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ZEAL COLLEGE OF ENGINEERING & RESEARCH, PUNE

Approved by AICTE, New Delhi, Recognised by Govt. of Maharashtra and
Affiliated to Savitribai Phule Pune University, Pune.

Accredited by NAAC with 'A' Grade

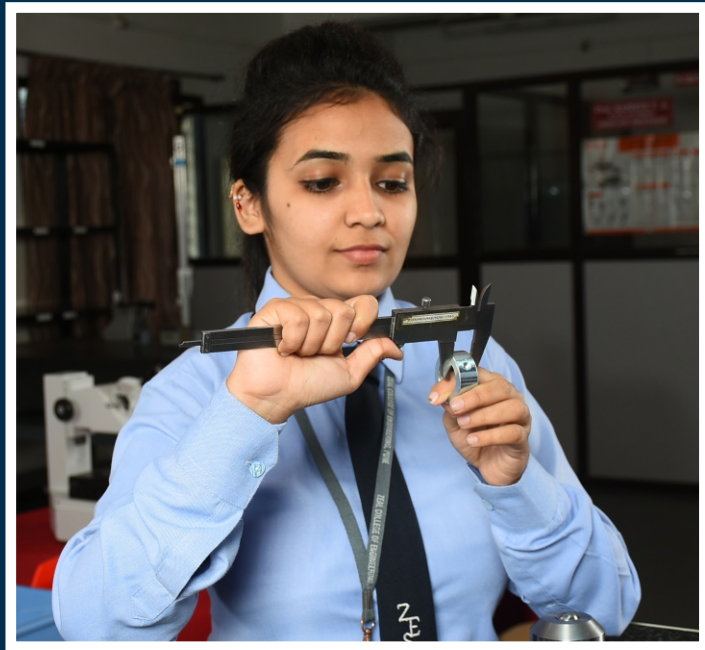
DEPARTMENT OF MECHANICAL ENGINEERING



TECHMANTRA

Newsletter

ABOUT DEPARTMENT OF MECHANICAL ENGINEERING



VISION OF THE DEPARTMENT-

To be recognized as esteemed Mechanical Engineering Program to produce to competent engineer to meet the needs of industry and society

MISSION OF THE DEPARTMENT-

- **M1** : To impart value-added education by creating an ambiance of academic excellence in teaching-learning processes.
- **M2** : To inculcate research approach through innovation and skill development centres.
- **M3** : By strengthening Industry-Institute interaction to imbibe the entrepreneur skill amongst the students.

PROGRAM EDUCATIONAL OBJECTIVES:

- **PEO1** To Impart strong fundamentals to caters the needs of society and Industry.
- **PEO2** Encourage graduates to involve in research, higher studies, and/or to become entrepreneurs
- **PEO3** To Work effectively as individuals and as team members in a multidisciplinary environment with high ethical values for the benefit of society.



Dear Readers,

It is a very pleasant moment to know that Mechanical Engineering Department of Zeal College of engineering and Research Pune is publishing their new edition of Newsletter 'TECHMANTRA' in the academic year 2020-2021 Second semester. The Department of Mechanical Engineering publishes newsletter "TECHMANTRA", it providing semester wise information of the students and staff activities taking place in inside and outside the campus. The newsletter comprises of all highlights of all events being organized in a semester including, sports activities, cultural activities, academic activities, professional society activities, etc. This Newsletter will reflect the intellectual as well as creative ideas of the students.

Prof.S.M.Godase
HOD Mech.Engg.Dept.

Dear Readers,

It is a great privilege to present the new edition of Newsletter 'TECHMANTRA'. We the team of TECHMANTRA would like to show our gratitude and heartfelt thanks to all student and faculty from mechanical department, those who have contributed to make this effort in a successful one. I am sure that this technical motivates students from Mechanical Engineering Department to participate extracurricular and co-curricular activities. We profusely thank our Principal Dr. A.M.Kate and Head of Mechanical Engineering Department Prof.S.M.Godase for giving support and encouragement for successfully completion of this edition.

Prof. S. A. Adewar
Assistant Professor,
Mech.Engg.Dept.

EXPERT LECTURE ORGANISED

- **Prof. Omkar Kulkarni** Assistant professor MIT(WPU) Pune, has delivered an expert talk on the topic "Modern Optimization Techniques" to understand various nature based optimization techniques and its implementation in mechanical engineering problems on 29,May,2021
- **Prof. Subhash Gadhave** Associate Professor DYPIT pune delivered an expert talk on the topic "Transfer function Based modeling of mechanical, thermal and fluid system" to understand concept of transfer function and modeling of various mechanical systems on 26,May,2021
- **Prof. Shoeb sheikh** Head of HVAC Department, Design & Draft Engineering Institute, has delivered an expert talk on the topic "MEP Services and VRS Systems in HVAC" to explore some application & technology in Refrigeration and Air Conditioning on 01,June,2021
- **Dr. P. R Kale** , has delivered an expert talk on the topic "Matrix method for determination of natural frequencies" to explore some application & technology in Design of mechanics on 18 ,August ,2020 for Third year student

PUBLICATIONS IN NATINAL /INTERNATIONAL JOURNALS/CONFERENCE:

- **Dr. Kulkarni C.N.** has published a paper entitled, "Novel concept of utilizing geometrically taper receiver and solar cycloidal concentrator system for enhancing efficiency of solar concentrating syste" in Materials Today: Proceedings.
- **Dr. Jagtap H. P.**, has published a paper entitled , " Performance analysis and availability optimization to improve maintenance schedule for a turbine-generator system of a coal-fired thermal power plant using Particle Swarm Optimization" , in Reliability Engineering and System Safety
- **Dr. Jagtap H. P.**, has published a paper entitled, "Performance analysis and availability optimization to improve maintenance schedule for a turbine-generator system of a coal-fired thermal power plant using Particle Swarm Optimization" in Reliability Engineering and System Safety.
- **Dr. Jagtap H. P.**, has published a paper entitled, "RAM analysis and availability optimization of thermal power plant water circulation system using PSD" in Energy Reports.
- **Dr. Jagtap H. P.**, has published a paper entitled, "Reliability analysis using condition monitoring approach" in thermal power plants in Reliability Engineering and System Safety.
- **Dr. Jagtap H. P.**, has published a paper entitled, "Application of particle swarm optimization method for availability optimization of thermal power plant" in Nature Inspired Optimization in Advanced Manufacturing Processes and Systems under series AI in Engineering CRC Press.
- **Prof. Gadhave P. S** , has published a paper entitled, "Selection of phase change material for domestic water heating using multi criteria decision approach" in Australian Journal of Mechanical Engineering.
- **Prof. Gadhave P.S** , has published a paper entitled, "Comprehensive Review of Phase Change Material Based Latent Heat Thermal Energy Storage System in International Journal of Ambient Energy.



PARENTS MEETING:

The department has organized online parent's teacher meet on 3rd May 2021 on google meet platform. The main purpose of meeting is to create a common platform, where teacher and parents come together to enrich the student's educational experiences and discuss variety of issues, regarding academics and results of students. Total 250 parents were present and interacted in the meeting. This meeting was chaired under HOD Mechanical Prof. S. M. Godase and Academic co-ordinator Prof. Y. R. Ingole

FACULTY ACHIVEMENTS:

- **Prof. H. P. jagtap** has completed Ph.d from mechanical engineering department of zeal college of engineering & research pune. The title of thesis is "availability improvement of selected critical components of thermal power plant using coordinated conditional monitoring approach".
- **Prof. P. P. Ritapure** has completed Ph.d from mechanical engineering department of zeal college of engineering & research pune. The title of thesis is "

