

AISSMS

COLLEGE OF ENGINEERING

ज्ञानम् सकलजनहिताय

Approved by AICTE, New Delhi, Recognized by Government of Maharashtra
Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC
(Id.No. PU/PN/Engg./093 (1992)

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

MECHPULSE

A NEWSLETTER BY DEPARTMENT OF MECHANICAL ENGINEERING



Vision

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

Mechanical Engineering Department

Staff Photo



BE Mechanical 2023-24

Passing Batch Students Photo



BE Mech Sand 2023-24

Passing Batch Students Photo



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
☐ Industrial 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 explore MECHPULSE and hope that you will find it as enjoyable to read as it was for us to create!

Yogesh B Karandikar, Assistant Professor, Mechanical Engineering AISSMS COE, Pune

EDITORIAL BOARD

Faculty Coordinator:

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

Faculty in charge & Editor:

Yogesh B Karandikar Assistant Professor Dept. of Mechanical Engineering

Design & Editing Team (Students):

Hritika Chafekar – 3rd Year

Vedant Raut - 2nd Year

Vision / Mission

Vision:

To be recognized as a premier center 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 medalists 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 31st 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 academic year 2023-24. The past year has seen significant accomplishments. We remain committed to explore innovative avenues to realize institute's vision as we anticipate coming year.

Achievements of Faculty Members

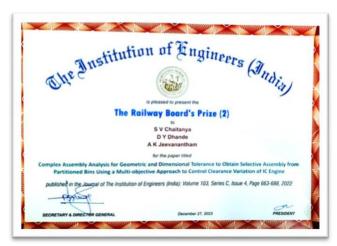
The President of India prize

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.



Student Achievements

UNIVERSITY TOPPERS

BE MECHANICAL

Rank	Student Name	CGPA	Class
1	Rane Mohit Umesh	9.8	First Class With Distinction
8	Lot Tejas Harish	9.5	First Class With Distinction

BE MECHANICAL SANDWICH

Rank	Student Name	CGPA	Class
1	Pattanshetti Siddharth Sheetal	9.7	First Class with Distinction
2	Khanse Aditya Santosh	9.6	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	9.5	First Class With Distinction
4	Karandikar Shreya Shailesh	9.5	First Class With Distinction
5	Upadhye Mrunal Sheetal	9.5	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	9.4	First Class With Distinction
9	Karande Atharva Abhijeet	9.4	First Class With Distinction
10	Kulkarni Shrungal Abhijeet	9.3	First Class With Distinction
10	Aher Adinath Subhash	9.3	First Class With Distinction

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	Premium Transmission	4.00 LPA
	Thombre		
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	India Pvt Ltd RLE International	3.50 LPA
39 40	Shivam Yewale Archit Kale		3.50 LPA 6.50 LPA
		RLE International	
40	Archit Kale	RLE International Godrej & Boyce	6.50 LPA
40 41	Archit Kale Dhiraj Rajesh Shinde	RLE International Godrej & Boyce Premium Transmission	6.50 LPA 4.00 LPA
40 41 42	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal	RLE International Godrej & Boyce Premium Transmission Premium Transmission	6.50 LPA 4.00 LPA 4.00 LPA
40 41 42 43	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA
40 41 42 43 44	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA
40 41 42 43 44 45	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi Prashant Vaijnath Surwase	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission Premium Transmission	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA 4.00 LPA
40 41 42 43 44 45 46	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA 4.00 LPA 4.50 LPA
40 41 42 43 44 45 46 47	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA 4.00 LPA 4.50 LPA 4.00 LPA
40 41 42 43 44 45 46 47 48	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA 4.00 LPA 4.50 LPA 4.00 LPA 4.00 LPA
40 41 42 43 44 45 46 47 48 49	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli Utkarsh Anil Ekatpure	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant Premium Transmission	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA 4.00 LPA 4.50 LPA 4.00 LPA 4.00 LPA 4.00 LPA
40 41 42 43 44 45 46 47 48 49 50	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli Utkarsh Anil Ekatpure Vedant Aher	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant Premium Transmission Thermax	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA 4.00 LPA 4.00 LPA 4.00 LPA 4.00 LPA 4.00 LPA 3.50 LPA
40 41 42 43 44 45 46 47 48 49 50 51	Archit Kale Dhiraj Rajesh Shinde Divya Mahendra Dhamal Lakshmi Bakshi Omkar Sharad Dalvi Prashant Vaijnath Surwase Raj Nishandar Sanskar Sunil Fursule Sayali Santosh Koli Utkarsh Anil Ekatpure Vedant Aher Vedant Rameshrao Godbole	RLE International Godrej & Boyce Premium Transmission Premium Transmission Linde Engineering Premium Transmission Premium Transmission Fleetguard Filters Premium Transmission Cognizant Premium Transmission Thermax Premium Transmission	6.50 LPA 4.00 LPA 4.00 LPA 5.00 LPA 4.00 LPA 4.00 LPA 4.50 LPA 4.00 LPA 4.00 LPA 4.00 LPA 4.00 LPA 4.00 LPA 4.00 LPA

Department Activities

FDP/STTP ATTENDED BY THE DEPARTMENT FACULTY

SN	Name of Faculty	Title of the FDP/STTP	Organized by	Duration/ Dates
1	Dr. M. M. Sayyad	One - week Short Term Training Program on "Ancient Indian Knowledge for Motivation and Spiritual Health	D Y Patil College of Engineering, Pune	26-Dec-2023 to 30-Dec- 2023
2	Dr. M.M. Sayyad	Three-day Online Faculty Development program on "Advanced Trends in Mechanical Engineering"	Department of Mechanical Engg, Ashokrao Mane Polytechnic, Vathar	27-Dec-2023 to 29-Dec-2023
3	M P Shah	Faculty Development Program Machine Learning Application for Mechanical Engineers	CVR College of Engineering	18-Dec-2023 to 23-Dec-2023
4	A T Thombare	Faculty Development Program Machine	CVR College of Engineering	18-Dec-2023 to 23-Dec-2023
5	Dr. M. S. Deshmukh	"Recent Advancement & Development in Renewable Energy Technologies"	Sinhgad College of Engineering, Pune	08-Jan-2024 to 13-Jan-2024
6	G P Lohar	Solid Works 3D Experience	PVG COET Pune	19-Jan-2024 to 23-Jan-2024

SEMINARS / WORKSHOPS / WEBINARS ATTENDED BY THE DEPARTMENT FACULTY

SN	Name of Faculty	Title of the Seminar/Webinar		Organized By	Duration/ Dates
1	S A Ansari	One week STTP/FDP	on	MMCOE Pune	26-Dec-2023 to 30-
		RTHVAR			Dec-2023
2	S H Wankhade				
	R A Marne	BYST Mentor Program		AISSMS COE	21-Mar-2024 to 22-
	P S Aglawe			Pune	Mar-2024
	M U Gan				
	V R Patil				
	S J Navale				

CONFERENCES / SYMPOSIUMS ATTENDED BY THE DEPARTMENT FACULTY

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

FACULTY SERVED AS RESOURCE PERSON, EXPERT, CHAIRPERSON

SN	Name of	Title of Activity	Organizing	Date
	Faculty		body	
1.	Dr. M R Phate	Expert talk on "Outcome	MMIT,	16-Dec-2023
		Based Education in	Lohegaon,	
		Teaching & Learning"	Pune	

RESEARCH CONTRIBUTION

FUNDED RESEARCH PROJECTS

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

PATENTS, COPYRIGHTS, TRADEMARKS/IPR

SN	Name of Faculty	Name of the Patent	Patent Number and Date	Status
1	N N Gotkhindikar	Analysis of FDM based additive manufacturing process through optimized deep learning strategy.	Copyright 14/12/23	Published
2	P V Deshmukh	Performance analysis of bioinspired multiblade centrifugal fan using numerical and experimental approach	Copyright 28/12/2023	Published
3	Dr Priya S Gajjal Dr Manoj R Dahake	A System and Process to regulate Bearing Functions	Patent 16/12/2023	Granted

PAPERS PUBLISHED / PRESENTED IN PROCEEDINGS OF CONFERENCES

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

(Details of the Research Papers published by Teachers in UCG / SCI / Scopus Index Journals)

No.	Title of the Paper	Name of the Authors	Name of the Journal	ISSN/ISBN Number
1	Recent Innovations in Organic Inhibitors for Mild Steel in corrosive solutions: A review	Ahmed A Al-Amiery, Wan Mohd Norsani Wan Nik, Mohd Sabri Mohd Ghazali, Emed Yousif, Wan Nor Roslam Wan Isahak, Waleed Khalid Al-Azzawi, Mohammad Fakhratul Ridwan Zulkifli, Walid Daoudi, Izionworu O. Vincent and Dinesh Y Dhande	Journal of Sustainability Science and Management, 19(5), 146-173	ISSN 1823-8556, 2672-7226
2	Development of Artificial Neural Network Model to Predict the Performance of R-290 Water Cooler Refrigeration System	Dhande, D Y, Choudhari C S	Journal of The Institution of Engineers (India): Series B	2250-2106
3	Experimental investigations on the performance and emissions of compression ignition engine fueled with lower blends of neembased biodiesel	D Y Dhande and S J Navale	The Archives of Automotive Engineering – Archiwum Motoryzacji, Vol. 103, No. 1, 2024 57	2084-476X
4	Application of Rule Learner Classifier for Studying Bioethanol Fuelled Spark Ignition Engine out Emissions and Classificati	Dhande, D Y , Gaikwad D P, Choudhari C S	ASEAN Journal on Science and Technology for Development, Vol.40 (1), Nov.2023	0217-5460
5	Development of Artificial Neural Network to predict performance of Spark Ignition Engine fueled with waste pomegranate ethanol blends	Dhande, D Y , Gaikwad D P, Choudhari C S and Kiran Dahe	Information Processing in Agriculture, vol.4 (4), 459-474	2214-3173

6	Enantioselective Application Of Tio2 And Zno Encapsulated Hollow Silica In The Photocatalytic Degradation Of Dimethylarsinic ACID	R. M. Mokhlesur, W. N. Wan Mohd Norsani, M. G. M. Sabri., B. M. Praveen, D. Y. Dhande , I. Nabilah	RASĀYAN Journal of Chemistry, Vol.16, No.3, 2023	ISSN: 0974- 1496 (Print) ISSN: 0976- 0083(Online)
7	Prediction of Abrasive Wear behavior of the Poly-Tetra- Fluoroethylene material using Adaptive Neuro Fuzzy Interface Systems	Dhande D Y Navale S J, Gaikwad DP Patil S R Nalawade RD Wadkar DV Nik WB Ghajali MJ	Jurnal Tribologi, vol.38, pg.141-158	2289-7232
8	Piper betle extract as an eco-friendly corrosion inhibitor for aluminium alloy in hydrochloric acid media	W.B. Wan Nik*, K. Ravindran, A.A. Al-Amiery, V.O. Izionworu, O.S.I. Fayomi, E. Berdimurodov, W. Daoudi, F. Zulkifli1 and D.Y. Dhande	International Journal of Corrosion and Scale Inhibition, 2023, 12, no. 3, 948-960	ISSN 2305- 6894
9	Tribo-mechanical characterization of Cu-Cr-Zr ternary alloy aimed at fin-tube resistance welding	Sirsath, K.G. and Bachchhav B.D .	Industrial Lubrication and Tribology, Vol. 75 No. 8, pp. 942-949	368792
10	Prediction of Thrust Force and Torque for High-Speed Drilling of AL6061 with TMPTO- Based Bio-Lubricants Using Machine Learning.	Kathmore, P.; Bachchhav, B. D.; Nandi, S.; Salunkhe, S.; Chandrakumar, P.; Nasr, E.A.; Kamrani, A.	Lubricants 2023, 11, 356.	2075-4442
11	"Wear Performance of Cu–Cd, Cu–Be and Cu– Cr–Zr Spot Welding Electrode Materials".	Bachchhav, B.D.; Chaitanya, S.V.; Salunkhe, S.; Chandrakumar, P.; Pagáč, M.; Nasr, E.A.	Lubricants 2023, 11, 291, pp. 1-15.	2075-4442
12	Tribological Performance Evaluation of TMPTO based Nano- Lubricants".	Bhanudas Bachchhav, Yash Anecha, Balraj Waghmare	Journal of Manufacturing Engineering, Vol. 18, Issue 3,pp. 091-095	0973-6867
13	"Selection of spot welding electrode material by AHP, TOPSIS, and SAW"	Bhanudas Bachchhav, Swarali Bharne, Atharva Choudhari, Siddharth Pattanshetti	Materials Today: Proceedings,	ISSN 2214- 7853
14	Tribological behaviour of Al6061-SiC hybrid MMC reinforced with 4% MoS2/Cu/Gr	Bachchhav, B.D.	Int. J. Materials Engineering Innovation Vol.	ISSN online 1757-2762 ISSN print 1757-2754

			14, No. 4, pp.297–314.	
15	Evaluation of Interlaminar Shear Performance of Carbon Fibre-reinforced Composite under Quasi-static and High Strain-rate Loading	Dr. M. M. Sayyad	Journal of Materials Engineering and Performance	1059-9495
16	An Intelligent Tribological Texture Behavior Analysis and Optimization of Air Bearing	Dr P S Gajjal Dr M R Dahake	International Journal of Engineering Bio and Tribo Corrosion Vol 9 No72 pp 1- 13	Electronic ISSN 2198-4239 Print ISSN 2198-4220
17	A Novel Optimized Dielectric Fluid Electric Discharge Machine Using African Buffalo Optimization	Dr P S Gajjal Dr M R Dahake	International Journal on Interactive Design and Manufacturing	Electronic ISSN 1955-2505 Print ISSN 1955-2513
18	Experimental Exploration of Hydrogen Fuelled Dual Fuelled CRDI equipped Diesel Engine Coupled With Exhaust Gas Recirculation Using ANN Approach	Dr M R Dahake Dr P S Gajjal	International Journal of Ambient Energy Vol 45 No 1 pp 1- 11.	Print ISSN: 0143-0750 Online ISSN: 2162-8246
19	CFD analysis of 210 MW Boilers Economiser For Detection Area Causes of Tube Failure	Dr M R Dahake	International Journal of Power and Energy Systems	ISSN Online 1710-2243 ISSN Print 1078-3466

BOOK / ARTICLE PUBLICATIONS

SN	Author	Title of the Book	Published by	ISBN	Year
1	Dr. M. S. Deshmukh	Mechanical Alloying of Ferrous & Non-ferrous Alloys : Processing, Applications & Properties	ELSA	eBook ISBN: 9780443161 520	2024

STUDENTS' CHAPTERS / CLUBS

SAE INDIA MBAJA: Team Resonance Racing India's Dreadnought 4.0

Resonance Racing Vehicle Dreadnought 4.0 at AISSMS COE stands as a pivotal moment in the history of the college. With the esteemed presence of Shri Maloji Raje Chhatrapati, Dr.D.S.Bormane, sponsors, parents, and alumni, the event marked remarkable achievements of the Resonance Racing Team but also underscored the college's unwavering commitment to nurturing a culture of excellence in engineering is celebrated. Dreadnought 4.0 symbolizes more than just a groundbreaking racing vehicle; it embodies the principles of collaboration, mentorship, and the boundless potential that emerges when passion and expertise converge within an academic setting. The event served as a testament to the collective efforts of the entire AISSMS COE community, showcasing the synergy between students, faculty, sponsors, and alumni in pushing the boundaries of innovation. As the college continues to cultivate an environment that fosters excellence and innovation, Dreadnought 4.0 stands as an inspiring example of what can be achieved through dedication, teamwork, and a shared commitment to advancing engineering process.

Achievements:

OVERALL, WINNER (AIR 1)
COST EVENT WINNER
MANUVERIBILITY EVENT WINNER
VDE ATP 1STRUNNERUP
VDE MANUVERABILITY 1ST RUNNERUP
OVERALL PHYSICAL DYNAMICS 1STRUNNERUP
SPECIALITY AWARD 1STRUNNERUP
SLEDGE PULL 2NDRUNNERUP
OVERALL STATICS 2ND RUNNERUP
ACCELERATION EVENT 2ND RUNNERUP





SAE INDIA EBAJA: TEAM

RESONANCE RACING'S SPARTAN X

INDUSTRIAL VISITS ORGANIZED

Industrial Visit to Stauff (Fluid Power Devices)



Industrial Visit to Diesel Loco Shed Pune



INDUSTRIAL VISITS ORGANIZED

Industrial Visit to State Transport Workshop Dapodi



Visit to Science Park on Science Day



INDUSTRIAL VISITS ORGANIZED

Industrial Visit to MAHA Metro Pune



Industrial Visit to Katraj Dairy



BE MECHANICAL SANDWICH STUDENTS INDUSTRIAL INTERNSHIP

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

		Private Limited			Solutions LLP
16	Gorad Saurav	DEC (DESAI	46	Sutar Omkar	Robtech
	Gorakshanath	ELECTRONICS		Bharat	Automation
4.5)	4.77	m 11 A ·	and Services
17	Gugale Yash Sandip	Shree Om Sai Engineering	47	Takle Anuj Balasaheb	Om industries
18	Gujarathi Gaurang	Knorr-Bremse	48	Tilekar Chetan	SteelFab
	Pankaj	Technology Centre		Nandkumar	Engineering
		India			Pvt.Ltd
19	Hattarge Abhishek Anil	Shree om sai	49	Urkude Niranjan	KNORR- BREMSE Technology
	AIII	engineering dhayari,pune		Jitendra	Center India
					Private Limited
20	Hattekar Nikhil	IndiTech Valves	50	Uttekar Aryesh	Stead Solve Design
	Abhay	Pvt. Ltd.		Dhiraj	&
					Manufacturing
21	Hingane Shubham Vikas	STEELFAB	51	Waghmare Shubham	Solutions LLP Shubham
21	Tilligane Shubham vikas	ENGINEERING	31	Sandip	Engineering
		PVT. LTD			
22	Ingale Asawari Dinkar	IndiTech Valve's Pvt. Ltd.	52	Welde Parth	Nathkrupa
23	Jadhav Shashwat	Llyods steel	53	Jagdish Yevatekar Yash	Engineering Greaves Cotton
20	Shivaji	Industries limited		Mukund	Ltd
24	Kale Mansi Ulhas	Twin Engineers Pvt	54	Kadam Siddhant	Suyog Engineering
25	77 - 11 A 1141	Ltd Bhosari.		Sachin	C F
25	Karanjkar Aditi Ramchandra	Stead Solve Design & Manufacturing Solutions LLP	55	Patil Aditya Ajay	Suyog Engineering
26	rzi i n i ·	D 11 1	- C	D D 1.4	Dada at
26	Kharkar Pushpanjay Hemkant	Burckhardt compression	56	Poman Prachit Pravin	Padmavati industries
		1			chakan
27	Kshirsagar Sharvari	Vishay	57	Sabale Prahlad	Trison'S
	Madhukar	Components India Pvt Ltd		Gautam	Engineering
28	Kulkarni Abhishek	ElringKlinger	58	Limkar Shaunak	Quantus
	Prashant	Automotives		Prashaant	Technik
29	Late Prathamesh	BEP INDIA	59	Mujawar	Precision
	Girish	AUTOMOTIVE		Mahammadsaif	pressing
30	Indhay Chachyyat	SYSTEMS Llyods stool	60	Jakirhusen Patil Siddhash Mahash	manufacturing
30	Jadhav Shashwat Shivaji	Llyods steel Industries	00	Patil Siddhesh Mahesh	Industries
		limited			

ACTIVE MEMORUNDUM OF UNDERASTANTING (MOU)

SN	Faculty Coordinator	Name of Industry	Date of MoU Signed	Valid up to
01	Dr. B. D. Bachhav Dr. C. S.	Setco Spindles India (Pvt) Ltd Pune	18/02/2022	17/02/2025
	Chaudhari			
	Dr. P. S. Gajjal			
02	Dr. B. D. Bachhav	Stead Solve Design and Manufacturing Solutions LLP Pune	23/02/2022	22/02/2025
03	Dr. S H Wankhade	UB Cryogenic Solutions LLP, Pune	04/03/2022	03/03/2025
04	Dr. B. D. Bachchhav	Institute of Systems Pune.	04/04/2022	03/04/2025
05	Dr. B. D Bachchhav	SSIG Manufacturing Advancements Pvt Ltd. Pune	27/04/2022	26/04/2025
	Dr S V Chaitanya			
06	Mr P S Aglawe	E-Addict Mobility Solutions Pvt Ltd OPC Pune	05/08/2022	04/08/2025
07	Dr S H Wankhade	Twin Engineers Pvt Ltd Pune	10/04/2023	09/04/2028

A few glimpses from the AY 2023-24 (Dec-2023 to May-2024)





"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





PAQIC Meeting AY 2023-24 Term II Date of Meeting 18-Mar-2024









Alumni Meet 2023-24 Date of Meeting 12-Apr-2024

SAE INDIA MBAJA:



POST EVENT JOY AND CELEBRATION'S AT NATRAX TESTING



TEAM FELECITATION BY CHIEF GUEST'S

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 &

Yogesh B Karandikar

Thank You