

# Department Newsletter

## *Mechanical Engineering Department* *SIES Graduate School of Technology, Nerul*

Newsletter 31<sup>st</sup> December 2021

Volume V, Issue 1

### *Vision of the Department*

To be a Centre of Excellence in the field of Mechanical Engineering instrumental in Innovation, Entrepreneurship and Serving the needs of Society.

### *Mission of the Department*

- To create an environment that inspires students and staff to develop competency in Mechanical Engineering field.
- To create the infrastructure necessary for overall development of students to work on current technologies in the Industry.
- To provide entrepreneurial culture to tackle the problems of Society.

### *PEO*

- Build a successful career in National or Multinational Organizations or as an Entrepreneur.
- Pursue higher education for professional development
- Exhibit ethics, values and good leadership qualities for organizational development.

### *PSO*

- An ability to identify, formulate, solve, analyze and draw appropriate conclusions to mechanical engineering problems in the field of design and manufacturing.
- An ability to use the techniques, skills and modern engineering tools such as CAD-CAM, analysis and automation tools necessary for engineering practice.

**FACULTY PROFILE**

Sr No	Name	Qualification	Designation	Area of Interest
1	Dr. Rupendra Nehete	Ph.D.(Production Engineering)	Professor	Manufacturing Renewable Energy Casting
2	Dr. Pradip Patil	Ph.D.(Production Engineering)	Associate Professor	Manufacturing systems and performance analysis Static and dynamics analysis of machinery
3	Prashant Ambadekar	M.E. (Production Technology and Management), PhD(pursuing)	Assistant Professor	Manufacturing, Industrial Engineering, Image Processing and Machine Learning
4	Ganesh Kadam	M.Tech.(Manufacturing)	Assistant Professor	Manufacturing, Material Technology, Energy Engineering, Heat-Power Engineering, Production Management
5	Ali Ansari	M.Tech.(Mechanical)	Asst Professor	Engineering Mechanics, Strength of Material , Engineering Drawing , FEA
6	Ajay Hundiwale	M.Tech (Thermal Engineering)	Assistant Professor	Heat Transfer, Refrigeration and Air Conditioning, Fluid Mechanics
7	Dr. Kaustubh Chavan	M.Tech. (Heat Power Engg.), Ph.D.(Mechanical Engg.)	Assistant Professor	Renewable Energy, Solar Thermal, Computational Fluid Dynamics (CFD)
8	Prajakta Kane	M.Tech (Thermal Engineering)	Assistant Professor	Internal Combustion Engine, Automotive Engineering, Heat Transfer, Engineering Drawing
9	Lokpriya Gaikwad	Ph.D*(.Mech.) M.E.(Manufacturing Systems Engineering)	Assist. Professor	Manufacturing strategy, Quality Management, Production & Operation management
10	Chandan Chaudhari	ME (CAD/CADM & ROBOTICS)	Assistant Professor	Mechanical System Design, Computer Aided Engineering,

## NON-TEACHING STAFF

Sr.No	Name
1	Mr.Pravin Virkar
2	Mr. Vinayak Chikane
3	Mr. Yogesh Panchal
4	Mr. Arvind Patil
5	Mr. Amol Patil
6	Mr. Arun Annamalai
7	Mr. Ankush Gade

## OUR CURRENT CLASS STRENGTH

Year	Total No of students	Boys	Girls
SE	69	64	05
TE	70	65	05
BE	76	69	07

## DEPARTMENT INFRASTRUCTURE



MECHANICS LAB



MQE LAB



PROJECT LAB



ΦΛΥΙΔ ΜΕΧΗΑΝΙΧΕΣ ΛΑΒ



MECHATRONICS LAB



SOM LAB

## DEPARTMENT INFRASTRUCTURE



RAC LAB



CNC LAB



HYDRAULIC LAB



MATERIAL TECHNOLOGY LAB



MACHINE SHOP



WORKSHOP

## DEPARTMENT ACTIVITIES

- Conducted special lectures for DSE students for Sem-III in online as well as offline mode.
- Provided guidance and orientation to SE and TE students for selection of topics for second year mini-projects.
- Provided guidance and orientation to BE students for selection of topics for final year projects.
- The department organized various SDPs for SE, TE and BE students.
- The department organized inhouse internship for SE, TE and BE students.
  
- Motivated and facilitated students of SE, TE and BE to attend webinars, online sessions and online workshops related to technical topics, internships, higher education and job opportunities, and the information for the same were provided from time-to-time.
- IQAC audit
- NAAC and AQAR data uploading.
- ISHRAE student chapter installation 2022-23.
- IIIE student chapter installation 2022-23.
- Orientation for DSE students.
- Organised ISTE approved STTP
- Organized Parents-Teachers Meet.
- Faculty-Alumni interaction.
- Training and Placement.
- Installation ceremony of ISHRAE SIES GST Student Chapter for 2022-23 was carried on 11th October, 2022.
- Organized and conducted online parents-teachers interaction on 24th September, 2022.
- Conducted TE mini-project presentation on project progress on 29th and 30th September, 2022.
- NAAC AQAR work
- NAAC SSR work

## DEPARTMENTAL ACHIEVEMENTS

- Prof. Ajay Hundiwale and Prof. Chandan Chaudhari mentored and conducted online in-house internship for students of SE to BE on the topic ‘Simulation using ANSYS and CFD’ scheduled from 21st June to 3rd July 2021.
- Prof. Siddique Ahmed and Prof. Prashant Ambadekar mentored and conducting online in-house internship for students of SE to BE on the topic ‘3D Modeling and Printing’ scheduled from 21st June to 3rd July 2021.
- Dr. R.S. Nehete and Dr. Pradip Patil published paper entitled ‘Root cause analysis of failure of suspension spring used in fiat bogie of indian railways’ in Industrial Engineering Journal in June 2021.
- Dr. Pradip Patil presented and published paper entitled ‘Methodology for Identification of Quality of clean-Cut surface for IS2062HR sheet metal blanking using Random Forest’ in 2021 5th Conference on Information and Communication Technology (CICT) by IIIT, Kurnool, India in 2021.
- Dr. R.S. Nehete and Dr. Pradip Patil presented and published paper entitled ‘Investigation of Blanking Clearance for IS277GI by Artificial Neural Network (ANN)’ in 2021 4th Biennial International Conference on Nascent Technologies in Engineering (ICNTE) by Fr FRCRIT, Vashi, Navi Mumbai in 2021.
- Dr. R.S. Nehete and Dr. Pradip Patil published paper entitled ‘Invesigaton of blanking clearance for IS277GI by Artificial Neural Network (ANN)’ in IEEE Xplore in August 2021.
- Prof. Lokpriya Gaikwad published paper entitled ‘Effect of green practices on organizational performance: An empirical study’ in Journal of Basic and Applied Sciences in August 2021.
- Prof. Ganesh Kadam was conferred ‘Ph.D. (Mechanical) Degree in Engineering and Technology’ by Dr. Babasaheb Ambedkar Technological University (DBATU), Lonere (Government-aided Autonomous – Maharashtra State’s Technological University) in the 23rd Convocation Ceremony on 4th September, 2021.
- Prof. Lokpriya Gaikwad won best teacher award in Academistan on 7th September, 2021.
- Prof. Lokpriya Gaikwad presented paper entitled ‘Implementation of Six Sigma DMADV to gain a competitive advantage: A case study’ in international conference ICMMSE:IR 2021 organised by Sandip Institute of Technology and Research Centre Nashik during 18th-19th September, 2021.
- Dr. Pradip Patil’s paper entitled ‘An Approach to Improvement in Heat Flow Analysis of Continuously Variable Transmission (CVT)’ got published in International Journal of Engineering and Applied Physics on 25th September 2021.
- Prof. Prashant Ambadekar published patent on ‘Method and process to identify tool wear through image processing’ on 29th October, 2021.

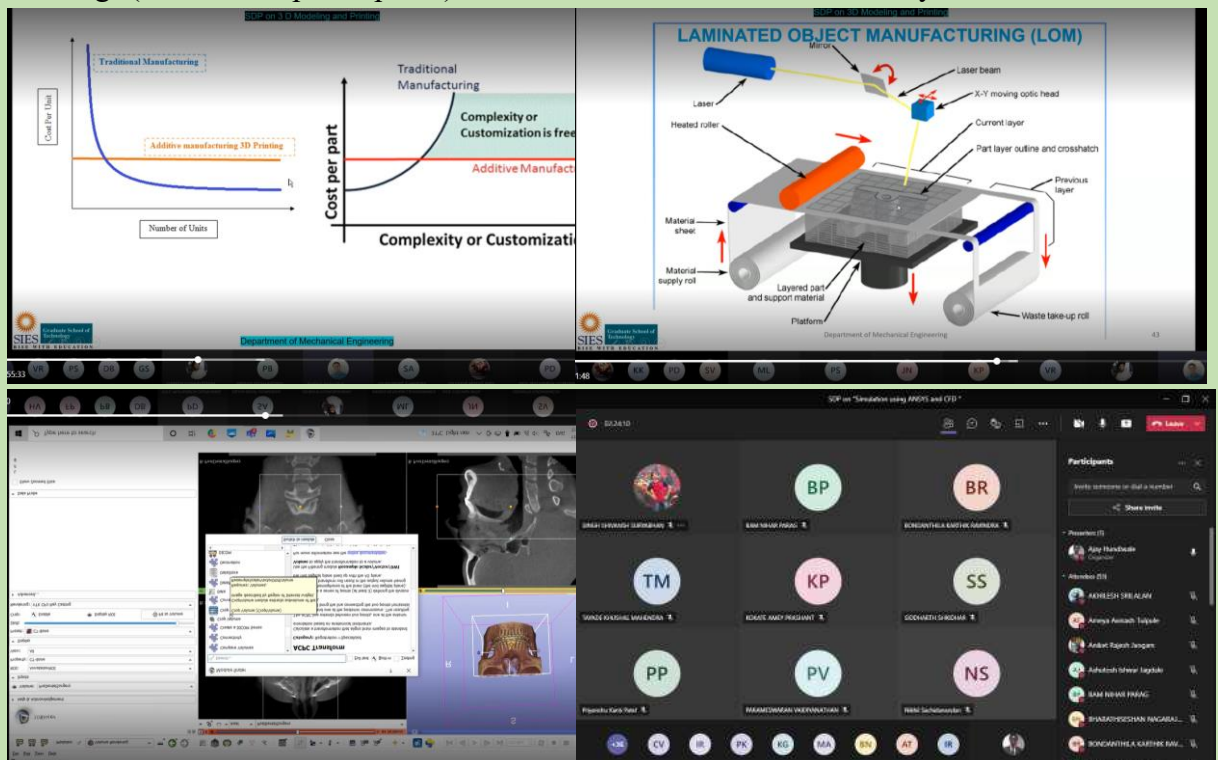
- Dr. R.S. Nehete presented and published paper entitled ‘Developing a Novel Approach for Crack detection in Metal Sheet through frequency analysis’ in Equinox 2021 6th International conference by Terna Engineering College, Navi Mumbai.
- Dr. R.S. Nehete and Dr. Pradip Patil published paper entitled ‘Developing a Novel Approach for Crack detection through frequency analysis’ in International Journal of Emerging Technologies and Innovative Research in October 2021.
- Dr. Pradip Patil published paper entitled ‘Dynamic response prosthetic leg’ in International Journal of Emerging Technologies and Innovative Research in October 2021.
- Dr. Pradip Patil published paper entitled ‘Condition Monitoring and Diagnosis of an IC Engine using Vibration Recognition’ in International Journal of Emerging Technologies and Innovative Research in October 2021.
- Dr. Pradip Patil presented and published paper entitled ‘An Approach for Predictive Maintenance and Monitoring of IC Engine Health for Future Cities’ in Conference for Future Cities(CTFC 2021) by Pillai College ,of Engineering, Panvel, Navi Mumbai, India in 2021.
- Dr. Pradip Patil presented and published paper entitled ‘Investigation of quality of clean-cut surface for sheet metal’ in Conference for Future Cities(CTFC 2021) by Pillai College ,of Engineering, Panvel, Navi Mumbai, India in 2021.
- Prof. Ajay Hundiwale presented and published paper ‘Design of Pancake Heat Exchanger for Waste Heat Recovery’ in IEEE CTFC 2021 Conference and Xplore by Pillai College of Engineering, Panvel.
- Dr. Rupendra Nehete presented and published paper entitled ‘Numerical Analysis to investigate the effect of solidification’ in AICTE sponsored third international conference on computing in Mechanical engineering (ICCME 21) by SCMS school of engineering and technology, Ernakulam in 2021.
- Prof. Ajay Hundiwale published paper entitled ‘Liquid Desiccant based Hybrid Air Conditioner: Offers High Performance while Maintaining Both Desired DBT and RH’ in Air Conditioning and Refrigeration Journal (ISHRAE magazine) in October 2021.
- Prof. Prashant Ambadekar acted as a reviewer and reviewed papers for international conference on ‘Future cities’ organized by PCOE, Panvel. On 8th October, 2021.
- Prof. Prashant Ambadekar and Dr. Rupendra Nehete filed patent on ‘Telescopic shaft for four-wheeler terrain vehicles’ on 21st October, 2021.
- Prof. Lokpriya Gaikwad published chapter having title ‘Effect of Lean practices on organizational performance’ in the book ‘Lean Manufacturing’ by Intechopen publications on 3rd November, 2021.
- Prof. Lokpriya Gaikwad was invited as an expert and gave a Guest/Expert lecture for Third year students on topic ‘Robust Design Methods’ at Mechanical Engineering department of G. M. Vedak Institute of Technology, Tala on 20th November, 2021.
- Dr. Pradip Patil published paper entitled ‘Methodology for Identification of Quality of clean-Cut surface for IS2062HR sheet metal blanking using Random Forest’ in IEEE Xplore 2021 5th Conference on Information and Communication Technology (CICT) in December 2021.



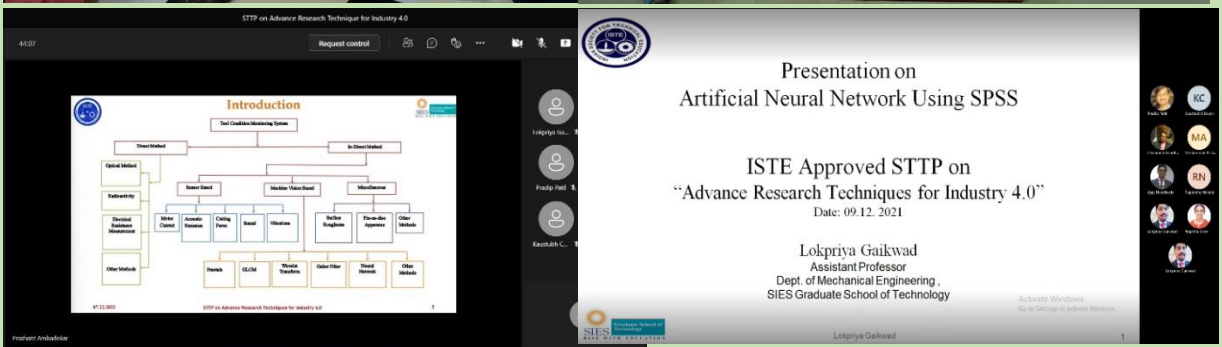
- Dr. Rupendra Nehete, Dr. Pradip Patil, Dr. Ganesh Kadam, Dr. Kaustubh Chavan, Prof. Prashant Ambadekar and Prof. Lokpriya Gaikwad gave expert talk in ISTE approved STTP on ‘Advance Research Technique for Industry 4.0’ organized by Mechanical Engg. Department, SIES GST from 6-11th December, 2021.
- Prof. Prashant Ambadekar was coordinator for SDP on ‘Structural modeling and 3D printing’ in collaboration with PPT department conducted for SE, TE and BE students from 13-20th December, 2021.
- Prof. Prashant Ambadekar and Prof. M. Ali Ansari conducted and delivered expert sessions in SDP on ‘Structural modeling and 3D printing’ in collaboration with PPT department for SE, TE and BE students from 13-20th December, 2021.
- Prof. Lokpriya Gaikwad published paper on ‘Implementation of Lean Six Sigma in Manufacturing Firm for Competitive Advantage’ in the Journal of Recent Activities in Production, Volume 6, Issue 3, December 2021, ISSN: 2581-9771.
- Prof. Lokpriya Gaikwad received ‘Academic Excellence Award 2021-2022’ by the Novel Research Academy on 28th December, 2021.
- Prof. Lokpriya Gaikwad completed Ph.D. Degree from Mumbai University (SPCE, Andheri) on 31st December, 2021.

## STUDENTS ACHIEVEMENTS

- Conducted online in-house internship for students of SE to BE on two topics – ‘Simulation using ANSYS and CFD’ (78 students participated) and ‘3D Modeling and Printing’ (17 students participated) scheduled from 21st June to 3rd July 2021.

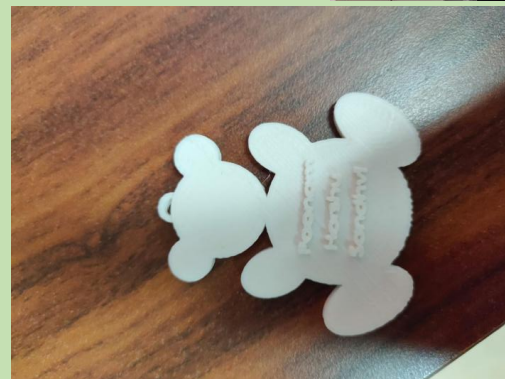


- Conducted online meeting in MS Teams with BE students for selection of final year project topics on 15th and 16th July 2021.
- SE students participated in webinar and interactive session on ‘Future Scope of Engineering’ by Dr. Jonathan Joshi, Co-founder & CEO Eduvance organized by admission team SIESGST on 28th August, 2021.
- SE students participated in webinar on ‘Tools for Cyber Security for Youth’ by Dr. Varun Kapoor, ADGP, Madhya Pradesh organized by CE department SIES GST on 11th September, 2021.
- Organized and conducted Parents-Teacher meeting on 17th September, 2021.
- Organized and conducted seminar on ‘Writing a conference/journal paper based on projects’ for TE and BE students on 5th October, 2021.
- Students participated in webinar on ‘Gender Sensitization’ by Ms. Shruthi, Fellowship Lead at The Gender Lab and Mr. Aniket Wakankar, Co-leading at The Gender Lab organized by WDC SIES GST on 14th October, 2021.
- Conducted an online session on ‘Resume Building’ by Prof. Rakhee Das, CE department for SE students on 13th November, 2021.
- Conducted orientation program for DSE admitted students on 10th December, 2021.
- Department organized and conducted ISTE approved STTP on ‘Advance Research Technique for Industry 4.0’ from 6-11th December, 2021.





- Organized and conducted SDP on ‘Structural modeling and 3D printing’ in collaboration with PPT department for SE, TE and BE students from 13-20th December, 2021.



- Department organized and conducted in-house internships for SE, TE and BE students in December 2021.

### ***Editorial Board:***

- ✚ Dr. Rupendra Nehete [HoD, Mechanical Dept]
- ✚ Dr. Pradip Patil [Associate Professor, Mechanical Dept]
- ✚ Prof. Chandan D. Chaudhari [Assistant Professor, Mechanical Dept]
- ✚ Prof. Prashant Ambadekar [Assistant Professor, Mechanical Dept]
- ✚ Mr. Nikhil Sachidanand , Mr. Shivam Varade, Mr. Shubham Varade [Student Members, Mechanical Dept]

### ***Editors Message***

We heartily welcome to the first issue of volume V of our **Department Newsletter December 2021**. We are indeed very happy and proud in bringing this newsletter about the latest developments and programs in the department. Newsletter acts as a communication channel among the alumni, faculty, students and experts in Mechanical Engineering.