class with Distinction |
| 2    | Khanse Aditya Santosh          | 9.675 | First Class With Distinction |
| 3    | Kale Chaitanya Prasad          | 9.6   | First Class With Distinction |
| 3    | Pawar Aniruddha Jitendra       | 9.6   | First Class With Distinction |
| 3    | Thorat Prathamesh Satish       | 9.6   | First Class With Distinction |
| 4    | Vedant Chitte                  | 9.575 | First Class With Distinction |
| 4    | Karandikar Shreya Shailesh     | 9.575 | First Class With Distinction |
| 5    | Upadhye Mrunal Sheetal         | 9.525 | First Class With Distinction |
| 6    | Thuse Varad Amod               | 9.5   | First Class With Distinction |
| 6    | Prajapati Girish Laxman        | 9.5   | First Class With Distinction |
| 7    | Kharade Yash Uttam             | 9.45  | First Class With Distinction |
| 9    | Karande Atharva Abhijeet       | 9.4   | First Class With Distinction |
| 10   | Kulkarni Shrungal Abhijeet     | 9.375 | First Class With Distinction |
| 10   | Aher Adinath Subhash           | 9.375 | First Class With Distinction |

#### RESONANCE RACING REEV

#### Faculty Advisor: Dr. A. V. Waghmare

The students of Mechanical Engineering Department have participated in REEV VIRTUALS competition 2023-24 at TVS IQL. They secure 1<sup>st</sup> rank and winner position in this virtual competition.

#### **AIR 1 Overall Rank**





# SAEISS DRONE DEVELOPMENT CHALLENGE 2023

Faculty Advisor: Dr. D. Y. Dhande

Students had participated in SAEISS DRONE DEVELOPMENT CHALLENGE 2023 and secured 2nd rank in Best Aerodynamic Analysis (CFD) Awards. The competition is intended to provide Bachelor/Master/Diploma students with a real-life autonomous drone development challenge.



**Abhishek Jadhav**, student of BE Mechanical had participated in Smart India Hackathon 2023 competition. Smart India Hackathon 2023 is a nationwide initiative to provide students a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mindset of problem solving.



**Prasad Mane**, student of BE Mechanical had participated in Technoxian World Robotics Championship 2023 competition.



#### CERTIFICATE / ONLINE COURSES COMPLETED BY STUDENTS

| S | Name of Student | Title of the | Course   | Conducted  | Duration/ |
|---|-----------------|--------------|----------|------------|-----------|
| N |                 |              |          | Ву         | Dates     |
| 1 | NVSS            | "ENERGY      | LITERACY | Swaraj     | 31/8/2023 |
|   | Lakshmiprasanna | TRAINING"    |          | Foundation |           |
| 2 | Rutik Sukale    | SOLIDWORKS:  | Advanced | LinkedIn   | 29/9/2023 |
|   |                 | Simulation   |          |            |           |
| 3 | Rutik Sukale    | SOLIDWORKS:  | Advanced | LinkedIn   | 29/9/2023 |
|   |                 | Simulation   |          |            |           |

### Training and Placement Corner

Dear Students,

Congratulations on your remarkable achievement! We have every confidence that you will make significant contributions to your respective fields and bring pride to our institution. Wishing you continued success and fulfillment in all your future endeavors.

| Sr | Name Of Student                  | Name of Organization      | Package  |
|----|----------------------------------|---------------------------|----------|
| No |                                  |                           |          |
| 1  | Akash Dipak Kakade               | Fleetguard Filters        | 4.50 LPA |
| 2  | Aashish Shashikant Mahale        | Cognizant                 | 4.00 LPA |
| 3  | Amey Gandhi                      | Fleetguard Filters        | 4.50 LPA |
| 4  | Aryan Deshpande                  | Siemens                   | 4.50 LPA |
| 5  | Atharav Abhijeet Karande         | L&T Infotech              | 4.00 LPA |
| 6  | Atharva Naik                     | Premium Transmission      | 4.00 LPA |
| 7  | Atharva Pravin Pakhode           | Cognizant                 | 4.00 LPA |
| 8  | Dnyaneshwar Babasaheb<br>Thombre | Premium Transmission      | 4.00 LPA |
| 9  | Durgesh Rajendra Nankar          | L&T Infotech              | 6.50 LPA |
| 10 | Gaurav Thakkar                   | Alten                     | 3.50 LPA |
| 11 | Girish Kamble                    | Thermax                   | 3.50 LPA |
| 12 | Kshitij Kishor Modhe             | Cognizant                 | 4.00 LPA |
| 13 | Kshitij Modhe                    | DeltaX                    | 8.50 LPA |
| 14 | Madhura Gulwani                  | Fleetguard Filters        | 4.50 LPA |
| 15 | Nikita Bhamre                    | Neilsoft                  | 3.00 LPA |
| 16 | Om Bayas                         | Bristlecone               | 4.50 LPA |
| 17 | Omkar Pralhad Landge             | Cognizant                 | 4.00 LPA |
| 18 | Parag Dhamne                     | Praj Industries           | 4.50 LPA |
| 19 | Parag Rajendra Dhamne            | Pinclick                  | 4.80 LPA |
| 20 | Parth Jivaraj Khedekar           | Cognizant                 | 4.00 LPA |
| 21 | Pritam Taksal                    | Thermax                   | 3.50 LPA |
| 22 | Ranjit Kharat                    | Tata Consultancy Services | 3.36 LPA |

| 23                                     | Rohit Sorate  | M3 Technologies   | 2.40 LPA   |
|--|---|---|--|
| 24                                     | Sanyogini Mohite  | Fleetguard Filters  | 4.50 LPA   |
| 25                                     | Siddharth Shitole   | Tata Consultancy Services   | 3.36 LPA   |
| 26                                     | Srushti Shinde  | Fleetguard Filters  | 4.50 LPA   |
| 27                                     | Tanaya Pradeep Jagtap   | Cognizant   | 4.00 LPA   |
| 28                                     | Tanvi Jayprakash Gavhane  | Cognizant   | 4.00 LPA   |
| 29                                     | Tejas Lot   | Godrej & Boyce  | 6.50 LPA   |
| 30                                     | Vikky Kale  | Tata Consultancy Services   | 3.36 LPA   |
| 31                                     | Vishvajeet Ghatage  | Twin Engineers  | 3.00 LPA   |
| 32                                     | Vrunda Parmeshwar Mane  | Cognizant   | 4.00 LPA   |
| 33                                     | Yogesh Dinesh Nawde   | Siemens   | 4.50 LPA   |
| 34                                     | Anushka Kulkarni  | Fleetguard Filters  | 4.50 LPA   |
| 35                                     | Suyash Pawar  | SwiftPLM  | 4.50 LPA   |
| 36                                     | Kundan Ghorpade   | I-DESIGN  | 3.60 LPA   |
| 37                                     | Pratul Mulik  | RLE International   | 3.50 LPA   |
| 38                                     | Ganesh Khandalkar   | Helical Auto Technology   | 3.00 LPA   |
|  |   | India Pvt Ltd   |  |
| 39                                     | Shivam Yewale   | RLE International   | 3.50 LPA   |
| 40                                     | Archit Kale   | Godrej & Boyce  | 6.50 LPA   |
| 41                                     | Dhiraj Rajesh Shinde  | Premium Transmission  | 4.00 LPA   |
| 42                                     | Divya Mahendra Dhamal   | Premium Transmission  | 4.00 LPA   |
|  |   | Tronnam Transmission  | 7.00 LI A  |
| 43                                     | Lakshmi Bakshi  | Linde Engineering   | 5.00 LPA   |
| 43                                     | Lakshmi Bakshi<br>Omkar Sharad Dalvi  |   |  |
|  |   | Linde Engineering   | 5.00 LPA   |
| 44                                     | Omkar Sharad Dalvi  | Linde Engineering Premium Transmission  | 5.00 LPA<br>4.00 LPA   |
| 44<br>45                               | Omkar Sharad Dalvi<br>Prashant Vaijnath Surwase   | Linde Engineering Premium Transmission Premium Transmission   | 5.00 LPA<br>4.00 LPA<br>4.00 LPA   |
| 44<br>45<br>46                         | Omkar Sharad Dalvi<br>Prashant Vaijnath Surwase<br>Raj Nishandar  | Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters  | 5.00 LPA<br>4.00 LPA<br>4.00 LPA<br>4.50 LPA   |
| 44<br>45<br>46<br>47                   | Omkar Sharad Dalvi<br>Prashant Vaijnath Surwase<br>Raj Nishandar<br>Sanskar Sunil Fursule   | Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission   | 5.00 LPA<br>4.00 LPA<br>4.00 LPA<br>4.50 LPA<br>4.00 LPA   |
| 44<br>45<br>46<br>47<br>48             | Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli  | Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant   | 5.00 LPA<br>4.00 LPA<br>4.00 LPA<br>4.50 LPA<br>4.00 LPA<br>4.00 LPA                                     |
| 44<br>45<br>46<br>47<br>48<br>49       | Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli Utkarsh Anil Ekatpure                                      | Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant Premium Transmission                              | 5.00 LPA<br>4.00 LPA<br>4.00 LPA<br>4.50 LPA<br>4.00 LPA<br>4.00 LPA<br>4.00 LPA                         |
| 44<br>45<br>46<br>47<br>48<br>49<br>50 | Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli Utkarsh Anil Ekatpure Vedant Aher                          | Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant Premium Transmission Thermax                      | 5.00 LPA<br>4.00 LPA<br>4.00 LPA<br>4.50 LPA<br>4.00 LPA<br>4.00 LPA<br>4.00 LPA<br>3.50 LPA             |
| 44<br>45<br>46<br>47<br>48<br>49<br>50 | Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli Utkarsh Anil Ekatpure Vedant Aher Vedant Rameshrao Godbole | Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant Premium Transmission Thermax Premium Transmission | 5.00 LPA<br>4.00 LPA<br>4.00 LPA<br>4.50 LPA<br>4.00 LPA<br>4.00 LPA<br>4.00 LPA<br>3.50 LPA<br>4.00 LPA |

### Department Activities

#### FDP/STTP ATTENDED BY THE DEPARTMENT FACULTY

| SN | Name of<br>Faculty | Title of the FDP/STTP  | Organized by             | Duration/<br>Dates                                  |
|----|--------------------|--|--------------------------|---|
| 1. | Dr D Y Dhande      | FDP on Induction Training  | NITTR, Kolkata           | 18-29 Sept<br>2023                                  |
| 2. | Ms. P. R. Tete     | One Week National Level<br>Faculty Development<br>Program on "Recent<br>Advances in Mechanical<br>Engineering (RAME-23)" | Institute of             | 24th to 28th<br>July 2023                           |
| 3  | Mr. Y. P. Patil    | One Week National Level<br>Faculty Development<br>Program on "Recent<br>Advances in Mechanical<br>Engineering (RAME-23)" | Institute of Technology, | 24th to 28th<br>July 2023                           |
| 4  | (Dr) M M<br>Sayyad | One Week National Level<br>Faculty Development<br>Program on "Recent<br>Advances in Mechanical<br>Engineering (RAME-23)" | Institute of             | 24th to 28th<br>July 2023                           |
| 5  | (Dr) M M<br>Sayyad | Five days online faculty development program on COMPUTER AIDED ENGINEERING ANALYSIS USING ANSYS                          | Institute of             | 17th to 21st<br>July 2023                           |
| 6  | (Dr) M M<br>Sayyad | One - week Short Term<br>Training Program on<br>"Ancient Indian Knowledge<br>for Motivation and Spiritual<br>Health      |                          | 26th to 30th<br>Dec 2023                            |
| 7  | (Dr) M M<br>Sayyad | Three-day Online Faculty Development program on "Advanced Trends in Mechanical Engineering"                              | Mechanical               | 27th December to 29th December 2023                 |
| 8  | Dr M R<br>Dahake   | ATAL FDP on Exploring<br>Perspective of AI & ML in<br>Mechanical Engineering   | KKWIOEER                 | 29th<br>November<br>2023 to 3rd<br>December<br>2023 |
| 9  | Dr P S Gajjal      | ATAL FDP on Exploring Perspective of AI & ML in  |                          | 29th<br>November                                    |

|    |                     | Mechanical Engineering   |  | 2023 to 3rd<br>December<br>2023                    |
|----|---------------------|--|--|--|
| 10 | Dr. S. R.Patil      | National Level One Week Faculty Development Program (FDP) on "Recent Advances and Challenges in Electric Vehicles"   | KJ's Educational<br>Institute K J<br>College of<br>Engineering and<br>Management<br>Research, Pune | 21 August<br>2023 to 25<br>August 2023             |
| 11 | N N<br>Gotkhindikar | FDP on Fundamentals of additive manufacturing  | NPTEL  | 1.5 Weeks  |
| 12 | Dr. M. R Phate      | One week National Level<br>FDP on "Recent Advances in<br>Mechanical Engineering"<br>RAME-2023  | Institute of   | 24/07/2023<br>to<br>28/07/2023                     |
| 13 | Dr D S Malwad       | One week FDP on Computer<br>Aided Engineering Analysis<br>Using Ansys  | Vishwakarma Institute of Information Technology, Pune  | From 17th to<br>21st July<br>2023                  |
| 14 | Dr D S Malwad       | One week FDP on Recent<br>Advances in Mechanical<br>Engineering (RAME-23)  |  | From 24th to<br>28th July<br>2023                  |
| 15 | M U Gan             | One Week National Level<br>Interdisciplinary Short<br>Term Training Program on<br>"Exploring Quality Research<br>and its Societal Impact"<br>October 09-13, 2023 | Institute of Technology,   | October 09-<br>13, 2023                            |
| 16 | M P Shah            | Faculty Development Programme Machine Learning Application for Mechanical Engineers  | Engineering  | (18th<br>December to<br>23rd<br>December,<br>2023) |
| 17 | A T Thombare        | Faculty Development Programme Machine  | CVR College of<br>Engineering  | (18th<br>December to<br>23rd                       |

|    |                       | Learning Application for<br>Mechanical Engineers   |  | December,<br>2023)                             |
|----|-----------------------|--|--|--|
| 18 | A T Thombar           | Faculty Development Programme Soft Skill Development   | NPTEL  | July to Sep<br>2023                            |
| 19 | Dr. M. S.<br>Deshmukh | "Recent Advancement & Development in Renewable Energy Technologies"  | Sinhgad College of<br>Engineering,<br>wadgaon,<br>Pune                         | 08<br>th January –<br>13<br>th January<br>2024 |
| 20 | Dr. M. S. Deshmukh    | Outcome based Education and NBA Process  | A G Patil Institute of Technology  | 28th to 30th Dec. 2023                         |
| 21 | Dr. M. S.<br>Deshmukh | Innovative and Creative<br>Approaches for teaching and<br>Research   | ISTE   | 16/01/2024 to 20/01/2024                       |
| 22 | Prof. G. P.<br>Lohar  | Faculty Development Program on SOLIDWORKS 2024 & 3DEXPERIENCE Hands on Workshop on FEA / CFD / MBD (Kinematics) / Solid Modeling As per SPPU Course Curriculum | Griha's College of Engineering and Technology & G. K. Pate (Wani) Institute of | 19th Jan24 to<br>23 Jan 24                     |
| 23 | O.A.More              | One Week National Level<br>Faculty Development<br>Program on "Recent<br>Advances in Mechanical<br>Engineering (RAME-23)"                                       |  | 24th to 28th<br>July 2023                      |
| 24 | V R Patil             | Faculty Development Program on Sustainable Energy Technology   | NPTEL  | July 23 to<br>October 23                       |
| 25 | P V Deshmukh          | Advancements & Application in Artificial Intelligence and Machine Learning   | Smt. Kashibai<br>Navale College of<br>Engineering,<br>Pune,<br>Maharashtra.    | 04.09.2023 to 08.09.2023                       |

# SEMINARS/ WORKSHOPS/ WEBINARS ATTENDED BY THE DEPARTMENT FACULTY

| SN   | Name of             | Title of the   | Organized By  | <b>Duration/ Dates</b>               |
|------|---------------------|--|---|--------------------------------------|
| O II | Faculty             | Seminar/Webinar  | Organizea Dy  | Duracion, Dates                      |
| 1    | Dr B D<br>Bachchhav | One day workshop on "Additive Manufacturing"   | CMET, Pune  | 21 July 2023                         |
| 2.   | Dr D Y<br>Dhande    | One day IPR awareness program  | IPR Office,<br>India                                | 30 August 2023                       |
| 3.   | Ms. P. R.<br>Tete   | One day Intellectual Property Awareness program  | Intellectual Property Office, India                 | 30 August, 2023                      |
| 4    | Mr. Y. P.<br>Patil  | One day Intellectual Property Awareness program  | Intellectual Property Office, India                 | 30 August, 2023                      |
| 5    | (Dr) M M<br>Sayyad  | IP Awareness/Training program under  | NATIONAL INTELLECTU AL PROPERTY AWARENESS MISSION   | August 30,2023                       |
| 6    | N N<br>Gotkhindikar | One day Intellectual Property Awareness program  | Intellectual<br>Property<br>Office, India           | 30 August, 2023                      |
| 7    | S A Ansari          | One day NPTEL E-<br>Awareness workshop   | IIT Madras  | July 27, 2023                        |
| 8    | S A Ansari          | One week STTP/FDP on RTHVAR  | MMCOE Pune  | 26-30 December 2023                  |
| 9    | S A Ansari          | Development Program<br>(Hybrid   | SVERI's<br>College of<br>Engineering,<br>Pandharpur | from 17th July to<br>22nd July, 2023 |
| 10   | S A Ansari          | One Week National Level Faculty Development Program on "Recent Advances in Mechanical Engineering (RAME-23)" | Technology,   | 24th to 28th July 2023,              |

# CONFERENCES/ SYMPOSIUMS ATTENDED BY THE DEPARTMENT FACULTY

| SN | Name o   |    | Title of the Conference /   | Organized By | <b>Duration/ Dates</b> |
|----|----------|----|-----------------------------|--------------|------------------------|
|    | Faculty  | y  | Symposium                   |              |                        |
| 1  | Dr. M.   | R. | International Conference of | MMCOE,       | 14 December to         |
|    | Phate    |    | Sustainable and Futuristic  | Pune         | 15 December,           |
|    |          |    | Technologies 2023           |              | 2023                   |
| 2. | Dr. M.   | S. | International Conferences   | GHRCE,       | 22nd and 23rd          |
|    | Deshmukh |    | of Advances in Mechanical   | Nagpur       | Dec 2023               |
|    |          |    | Engineering (ICAME-23)      |              |                        |

# ONLINE COURSES / CERTIFICATE COURSES COMPLETED BY DEPARTMENT FACULTY

| SN | Name of Faculty  | Title of the Course  | Conducted<br>By        | <b>Duration/ Dates</b>                      |
|----|------------------|--|------------------------|---|
| 1. | Dr D Y<br>Dhande | Accreditation and Outcome Based Education                                      | IIT, Madras<br>(NPTEL) | 21 August - 10<br>October 2023 (8<br>Weeks) |
| 3. | Dr M R<br>Dahake | Patent Drafting for<br>Beginners   | IIT Madras<br>(NPTEL)  | 24 July 2023-<br>18 Aug 2023<br>(4 weeks)   |
| 4  | Dr M R<br>Dahake | Stress Management  | IIT<br>(NPTEL)         | Aug 2023-Sep 2023                           |
| 5  | Dr P S Gajjal    | Patent Drafting for<br>Beginners   | IIT Madras<br>(NPTEL)  | 24 July 2023-<br>18 Aug 2023<br>(4 weeks)   |
| 6  | Dr P S Gajjal    | Stress Management  | IIT<br>(NPTEL)         | Aug 2023-Sep 2023                           |
| 4  | Dr M M<br>Sayyad | Building Materials And<br>Composites   | IIT Roorkee            | 8 weeks                                     |
| 5  | Dr M M<br>Sayyad | Ansys Track Completion:<br>Foundations in Linear<br>Dynamics of Structures     | Ansys                  | 4 weeks                                     |
| 6  | Ms. P. R. Tete   | Selection of Nanomaterials<br>for Energy Harvesting and<br>Storage Application | IIT Roorkee<br>(NPTEL) | Jul-Aug 2023<br>(4 week course)             |

| 7  | Ms. P. R. Tete      | Stress Management  | IIT Kharagpur<br>(NPTEL)     | Aug-Sep 2023 (4 week course)             |
|----|---------------------|--|------------------------------|--|
| 8  | N N<br>Gotkhindikar |  | IIT Guwahati<br>NPTEL        | 12 Weeks July-<br>Nov                    |
| 9  | Dr D S<br>Malwad    | National Education Policy<br>2020: Professional<br>Development Programme                   | IGNOU NPTEL<br>Certification | From December<br>1-31, 2023 (4<br>Weeks) |
| 10 | M P Shah            | NPTEL course on "Rapid Manufacturing"  | NPTEL, IIT-<br>Madras        | July-October<br>2023                     |
| 11 | M P Shah            | MATHWORKS online<br>course on Optimization<br>Onramp                                       | MATHWORKS                    | 30 June 2023                             |
| 12 | O.A.More            | NPTEL-AICTE FDP on<br>"Metal Additive<br>Manufacturing"                                    | NPTEL, IIT-<br>Madras        | From July -Oct 2023(12 week)             |
| 13 | V R Patil           | "~ · · · · · -   | NPTEL,IIT<br>Madras          | July 23 to<br>October 23(12<br>Weeks)    |
| 14 | SA Ansari           | NPTEL course on "Selection of Nanomaterials for Energy Harvesting and Storage Application" | IIT Madras                   | Jul-Aug 2023                             |

# EXTENSION LECTURES/WEBINARS (LECTURES ORGANIZED ON OTHER THAN TECHNICAL TOPICS)

| SN | Name of faculty coordinator          | Topic   | Name and contact details of guest | Date     | Number of beneficiaries |
|----|--------------------------------------|---|-----------------------------------|----------|-------------------------|
| 1  | Dr P S Gajjal<br>Dr C S<br>Choudhari | Gender<br>Equality                            | Dr Lalita<br>Kangude              | 02/11/23 | 85                      |
| 2  | Dr P S Gajjal<br>Dr C S<br>Choudhari | Personality Development and Menstrual Hygiene | Harshita<br>Raman                 | 26/09/23 | 132                     |

# FACULTY SERVED AS RESOURCE PERSON, EXPERT, CHAIRPERSON

| SN | Name of             | Title of Activity  | Organizing              | Date         |
|----|---------------------|--|-------------------------|--------------|
|    | Faculty             |  | body                    |              |
| 1. | Dr C S<br>Choudhari | Conducted session on "NBA<br>Preparations" at Sinhgad<br>Academy of Engineering,<br>Kondhwa, Pune on<br>01/11/2023               | Academy of Engineering, | 01/11/2023   |
| 2. | Dr C S<br>Choudhari | Conducted session on<br>"Awareness of NEP 2020 for<br>students" Ajeenkya DY Patil<br>School of Engineering Pune<br>on 28/07/2023 | Patil School<br>of      | 28/07/2023   |
| 3. | Dr C S<br>Choudhari | Worked as a session chair for "International Conference on Convergence in Technology 2023"                                       | Institute of            | •            |
| 4. | Dr B D<br>Bachchhav | Conducted session on "NBA<br>Preparations" at Sinhgad<br>Academy of Engineering,<br>Kondhwa, Pune on<br>01/11/2023               | Academy of Engineering, | 01/11/2023   |
| 5. | Dr C S<br>Choudhari | Delivered session on "Energy<br>Conservation in Thermal<br>Utilities" for students   |                         | 10/10/2023   |
| 6. | (Dr) M M<br>Sayyad  | Reviewer in GT 2023 ASME India Conference  | ASME India              | 27 June 2023 |
| 7. | (Dr) M M<br>Sayyad  | Reviewer of Journal of The<br>Institution of Engineers<br>(India): Series C (IEIC)   |                         | 5 Nov 2023   |
| 8. | Dr. M R Phate       | Expert talk on "Outcome<br>Based Education in<br>Teaching & Learning"  |                         | 16/12/2023   |
| 9. | P V Deshmukh        | Conducted session on "NBA<br>Preparations" at Sinhgad<br>Academy of Engineering,<br>Kondhwa, Pune on<br>01/11/2023               | Academy of Engineering, | 01/11/2023   |

#### FDP/STTP ORGANIZED BY THE DEPARTMENT

| SN | Name of faculty coordinator | Title of the FDP/STTP/WS/Sem inar/Symposium       | Duratio<br>n/<br>Dates | No. of<br>Participant<br>s | Funding Agency (If any) and Amount (Rs.) |
|----|-----------------------------|---|------------------------|----------------------------|--|
| 1. | Dr. D Y<br>Dhande           | Research Project<br>Competition:<br>Avishkar 2023 | 27/10/2<br>023         | 650                        | IQAC, SSPU,<br>Pune , 1 Lac.             |

# SEMINARS/ WORKSHOPS/ WEBINARS ORGANIZED BY THE DEPARTMENT

| SN | Name of<br>Coordinator/<br>s                             | Title of the<br>Seminar/Webinar                        | Duration / Dates       | No. of Participant s | Funding Agency (If any) and Amount (Rs.) |
|----|--|--|------------------------|----------------------|--|
| 1  | Dr M R<br>Dahake<br>Dr P S Gajjal                        | One Day Workshop<br>on Intellectual<br>Property Rights | 23/08/2<br>023         | 161                  | AISSMSCOE<br>Pune                        |
| 2  | Dr. S. V.<br>Chaitanya<br>Ms. P. R. Tete                 | Quality and Drawing                                    | 28th<br>August<br>2023 | 53                   | AISSMSCOE<br>Pune                        |
| 2  | Dr. B. D.<br>Bachchhav<br>Ms. P. R. Tete                 | CNC Programming  | 29th<br>August<br>2023 | 50                   | AISSMSCOE<br>Pune                        |
| 3  | Dr.A.V<br>Waghmare<br>Dr.M.S<br>Deshmukh<br>Mr SA Ansari | Mis-Concepts in<br>Psychrometrics                      | 06 Oct.<br>2023        | 70                   | AISSMS COE Pune                          |

# EXTENSION ACTIVITIES CONDUCTED BY THE DEPARTMENT

| S | Name of Faculty                    | Details of activity  | Date                                  | Number of     |
|---|------------------------------------|--|---------------------------------------|---------------|
| N | Coordinator                        | conducted  |                                       | beneficiaries |
| 1 | Dr C S Choudhari,<br>Mr S A Ansari | National level online quiz on "Innovation and Start Up"  | 4 Sept to<br>18 Sept<br>2023          | 80            |
| 2 | Prof. P M Warke<br>Prof M P Shah   | Seminar on "Awareness of<br>BIS activities in engineering<br>college" organized by<br>Standards' club (BIS),<br>AISSMSCOE, Pune. | · ·                                   | 38            |
| 3 | Prof. P M Warke<br>Prof M P Shah   | Competition on<br>"PRESENTATION ON<br>STANDARDS" by Standards'<br>Club (BIS), AISSMSCOE  | <b>,</b>                              | 44            |
| 4 | A T Thombare                       | Engineering Today  | 14th and<br>15th<br>September<br>2023 | 409           |

### RESEARCH CONTRIBUTION

#### FUNDED RESEARCH PROJECT

| S | Principal         | Title of the Project       | Amount        | Funding Agency   |
|---|-------------------|----------------------------|---------------|------------------|
| N | Investigator      |                            | Received (Rs) |                  |
| 1 | Dr. B D Bachchhav | Modernization of           | 17,18,500/-   | AICTE            |
|   |                   | Tribology Laboratory for   | Ongoing       |                  |
|   |                   | Performance Evaluation     |               |                  |
|   |                   | of Nano/Bio Lubricants     |               |                  |
| 2 | Dr. M. S.         | Performance assessment     | 5,01,950 /-   | 4645/GEH-        |
|   | Deshmukh          | of VCC based Air water     | ongoing       | Research/policy- |
|   |                   | generator using flat plate |               | 1/1021-          |
|   |                   | type Evaporator.           |               | 24/2021/IN-85    |

#### PATENTS, COPYRIGHT, TRADEMARK AND OTHER (IPR)

| SN | Name of Faculty     | Name of the Patent   | Patent Number and Date                  | Type (National/<br>International/<br>Commercialized) |
|----|---------------------|--|---|--|
| 1  | Ms. P. R.<br>Tete   | A System for cooling of battery cells  | <b>Patent</b> 202121028817 03/11/2023   | National<br>(Granted)                                |
| 2  | Dr D S<br>Malwad    | System To Heat A Fluid<br>Using Solar Energy   | <b>Patent</b> 201921 049373 02/12/20 19 | National<br>(Granted)                                |
| 3  | SA Ansari           | A system and method for investigation on performance cooling parts for an internal combustion engine                 | 202321067013 A                          | National<br>(Granted)                                |
| 4  | N N<br>Gotkhindikar | Analysis of FDM based additive manufacturing process through optimized deep learning strategy.                       |   | Published  |
| 5  | P V<br>Deshmukh     | Performance analysis of<br>bioinspired multiblade<br>centrifugal fan using<br>numerical and experimental<br>approach | <b>Copyright</b> 28/12/2023             | Published  |

# PAPERS PUBLISHED/ PRESENTED IN PROCEEDINGS OF CONFERENCES

| SN | Authors                        | Document Details   | Conference<br>Details  | Organized<br>by                |
|----|--------------------------------|--|--|--------------------------------|
| 1  | (Dr) M M<br>Sayyad             | Development Techniques<br>for Energy Efficient<br>Electric Motors – A<br>Review  | ICOGE 2023   | AISSMS CoE,<br>Pune            |
| 2  | Dr M R Dahake<br>Dr P S Gajjal | Experimental Investigation of Performance And Emissions Of Single Cylinder Diesel Engine using HHO and BioDiesel Blends  | SAIT 2023  | Northcap<br>University         |
| 3  | N N<br>Gotkhindikar            | Optimization of Mechanical Properties of In-Situ Aluminum Matrix Composites by Hybrid Process  | ICOGE 2023   | AISSMS CoE,<br>Pune            |
| 4  | N N<br>Gotkhindikar            | Rapid Anomaly Detection for Optimization of Wind Turbine Operating Behavior using ML   | ICOGE 2023   | AISSMS CoE,<br>Pune            |
| 4  | Dr D S Malwad                  | Thermal Performance<br>Analysis of Serpentine<br>Tube Flat Plate Collector<br>Used for Effluent<br>Treatment   | COGE 2023  | AISSMS CoE,<br>Pune            |
| 5. | Dr. M. S.<br>Deshmukh          | Study on Oxidative<br>Stability of Ghee (Butter<br>Oil) Extracted from Beet<br>(Betavugaris) Peels to<br>Increase the Oxidative<br>Stability of Ghee (Butter<br>Oil) | International Conference on "Advances in Mechanical Engineering- 2023" | GHRCE, Nagpur                  |
| 6  | SA Ansari                      | Experimental analysis of LHTESS using PCM  | ICFMEM202  | Palavan College of engineering |

#### PAPERS PUBLISHED IN JOURNALS

| SN | Authors   | Document Details  | Source Details   | Publisher  |
|----|---|---|--|--|
| 1  | Bachchhav, B.D.   | Tribo-mechanical<br>characterization of Cu-Cr-Zr<br>ternary alloy aimed at fin-tube<br>resistance welding electrode<br>material             | Industrial Lubrication and Tribology, Vol. 75 No. 8, pp. 942-949   | Emerald<br>Internation<br>al                       |
| 2  | Bachchhav, B. D.  | Prediction of Thrust Force and<br>Torque for High-Speed Drilling<br>of AL6061 with TMPTO-Based<br>Bio-Lubricants Using Machine<br>Learning. | Lubricants 2023,<br>11, 356.                                       | MDPI   |
| 3  | Bachchhav, B.D.;<br>Chaitanya, S.V.                             | "Wear Performance of Cu-Cd,<br>Cu-Be and Cu-Cr-Zr Spot<br>Welding Electrode Materials".   | Lubricants 2023, 11, 291, pp. 1-15.                                | MDPI   |
| 4  | Bhanudas<br>Bachchhav, Yash<br>Anecha, Balraj<br>Waghmare.,     | Tribological Performance<br>Evaluation of TMPTO based<br>Nano-Lubricants".  | Journal of Manufacturing Engineering, Vol. 18, Issue 3,pp. 091-095 | Society of<br>Manufactur<br>ing<br>Engineerin<br>g |
| 5  | Bhanudas<br>Bachchhav   | "Selection of spot welding electrode material by AHP, TOPSIS, and SAW"  | Materials Today:<br>Proceedings,                                   | Elsevier   |
| 6. | D. Y. Dhande,   | And Zno Encapsulated Hollow<br>Silica In The Photocatalytic<br>Degradation Of<br>Dimethylarsinic ACID                                       | RASĀYAN Journal of Chemistry, Vol.16, No.3, 2023                   | Rasayan<br>Journal of<br>Chemistry                 |
| 7. | Dhande DY* Navale SJ, Gaikwad DP Patil SR Nalawade RD Wadkar DV | Prediction of Abrasive Wear<br>behavior of the Poly-Tetra-<br>Fluoroethylene material using<br>Adaptive Neuro Fuzzy Interface<br>Systems    | Jurnal Tribologi,<br>vol.38, pg.141-<br>158                        | Malaysian<br>Tribology<br>Society<br>(MYTRIBOS     |
| 8. | D.Y. Dhande   | Piper betle extract as an eco-<br>friendly corrosion inhibitor for<br>aluminium alloy in<br>hydrochloric acid media                         | Int. J. Corros.<br>Scale Inhib.,<br>2023, 12, no. 3,<br>948-960    | Russian Association of Corrosion Engineers         |

| 9  | Mannan Sayyad                  | Evaluation of Inter-laminar<br>Shear Performance of Carbon<br>Fibre-reinforced Composite<br>under Quasi-static and High<br>Strain-rate Loading                 | Journal of<br>Materials<br>Engineering and<br>Performance                        | ASM<br>Internation<br>al |
|----|--------------------------------|--|--|--------------------------|
| 10 | Dr P S Gajjal<br>Dr M R Dahake | An Intelligent Tribological<br>Texture Behavior Analysis and<br>Optimization of Air Bearing  | International Journal of Engineering Bio and Tribo Corrosion Vol 9 No72 pp 1- 13 | Springer                 |
| 11 | Dr P S Gajjal<br>Dr M R Dahake | A Novel Optimized Dielectric<br>Fluid Electric Discharge<br>Machine Using African Buffalo<br>Optimization  |  | Springer                 |
| 12 | Dr M R Dahake<br>Dr P S Gajjal | Experimental Exploration of<br>Hydrogen Fuelled Dual Fuelled<br>CRDI equipped Diesel Engine<br>Coupled With Exhaust Gas<br>Recirculation Using ANN<br>Approach | Journal of<br>Ambient Energy   | Taylor & Francis         |
| 13 | Dr M R Dhake                   | CFD analysis of 210 MW<br>Boilers Economiser For<br>Detection Area Causes of Tube<br>Failure   |  | ACTA Press               |
| 14 | Ms. P. R. Tete                 | A comparative study of novel<br>designs of liquid-cooled battery<br>thermal management systems   | Transportation<br>Research<br>Procedia   | Elsevier                 |
| 15 | N N Gotkhindikar<br>et al.     | Optimized deep neural network<br>strategy for best parametric<br>selection in fused deposition<br>modelling  | International Journal on Interactive Design and Manufacturing (IJIDeM)           | Springer                 |

| 16 | Dr. M R Phate   | Design, Development and<br>Performance Analysis of<br>Portable Solar Scheffler<br>Reflector Water Heater (SRWH)                                    | Inderscience, Int. J. of Computer Applications in Technology.    | Inderscienc<br>e (WoS) |
|----|---|--|--|------------------------|
| 17 | D Y Dhande, D P<br>Gaikwad, C S<br>Choudhari                    | Application of rule learner classifier for studying bioethanol fueled spark ignition engine out emissions and classification                       | ASEAN Journal<br>on science and<br>technology for<br>development | Scopus                 |
| 18 | D Y Dhande , C S<br>Choudhari, D P<br>Gaikwad, Kiran B.<br>Dahe | Development of Artificial<br>Neural Network to predict<br>performance of Spark Ignition<br>Engine fuelled with waste<br>pomegranate ethanol blends | Information Processing in Agriculture (Elsevier)                 | Scopus                 |
| 19 | S C Choudhari,<br>C S Choudhari                                 | Education in human rights at school level: Role and perspectives of teacher  | Education and Society  | UGC Care<br>Listed     |
| 20 | Dnyaneshwar S.<br>Malwad  | A Review on Recent<br>Advancements in Indirect Solar<br>Drying of Agricultural Products  | Journal of Renewable Energy and Environment                      | Scopus<br>Indexed      |

#### **BOOK / ARTICLE PUBLICATIONS**

| SN | Author    | Title of the Book              | Published by  | ISBN        | Year |
|----|-----------|--------------------------------|---------------|-------------|------|
| 1  | Dr. M R   | Critical Analysis of Noise     | LAMBERT       | 978-620-6-  | 2023 |
|    | Phate     | Reduction for Motorcycle       |               | 79291-8     |      |
|    |           | Exhaust System                 |               |             |      |
| 2  | Dr B D    | Quality & Reliability          | Techknowledge | NA          | 2023 |
|    | Bachchhav | Engineering                    | Publications  |             |      |
| 3  | Dr. M. S. | Mechanical Alloying of Ferrous | ELSA,         | eBook ISBN: | 2024 |
|    | Deshmukh  | and Non-ferrous Alloys:        |               | 9780443161  |      |
|    |           | Processing, Applications, and  |               | 520         |      |
|    |           | Properties                     |               |             |      |

#### STUDENTS' CHAPTERS/CLUBS

- Aero Design Club (Garudashwa)
- Society of Automotive engineers, SAE
- Indian Society of Heating Refrigeration and Air Conditioning Engineers, ISHRAE
- Institute of Engineers (India), IEI
- TRIZ Student Chapter
- Institute of Mechanical Engineers, IMechE

### INDUSTRY VISITS ORGANIZED

# Industrial Visit to Balgandharv Rangmandir to Study Central Air-Conditioning

On October 16, 2023, students from the BE Mechanical Engineering A and B Divisions participated in a field visit to Balgandharv Rangmandir. The primary objective of the visit was to gain practical knowledge about Central Air Conditioning systems. The visit was highly educational and informative, providing insights into the central air conditioning system used for the auditorium with a capacity of 1000 people.



# Industrial Visit to PRIHODA INDIA Private Limited

On October 19, 2023, students from the BE Mechanical Engineering program, A & B Division, had the privilege of participating in an Industrial Visit to Prihoda India Pvt Ltd. Chakan. The visit aimed to provide students with valuable insights into the practical applications of mechanical engineering concepts and to gain a deeper understanding of Prihoda's tailor-made fabric ducting solutions.



# Industrial Visit to Emerson Climate Technologies Pvt Ltd Pune

The industrial visit to Emerson was organized by Dr. A V Waghmare on 19th October, 2023 for Final year engineering students. It was a comprehensive and educational experience for our engineering students. The visit covered various aspects of Emerson's operations, including product assembly, testing, and maintenance. The purpose of the visit was to gain practical insights into the company's operations and products.



### Industrial Visit to Lashkar Water Supply Department PMC Pune

An Industrial Visit to Lashkar Water Supply Department PMC Pune for BE Mechanical Engineering students was organized by Prof. M. U. Gan and Prof. S. A. Ansari on 27<sup>th</sup> October, 2023.



#### Industrial Visit to MAHA Metro Pune

Industrial Visit of Third Year Mechanical Engineering students was organized for Mechatronics subject by Prof. Yogita Funde on 27<sup>th</sup> October, 2023 in which students were able to see various operating processes that actual happens in MAHA METRO Pune. Students are able to see the dashboard and its control parameter to operate and control the METRO.



### Industrial Visit to Katraj Dairy

Industrial Visit of Second Year Mechanical Engineering students was organized by Prof. V. R. Patil on 8<sup>th</sup> November, 2023. The Aim of the Industrial Visit was to acquaint the students with the process and working of boiler working in the industry.



# BE MECHANICAL SANDWICH STUDENTS INDUSTRIAL INTERNSHIP

| SN | Name Of Student              | Industry   | SN | Name Of Student             | Industry                                    |
|----|------------------------------|--|----|-----------------------------|---|
| 1  | Agrawal Jay Ganesh           | ZEN<br>ELECTRICAL<br>COMPANY                               | 31 | Lonari Rohit<br>Shankar     | Fenace Auto                                 |
| 2  | Bhoi Bhavesh Sunil           | Twin engineers   | 32 | Malekar Sarvesh<br>Deepak   | Shri Padmavati<br>Industries                |
| 3  | Bhonsle Karan<br>Hambir      | Sthenos composites   | 33 | Mane Manasi<br>Narendra     | YASH PLASTIC<br>AND<br>ENGINEERING<br>WORKS |
| 4  | Bhosale Jayesh<br>Dattatray  | KNORR-<br>BREMSE TCI                                       | 34 | Paliwal Sheetal<br>Sachin   | Mettechenik                                 |
| 5  | Buundele Prernaa<br>Dinesh   | Forbes Marshall  | 35 | Panchal Maroti<br>Dnyanoba  | Fine Dies &<br>Moulds (India)<br>Pvt. Ltd.  |
| 6  | Chaudhari Devendra<br>Anil   | Knorr Bremse<br>Technological<br>Center India<br>Pvt. Ltd. | 36 | Patel Yash Jayant           | Burckhardt<br>Compression                   |
| 7  | Chaudhari Mohan<br>Dattatray | Burckhardt compression                                     | 37 | Patil Pragati Uday          | Mettechnik                                  |
| 8  | Chaudhari Shalem<br>Naresh   | Matchwell<br>Engineering                                   | 38 | Patil Raj Kiran             |   |
| 9  | Choudhari Kailash<br>Somaram | SAMVINSAN<br>Engineering<br>Pvt. Ltd.                      | 39 | Patil Yash Dipak            | KSB pumps                                   |
| 10 | Choure Ramhari<br>Asaram     | Dhriti<br>Automotive LLP                                   | 40 | Pawaskar<br>Mayuresh Kishor | ACME Tools                                  |
| 11 | Dakliya Yash<br>Prashant     | Armatech<br>Associates                                     | 41 | Pimple Malhar Ajit          | Haldex Anand<br>India Pvt Ltd               |
| 12 | Date Dhananjay<br>Vilas      | Burckhardt<br>Compression<br>(India) Pvt. Ltd              | 42 | Rane Vishal<br>Prakash      | Tata motors<br>Ltd                          |
| 13 | Deshmukh Athang<br>Vivek     | Knorr-bremse<br>Technology<br>Center India                 | 43 | Shinde Yogada<br>Santosh    | Sadhana<br>Enterprises                      |
| 14 | Garodi Kunal<br>Namdeo       | Knorr-Bremse<br>Technology<br>Centre India Pvt<br>Ltd      | 44 | Sonawani Parth<br>Sanjay    | A.N.<br>ENGINEERING<br>WORKS                |
| 15 | Ghoderao Shubham<br>Anil     | Knorr Bremse<br>Technology<br>Center India                 | 45 | Sondkar Shweta<br>Amol      | Stead Solve<br>Design &<br>Manufacturing    |

|     |                               | Private Limited                       |            |                             | Solutions LLP                  |
|-----|-------------------------------|---------------------------------------|------------|-----------------------------|--------------------------------|
| 16  | Gorad Saurav                  | DEC (DESAI                            | 46         | Sutar Omkar                 | Robtech                        |
|     | Gorakshanath                  | ELECTRONICS                           |            | Bharat                      | Automation                     |
| 1 7 | Carrela Vach Candin           | Change Ome Coi                        | 17         | Tol-lo Ami                  | and Services                   |
| 17  | Gugale Yash Sandip            | Shree Om Sai<br>Engineering           | 47         | Takle Anuj<br>Balasaheb     | Om industries                  |
| 18  | Gujarathi Gaurang<br>Pankaj   | Knorr-Bremse<br>Technology            | 48         | Tilekar Chetan<br>Nandkumar | SteelFab<br>Engineering        |
|     | i alikaj                      | Centre India                          |            | Ivanukumai                  | Pvt.Ltd                        |
| 19  | Hattarge Abhishek             | Shree om sai                          | 49         | Urkude Niranjan             | KNORR-                         |
|     | Anil                          | engineering<br>dhayari,pune           |            | Jitendra                    | BREMSE<br>Technology           |
|     |                               | dilayari,puile                        |            |                             | Center India                   |
|     |                               |                                       |            |                             | Private Limited                |
| 20  | Hattekar Nikhil               | IndiTech Valves                       | 50         | Uttekar Aryesh              | Stead Solve                    |
|     | Abhay                         | Pvt. Ltd.                             |            | Dhiraj                      | Design &                       |
|     |                               |                                       |            |                             | Manufacturing<br>Solutions LLP |
| 21  | Hingane Shubham               | STEELFAB                              | 51         | Waghmare                    | Shubham                        |
|     | Vikas                         | ENGINEERING<br>PVT. LTD               |            | Shubham Sandip              | Engineering                    |
| 22  | Ingale Asawari                | IndiTech Valve's                      | 52         | Welde Parth                 | Nathkrupa                      |
| 02  | Dinkar                        | Pvt. Ltd.                             | <b>E</b> 2 | Jagdish<br>Yevatekar Yash   | Engineering Greaves Cotton     |
| 23  | Jadhav Shashwat<br>Shivaji    | Llyods steel<br>Industries<br>limited | 53         | Mukund                      | Ltd                            |
| 24  | Kale Mansi Ulhas              | Twin Engineers                        | 54         | Kadam Siddhant              | Suyog                          |
| 05  | Vananilran Aditi              | Pvt Ltd Bhosari. Stead Solve          | 55         | Sachin                      | Engineering                    |
| 25  | Karanjkar Aditi<br>Ramchandra | Design & Manufacturing Solutions LLP  | 55         | Patil Aditya Ajay           | Suyog<br>Engineering           |
| 26  | Kharkar Pushpanjay            | Burckhardt                            | 56         | Poman Prachit               | Padmavati                      |
|     | Hemkant                       | compression                           |            | Pravin                      | industries<br>chakan           |
| 27  | Kshirsagar Sharvari           | Vishay                                | 57         | Sabale Prahlad              | Trison'S                       |
|     | Madhukar                      | Components<br>India Pvt Ltd           |            | Gautam                      | Engineering                    |
| 28  | Kulkarni Abhishek<br>Prashant | ElringKlinger<br>Automotives          | 58         | Limkar Shaunak<br>Prashaant | Quantus<br>Technik             |
| 29  | Late Prathamesh               | BEP INDIA                             | 59         | Mujawar                     | Precision                      |
|     | Girish                        | AUTOMOTIVE<br>SYSTEMS                 |            | Mahammadsaif<br>Jakirhusen  | pressing manufacturing         |
| 30  | Jadhav Shashwat               | Llyods steel                          | 60         | Patil Siddhesh              | Ghatage Patil                  |
|     | Shivaji                       | Industries                            |            | Mahesh                      | Industries                     |
|     |                               | limited                               |            |                             |                                |

# EXPERT LECTURES / WEBINARS DELIVERED BY INDUSTRY EXPERTS

| SN | Faculty<br>Coordinator                                    | Class (Number of students attended) | Name, Industry,<br>designation and<br>contact details of<br>Expert   | Topic  | Date                                 |
|----|---|-------------------------------------|--|--|--------------------------------------|
| 1  | Dr C S<br>Choudhari,<br>Dr M R<br>Dahake                  | TE Mech (A,B<br>and SW)             | Mr B B Mate<br>Senior Consultant,<br>Thermax, Pune                   | NDT in Heat<br>Exchanger<br>Manufacturi<br>ng        | 11 <sup>th</sup><br>October,<br>2023 |
| 2  | Dr B D<br>Bachchhav,<br>Ms P R Tete                       | TE Mech (A, B)                      | Mr D K Mohan<br>Consultant   | CNC<br>Programmin<br>g                               | 29th<br>August,<br>2023              |
| 3  | Dr P S Gajjal   | BE                                  | Mr S S Gawade  | New Era in<br>EV                                     | 26th<br>Septembe<br>r, 2023          |
| 4  | Dr S V<br>Chaitanya<br>Ms P R Tete                        | TE Mechanical                       | Mr D K Mohan<br>Consultant   | Quality and<br>Drawing                               | 28th<br>August,<br>2023              |
| 5  | Dr A V<br>Waghmare Dr<br>M S<br>Deshmukh Mr<br>S A Ansari | BE Mechanical                       | Mr Mukund Ranade   | Misconcepts<br>in<br>Psychromet<br>rics              | 06th<br>August,<br>2023              |
| 6  | Dr S H<br>Wankhade  | TE Mech SW                          | Mr. Amrendra<br>Project Manager,<br>Rolling Stock, Pune<br>Metro     | Mechatronic<br>s<br>applications<br>in Pune<br>Metro | 27th<br>October,<br>2023             |
| 7  | Dr D S<br>Malwad  | TE Mech SW                          | Mr. Laxmikant<br>Lahankar<br>Atlas Copco (India)<br>Private Limited, | Opportuniti es in Supply Chain Managemen t           | 30<br>October,<br>2023               |

#### MOU INITIATED BY THE DEPARTMENT

| SN | Faculty<br>Coordinator                    | Name of Industry  | Date<br>of MoU Signed | Valid up to                              |
|----|---|---|-----------------------|--|
| 01 | Mr. M P Bauskar                           | Mettchnik Pvt Ltd<br>Pune                                     | 10/10/2019            | 10/10/2024                               |
| 02 | Dr C S<br>Choudhari,<br>Dr A V Waghmare   | Vimal Nourishment<br>Technologies Pvt. Ltd.<br>Pune           | 04/08/2021            | 04/08/2024                               |
| 03 | Dr A V Waghmare                           | Ameya Industries Pune   | 31/08/2021            | Till it is discontinued by both parties. |
| 04 | Dr. B. D. Bachhav Dr. C. S. Chaudhari     | Setco Spindles India<br>(Pvt) Ltd Pune                        | 18/02/2022            | 17/02/2025                               |
|    | Dr. P. S. Gajjal                          |   |                       |  |
| 05 | Dr. B. D. Bachhav                         | Stead Solve Design<br>and Manufacturing<br>Solutions LLP Pune | 23/02/2022            | 22/02/2025                               |
| 06 | Dr. S H<br>Wankhade                       | UB Cryogenic<br>Solutions LLP, Pune                           | 04/03/2022            | 03/03/2025                               |
| 07 | Dr. B. D.<br>Bachchhav                    | Institute of Systems<br>Pune.                                 | 04/04/2022            | 03/04/2025                               |
| 08 | Dr. B. D<br>Bachchhav<br>Dr S V Chaitanya | SSIG Manufacturing<br>Advancements Pvt Ltd.<br>Pune           | 27/04/2022            | 26/04/2025                               |
| 09 | Mr P S Aglawe                             | E-Addict Mobility<br>Solutions Pvt Ltd OPC<br>Pune            | 05/08/2022            | 04/08/2025                               |
| 10 | Dr S H Wankhade                           | Twin Engineers Pvt Ltd<br>Pune                                | 10/04/2023            | 09/04/2028                               |

# A few glimpse from the AY 2023-24 (June-December 2023)





"NDT Techniques in Heat Exchanger Design" Talk by Mr B B Mate



Expert Lecture: Mr. Amrendra Project Manager, Rolling Stock, Pune Metro titled "Mechatronics applications in Metro Train" on 27th October, 2023



Dr. S H Wankhade at Maharajashree Industrial Solutions, PCMC, Pune undergoing Industrial Training and participating in the Development of Project on Automatic machine for Cheese Stuffing in Mushroom for an USA client.



TRAINING TO INDUSTRY PERSONNEL: Dr. Sandeep Wankhade with the participants of L&T - PRAYAG 2.0 - Emerging Technology Workshops at HE Hazira CTCW \_ 61 Participants



Dr. D. K. Mohan, and industry expert delivered a lecture on "Quality and Drawing" for the third year students. The event was coordinated by Dr. S. V. Chaitanya.



A patent titled "A System for Cooling of Battery Cells" has been granted to Ms. P. R. Tete by The Patent Office, Government of India based on her Ph.D. research work.

#### Dear Readers,

We extend our heartfelt gratitude to each of you for taking the time to engage with this edition of our newsletter. A special thanks goes to the dedicated faculty, diligent students, and supportive staff whose contributions and achievements have been the spotlight of our stories. Your hard work and enthusiasm not only enrich our department but also strengthen the sense of community that sets us apart. Thank you for making our Mechanical Engineering Department a vibrant and inspiring place to learn, teach, and innovate.

Thank you once again for joining us in this issue. We hope you found it enlightening and engaging. Until next time, keep turning the gears of innovation!

Warm regards,

Dr. S. V. Chaitanya

Dr. P. R. Tete

# Thank You