# M. E. Society's College of Engineering, Pune-01

(Accredited by NAAC with "A" Grade)

# Mechanical Engineering Department News Letter

Vol. 11, No. 2, December – June 2020 – 21

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#### **Patrons**

• Dr. S. S. Sarwade (Principal)

#### **Editors**

- Dr. S. H. Gawande
- Prof. H. S. Salave

### Name of Faculty

- Dr. V. N. Chougule (HoD)
- Dr. V. N. Raibhole
- Prof. V. J. Sonawane
- Dr. S. H. Gawande
- Dr. A. C. Mitra
- Prof. S. P. Gadewar
- Dr. A. R. Patil
- Prof. S. D. Wankhede
- Prof. S. S. Jadhav
- Prof. K. A. Mahajan
- Dr. R. N. Yerrawar
- Prof. H. S. Salave
- Dr. B. D. Nandre
- Prof. Sushant Jadhav
- Prof. S. R. Kandharkar
- Prof. V. R. Varude
- Prof. B. R. Pujari
- Prof. V. S. Mane
- Prof. A. A Patil
- Prof. A. C. Chaugule
- Prof. P. R. Magdum
- Prof. C. B. Meshram

#### From the HOD's Desk .....

During the **Second semester** of academic year **2020-21**, various extracurricular activities were conducted successfully by the Mechanical Engineering Department like Paper Publication & Paper Presentation by faculty members and students in National / International journals.

The Faculty member regularly contributes for publications of Text Books and work on Research Projects by involving UG & PG students funded by BCUD, Savitribai Phule Pune University, DST New Delhi. Faculty Members publish their research papers in National and International Journals& Conferences regularly. Numbers of faculty members are working as resource person and key note speaker for conferences and workshops.

Mechanical Engineering students regularly contributing by involving in various technical events like **MESA-PHOENIX**, **Designers Club**, **SAE India eBAJA and mBAJA** organized by SAE India which encourages them and staff members, which we want to continue in coming years also. Also various projects by final year students are as per present requirements of industries and Quality.

Dr. V. N. Chougule

#### From the Editor's Desk.....

Greetings to faculty, students and friends!

It gives us an immense pleasure in bringing out this issue of our **Second Semester** Departmental Newsletter [2020-21].

We hope this newsletter will provide a brief report of all activities conducted by the faculties and students of Mechanical Engineering Department during the Second Semester of academic year **2020-21** 

> Dr. S. H. Gawande Prof. H. S. Salave

### Department of Mechanical Engineering- Semester-II [2020-21]

Mechanical Engineering is the core branch of Engineering and Technology, which plays important role in the industrial growth of the nation. The department has well equipped laboratories. Besides high quality teaching, the practical knowledge of students is enhanced through Expert Lectures by eminent persons from Industry, industrial visits, etc. The department has a team of dedicated faculty members, who strive hard to give their 100%. The department adopts flexible and innovative learning opportunities for students enabling them to enhance theoretical and professional skills. Numbers of faculty members are contributing to Text Books Publications & working on research projects funded by BCUD, University of Pune and presented & published their research work in international conferences at USA, Singapore& China and in International Journals. The department has set ground zero between faculty& students which facilitates teaching learning process effectively. The department had been pioneering many quint-essential activities which led to the development of the college. Final year students have presented and published technical papers based on their projects in national and International Journals.

**Department Advisory Board:** 

PG Co-ordinator:

Dr. S. S. Sawarade

Dr. V. N. Chougule

Dr. S. H. Gawande

Dr. A. C. Mitra

Dr. S. H. Gawande

**NSS Coordinator:** 

Prof. B. D. Nandre

**MESA Coordinator:** 

Dr. S. H. Gawande Prof. H. S. Salave

**NBA/NAAC Coordinators:** 

Dr. R. N. Yerrawar

Prof. S. P. Gadewar

**BAJA/ Go-Kart coordinator:** 

Prof. S. R. Kandharkar

Prof. B. R. Pujari

**Extra-Curricular Co-ordinator:** 

Prof. H. S. Salave

**Academic Monitoring** 

**Coordinator:** 

Prof. K. A. Mahajan

**Exam Coordinator:** 

Prof. S.S. Jadhav

**Load Distribution and Time Table** 

In-charge:

Prof. S. D. Wankhede

#### **Guest Lecture/Industrial Visit Co-ordinator:**

Prof. V. R. Varude

# **Pride of Mechanical Engineering Department**

# 1. List of Faculty with PhD



Dr. S. S. Sarawade (Principal)



Dr. V. N. Raibhole



Dr. S. H. Gawande



Dr. B. D. Nandre



Dr. V. N. Chougule (HoD)



Dr. A. C. Mitra



Dr. R. N. Yerrawar



Dr. A. R. Patil

# 2. List of Faculty Registered with PhD

- 1. Prof. Mrs. V. J. Sonawane
- 2. Prof. S. P. Gadewar
- 3. Prof. S. D. Wankhede
- 4. Prof. K. A. Mahajan
- 5. Prof. H. S. Salave
- 6. Prof. S. R. Kandharkar
- 7. Prof. V. R. Varude

### 3. List of PhD Guide

Sr. No.	Name of PhD Guide	No. of PhD Students	No. of Students PhD Completed
1.	Dr. S. S. Sarawade	04	01
2.	Dr. V. N. Raibhole	05	
3.	Dr. S. H. Gawande	06	03

### 3. Departmental Activities

### 3.1 SAE BAJA'2021 Competition

1. **In M-BAJA 2021 Competition** Participated and performed in all the static and dynamic events. We secured 2nd rank in S&T, 6<sup>th</sup> in Endurance Race, 9<sup>th</sup> in manoeuvrability and 10th in overall dynamic events. With an Overall All- India-Rank of 9, 2021 was one of the most successful events in our history.



M-BAJA Team

2. **In e-BAJA 2021 Competition** Participated and performed in all the static and dynamic events. We secured 3rd rank in Cost with an Overall All-India-Rank of 4, 2021 was one of the most successful events in our history.



e-BAJA Team

#### 3.2 MESA Activities

1. MESA TECHTRONIX-2k21 Technical Event organised on 22 to 23<sup>th</sup> Jan 2021.

#### • PICXELLENS:-

The PICXELLENS was the photography competition of individual ones showcasing their best clicks in specific categories. The main three Categories are Flora and Fauna, Still life and Macro. The total No. of Participants-25

#### MindKraft

MindKraft was a virtual inter-disciplinary quiz event which was conducted in 3 rounds. All the preparations for this event were started from 14th January 2021 onwards by the respective event head & event co-ordinators / volunteers. The preparations included designing of the rounds, preparation of the question bank for each round, event poster making, event publicity & all other necessary tasks. Finally after all the preparations, the event posters were released on various social media platforms on 19th January 2021. Registrations were open from 19th January 2021 till 21st January 2021. Round 1 & round 2 were conducted on 22nd January 2021 at 10:30am & 4:00pm respectively. Round 3 carried a weightage of 100 points. +10 points were allotted for every correct answer & -5 for every incorrect answer. Finally, top 2 scorers from round 3 were declared as winner & runner-up respectively. Every round was completed within approximately 20 minutes. The total No. of Participants-18

2. Mr. Amol Relkar, Head, Product Development, Greaves Cotton Limited, Pune, delivered a lecture on,"Before you Get out of College" for SE, TE and BE Mechanical students on 6<sup>th</sup> Feb 2021 in online mode. Organized by: Dr. A. R. Patil, Prof. H. S. Salave and all MESA Members



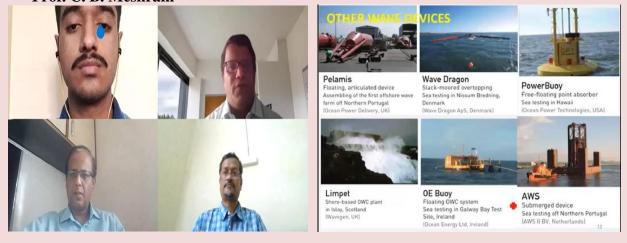
#### 3.3 Guest Lecture

**1. MESCOE-IIC** Mechanical Engineering Department, successfully organised webinar on Technology Commercialization through Innovation for Entrepreneurship held on 30<sup>th</sup> Dec. 2020

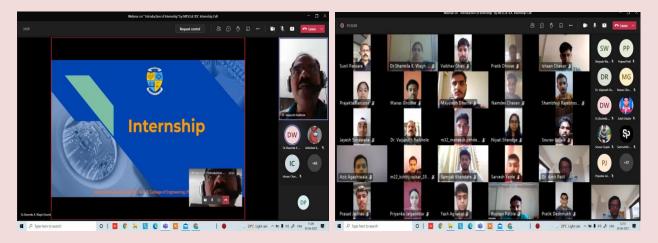
2. Mr. Vikas Sharma, Assistant Manager, ISIEINDIA, Noida Delhi, delivered a lecture on," Internship opportunities EV and core areas of Mechanical Engineering" for SE, TE and BE Mechanical students on 17<sup>th</sup> May 2021 in online platform Organized by: Dr. A. R. Patil



3. Dr. Abdus Samad, Professor, Indian Institute of Technology Madras, India, delivered a lecture on, "Marine Energy and its Indian Perspective" for SE, TE and BE Mechanical students on 25<sup>th</sup> March 2021 in an online platform Organized by: Dr. A. R. Patil and Prof. C. B. Meshram



4. MESCOE, Internship Cell organised a Webinar on" Internship" for SE, TE and BE students on 30<sup>th</sup> June 2021. A total of 105 students participated in this event. Dr. V. N. Raibhole and Dr. S. K. Wagh explained the need and importance of Internship in engineering career while Dr. A. R. Patil explained different types of internship schemes available in both private and government sectors for students. Coordinated by Dr. V. N. Chougule, Dr. V. N. Raibhole, Dr. S. K. Wagh and Dr. A. R. Patil

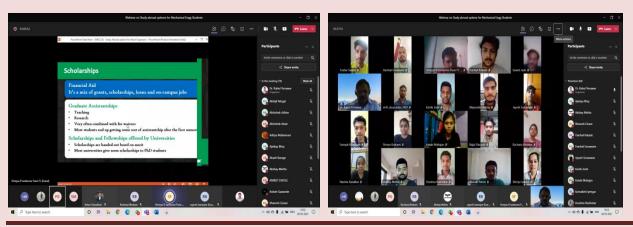


### 3.4 Training Program/FDP/Workshop

1. Two Days Online FDP/Students Training Program on "MATLAB and SIMULINK" organised by Mechanical Engineering department dated on 3 to 4 December 2020. The Resource Person:-Mr. Milind Khanderao, Design Tech System Pvt. Ltd. Pune, The total no. of participants are 169, Co-ordinated by: Prof. A. A. Patil and Prof. S. P. Patil



2. One Day webinar on "Study abroad options for Mechanical Engineering students" organised by Mechanical Engineering department dated on 28<sup>th</sup> May 2021. The Resource Person:-Mr. Shreyash Ramkrishnan, Chief Mentor, Jamboree Education, Pune, Co-ordinated by: Dr. R. N. Yerrawar



### 3.5 Establishment of Designers Club

### 1. Induction Program

The Induction Program was organized by the Designers Club Members on 29<sup>th</sup> May 2021. As it an interdisciplinary club so the Registration link was circulated among all the students of different branches and year. Total 273 people responded to the form and 185 people were present in the program. Faculty Coordinator:- **Prof. V. R. Varude and Prof. V. S. Mane** 





## 2. Digital Marketing

The Guest lecture was organized by the Designers Club team on 2nd July 2021 to create awareness among students about digital marketing. Total 215 people had registered and out of that 110 participants were present at the program. Speaker:- Mr. Nikhil Kumbhar, Digital Marketing Consultant, Faculty Coordinator:- Prof. V. R. Varude and Prof. V. S. Mane





### 3.6 Revenue Generation/Lab Utilization

#### 1. Industrial Tribology Lab

The revenue is generated by providing the research and testing facilities to outside organizations and research centers available at Industrial Tribology Laboratory. Till date more than 15 UG/PG/PhD research projects are completed with more than 20 research paper publications in highly prestigious journals published by Springer and Taylor and Francis publications. The year wise revenue generated is given below:

Year	Amount	
2020-21	Rs. 32150.00	
2019-20	Rs. 25750.00	
2018-19	Rs. 32570.00	
2017-18	Rs. 35000.00	
Total	Rs. 125470.00	

### 3.7 Internship Activity

Total 20 students received internships in different core industries like Tata Motors. Ltd, Ambuja Cements Ltd, Armament Research & Development Establishment (ARDE), DRDO etc. Activities coordinated by **Dr. A. R. Patil** 

Sr. No	Name of Student	Class	Company Name	Duration
1	Krishnakant Mallesh Idam	BE A	KTK MACHINES	1 month
2	Pratik Arvind Tambe	BE A	Decibels Lab Private Limited	4 week
3	Vaishnavi Dhananjay Deshpande	BE A	Environmental services	6 months
4	Andhale Dhananjay Ambadas	BE B	cBalance Solution Hub	6 months
5	Atharv Avinash Pathak	BE B	Unschool	1.5 Month
6	Kartik joshi	BE B	Jay Hind Industries Ltd	1 year
7	Kunal Prakash Gatkal	BE B	Tirupati Engineering	3 months
8	Nikhil Harish Jadiye	BE B	Ambuja Cements Ltd (A LafargeHolcim Group Company)	2 Months
9	Shubhankar Angir	BE B	Mahle Anand Thermal Systems Pvt. Ltd.	3 months

10	Vaishnavi Hemant Deshpande	BE B	Production/Manufacturi ng	3 months
11	Varad Makarand Saptarshi	BE B	Technoskill	6 Months
12	Dhawal Dhananjay Bhaganagare	TE A	Kirloskar Ferrous Limited	3 Months
13	Kunal Thakur	те а	Armament Research & Development Establishment (ARDE), DRDO	3 months
14	Omkar Kamble	TE A	Tata Motors. Ltd	3 months
15	Shardul Devdatta Ashtekar	TE A	United Metallurgicals Pvt Ltd.	15 days
16	Swami jade	TE A	Decibels Lab Private Limited	1 month
17	Swamini Pachankar	TE A	Aspiration energy	3 months
18	Vinit Nitin Savale	TE A	Tata Motors(ERC)	3 months
19	Yash Bakliwal	TE A	Internshala Student Partner 19	3 months
20	Yash Nanasaheb Chaudhari	TE A	Dobot India	2 months
21	Kanishka Kedar Deshak	BE A	Bosch chassis System India Pvt. Ltd	3 months

#### 4. Alumni Meet-2021

Alumni Meet 2021 was organized on 26th June 2021 (Saturday) by using an online platform (MS Team). The alumni meet is conducted every year in order to reconnect with the alumni and celebrate their success and various achievements.

Total No. of Registrations for alumni meet – 157

No. of Attendee for alumni meet - 125

MESCOE Alumni Portal url- <a href="http://www.mescoepune.org/alumni/index.php">http://www.mescoepune.org/alumni/index.php</a>









## 5. NSS Activity

1. MESCOE NSS organised webinar on "COVID-19 Disaster Management: Stand against pandemic" dated on 27<sup>th</sup> Feb 2021. The Speaker Name:- Dr. Milind Bhoi (Surgeon, Member of Sports and Youth Affairs Committee. Central Planning Commission, New Delhi (Govt. of India.)). The NSS Volunteers and Staff Members: 220 & views on you tube link: 550





#### 2. Marathi Language Day

MESCOE NSS Team organised webinar on "Marathi Language Day" dated on 5th March 2021. Marathi Language Day is celebrated on every year across the Indian states of Maharashtra and Goa. This is celebrated to honour the birth anniversary of famous Marathi poet Vishnu Vaman Shirwadkar, who was popularly known as 'Kusumagraj'. The day is celebrated to recognize and honour the greatness of Marathi literature. The guest of honour was an eminent speaker Dr. Angha Mandavkar Professor D.G. Ruparel College, Mumbai, explained how to improve soft skills using Marathi. She shared lots of information about importance of Marathi in day to day life through student development activity. She told about how Marathi helped to strongly understand science to all. The way how engineering students give the contribution to make Marathi language strong. There are lots of carrier opportunities available in Marathi.





#### 6. Staff Achievements

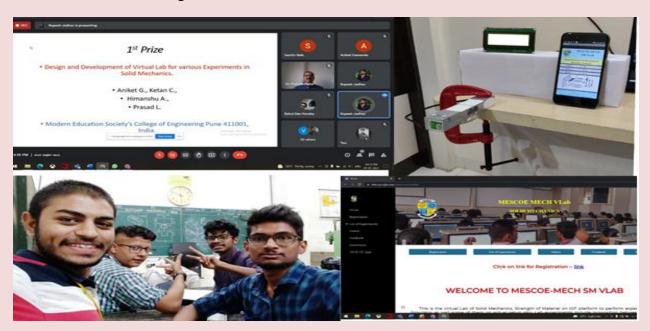
- 1. Two research scholars completed PhD in mechanical engineering from Savitribai Phule Pune University under the guidance of Dr. S. H. Gawande
- 2. Prof. H. S. Salave attended and Participated in Technical Conference and Presentation organised by American Society of Mechanical Engineers (ASME) on "International Gas Turbine Institute ASME Turbo Expo-2021" during 7-11 June 2021.
- 3. Dr. S. H. Gawande published more than 6 research paper publications in highly prestigious journals published by Springer and Taylor & Francis publications
- 4. Prof. H. S. Salave attended and Participated in a One week faculty Development Program on "Advances in HVAC and R Technology" from 15th April to 19th April 2021 organized by Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune-18 in association with Indian Society of Heating, Refrigerating and Air-Conditioning Engineers (ISHRAE) Pune chapter.
- 5. Dr. A. R. Patil successfully completed two "14 week certification courses in CFD" by NPTEL Swayam, a program programme initiated by the Government of India and conducted by different IITs.
- 6. Dr. S. H. Gawande delivered an invited webinar on "Research Paper writing for publications in International Journals" at Dattakala Campus, Pune on 28<sup>th</sup> April 2021.
- 7. Prof. H. S. Salave attended and Participated in AICTE and ISTE approved One Week Faculty Development Program on "Engineering Trends in Refrigeration and Air conditioning" organised by College of Engineering, Pune during 15 March to 20 March 2021.
- 8. Prof. A. R. Patil successfully completed Doctor of Philosophy (PhD) in Mechanical Engineering from Savitribai Phule Pune University on 12/02/2021

#### 7. Student Achievements

1. ME student Priti Deshmukh Participated and received best paper award in international conference of Ideas, Innovations, Impact in science and Technology organised by SMT Kashibai Navale College of Engineering, Vadgaon Pune on 17<sup>th</sup> June 2021. Under the guidance of **Dr. R. N. Yerrawar** 



2. BE Mechanical students Mr. Aniket K Gawande, Mr. Ketan R Chaudhari, Mr. Prasad A Lokhande and Mr. Himanshu S Aate Participated "SPARK 2k21" National level Project Competition organized by MITAOE, Pune and received First prize in this event dated on 23<sup>th</sup> June 2021. Under the guidance of **Dr. A. C. Mitra** 



# 3. BE Toppers 2019-20 (SEM-2)



Mr. Kench Rushikesh Rughuveer CGPA-9.33



Mr. Sangle Rohit Babasaheb CGPA-9.33



Mr. Khater Ninad Bharat CGPA-9.09



Mr. Ladkat Pranay Dhananjay CGPA-9.08



Mr. Gunjkar Vedant Vijay CGPA-9.04

## 4. TE Toppers 2019-20 (SEM-2)



Mr. Kadam Prasad Dilip CGPA-9.91



Mr. Pathak Rushikesh Harish CGPA-9.41



Mr. Bakare Shubham Sanjay CGPA-9.33



Konduskar Meghraj Milind CGPA-9.17



Mr. Patil Mayuresh Sanjay CGPA-9.09

# 5. SE Toppers 2019-20 (SEM-2)



Mr. Bhosale Rajat Shahaji CGPA-9.88



Mr. Gaikwad Atharva Jagdish CGPA-9.8



Mr. Jhantu Rahul CGPA-9.66



Miss. Sharon James CGPA-9.64



Mr. Savale Vinit Nitin CGPA-9.60

# **6. GATE Qualified Students**



Mr. Pranav Gore GATE Score-785



Mr. Vedant Gunjkar GATE Score-430



Mr. Shubham Thok GATE Score-395

## 8. Training & Placement Activity

Following BE Mechanical Students are selected in Campus interview with different companies in AY 2020-21 (SEM-II)



**Mr. Mayresh Patil** Company: EASi Engg. Services



**Mr. Meghraj Konduskar** Company: EASi Engg. Services



Miss. Sanika Chitale Company: EASi Engg. Services



**Mr. Muqeet Patil**Company: EASi Engg. Services



Miss. Komalkriti Iyengar Company: Faurecia India Pvt. Ltd and Amazon CS



**Mr. Utsav Dube** Company: Thermax Pvt. Ltd.



Miss. Prachi Bibekar Company: Infosys

# **List of Companies Visited**

- EASi
- Faurecia
- Eleation
- Amazon CS
- TCS N
- KAAR Technology
- QualityKiosk
- Wipro
- Infosys
- Enzigma
- Rudder Analytics
- Globalstep

\*\*\*\*

#### **Vision of Department**

To groom Motivated, Environmental friendly, Self-esteemed, Creative and Oriented Mechanical Engineers

#### **Mission of Department**:

To Develop Industry Oriented Manpower to accept the challenges of Globalization by,

- Imparting mechanical engineering knowledge through trained faculty in conducive environment,
- Creating awareness about the needs of mechanical industries through alumni and industryinstitute interactions
- Encouraging them to think innovatively and introduce them to various research activities
- Supporting them to groom in all aspects like communication, interpersonal skills.

#### **Program Educational Objectives:**

The following Program Educational Objectives are established for the Mechanical Engineering:

- I. To prepare students with strong foundation in mathematical, scientific and engineering fundamentals that will enable them to have successful career in Mechanical and Interdisciplinary Industries
- II. To prepare students for rapid technological change equipped with strong conceptual understanding of core and basic concepts of mechanical engineering
- III. To enable students to develop their knowledge and skills across the range of disciplines.
- IV. To prepare students for soft skills with good communication, ethical values and ability to work in a team
- V. To prepare students to strengthen their knowledge and skills through self-learning abilities throughout their professional career as well as to pursue higher education.

#### **Mechanical Engineering Program Outcomes:**

The Mechanical Engineering graduates will be able to:

- 1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

- 7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
- 13. **PSO I:** Apply principles of machine design, manufacturing, thermal engineering and management to identify, formulate and solve real life problems in various fields of engineering
- 14. **PSO II:** Use modern modeling, simulation techniques and computational tools.
- 15. **PSO III:** Develop practical solutions for mechanical engineering problems/processes under professional and ethical constraints.