

SANDIP FOUNDATION'S SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CENTRE , NASHIK DEPARTMENT OF MECHANICAL ENGINEERING E-BULLETIN

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VISION OF SITRC

TO BE ACCLAIMED INSTITUTION FOR LEARNING AND RESEARCH

#### MISSION OF SITRC

TO IMPART IN-DEPTH TECHNICAL KNOWLEDGE.

TO CREATE CONDUCIVE ENVIRONMENT FOR RESEARCH, INNOVATION AND ENTREPRENEURSHIP.

TO INSTILL THE SOCIAL AND CULTURAL VALUES.



## FROM THE HOD'S DESK

I am happy to learn that Mechanical Engineering Department, Sandip Institute of Technology and research Centre is coming out with the quarterly departmental E-Bulletin. This E-Bulletin will help to share the news, events achievements of the department among alumni. This E-Bulletin will provide an opportunity for the staff and students to showcase their talents in technical writing. I would like to appreciate and congratulate editorial team of the department for their unrelenting efforts in compiling this E-Bulletin.

## FROM THE EDITOR'S DESK

It gives us an immense pleasure to introduce this E-bulletin of Mechanical Engineering Department. Proper communication plays a vital role in institution's development. This E-bulletin will serve to reinforce and allow increased awareness, improved interaction and integration among all of us. This E-bulletin will be a medium to provide proper acknowledgement and respect all of these efforts and its results.

### VISION OF THE DEPARTMENT

To achieve excellence in the domain of Mechanical Engineering by inculcating a culture of learning and research.

#### MISSION OF THE DEPARTMENT

- To nurture the students of Mechanical Engineering to be competent, motivated and ethical professionals.
- To foster research, innovation and entrepreneurship skills leading to employable and self reliant technocrats.
- To groom the socio-techno potential for up-liftment of society.

### **PROGRAMME EDUCATIONAL OBJECTIVES ( PEO'S )**

- PEO 1: To pursue and establish the career in Mechanical Engineering.
- PEO 2: To demonstrate personal growth by pursuing higher studies, professional development course and/or engineering certifications.
- PEO 3: To inculcate entrepreneurship skills and nurture the ethics in the domain.

#### **PROGRAMME OUTCOMES**

- 1. **Engineering Knowledge** Apply knowledge of mathematics, science and engineering to solve the real life problems in Mechanical systems. An ability to analyze and interpret data.
- 2. **Problem Analysis** Identify, formulate and solve Mechanical Engineering problems in thermal, manufacturing and machine design and conduct new experiments.
- 3. **Design/development of Solutions** Design systems like thermal, robotics, mechatronics and machines within realistic constraints.
- 4. **Conduct investigations of complex problems** Design and conduct experiments to interpret data and analyse the results.
- 5. **Modern Tool Usage** To develop awareness and work on emerging technologies like CAD/CAM software's, Robotics.
- 6. **The engineer and society** Understand the impact of an engineer in general and Mechanical Engineering knowledge for welfare of society in particular.
- Environment and Sustainability Develop or modify eco-friendly and highly reliable as well as sustainable systems.
- 8. Ethics Take professional decision with a sense of ethical responsibility.
- Individual and team work Function effectively as an individual and as a member or leader in multidisciplinary and/or cross cultural teams.
- 10. Communication Communicate effectively for achievements of goals.
- 11. **Project Management and Finance** Execute disciplinary and interdisciplinary projects in day-today life.
- 12. Life-Long Learning Imbibe habit of lifelong learning.

### **ABOUT THE DEPARTMENT**

The department is having highly qualified, experienced & motivated faculty members. The department has laboratories with latest testing facilities like multifuel VCR engine, computerized UTM (capacity 100 tonnes), computerized diesel engine test rig & exhaust gas analyzer for Engines. The CAD Centre of the department armed with latest hardware & software like Pro-E wildfire-5, ANSYS, Hypermesh, Mastercam, and AutoCAD etc. Department also have MOU with Altair Engg. Corporation (India) for conducting training on HyperMesh, Radioss (Linear), HyperForm, HyperCrash etc. The strength of department enables to offer the consultancy in all fields related to Mechanical Engineering.

# **Professor and Head**

#### DEPARTMENTAL ACTIVITIES

## Guest Lecture on "3D printing for beginners"

Mr. Prashant Suryavanshi, 3D Shikshan Founder, Ahmednagar was invited for lecture as Expert. Mr. Prashant Suryavanshi has delivered the lecture and it was quiet a good and informative session. Students have cleared many concepts regarding the career opportunities available in 3D printing.





## Guest Lecture on "Current Requirement of Automotive Industrial Design"

Mr. Anil Patil, Asia Tech, Pune, was invited for lecture as Expert. Mr. Anil Patil, Asia Tech, Pune has delivered the lecture and it was quiet a good and informative session. Students have cleared many concepts regarding the opportunities available for Mechanical Engineer in design domain in automotive sector.





Industrial Visit Co-generation Power Plant at Kadva Sugar Factory for BE Mechanical students



Industrial Visit Co-generation power plant at Kadva Sugar Factory, Tal-Dindori, Dist Nashik was organized by Department of Mechanical Engineering, SITRC under the syllabus of Energy Engineering subject of BE Mechanical on 21<sup>st</sup> April 2022. Total 120 Students from BE-A and BE-B Class and 05 Staffs Members were present for the plant visit. Prof. J. N. Yadav/Dr.S.V.Kasar took the permission from Manager, Kadva Sugar Factory, to visit industry by considering the academic importance and practical exposure to students for Energy Engineering Subject.

As a part of academic, it is mandatory to conduct industrial visit to a industry having applications of Energy Engineering according to BE Mechanical syllabus, SPPU, University of Pune. Mr. More Production Engineer guided our students during plant visit, they had explained in detail the process flow, set up available with the sugar Factory, technical specification of the turbine and use & applications of the resources. Prof.J. N. Yadav, Dr.S..V.Kadar, Prof.Pankaj Shirsath, Prof.Santosh Katkade, Prof Pallavi Gade were present along with student.



**Industrial visit to Shree Ganesh Industries** 



Industrial visit of SE Mechanical students was arranged on 27<sup>th</sup> April 2022 to 'Shree Ganesh Industries, Ambad ,Nashik' under the subject 'Applied Thermodynamics'. The visit was arranged by considering the practical exposure and academic importance to students.

SHREE GANESH INDUSTRIES is a young and progressive, dynamically developing -Company. It was founded in 2015 by Partners of professionals who had many years of experience in the field of Automobile sector. They are Manufacturing of Precision -Components, Auto Parts & CNC Turning Parts.

They have different machines like CNC lathe, lathe machine, drilling machine and band saw machine etc.

Prof.S.D.Katkade, Prof.P.A.Gade and Prof.J.N.Yadav guided the batch of 20 students each about the manufacturing of different parts used in SI and CI engines.



