

# SYNERGY-34

DEPARTMENT OF MECHANICAL ENGINEERING

A Half Yearly News Magazine

January 2022 – June 2022



## DEPARTMENT VISION

To be a department providing excellent education in the field of Mechanical Engineering with effective teaching, learning and industry interaction.

## DEPARTMENT MISSION

- To prepare effective and responsible graduate for global requirements by providing quality technical education & enable them to become leaders & pioneers in their field.
- To provide a program of professional study grounded in engineering fundamentals augmented by the development of interpersonal skills, social values, experiential learning, and flair for life-long learning.
- To establish center of competence to conduct basic and applied research in core area and strengthen the link with industry of time relevance.



**Prof. Vinayak Pandurang Gaikwad has been awarded PhD in Mechanical Engineering by Shivaji University, Kolhapur**

Prof. Vinayak Pandurang Gaikwad from Mechanical Engineering Department has been awarded PhD in Mechanical Engineering by Shivaji University, Kolhapur under the guidance of Dr S.S. Mohite. He has carried out the doctoral research work entitled "Study of Fluid flow and Heat transfer in microchannel heat sinks for monolithic chip cooling application". The research work is highly useful in the field of Electronic cooling. He has also been granted a patent based on this PhD research by Patent Office, India.



**Mr. Prahalad Sawant Badkar from Mechanical Engineering Department has been awarded Ph.D. in Mechanical Engineering by Visvesvaraya Technological University, Belgaum (VTU)**



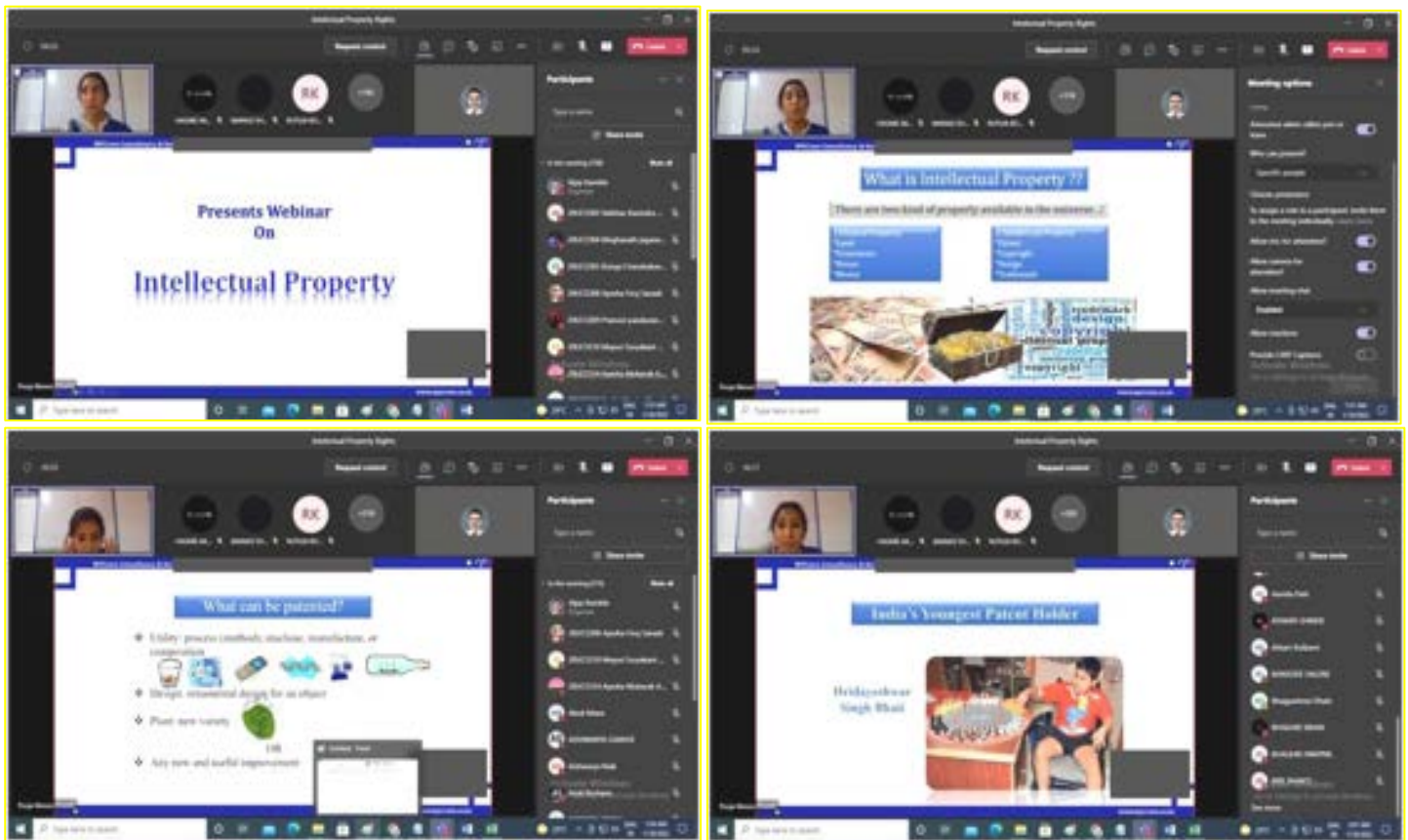
Mr. Prahalad Sawant Badkar from Mechanical Engineering Department of our institute has been awarded Ph.D. in Mechanical Engineering by Visvesvaraya Technological University, Belgaum (VTU) under the guidance of Dr. M. M. Benal, Principal, Government Engineering College, Challakere, Chitradurga, Karnataka. He has carried out the doctoral research work entitled “Experimental and Numerical Analysis of Power loom for Suppression of Vibration and Noise”. This Kind of research work helps to provide the useful information to the industries to reduce the vibration and noise level. He has published seven research papers in International Journals and Conferences (Scopus indexed) based on his research.

He was felicitated at the auspicious hands of our Chairman Hon’ble Shri. K.B. Awade. Director Prof.Dr. P.V. Kadole and HOD of Mechanical Engineering Department Prof.Dr. V.R. Naik were present on this occasion.



**Participation of DKTE IDEA LAB GURUs  
in Advanced FDP on ‘Smart Manufacturing’**

AICTE organized Advanced FDP for 'Idea Lab Gurus' to establish upcoming idea labs at various institutes. DKTE is one of the institutes who have received the AICTE grant for DKTE Idea Lab. As per IDEA Lab scheme, Gurus should be appointed to organize, conduct and manage IDEA Lab activities for students, faculties and industrial people. Gurus will help them to convert their ideas into reality. In the role of 'IDEA lab gurus', faculties from Mechanical Engineering Department of our institute – Mr.Suyog Rayjadhav and Mr.Utkarsh Patil participated in One Week Advanced FDP on 'Smart Manufacturing' under ATAL Scheme from 16th to 22nd December 2021 organized by Department of Manufacturing Engineering and Industrial management, College of Engineering, Pune (COEP). They got the opportunity to work on advanced machines like CNC Wood Router, Laser Cutting Machine and 3D Printer. The 'CNC prototype lathe' has been designed and developed by our DKTE Team with successful testing and calibration of the machine. Prof. Dr. Sandeep Anasane (COEP) expressed his views on Idea Lab Management and activities. Also other experts focused their views on Design Thinking, IPR and Patents, Yoga and Stress Management, Vigyan Ashram Fab Lab, Cam Programming, 3D Printing, IoT and Application, Reliability and Product Design. On the valedictory day the advisor of AICTE Dr. Neeraj Saxena was also present.



### **Webinar on “Intellectual Property Rights (IPR)” for Students**

Webinar on “Intellectual Property Rights (IPR)” was organized on Wednesday, 18<sup>th</sup> January 2022 for the students of Third year B.Tech. of all branches. Session was conducted by Ms.Puja Menon from MyCrave Inc. Vadodara. During the session, various types of IPR like utility patent and design patent were explained with related examples. Typical products as well as case studies were shared to students followed by question answer session. This webinar was coordinated by Prof. V.A. Kamble from Mechanical Dept., Prof. Vivek Kheradkar from CSE Dept. and Prof. Dr. V.R. Naik, HOD, Mech.Engg.





### Seminar on Piping Design Engineering and Construction

Mechanical Engineering Students Association (MESA) organized a seminar on “Piping Design Engineering and Construction” on Monday 4th April 2022. The seminar was conducted by Mr. Ravi Jorjil, Manager-Business Development, Asian Academy, Pune. The seminar was organized for students of third and final year Mechanical Engineering students. Contents discussed in seminar are: Current situation in process industry, requirement of piping design engineers and placement situation in process industry. The seminar was coordinated by Prof. B.B. Kabnure under the direction of Prof.Dr. V.R. Naik.



**Design Patent Granted to "VARYING FORCE MEASURING DEVICE"  
Developed by Prof. V. A. Kamble and Prof.Dr. V.D. Shinde.**

Indian Design Patent has been granted to Prof. V. A. Kamble and Prof.Dr. V.D. Shinde, faculty members from Mechanical Engineering Department of our institute, which is entitled as "VARYING FORCE MEASURING DEVICE". Varying force measuring device helps in the measurement of force without disturbing the accuracy of measurement. It can be applied for wide range of force and reduces the number of force measuring devices. The invented device machine can be used for weighing purpose and in calibration process of tensile testing machines, hardness testing machines.

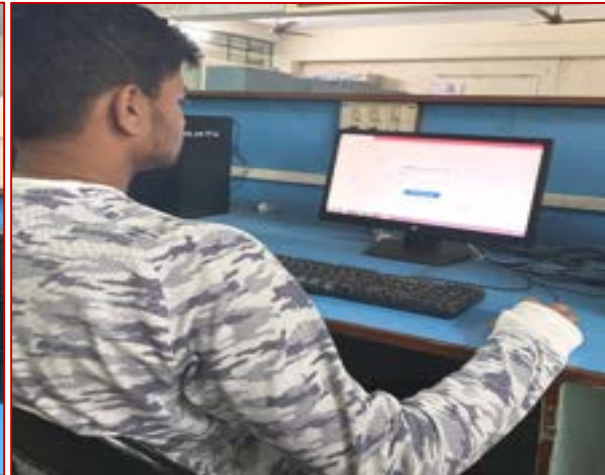
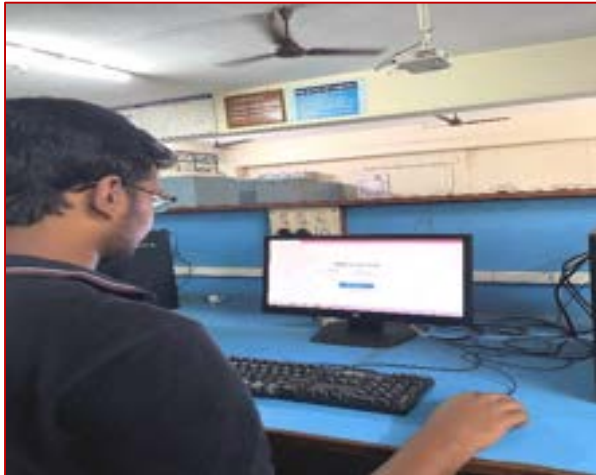
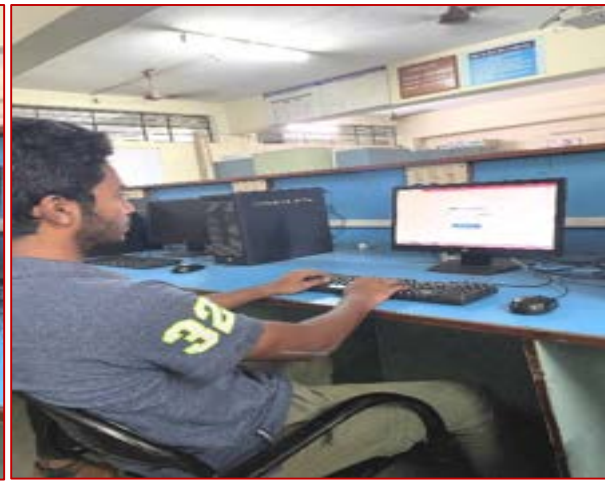


### **Industrial Visit of SY B. Tech Mechanical Engineering Student**

SY B.Tech. Mechanical Engineering students visited 'Konark Heat Services' @ Five Star MIDC Kagal and Laxmi Lada Pumps, S.K. Heat Treaters, Vira Pumps located in MIDC Gokul shirgaon on 22 nd April 2022 as a part of Industrial Exposure. During the visit, students were exposed to different heat treatment processes, Manufacturing and Assembly of submersible pumps.

Industrial visit was coordinated by Prof. (Dr.) V.D.Shinde, Prof. R. D. Patil, Prof. B.B.Kabnure, Prof. G.C.Mekalke and Mr. M. K. Desai.





## **Tata Technologies Ltd.(TTL) - Ready Engineer Program (Re 2.0)**

Our institute has signed MOU with TATA Technologies Ltd., Pune. As per MOU, TTL has conducted an online Ready Engineer (RE2) final test on 30<sup>th</sup> April 2022, which included test on BIW and Plastic trims. For this program total 80 students of Third Year B.Tech. Mechanical class were enrolled. The test was coordinated by Prof. R.R. Kolhapure, Prof. G.C. Mekalke, Prof. B.B. Kabnure and Prof. A.V.Sutar under the guidance of Prof. Dr. V. R. Naik. This certification will enhance the academic credentials of the students in the domain area of BIW and Plastic trims design in automobiles.



**Mr. Aditya Kadole secured admission  
for MS @ 'Northumbria University Newcastle, UK'**

Mr. Aditya Kadole from Mechanical Engineering of our institute has been selected for Master of Science in 'Engineering Management with Advanced Practice' at the very renowned institute in the UK- 'Northumbria University Newcastle, UK.'



**Mr. Pratik Balwan of Mechanical Engineering secures admission to MBA in Operations @ IIM Bodh Gaya**

It is our pride that, Mr. Pratik Ajit Balwan, from Mechanical Engineering Department of our institute, secured admission at 'Indian Institute of Management (IIM)', Bodh Gaya, Bihar to pursue 'Master of Business Administration (MBA) in Operations'. He has Scored @ CAT 2021 exam with overall percentile of 97.30. We wish him all the best for his career at IIM.



**Mr. Nikhil Hulle got selected @ 'Texas A&M University, USA' for MS**

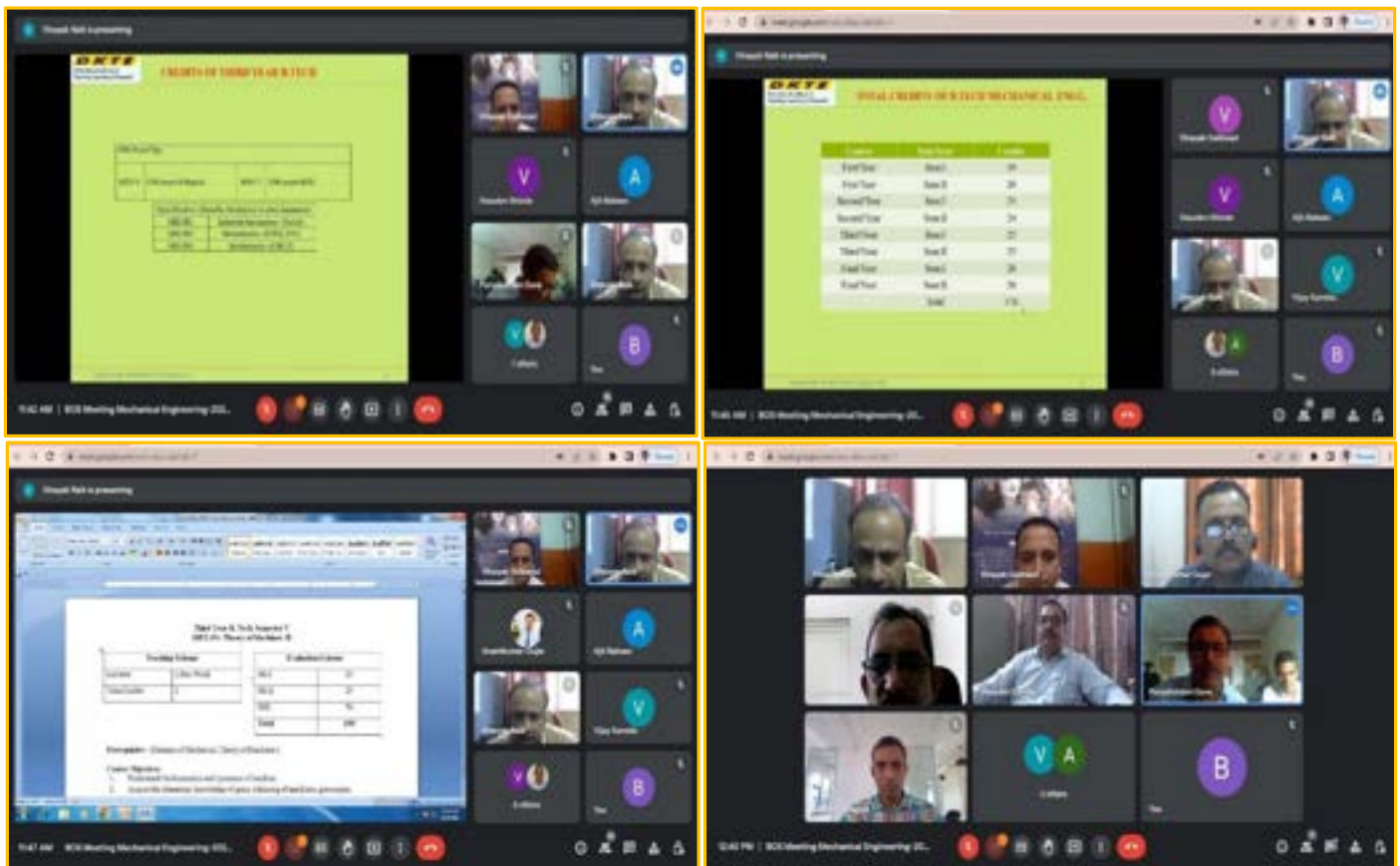
Mr. Nikhil Hulle, a student from Mechanical Engineering of our institute has secured admission in Master's Program- MS in 'Industrial Engineering' at very renowned public research university -'TEXAS A&M UNIVERSITY, USA'.





**Miss. Prajakta Mahesh Chougule (Second year Mechanical Engineering) secured First Runner-up position in ‘Abhivaykti’ National Paper presentation contest**

Miss. Prajakta Mahesh Chougule (Second year Mechanical Engineering) secured First Runner-up position in ‘Abhivaykti’ National Paper presentation contest in Pioneer-2022 conducted at KIT’s college of Engineering Kolhapur. They presented their paper on the topic “Role of Green Technology in Designing Sustainable Engineering Framework”.



**BOS Meeting of Mechanical Engineering**

Board of Studies (BOS) Meeting of Mechanical Engineering was organized on Thursday, 30<sup>th</sup> June 2022 through online mode. Prof.Dr. V. R. Naik, Chairman and Head of Department, Mechanical Engineering, welcomed all the BOS members and appreciated the support extended by them. Prof.Dr. Jayant Kittur, Principal, Gogte Institute of Technology, Belgaum, Prof.Dr. Raju S. Pawade, Professor, Dr. Babasaheb Ambedkar Technological University, Lonere, Prof.Dr. Anil Acharya, Government College of Engineering, Karad, Prof.Dr. Anantkumar Gujar, D.Y.Patil College of Engineering & Technology, Kasaba Bawada, Kolhapur and Mr. Sachine Chougule, Manager, Inteliment Technologies Pvt. Ltd. Pune attended the meeting. Senior faculty members from department were also present in the meeting. Prof.Dr. V. R. Naik shared presentation as per the agenda points. BOS members gave their valuable suggestions, inputs and comments related to various academic activities conducted. BOS members appreciated efforts put in by department for successful conduction of academic activities, training and placement of the students.



### **Farewell function of Final Year B. Tech. Mechanical Engineering Students 2021-22 Batch**

The Department of Mechanical Engineering organized a farewell function for Final Year B Tech. Mechanical Engineering students on 19<sup>th</sup> May 2022. All the Final Year students and faculty members were present on this occasion. Students expressed their emotions and gratefulness for the institute and gratitude towards the Mechanical Engineering Department and faculty members. Prof. P. N Gore, Prof. S.G. Kanitkar and Prof. S.A. Soundattikar shared their views about this outgoing batch. Prof.Dr. V.R. Naik delivered a speech on Career Opportunities and guided students for their future prospects. Prof.Dr. V.P. Gaikwad during his speech announced the best project for the year 2021-2022. The other faculty members, through their speech, guided the students and asked the students to remain in contact with the institute. The function was coordinated by Prof. B.B. Kabnure and hosted by Mr. Atharv Joshi from T.Y. Mechanical.



**PLACEMENT: 101 students of 2022 batch got selected**

<b>Placed Student Name</b>	<b>Company Name</b>
GONDKAR PRADNYA PRAVIN	AGILIAD TECHNOLOGY
KALEKAR YOGESH SHRIRANG	ARNI MECH PRODUCTS KOLHAPUR
JADHAV ANIKET NANASO	BHARAT FORGE LTD.
KOTHALE PRATIK ANIL	BHARAT FORGE LTD.
CHIVATE KEDAR ANIL	BHARAT FORGE LTD.
KUMBHAR RAJVARDHAN HINDURAO	BHARAT FORGE LTD.
SATEJ SUBHASH DANGARE	BHARAT FORGE LTD.
MUDHOL SHREYAS SIDDHAPPA	BHARAT FORGE LTD.
KUPADE AKARSH BABASO	CAPGEMINI
KHARADE SOURABH SURESH	CAPGEMINI
MAGDUM VRUSHABH DADASO	CAPGEMINI
PATIL MADHURI MAHAVEER	CAPGEMINI
CHOUGULE PRATIK SANJAYKUMAR	CAPGEMINI
GHUME RUSHIKESH GAJANAN	CAPGEMINI
KUMBHAR DEEPAK RAGHUNATH	CAPGEMINI
PASARE SHAILESH SHRIKANT	CAPGEMINI
KULKARNI VAISHNAVI RAHUL	CAPGEMINI
KHAJURE PRATIK BHALCHANDRA	CAPGEMINI
PATIL BHUSHAN MANIKCHAND	CAPGEMINI
CHAVAN PRASAD RANJIT	CAPGEMINI
YADAV ROHIT SHUBHKARAN	CAPGEMINI
GADGIL CHAITANYA PRAVIN	CAPGEMINI
ATANURE AKSHAY MANOJ	CAPGEMINI
PATIL PUSHPDANT SHREYANSH	CAPGEMINI
SAWANT VIDIT VINOD	CAPGEMINI
BHOSALE PRADNYESH RAMESH	CAPGEMINI
CHIVATE KEDAR ANIL	INFOSYS
MADIWAL APARNA KIRAN	INFOSYS
ADARSHE SAURABH SUDHIR	INFOSYS
SAWANT RUTIK UTTAM	INFOSYS
KAMBLE SANKET JAGANNATH	INFOSYS
MAGAR ADITI KRUSHNAT	INFOSYS
KAWADE SANKET DIPAK	INFOSYS
PATIL SHRADHA JAYVANT	INFOSYS
KAMBLE ROHIT ANIL	INFOSYS
JANKAR RUTIK PRAKASH	INFOSYS
KALEKAR YOGESH SHRIRANG	INFOSYS
JIRAGE PRAJWAL GURUDAS	INFOSYS
TAWATE DHANRAJ ANIL.	INFOSYS
LATTHE SHREYAS BHARAT	INFOSYS
PATIL AISHWARYA ARUN	INFOSYS
MUJAWAR ARSHAD FIROJ	INFOSYS
BAGAL SHUBHAM RAMESH	INFOSYS
PARAMANE SIDDHARAJ PRASHANT	INFOSYS
BHURKE VAISHNAVI SHRIDHAR	MERCEDES BENZ

<b>Placed Student Name</b>	<b>Company Name</b>
KUMBHAR RAJVARDHAN HINDURAO	NOVUS NEXUS
SATEJ SUBHASH DANGARE	NOVUS NEXUS
MUJAWAR ARSHAD FIROJ	SLK
BHOSALE PRADNYESH RAMESH	SLK
JADHAV PRAMOD PRAKASH	TCS
BHOSALE AKASH PRABHAKAR	TCS
PATIL HRITHIK ANANDRAO	TCS
RAUT GANESH RAJENDRA	TCS
ANUSE ANIKET PANDURANG	TCS
KONE SANKET SHASHIKANT	TCS
PATIL PRANAV MALGONDA	TCS
CHOUGULE AISHWARYA VRUSHABH	TCS
BHASME AKASH PANDURANG	TCS
MULLANI PARVEZ IBRAHIM	TCS
MAKANDAR FIZA BASHIRAHAMAD	TCS
PATIL OMRAJ SHASHIKANT	TCS
GAVANALE PAVANKUMAR MALLIKARJUN	TCS
HULLE NIKHIL	TCS
YADAV ROHIT SHUBHKARAN	TCS
GADGIL CHAITANYA PRAVIN	TCS
ATANURE AKSHAY MANOJ	TCS
PATIL PUSHPDANT SHREYANSH	TCS
SAWANT VIDIT VINOD	TCS
PATIL BHUSHAN MANIKCHAND	TCS
CHAVAN PRASAD RANJIT	TCS
BANNE MAHESH LAXMAN	THERMAX LTD
BHORE SOURABH DILIP	THERMAX LTD
KARNE POOJA RAJENDRA	THERMAX LTD
AURGOLE ANIKET BASGONDA	THERMAX LTD
AURGOLE ANIKET BASGONDA	WIPRO
MANER AJIM SHAKIL	WIPRO
GOTAM MANSING BANDU	WIPRO
KURNE OMKAR SANJAY	WIPRO
KATKE KIRIT KISHOR	WIPRO
PATWARDHAN AKANKSHA ARVIND	WIPRO
KAMBLE PRANAV PRAVIN	WIPRO
PATIL PRADYUMN ABHAYKUMAR	WIPRO
KETKALE SNEHAL DHULGONDA	WIPRO
PATIL ASIKET DHONDIRAM	WIPRO
KAMBLE DHANASHREE SUNIL	WIPRO
SAKSHI SHENDE	WIPRO
BAGAL SHUBHAM RAMESH	WIPRO
PARAMANE SIDDHARAJ PRASHANT	WIPRO
PATIL OMRAJ SHASHIKANT	WIPRO
GAVANALE PAVANKUMAR MALLIKARJUN	WIPRO
HULLE NIKHIL	WIPRO
PATIL PRANAV MALGONDA	WIPRO
CHOUGULE AISHWARYA VRUSHABH	WIPRO
BHASME AKASH PANDURANG	WIPRO



<b>Placed Student Name</b>	<b>Company Name</b>
MAKANDAR FIZA BASHIRAHAMAD	WIPRO
JIRAGE PRAJWAL GURUDAS	WIPRO
TAWATE DHANRAJ ANIL.	WIPRO
LATTHE SHREYAS BHARAT	WIPRO
PATIL AISHWARYA ARUN	WIPRO
BUDAKE VAIBHAV DATTATRAY	WIPRO PARI
SHAH NEEL JEETENDRA	LEAD SQUARED
PATIL SUJAY SATAPPA	CAPGEMINI
LAWAND ROHIT DASHARATH	CAPGEMINI
DAVANDE PRATHAMESH SATISH	CAPGEMINI
PATIL SOURABH SHITAL	CAPGEMINI
KARANDIKAR SAKSHI PRASANNA	CAPGEMINI
SHAIKH SABA AMJAD	CAPGEMINI
MALI ASHOK TANAJI	TCS
AGRAWAL JAYESH RUPESH	TCS/ CAPGEMINI
BAHADUR ALIM AKRAM	TCS
CHOUGULE SIDDHANT SANJAY	TCS
CHAVAN ANAGHA UMESH	TCS
KININGE SAMMED DADASO	TCS
MALI MANGESH UTTAM	TCS
CHOUGULE MANTHAN SUBHASH	TCS
JADHAV SHREYAS VIVEK	TCS
PATIL DARSHAN SHEETAL	TCS
NALAWADE KEDAR SANJAY	TCS
PRATHAMESH KAVATHEKAR	TCS
KADGAONKAR. MOHD. TAHIR HAROON	SLK SOFTWARE
JAGATAP SAURABH SOPAN	SLK SOFTWARE
SUTAR OMKAR SANTOSH	SLK SOFTWARE/ ACCENTURE
KATTI SURUCHI SANJAY	TATA ELECTRONICS
BANDGAR DIGVIJAY MARUTI	ACCENTURE
GAVANDI AYESHA IBRAHIM	ACCENTURE
KOLI KAJAL SANJAY	ACCENTURE
KHOT PRATIK ARUN	ACCENTURE
MATHPATI SHRISHAIL POWADI	ACCENTURE
PATIL ABHISHEK ANANDRAO	CHEGG IND/ ACCENTURE
KANDEKAR ABHINANDAN SANTOSH	CHEGG INDIA
SALGAR SHUBHAM BAJARANG	CHEGG INDIA
HATALAGE ABHAY ASHOK	CHEGG INDIA
MOKALE SURAJ RAJENDRA	CHEGG INDIA
WAGHMARE SHANMUKH VIJAY	CHEGG INDIA
GORE KOMAL VILAS	CHEGG INDIA

**Faculty Paper Publication: Journal**

Sr.	Authors Name	Title of Paper	Name of Journal	ISSN-ISBN	Volume	Issue	Month Year	PP	Indexed
1	Dr. V. P. Gaikwad	Performance Analysis of Microchannel Heat Sink with Flow Disrupting Pins	Journal of thermal engineering	2148-7847	08	03	May 2022	402-425	Scopus
2	S. A. Soundattikar	Component Handling Automated Guided Vehicle - A Cyber Physical System Case Study	IEEE Xplore Digital Library	978-1-6654-1121-9	-	Special Issue	July 2022	1-6	Scopus
3	Dr. V.D. Shinde, S.B. Rayjadhav	Characterization of SG Iron by Ultrasonic Techniques	J. Inst. Eng. India Ser. D		103		June 2022	107-116	Scopus
4	P.N. Gore	Computer Integrated Manufacturing (CIM) In Die Manufacturing Industry For Productivity & Quality Enhancement	International Research Journal of Engineering and Technology (IRJET)	e-ISSN: 2395-0056, p-ISSN: 2395-0072	09	01	Jan 2022		google scholar
5	A. R. Balwan, Dr V D Shinde	Manufacturability assessment of custom knee implant prototype	J. Inst. Eng. India Ser. C		103	04	April 22	857-865	Scopus

**Faculty Paper Publication: Conference**

Sr. No.	Authors Name	Title of Paper	Name of Conference	ISSN-ISBN No.	Vol.	Issue	Month-Year	PP.	Indexed (eg. google scholar/ web of science/ scopus/ UGC care list)
1	V. P. Gaikwad	Performance analysis of microchannel heat sink with converging secondary channels	The 26th National and 4th International ISHMT-ASTFE Heat and Mass Transfer Conference	JULember 17-20, 2022, IIT Madras					
2	S. A. Soundattikar	Component Handling Automated Guided Vehicle - A Cyber Physical System Case Study	IEEE Second International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2022)	978-1-6654-1121-9	-	Special issue	July 2022	1-6	Scopus



**Faculty Development Programme (FDP) attended:**

Sr. No.	Faculty Name	Date	Title of Course / Program	Organizer
1	S. A. Soundattikar	25-26 March 2022	Emerging Trends in Mechanical Engineering	Yashwantrao Chavan Polytechnic, Ichalkaranji
2	R.D.Patil	25-26 March 2022	Emerging Trends in Mechanical Engineering	Yashwantrao Chavan Polytechnic, Ichalkaranji
3	A. V. Sutar	21-25 Feb, 2022	Industry 4.0 With Emphasis On Robotics And Automation	DYPCOE, Akurdi

**STTP attended by Faculty:**

Sr. No.	Faculty Name	Date	Title of Course / Program	Organizer
1	R.D. Patil	14-18 February, 2022	“Machine Learning Applications In Mechanical Engineering”	Dr. J. J. Magdum College Of Engineering, Jaysingpur (Under AICTE Quality Improvement Scheme (AQIS) )

**WORKSHOP Attended by faculty**

Sr. No.	Faculty Name	Title of Workshop	Date	Organizer
1	S. A. Soundattikar	Demystifying Industry 4.0	7 April 2022	COE, Gokul Shirgaon

**Industrial Visits conducted:**

Class	Date	Industry Name
SY Mechanical	22 April 2022	Lada Pumps Gokul Shirgaon
TY Mechanical	23-25 April 2022	Sound Casting, Kagal & Tardal
Final year Mechanical	26 April 2022	Urjankur, Shirol
SY Mechanical	22 April 2022	S.K. Heat Treaters, Gokul Shirgaon.
SY Mechanical	22 April 2022	Konark Heat Systems, MIDC, Kagal.
SY Mechanical	22 April 2022	Vira Pumps, Gokul Shirgaon, Kolhapur.

**Prof. K. K. Powar**  
**Editor.**

**Prof. Dr. V. R. Naik**  
**Advisor.**