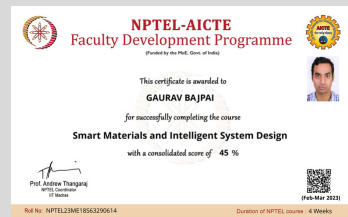


# MECHANICAL NEWSLETTER

SUMMER EDITION, 2023

## Achievements of faculty

### Certificates by NPTEL-AICTE



**Dr. Gopal Kumar Deshmukh** (Assistant Professor, Mechanical Engineering) has been awarded with the degree of "Doctor of Philosophy" in Thermal Engineering, with specialised research on Automobile Engineering, in January 2023; from Maulana Azad National Institute of Technology, Bhopal.

## FROM HOD'S DESK



### New session, new challenges, new opportunity

New session in the world of academics comes with new challenges in the form of new technology and its adaptation. It also opens new doors of opportunities to be part of exciting world of technology, innovation and entrepreneurship.

Mechanical Engineering has always been part of almost every industrial revolution that has taken place over the period of last two centuries, and played a key role. The industrial revolution 4.0, is unfolding in the world and opening a big window of opportunity for mechanical engineers to participate and bring equality and prosperity to the world and for themselves. Smart manufacturing, including additive manufacturing, nano materials, alternative sources of energy are some of the area, we mechanical engineers need to work upon. Academics is the place to kick start and in line with this new curriculum which is in implementation phase is focused on industry 4.0 with introduction of new subjects, new chapters and other initiatives to make our burgeoning engineers, to meet the new challenges. I am confident that our students will play a key role in future technology.

• **Dr. Sanjay Katarey**

## Bureau Of Indian Standards club

Bureau of Indian Standards (BIS) [Ministry of Consumer Affairs, Food & Public Distribution, Government of India] is the National Standards Body mandated under the BIS Act, 2016 to formulate Indian Standards for products, processes and services covering different sectors of economy, and is also responsible for devising and implementing Conformity Assessment Schemes, which involve Certification and Factory & Market Surveillance to monitor the implementation of the standards.

Students are the future and form the foundation on which a strong, vibrant and dynamic nation is built. The values children are exposed to in their formative years get inculcated in their young minds and serve as a force multiplier that has the capacity to transform the future of a nation.

Quality consciousness, based on standardization, is one of the pillars of accelerated economic development and priming students to appreciate the significance of quality, standards and standardization can serve as a catalyst to improve societal awareness on these subjects

In View of the above BIS forms a standard Club for Mechanical Engineering students of our institute.

Through a variety of activities under these Clubs, young talents get learning opportunities in the field of quality and standardization. Faculties have an important role in the activities of the Clubs and would serve as beacons of light, guiding and motivating students to channelize their creativity and enhance their scientific temperament. Though in its nascent stage, the Standards Clubs have already garnered prominence and are being enthusiastically promoted by educational institutions to supplement and improve the schooling experience of students and provide opportunities to better their professional and personal growth.

Standards Club in Mechanical Engineering department will organize at least two or more programmes in an academic year (2023-24), at least one each on the following two themes:

- Competition on writing Standards
- Workshops / Seminars on specific standards, workshops on areas for developing new standards, industry-oriented projects on standards, etc.

• **Dr. Ashish Manoria**

# MECHANICAL NEWSLETTER

## Achievement

1	Dheeraj Pali	Ceasfire	4.8 LPA
2	Ma Muneer Sheikh	Ceasfire	4.8 LPA
3	Srajan Shrivastava	Ceasfire	4.8 LPA
4	Sudheer Pandey	Ceasfire	4.8 LPA
5	Shantanu Dixit	HEG Ltd.	1.62 LPA
6	Ashut Singh Pawar	HEG Ltd.	1.62 LPA
7	Ashwary Turkar	HEG Ltd.	1.62 LPA
8	Vikas Patel	HEG Ltd.	1.62 LPA
9	Priyanshu Khare	MITS Global Consulting Pvt Ltd	6.0 LPA
10	Stuti Shrivastava	Tcs Ninja	3.5 LPA
11	Ritesh Singh Rathore	Tcs Ninja	3.5 LPA
12	Rudra Pratap Tomar	Tcs Ninja	3.5 LPA
13	Vikram Singh	Tcs Ninja	3.5 LPA
14	NITIN SINGH KHARAR	Pantagon Space	3.0 LPA
15	Apeksha Parihar	Pantagon Space	3.0 LPA
16	Sudheer Pandey	Pantagon Space	3.0 LPA
17	Srajan Shrivastava	Physicswallah	3.0 LPA
18	Aparita Singh Raghuvanshi	Physicswallah	3.0 LPA
19	Ashut Singh Pawar	Physicswallah	3.0 LPA
20	Astri Gupta	Physicswallah	3.0 LPA
21	Apeksha Parihar	Physicswallah	3.0 LPA
22	VRANSIT SINGH	Osipder	4.2 LPA
23	Rashi Sharma	Osipder	4.2 LPA
24	Ayush Pandey	Osipder	4.2 LPA
25	Shantanu Dixit	Osipder	4.2 LPA
26	Ravi Jain	Osipder	4.2 LPA
27	Ma Muneer Sheikh	Osipder	4.2 LPA
28	KALSHESH SHARMA	Sustainability Ltd.	3.5 LPA
29	Stuti Shrivastava	Eicher	4.5 LPA
30	Ashwary Turkar	Eicher	4.5 LPA
31	Aruni Jais	Eicher	4.5 LPA
32	Sherya Dongre	Eicher	4.5 LPA
33	Rashi Sharma	Eicher	4.5 LPA
34	Harshali Tendekar	Eicher	4.5 LPA
35	Vikram Singh	Eicher	4.5 LPA
36	Vikas Patel	Eicher	4.5 LPA
37	Stuti Shrivastava	Linde Engineering	5.0 LPA

We are delighted to announce the outstanding performance of students who have graduated in 2023. Many of the students have made us proud, being placed shortly after their studies. Their dedication, hard work, and commitment to excellence have truly paid off. This accomplishment stands as a testament to the quality of education and guidance provided at our institution, empowering students to succeed in their chosen fields. More than 20 students are placed in 2023. Their remarkable feat is an inspiration to current and future students, motivating them to strive for greatness. We are privileged to have been a part of their educational journey and look forward to witnessing many more success stories in future.

## Sport's achievement



SATI cricket team had won Shrimant Madhavrao Scindia Memorial State Level Cricket Tournament-2023 under the captaincy of **Chandrama Prasad Shastri** final year student of Mechanical Engineering.

Students who wish to share any *article, research, achievement, certification, etc.* for publishing in the next edition of the "**Mechanical Newsletter**", can submit their work at [newsletter.me@satiengg.in](mailto:newsletter.me@satiengg.in) For any suggestions, updates, and queries, you can contact us at the above-mentioned email.

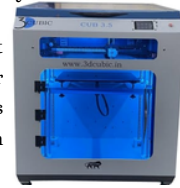
## Facilities added in IDEA lab

Two new facilities (CNC router and advanced 3D printer) have been added in IDEA lab for developing structures. Students can use these machines to create structures like frames, supports and machine elements like gears, small pulleys and slotted links for their projects.

CNC stands for computer numerical control. CNC router creates objects from wood. Parts of a project can be designed in the computer with a CAD/CAM program and CAD file is uploaded to CNC router software. Software creates simulation of cutting operation and projects finished part virtually. Once this file uploading phase is completed router interface and control unit enables actual cutting operations in sequence to produce finished parts.



Advanced extended 3D Printer based on FDM/ FFF Technology having Layer Resolution minimum of 0.08 micron. It is provided with aluminum extruder for High Accuracy. The Print Temperature is 30 to 290 Degree Celsius. This printer can print object of material like PLA, ABS, Composite, Nylon, Carbon Fiber Flexible, PCTPE, PVA, TPU, HIPS, PETG, P.C, WOOD etc. It is facilitated with power failure protection and touch screen interface. It has USB connectivity and software compatibility to Mac, Windows & Linux OS.



• **Dr. C.P. Singh**

## Board Of Studies

The Board of Studies (BOS) is the basic constituent of the academic system of an Institute. Some of its functions include framing the content of various courses, reviewing and updating the content from time to time and introducing new courses of study. The meeting of Board of studies is conducted time to time for monitoring of academic status and to get rid of any hiccup in achieving academic excellence.

Likewise meeting of board of studies of mechanical engineering held on 8th of June 2023 in hybrid mode in which following important decisions were taken:

- Addition of value added course to enhance professional knowledge of students.
- Addition of Holistic education courses for overall development of students.
- Introduction of open elective subjects from III semester onwards.
- Introduction of Minor degree and Honors degree process in Mechanical Engineering
- Any student of UG engineering program other than mechanical engineering discipline, who earns additional twenty credits from the approved SWAYAM course list will be awarded minor degree in mechanical engineering.
- Any student of UG Mechanical Engineering discipline who earns additional twenty credit from the approved SWAYAM courses list will be awarded B Tech in Mechanical Engineering with Honors (Advances in Manufacturing Technology).

## Glimpses Of IQAC Workshop



## Research papers

- Pradeep Singh, CP Singh, JP Shakya, S Tomar, V Shrivastava "**Effects of Cobalt on mechanical and electrochemical properties of porous Ti-Al alloy Advances in Materials and Processing Technologies**" Taylor & Francis ESCI Accepted June, 2023
- N. S. Raghuvanshi, G. Dutta and M. K. Panda "**Density wave instability analysis in a parallel channel natural circulation loop of supercritical pressure fluid Nuclear Engineering and Design**" Elsevier SCI Published January, 2023
- Dr. Kamlesh Kumar Sharma, Dr. Sanjay Katarey "**Simulation of Air Conditioning System for substitute of Refrigerant R-22 by using Refrigerant R407C and R410A**"

### Our Mechanical Newsletter's team :

#### Advisor:

**Dr. Pankaj Agarwal**  
Professor, MED.

#### Faculty Coordinators

**Dr. C. P. Singh**  
Asst. Professor, MED

**Prof. Nikhil Mohan Vyas,**  
Asst. Professor, MED.

#### Editors

**Akshat Namami Pathak** (4th year)

**Abhijeet Singh Thakur** (4th Year), **M. Sadananda Singh** (4th Year)  
**Aditya Suryawanshi** (4th Year), **Abhishek Kumar** (4th Year),  
**Mahima Choudhary** (4th year), **Shailee Soni** (4th year)