

DIRECTOR'S DESK



Hon. Achyut Sawantbhonsale
Executive Chairman, SYBES

I am pleased to know that our Mechanical Department is coming with its News letter 'The Horizon.' As we know that we are going through a very crucial time of COVID 19. This pandemic has changed the scenario of whole life. The education is the most affected field due to this pandemic. Though the traditional way of education changed a lot, we don't want to stop teaching-learning process. Online education has changed the whole scenario of this system. Online education has helped a lot to keep the students updated and knowledgeable. In such situation teachers are trying their best to keep students updated and knowledgeable. They are conducting various online activities to fulfill their aim. So I appreciate the efforts done by them.

So this Newsletter focusing on all the activities which have been done through online will give us the clear idea about all happenings. On this Occasion, I congratulate all team members for bringing this newsletter. I am sure that we will get good response from our students and stakeholders. ★★★

Editorial Committee

Editor in Chief

Mr. G. A. Bhosale (Principal)

Co-Ordinator

Mrs. Nehal N. Sandye (Lecturer)

Departmental Faculty Member

Mr. Amrut G. Yadav (Lecturer)

ViSiON



To have a foundational impact on our students through continual education in Mechanical Engineering.

To transform our students into employable engineers using fundamentals of Mechanical Engineering.

M1

To enhance capabilities of our students by exposing them to outside world.

M2

To serve the society through technical contribution in Mechanical Engineering.

M3

Institute level Technical Quiz competition arranged by Mechanical Department

Mechanical Department of Yashwantrao Bhonsale Polytechnic successfully conducted "Institute Level Technical Quiz Competition" through online mode which was organized on 15th September 2020 on the occasion of 'Engineers Day'. On this occasion YBP Principal, Mr.G.A.Bhosale, Mechanical Department incharge HOD Mr. A J Rane, MESA coordinator Mr A G Yadav, event coordinator Mr. R. B. Giryalkar & all teaching staff graced the event. All participants showed enthusiastic participation in the program. Overall 241 students registered for the quiz.

Before the quiz, the advertisement of this event was made by circulating the pamphlet, registration link and other information on the whatsapp groups of respective classes of the Mechanical Department students. Around 241 students registered for the competition. There were 3 prizes for the top 3 rankers. Rs 300/- for 1st rank, Rs 200/- for 2nd rank and Rs 100/- for the 3rd rank with the certificate of ranking. All the other passing candidates were given the certificates of passing to honour their interest in the competition. With reference to the data (both marks as well as time taken) recorded on the Google form. Following students won the respective ranks in the competition.

1st rank - Mohan Keni (TYME-B), 2nd rank - Elias Rodrigues (TYME-A), 3rd rank - Adinath Sawant (TYME-B)

HOD'S DESK



Mr. A.J.Rane
HOD, Mech Dept.

I am very excited to know that Mechanical Department is coming with its new vol. of a Newsletter 'The Horizon.' As we know that COVID -19 pandemic has taught us many lessons. For the students and the teaching faculty this period has turned out to be very crucial experience. Usages and adoption of technology helped to gain knowledge. With the arrival of COVID 19, the need of online education came to its front. Online platforms like zoom, youtube, moodle, google class room became very important in delivering lectures and giving knowledge. So this Newsletter focuses on the online activities which were conducted during and later the lockdown period. We are sure that we will get the good response from the readers. ★★★

Achievements in higher studies by staff members of Mechanical Engineering

Mr. A. G. Yadav, staff member from Mechanical Engineering started Ph.D. in Mechanical Engineering under Savitribai Phule Pune University, Pune. His research area is Wire Arc Additive Manufacturing.

Mr. Pushkar Parab completed his M.Tech. in Mechanical Production Engineering from Ashokrao Mane Group of Institution, Wathar under BATU University, Lonere. He achieved first class with distinction grade with 8.33 CGPA. He worked on Residual Stress Analysis in GMAW process.

Also Mr. S. H. Sawant started his Post-Graduation in Machine Design subject at Tatyasaheb Kore College of ,Warnanagar under BATU university, Lonere.



Mr. P.K. Parab



Mr. S.H. Sawant



Mr. A.G. Yadav

Various Expert Lectures conducted by Mechanical Department and TPO Cell

Mechanical Engineering department and TPO cell conducted various expert lectures and events for development of students. On 25th July 2020 TPO cell conducted expert lecture on Career Opportunities on RTO cell. Assistant Inspector of motor vehicle Mr. Nagnath Sawant was the guest for this event. He gave detailed information regarding opportunities for engineers in Government Services such as RTO, Railways and Power Generation. Mr. M. R. Desai TPO Head, arranged expert lecture on CAD/CAM and CNC Programming. Mr. Nitin Wakode, Director, Mastarcam, Deccan IT Technologies was the guest expert for this lecture.



Training And Placement Department organized expert talk on Energy Conservation and Energy Audit for Mechanical and Electrical Department. It was conducted on 17th July 2020. Prof. M. M. Wagh faculty of PCRA, Kolhapur was the guest expert for this event. He gave information regarding scope and challenges in energy audit. **All the expert lectures conducted through Online Mode and using YouTube and Zoom meeting.** Mr. Milind Desai was the Staff Coordinator for these Events. Principal Mr. G. A. Bhosale, HOD of Mechanical Department N. V. Salave, Mr. A. J. Rane and were present and also shared their thoughts during the expert lectures.



NPTEL course completed by Mr. S. S. Lanjekar from IIT Kharagpur

Mr. Sachin S. Lanjekar completed online NPTEL Course Conduction and Convection Heat transfer with Elite grade (93%). The exam was organized by Indian Institute of Technology, Kharagpur. Total duration of course was 12 days. Online proctor exam was conducted at Panaji. This course helps to gain addition knowledge in the area of conduction heat transfer, natural and forced convection, heat exchangers.

Students from Mechanical Engineering placed at various Reputed Industries

Passout Mechanical Engineering students from 2019-20 batch have been placed at various national and multi national industries. Four students have been placed at Force Motors, 11 students at KSPG Automotives, 6 students at JCB, Pune. Sahil Naik and Pavin Gawade selected at John Dheere and Mahindra, Pune respectively. Overall 45 students have been selected at various industries. Other students applied for higher studies in Mechanical Engineering, Management, Principal, HOD and staff congratulated the placed candidates.

SUMMER 2020 RESULT : TOPPERS

TY ME



Vivek Gosavi 85.91%
Sanket Padkil 81.91%
Shah Mohammedi Sharfuddin, 80.67%

SY ME



Shubhay Dongare 97.62%
Arjun Morje 95.21%
Adinath Sawant 94.89%

FY ME



Sakharan Sawant 88.09%
Bhau Ghogale 85.07%
Abhishek Gawade 85.02%

Research Paper Publication by Mr. M. R. Desai



Mr. M. R. Desai, Head of the Training and Placement Department published research paper in first international conference in Resent Advancements in technological Evolution. It was held on 19 and 20th March 2020. His research topic was "Finite Element analysis of tribological properties of worm gear under wet condition." his research paper deals with FEA

results related to tribological properties such as friction, wear, and lubrication of worm gear pair. A worm gear is having a very high reduction ratio in a single stage upto a 200:1 ratio. Due to sliding action between gear pair tribological properties mostly friction, wear, lubrication plays an important role in the performance of the worm gear. Energy wastage results in direct and indirect losses. Experimentation was carried out with Pin on Disc Tribometer to analyzed tribological properties of worm gear

pair under wet condition. Ansys Workbench 19 was used to check the effect of tribological properties of worm gear pair under the same condition.

In this research load, speed and time are considered as an input parameter and frictional force and wear are the output parameter. 16 to 22% of deviation between experimental result and simulation result. FEA method is an approximation method, so due to assumed data or inputs results are varying.

